

Macrochaetus Perty, 1850*Macrochaetus altamirae* (Arevalo, 1918)

- Palaearctic region: Spain: Gerona & Valencia (Velasco, 1990)
- Australian region: Creek in Vic, Australia (Bērziņš, 1982); Vic, Aust. (Shiel & Koste, 1985); Australia (Koste & Shiel, 1989a)
- Neotropical region: Ecuador: Oriente (Koste & Böttger, 1989); Amazonia, Brazil (Koste, 1975b)

Macrochaetus altamirae (Arevalo), f. *braziliensis* Koste, 1972

- Neotropical region: Amazonia, Brazil (Koste, 1972f)

Macrochaetus altamirae (Arevala), f. *intermedius* Rodewald, 1940

- Palaearctic region: Romania (Rudescu, 1960); Pontic province of Europe (Bērziņš, 1978)

Macrochaetus australiensis Bērziņš, 1982

- Australian region: Creek in Australia (Bērziņš, 1982)

Macrochaetus collinsi (Gosse, 1867)

- Palaearctic region: Lake Stråken, Aneboda, Sweden (Bērziņš, 1972); Danube delta, Romania (Popescu-Marinescu & Zinevici, 1967; Godeanu & Zinevici, 1983); Romania (Rudescu, 1960); In reed borders of Danube delta, Romania (Rudescu, 1968); Lago Trasimeno, Italy (Taticchi, 1968); Europe (Koste, 1972f); Peat bogs in the Massif Central, France (Batut, 1965); Italy, Alps, W & C Eur. mountains, Pontic prov., W, C & E Eur. plains, UK. Cosmopolitan (Bērziņš, 1978); Japanese inland waters (Yamamoto, 1960a); Prov. Drente, NL (Dresscher, 1976)

- Nearctic region: N & S America (Koste, 1972f); Canada (Chengalath, 1977); Laurentian Great Lakes (Stemberger, 1979)

- Oriental region: Philippines (Mamaril & Fernando, 1978); Sri Lanka (Fernando, 1980a); Singapore (Karunakaran & Johnson, 1978); Rajsthan, India (Nayar, 1968); Taiwan (Sudzuki, 1988); Taiwan, Thailand, Malaysia, Singapore, India, Indonesia, Sri Lanka & Philippines (Sudzuki, 1989); Asia (Koste, 1972f); Bung-Borapet, C Thailand (Koste, 1975a); Sri Lanka & W Malaysia (Koste, 1975b); Kalimantan (Borneo), Indonesia (Koste, 1988a); Lakelet Tan Daha, Kathmandu valley, Nepal (Daems & Dumont, 1974); Sri Lanka. Found in small ponds (Chengalath, Fernando & Koste, 1973); W & E Malaysia & Singapore (Fernando & Zankai, 1981); Impoundment Kinda, C Burma (Koste & Tobias, 1990); Ricefields in NE Thailand (Heckman, 1979); Nimeta water works, near Baroda, India (Wulfert, 1966)

- Australian region: Farm dams near Gloucester, NSW, Aust. (Sudzuki & Timms, 1980); Qld, Aust. (Shiel & Koste, 1979); NW Aust.: Magela Creek area (Koste, 1981b); Alligator rivers area, NT, Aust. (Koste & Shiel, 1983a; Tait, Shiel & Koste, 1988); S Tasmania; Qld, Aust. (Koste, Shiel & Tan, 1988); New Zealand (Koste, 1972f); Australia (Koste & Shiel, 1989a); Mountain Cook, New Zealand (Russell, 1960)

- Neotropical region: Amazonia, Brazil (Hauer, 1965b; Gillard, 1967; Thomasson, 1971; Koste, 1972f & 1975b); Varzea near Santarem, Brazil (Koste, 1974b); Brazil, Venezuela, Honduras, Panama (Koste & José de Paggi, 1982); Rio Uatuma, Amazonia, Brazil (Koste & Hardy, 1984); Lago Camaleão, Amazonia, Brazil (Koste & Robertson, 1983; Koste, Robertson & Hardy, 1984); Rio Nhamunda, Amazonia, Brazil (Brandorff, Koste & Smirnov, 1982); Near Concepcion, Paraguay (Koste, 1986b); Island of Maraca, Roraima, Brazil (Koste & Robertson, 1990); Chilean lakes (Schmid-Araya, 1991); Ecuador: Oriente & Costa (Koste & Böttger, 1989); Ecuador: Oriente (Koste & Böttger, 1992); Orinoco river basin, Venezuela (Vasquez, 1984a); Lower Orinoco and its delta, Venezuela (Vasquez & Rey, 1989); Haiti & Panama (Collado *et al.*, 1984); Flooded savanna at Mantecal, Venezuela (Michelangelli *et al.*, 1979/1980); Araucarian lakes, W of the Andes & Araucarian ponds & pools, Chile (Thomasson, 1963b); Mato Grosso, C Brazil (Turner & Da Silva, 1992); Lake Monte Galan, Nicaragua (Moreno *et al.*, 1992); Suape area, Pernambuco, Brazil (Neumann-Leitao *et al.*, 1992)

Macrochaetus danneeli Koste & Shiel, 1983

- Australian region: Alligator rivers area, NT, Aust. (Koste & Shiel, 1983a; Tait, Shiel & Koste, 1984); NT, Aust. (Koste & Shiel, 1989a)

Macrochaetus hauerianus singapurensis Sudzuki, 1989

- Oriental region: Singapore & Indonesia (Sudzuki, 1989); Singapore (Sudzuki, 1991)

Macrochaetus longipes Myers, 1934

- Palaearctic region: Spain: Huesco (Velasco, 1990)

- Nearctic region: USA (Koste, 1972f); Lake 382, experimental lake area, NW Ontario, Canada (Malley & Chang, 1991)

- Oriental region: Malaysia (Karunakaran & Johnson, 1978); Malaysia & Singapore (Sudzuki, 1989)

- Australian region: Not yet recorded from Australia (Koste & Shiel, 1989a)

- Neotropical region: Amazonia, Brazil (Koste, 1972f); Varzea near Santarem, Brazil (Koste, 1974b); Brazil

& Argentina (Koste & José de Paggi, 1982); Lago Paroni, Brazil (Koste, 1974a); ? River Parana, Argentina (Paggi & José de Paggi, 1974); Prov. Santa Fé, Argentina (José de Paggi, 1990); Mato Grosso, C Brazil (Turner & Da Silva, 1992)

Macrochaetus longisetus Sudzuki, 1991

- Oriental region: Singapore (Sudzuki, 1991)

Macrochaetus multispinosus Myers, 1934

- Neotropical region: Brazil (Koste & José de Paggi, 1982); Rio Nhamunda, Amazonia, Brazil (Brandorff, Koste & Smirnov, 1982); Amazonia, Brazil (Gillard, 1967; Thomasson, 1971)

Macrochaetus philopax Wulfert, 1961

- Palaearctic region: Dübener Heide, Germany (Wulfert, 1961); C Eur. mountains, Balkan, C Eur. plain (Bērziņš, 1978)

Macrochaetus rossicus (Michaeloff, 1900)

- Palaearctic region: Pyrenees, Italy, Carpathes, C & E Eur. plains. Cosmopolitan (Bērziņš, 1978)

- Neotropical region: Brokopondo Lake, Surinam (Leentvaar, 1979)

Macrochaetus sericus (Thorpe, 1893)

- Palaearctic region: Italy & R.F., China, Persian Gulf, C Asia (Koste, 1972f); Iberic peninsula, Italy, Balkan, Caucasus, Caspian area (Bērziņš, 1978); Western substeppic floodplain of r. Volga, R.F. (Chuykov & Merkulov, 1986); Southwest islands of Japan (Sudzuki *et al.*, 1992); Lake Doiran, Macedonia, ex-Yugoslavia (Popovska-Stankovic, 1990); Serbian section of river Danube (Zivkovic, 1987)

- Nearctic region: Florida, USA (Koste, 1972f); Laurentian Great Lakes (Stemberger, 1979)

- Oriental region: Sakardhara Tank near Nagpur, India (Arora, 1965); Sri Lanka (Fernando, 1980a); Singapore (Karunakaran & Johnson, 1978); Malaysia, Singapore, Sri Lanka, India (Sudzuki, 1989); India & Indochina (Koste, 1972f); Sri Lanka. Rare; found in small ponds (Chengalath, Fernando & Koste, 1973); Singapore & Taiwan. Cosmopolitan (Sudzuki, 1991); Andhra Pradesh, India (Dhanapathi, 1974b); W & E Malaysia & Singapore (Fernando & Zankai, 1981); West Bengal, NE India (Sharma, 1979a)

- Neotropical region: Rio Saladillo basin, Argentina (José de Paggi & Koste, 1988); Orinoco river basin, Venezuela (Vasquez, 1984a); Caroni river basin, Venezuela (Vasquez, 1984b); Amazonia, Brazil; Cuba; Brazil (Koste, 1972f); Varzea near Santarem, Brazil (Koste, 1974b); Chile, Brazil, Venezuela, Peru (Koste & José de Paggi, 1982); Lago Camaleão, Amazonia, Brazil (Koste & Robertson, 1983; Koste, Robertson & Hardy, 1984); Chilean lakes (Schmid-Araya, 1991); ? Chile (Löffler, 1962); Prov. Corriente & Santa Fé, Argentina (José de Paggi, 1990); Amazonia, Brazil (Hauer, 1965b; Gillard, 1967; Thomasson, 1971); Flooded savanna at Mantecal, Venezuela (Michelangelli *et al.*, 1979/1980); Mato Grosso, C Brazil (Turner & Da Silva, 1992)

Macrochaetus sericus coniunctus Sudzuki, 1991

- Oriental region: Singapore (Sudzuki, 1991)

Macrochaetus subquadratus (Perty, 1850)

- Palaearctic region: Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); Impoundment Neunzehnhain, Germany (Althaus, 1976); Lake Stråken, Aneboda, Sweden (Bērziņš, 1972); Lake Darnsee near Epe, NW Germany (Koste, 1962); Lake Darnsee and other lakes of NW Germany (Koste, 1970a); Groszes Heiliges Meer, NW Germany (Koste, 1975b); Coast of S Finland (Eriksen, 1969); Delta of river Danube, Romania (Popescu-Marinescu & Zinevici, 1967); Aral Sea spawning grounds, R.F. (Yerekeyev & Kazakhbayev, 1972); All over Europe; Caucasus, Caspian area. Cosmopolitan (Bērziņš, 1978); Dübener Heide, N Germany (Wulfert, 1961); Japanese inland waters (Yamamoto, 1960a); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); Nat. Res. Oisterwijkse vennen, NL (De Graaf, 1960); Nat. Res. Het Hol, Kortenhoeft, NL (Dresscher, 1976); In reed borders of the Danube delta, Romania (Rudescu, 1968); Spain: ? Orense, Tarragona (Velasco, 1990)

- Nearctic region: Illinois & Missouri, USA (Bērziņš, 1984); Cap Breton Island, Nova Scotia, Canada (Chengalath & Koste, 1988); Laurentian Great Lakes (Stemberger, 1979); Northern Michigan inland lakes (Stemberger, 1990); Experimental ponds, C Florida, USA (Fry & Osborne, 1980); Lac Echo, Québec, Canada (Nogrady, 1976)

- Oriental region: South India (Naidu, 1967); Near Kuala-Lumpur, Malaysia (Koste, 1975b); India (Sudzuki, 1989)

- Australian region: Lake Euramoo, tropical Queensland Aust. crater lake (Green, 1981); NSW, Aust. (Shiel & Koste, 1979); Alligator rivers area, NT, Aust. (Tait, Shiel & Koste, 1984); E Aust. (Koste & Shiel, 1980b); Australia (Koste & Shiel, 1989a)

- Neotropical region: Araucarian lakes, W & E of the Andes, Chile (Thomasson, 1963b); Paraguay & Surinam (Koste & José de Paggi, 1982); Prov. Rio Negro, Argentina (José de Paggi, 1990)

Macrochaetus spec.

- Nearctic region: Long Pond, St. John's, Newfoundland, Canada (O'Connell & Andrews, 1977); Massey

Lake, 16 km of Beaumont, Texas, USA (Marsh *et al.*, 1978); Mirror Lake, New Hampshire, USA (Strayer, 1985)

- Oriental region: Thailand (Boonsom, 1984b)

- Neotropical region: Surinam (Leentvaar, 1975); S Brazil (Arcifa, 1984)

Manfredium Gallagher, 1957

Manfredium eudactylosum (Gosse, 1886)

- Palaearctic region: Romania (Rudescu, 1960); Middle course of river Po, Italy (Ferrari *et al.*, 1986); Coast of S Finland (Eriksen, 1969); Man-made lake Zegrzynskie, Poland (Dusoge *et al.*, 1985); Lake Quackjeswater, Voorne Island, NL (Leentvaar, 1963); N Swedish Lapland (Pejler, 1962a); Italy, Alps, C Eur. mts. & plains, Hungarian plain, Pontic province, UK, NW Russian taiga (Bērziņš, 1978); Engelbergs Moor, near Druchhorn, NW Germ. (Koste, 1965); Nat. Res. Het Hol, Kortenhoef; Dune waters Quackjeswater, Breedewater & Vogelmeer, NL (Dresscher, 1976); Japanese inland waters (Yamamoto, 1960a); Dune waters in NL: Zwanewater, Muy, Oerd & Van Hunenplak (Leentvaar, 1967a); Obretin embanked basin, Danube delta, Rom. (Godeanu *et al.*, 1973); Small water bodies in the Mikolajki area, Poland (Klimowicz, 1967); Bog pond near Budapest, Hungary (Nogrady, 1962); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); Pool "Mare à Piat", Fontainebleau forest, France (Pourriot, 1976); In reed borders of the Danube delta, Romania (Rudescu, 1968); River Loire in St. Laurent-les-Eaux, France (Pourriot *et al.*, 1982); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Pool, S of Trondheim, Norway (Thomasson, 1979); Lago Trasimeno, Italy (Taticchi, 1968); Waters near river Bodrog, NE Hungary (Dévai *et al.*, 1972/1973)

- Nearctic region: Canada (Chengalath, 1977); Ross Lake, Florida, USA (Bienert, 1986); Mt. Tremblant Prov. Park, Québec, Canada (Nogrady, 1980); Kingston, Ontario, Canada (Nogrady, 1989); Experimental ponds, C Florida, USA (Fry & Osborne, 1980); Atchafalaya river basin, Louisiana, USA (Holland *et al.*, 1983); Massey Lake, 16 km of Beaumont, Texas, USA (Marsh *et al.*, 1978); Silver Lake, Adirondack mts., NY State, USA (Siegfried, 1991)

- Oriental region: Punjab State, NW India (Sharma, 1976); Sri Lanka (Fernando, 1980a); Malaysia, Singapore, Sri Lanka (Sudzuki, 1989); Sakardhara Tank near Nagpur, C India (Arora, 1965); Kalimantan (Borneo), Indonesia (Koste, 1988a); W & E Malaysia & Singapore (Fernando & Zankai, 1982); Sri Lanka. Paddy field, near to Ratnapura (Chengalath, Fernando & Koste, 1974); Singapore. Cosmopolitan (Sudzuki, 1991); Andhra Pradesh, India (Dhanapathi, 1974b); 2 Kumaun Himalayan lakes, UP, India (Sharma & Pant, 1985)

- Australian region: Tasmania (Koste & Shiel, 1987); SW Australia (Koste, Shiel & Brock, 1983); NW Australia: Magela Creek area (Koste, 1981b); Alligator rivers area, NT, Aust. (Koste & Shiel, 1983a; Tait, Shiel & Koste, 1984); NT and SW West Australia (Shiel & Koste, 1985); Australia (Koste & Shiel, 1989a); Mountain Cook, New Zealand (Russell, 1960)

- Neotropical region: Surinam (Leentvaar, 1975); Brokopondo Lake, Surinam (Leentvaar, 1979); Mato Grosso, C Brazil (Turner & Da Silva, 1992); Ecuador: Costa (Koste & Böttger, 1989); Ecuador: Oriente (Koste & Böttger, 1992); Lago Camaleão, Amazonia, Brazil (Koste & Robertson, 1983; Koste, Robertson & Hardy, 1984); Provinces in NW Argentina (José de Paggi, 1989); Panama & Surinam (Koste & José de Paggi, 1982); Rio Nhamunda, Amazonia, Brazil (Brandorff, Koste & Smirnov, 1982); Near Panguana, Peru (Koste, 1988b); Near Concepcion, Paraguay (Koste, 1986b); Island of Maraca, Roraima, Brazil (Koste & Robertson, 1990); Lake Coca-Cola, near Rio de Janeiro, Brazil (Turner, 1990); Prov. Santiago del Estero, Chaco & Santa Fé, Argentina (José de Paggi, 1990); Panama (Collado *et al.*, 1984)

Manfredium eudactylosum (Gosse), f. *wulferti* (Hauer, 1965)

- Nearctic region: Everglades Nat. Park, Florida, USA (Nogrady, 1983)

- Neotropical region: Amazonia, Brazil (Hauer, 1965b; Thomasson, 1971; Koste, 1972f); Lago Paroni, Brazil (Koste, 1974a); Varzea near Santarem, Brazil (Koste, 1974b); Brazil & Venezuela (Koste & José de Paggi, 1982); Flooded savanna at Mantecal, Venezuela (Michelangelli *et al.*, 1979/1980)

Manfredium spec.

- Neotropical region: Surinam (Leentvaar, 1975)

Metadiaschiza Fadeev, 1925

Metadiaschiza trigona (Rousselet, 1895)

- Palaearctic region: Italy, C Eur. mts., Carpathes, Hungarian plain, C & E Eur. plains, UK, Iceland, Boreal highlands, N Sweden, NW Russian taiga, Asia Minor (Bērziņš, 1978); Pool, S of Trondheim, Norway

(Thomasson, 1979); Romania (Rudescu, 1960); Near Asperg, Württemberg, Germany (Klement, 1960); W Iceland (De Ridder, 1972); Prov. Zuid Limburg, NL (Dresscher, 1976)

Metadiaschiza spec.

- Palaearctic region: Southwest islands of Japan (Sudzuki *et al.*, 1992)

Microcodides Bergendal, 1892

Microcodides chlaena (Gosse, 1886)

- Palaearctic region: Italy, C Eur. mts. & plains, Hungarian plain, Pontic prov., Boreal highlands, N Sweden, NW Russian taiga (Bērziņš, 1978); Nat. Res. Het Hol, Kortenhoeft, NL (Dresscher, 1976); Coast of S Finland (Eriksen, 1976); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); Impoundment Kninicki, CSR (Kubicek, 1964); Possibly cosmopolitan (Koste & Shiel, 1987b); Engelbergs Moor, near Druchhorn, NW Germ. (Koste, 1965); Achmer Grasmoor, NW Germany (Koste, 1968b); Pools in Fontainebleau and peat bogs in the Sologne, France (de Beauchamp & Pourriot, 1961); Romania (Rudescu, 1960); Baraque Michel, Belgium (De Ridder, 1986); Dübener Heide, Germany (Wulfert, 1961); District Hoge Venen, Belgium (Gijssels *et al.*, 1976); Karelian inland waters, R.F. (Kutikova, 1965); Peat bogs Poiana Stampei, Bukowina, Romania (Rudescu, 1966); Peat bog Grandvaux, Paris suburb, France (Pourriot, 1965)

- Nearctic region: Lake Wabamun, Alberta, Canada (Gallup & Hickman, 1975); Laurentian Great Lakes (Stemberger, 1979); Kingston, Ontario, Canada (Nogrady, 1989)

- Oriental region: Littoral of India; Delhi, India (Sarma, 1988)

- Australian region: Qld, Australia (Shiel & Koste, 1979)

- Neotropical region: Near Concepcion, Paraguay (Koste, 1986b); Near Panguana, Peru. First record for S America (Koste, 1988b); Ecuador: Oriente (Koste & Böttger, 1989); Ecuador: Oriente & Costa (Koste & Böttger, 1992)

Microcodides chlaena (Gosse), f. *mobilis* Rodewald, 1940

- Palaearctic region: Pontic province of Europe (Bērziņš, 1978)

Microcodides hertha Wulfert, 1961

- Palaearctic region: Dübener Heide, N Germany (Wulfert, 1961); C Eur. plains (Bērziņš, 1978)

Microcodides robustus (Glascott, 1892)

- Palaearctic region: Coast of S Finland (Eriksen, 1969); Dübener Heide, N Germany (Wulfert, 1960a & 1961); Lake Neusiedlersee, Austria (Donner, 1979); Darnsee near Epe, NW Germany (Koste, 1962); Engelbergs Moor, near Druchhorn, NW Germ. (Koste, 1965); Achmer Grasmoor, NW Germany (Koste, 1968b); Italy, Alps, C Eur. mts. & plains, Ireland, UK, Boreal highlands & NW Russian taiga (Bērziņš, 1978); Nat. Res. Jursky Sur, CSR (Hudec, 1978); Peat bogs Chambedaze & La Godivelle, Massif Central, France (Francez & Dévaux, 1985); Peat bogs in the Auvergne, France (Francez, 1981 & 1984c)

- Nearctic region: Canada (Chengalath, 1977)

- Neotropical region: Ecuador: Oriente (Koste & Böttger, 1989 & 1992)

Microcodon Ehrenberg, 1830

Microcodon clavus Ehrenberg, 1830

- Palaearctic region: Romania (Rudescu, 1960); Peat bogs Poiana Stampei, Bukowina, Romania (Rudescu, 1966); Peat bog Grandvaux, Paris suburb, France (Pourriot, 1965); Impoundment Neunzehnhain, Germany (Althaus, 1976); Lake Stråken, S Sweden (Bērziņš, 1972); Coast of S Finland (Eriksen, 1969); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); N Swedish Lapland (Pejler, 1962a); Mt. Hoverla, Maramarosch Alps, Hungary (Varga, 1962); Darnsee near Epe, NW Germany (Koste, 1962); Engelbergs Moor, near Druchhorn, NW Germ. (Koste, 1965); Achmer Grasmoor, NW Germany (Koste, 1968b); Peat bogs in the Massif Central, France (Batut, 1965); Sphagnum bogs in the Sologne, France (de Beauchamp & Pourriot, 1961); Italy, W Balkan, W & C Eur. mts., Carpathes, Pontic prov., W, C & E Eur. plains, Baltic prov., Ireland, UK, Fennoscandia (Bērziņš, 1978); River Ybbarpsån, Sweden (Bērziņš, 1979); Peat bogs Chambedaze & La Godivelle, Massif Central, France (Francez & Dévaux, 1985); Peat bog Chambedaze, Massif Central, France (Francez, 1982, 1987 & 1988); Peat bogs in the Auvergne, France (Francez, 1981 & 1984c); Dübener Heide, N Germany (Wulfert, 1960a, 1960b & 1961); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); Nat. Res. Oisterwijkse vennen, NL (De Graaf, 1960); Id. + Dwingelose Heide, NL (Dresscher, 1976); In reed borders of Danube delta, Romania (Rudescu, 1968)

- Nearctic region: Canada (Chengalath, 1977); Great Dismal Swamp, border Virginia-N Carolina, USA (Anderson, Benfield & Buikema, 1977); NW Canada (Chengalath & Koste, 1987); Arctic N America

(Chengalath & Koste, 1989); Lac Echo, Québec, Canada (Nogrady, 1976); Mt. Tremblant Prov. Park, Québec, Canada (Nogrady, 1980); Kingston, Ontario, Canada (Nogrady, 1989); Northern Michigan inland lakes (Stemberger, 1990); Fayetteville, Onondaga County, NY State, USA (Jackson, 1972); Mirror Lake, New Hampshire, USA (Strayer, 1985)

- Australian region: Tasmania (Koste & Shiel, 1987); NSW, Australia (Shiel & Koste, 1979); Lake Summer district, New Zealand (Russell, 1960)

- Neotropical region: Lago do Macaco, Brazil (Koste, 1989a); Rio Uatuma, Amazonia, Brazil (Koste & Hardy, 1984)

Monommata Bartsch, 1870

Monommata actices Myers, 1930

- Palaearctic region: C Eur. mts. & plains, NW Russian taiga (Bērziņš, 1978); Achmer Grasmoor, NW Germany (Koste, 1968b); River Grabia basin, Poland (Pawłowski, 1960, 1968 & 1970); Dübener Heide, N Germany (Wulfert, 1960a, 1960b & 1961); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978)

- Nearctic region: N America (Bērziņš, 1978)

- Australian region: NT, Australia (Koste & Shiel, 1980c); Alligator rivers area, NT, Aust. (Tait, Shiel & Koste, 1984); S Tasmania & NT, Aust. (Koste, Shiel & Tan, 1988); Billabongs at Jabilake, NT; Goulburn river billabong at Seymour, Vic; Cradle mt. Nat. Park, Tasmania (Koste & Shiel, 1991)

- Neotropical region: Rio Jatapu & Rio Uatumã, Amazonia, Brazil (Koste & Hardy, 1984); ? Lago Camaleão, Amazonia, Brazil (Koste, Robertson & Hardy, 1984); Near Concepcion, Paraguay (Koste, 1986b)

Monommata aequalis (Ehrenberg, 1832)

- Palaearctic region: Italy, Alps, C Eur. mts. & plains, Hungarian plain, Pontic prov., Ireland, UK, Boreal highlands (Bērziņš, 1978); Waldviertel area, lower Austria (Naidenow & Wawrik, 1984); Maria- & Helenapeel, Limburg; Leersumse plassen, NL (Dresscher, 1976); Lago Trasimeno, Italy (Taticchi, 1968)

- Nearctic region: Mesotrophic fen, Newfoundland, Canada (Bateman & Davis, 1980)

- Oriental region: W & E Malaysia & Singapore (Fernando & Zankai, 1981); Malaysia (Sudzuki, 1989)

- Australian region: Qld, Australia (Shiel & Koste, 1979); S Tasmania & Qld, Aust. (Koste, Shiel & Tan, 1988); Early record from Qld; Great Lake, Central Plateau, Tasmania (Koste & Shiel, 1991)

- Neotropical region: Paraguay (Koste & José de Paggi, 1982); ? Near Concepcion, Paraguay (Koste, 1986b)

Monommata aeschyna Myers, 1930

- Palaearctic region: Carpathes, C Eur. plains, N Sweden (Bērziņš, 1978); Romania (Rudescu, 1960); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978)

- Nearctic region: N America (Bērziņš, 1978); NE Canada (Chengalath & Koste, 1983); Arctic N America (Chengalath & Koste, 1989); Kingston, Ontario, Canada (Nogrady, 1989)

- Australian region: Rare; billabong at Seymour; Ryans 2 billabong; Wodonga, Vic & shallow pools, western Tasmania (Koste & Shiel, 1991)

Monommata appendiculata Stenroos, 1898

- Palaearctic region: C Eur. mts. & plains, Pontic province, NW Russian taiga (Bērziņš, 1978); Coast of S Finland (Eriksen, 1969); Romania (Rudescu, 1960); In reed borders of the Danube delta, Romania (Rudescu, 1968)

- Nearctic region: Mt. Tremblant Nat. Park, Québec, Canada (Nogrady, 1980)

Monommata arndti Remane, 1933

- Palaearctic region: C Eur. plain (Bērziņš, 1978); NW Germany; N France after de Beauchamp (Koste, 1972g); C Finland (Eloranta, 1982b); Peat bogs in the Auvergne, France (Francez, 1981); "Altes Land" near Hamburg, Germany (Caspers & Heckman, 1981 & 1982; Heckman, 1986)

- Nearctic region: Kingston, Ontario, Canada (Nogrady, 1989)

- Oriental region: Delhi, India (Sarma, 1988)

- Australian region: Vic, Australia (Koste & Shiel, 1980c); Billabong of Goulburn river, Vic (at Alexandra) (Koste & Shiel, 1991)

- Neotropical region: ? Near Concepcion, Paraguay (Koste, 1986b)

Monommata astia Myers, 1930

- Palaearctic region: Lake Stråken, Aneboda, Sweden (Bērziņš, 1972); C Eur. mountains & plains (Bērziņš, 1978); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); Engelbergs Moor, near Druchhorn, NW Germ. (Koste, 1965); Lake Balaton, Hungary (Zankai, 1968); ? Dübener Heide, N Germany (Wulfert, 1961); Pond Heinrichsweiher, Bonn, Germany (Reck, 1981)

- Nearctic region: N America (Bērziņš, 1978)
- Australian region: Takahe valley, New Zealand (Russell, 1960)
- Neotropical region: Mato Grosso, C Brazil (Turner & Da Silva, 1992)

***Monommata caeca* Myers, 1930**

- Palaearctic region: C Eur. plain (Bērziņš, 1978)
- Nearctic region: N America (Bērziņš, 1978)
- Australian region: ? Wellington, New Zealand (Russell, 1960)

***Monommata caudata* Myers, 1930**

- Palaearctic region: C Eur. plain (Bērziņš, 1978); Southwest islands of Japan (Sudzuki *et al.*, 1992); Dübener Heide, N Germany (Wulfert, 1960a)
- Nearctic region: N America (Bērziņš, 1978); Canada (Chengalath, 1977); Arctic N America (Chengalath & Koste, 1989)

***Monommata dentata* Wulfert, 1940**

- Palaearctic region: Alps, C Eur. mts. & plains, Pontic prov., NW Russian taiga (Bērziņš, 1978); Reed belt of Lake Neusiedlersee, Austria (Donner, 1975); Nat. Res. Oisterwijkse vennen, NL (De Graaf, 1960); Peat bog Chambedaze, Puy-de-Dôme, France (Francez, 1987); Romania (Rudescu, 1960); Coast of S Finland (Eriksen, 1969); Engelbergs Moor, near Druchhorn, NW Germ. (Koste, 1965); Lake Alfsee, NW Germany (Koste & Poltz, 1987); Southwest islands of Japan (Sudzuki, 1990); Balearic Archipelago, Spain (de Manuel *et al.*, 1992); R. Maas, Rijn, Waal & Yssel; Nat. Res. Oisterwijkse vennen, NL (Dresscher, 1976); In periphyton of mosses & *Myriophyllum* in the Danube and in some Alpine brooks, Austria (Donner, 1964); Shores of dammed or flowing stretches of Danube river, at the German-Austrian border (Donner, 1972); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); Peat bogs Chambedaze & La Godivelle, Massif Central, France (Francez, 1988); Lake Neusiedlersee, Austria (Donner, 1979); In reed borders of the Danube delta, Romania (Rudescu, 1968); Pond Heinrichsweiher, Bonn, Germany (Reck, 1981); La Bonne Mare, Rambouillet, Paris suburb, Fr. (Pourriot, 1965)
- Nearctic region: NE Canada (Chengalath & Koste, 1983); NW Canada (Chengalath & Koste, 1987); Arctic N America (Chengalath & Koste, 1989)
- Australian region: ? Tasmania (Koste & Shiel, 1987); Golden valley, Tas (?); Ryans 2 billabong, Wodonga, Vic (Koste & Shiel, 1991)

***Monommata diaphora* Myers, 1930**

- Palaearctic region: Carpathes, C Eur. plain (Bērziņš, 1978); Romania (Rudescu, 1960)
- Nearctic region: N America (Bērziņš, 1978); Canada (Chengalath, 1977); Mt. Tremblant Prov. Park, Québec, Canada (Nogrady, 1980)
- Australian region: Rushdie billabong, r. Murray near Barnawartha, Vic (Koste & Shiel, 1991)

***Monommata dissimile* Bērziņš, 1949**

- Palaearctic region: C Eur. mountains & plains, Fennoscandia (Bērziņš, 1978)

***Monommata enedra* Myers, 1930**

- Palaearctic region: Lake Stråken, Aneboda, Sweden (Bērziņš, 1972); C Eur. plains (Bērziņš, 1978); Nat. Res. Oisterwijkse vennen, NL (De Graaf, 1960); Id. + Lake Wijde Blik, NL (Dresscher, 1976)
- Nearctic region: N America (Bērziņš, 1978); Canada (Chengalath, 1977)

***Monommata grandis* Tessin, 1890**

- Palaearctic region: All over Europe, Caucasus (Bērziņš, 1978); Romania (Rudescu, 1960); Nat. Res. Oisterwijkse vennen, NL (De Graaf, 1960); Spain: Valencia (Velasco, 1990); Peat bogs Poiana Stampei, Bukowina, Romania (Rudescu, 1966); Lake Stråken, Aneboda, Sweden (Bērziņš, 1972); Coast of S Finland (Eriksen, 1969); Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1986); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); River Grabia basin, Poland (Pawlowski, 1970); Lake Balaton, Hungary (Zankai, 1968); Japanese inland waters (Yamamoto, 1960a); Peat bogs Chambedaze & La Godivelle, Massif Central, France (Francez & Dévaux, 1985); Peat bog Chambedaze, Puy-de-Dôme, France (Francez, 1981 & 1984c); Nat. Res. Het Hol, Kortenhoeve & Grote Huisven, Oisterwijk, NL (Dresscher, 1976); Karelian inland waters, R.F. (Kutikova, 1965); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); In reed borders of the Danube delta, Romania (Rudescu, 1968); Pelagic zone of the Lecznawłodawa lakes, Pol. (Radwan, 1975); Parczew area peat bogs, Poland (Radwan, 1974); Peat bogs Cériseaux & Grandvaux, Paris suburb, Fr. (Pourriot, 1965); Serbian section of river Danube (Zivkovic, 1987)
- Nearctic region: Canada (Chengalath, 1977); Cap Breton Island, Nova Scotia, Canada (Chengalath & Koste, 1988); Arctic N America (Chengalath & Koste, 1989); Mt. Tremblant Nat. Park, Québec, Canada (Nogrady, 1980); Desaulniers reservoir, Québec, Canada (Pinel-Alloul *et al.*, 1982); Laurentian Great Lakes (Stemberger, 1979)
- Oriental region: ? Swamp near Menggala, Sumatra (Bērziņš, 1982a); Malaysia & Indonesia (Sudzuki, 1989); W & E Malaysia & Singapore (Francez & Zankai, 1981)

- Australian region: Tasmania (Koste & Shiel, 1987); Alligator rivers area, NT, Aust. (Koste & Shiel, 1983a; Tait, Shiel & Koste, 1984); NW Aust.: Magela Creek area (Koste, 1981b); Rare: Qld, Vic, Tas (Koste & Shiel, 1991)

- Neotropical region: Ecuador: Oriente (Koste & Böttger, 1989 & 1992); ? Amazonia, Brazil (Koste, 1972f); Varzea near Santarem, Brazil (Koste, 1974b); Chile, Brazil, Panama & Peru (Koste & José de Paggi, 1982); Near Panguana, Peru (Koste, 1988b); Island of Maraca, Roraima, Brazil (Koste & Robertson, 1990); Chilean lakes (Schmid-Araya, 1991)

Monommata hyalina Myers, 1930

- Nearctic region: Canada (Chengalath, 1977); Mt. Tremblant Nat. Park, Québec, Canada (Nogrady, 1980)

- Neotropical region: ? Varzea near Santarem, Brazil (Koste, 1974b); Brazil (Koste & José de Paggi, 1982)

Monommata longiseta (O.F. Müller, 1786)

- Palaearctic region: Romania (Rudescu, 1960); L. Muy on Texel & L. Oerd on Ameland, NL (Leentvaar, 1967a); Lake Quackjeswater on Voorne, NL (Leentvaar, 1963); Broads & peat pits in NW Overijssel, NL (Leentvaar, 1965); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); Mt. Hoverla, Maramarosch Alps, Hungary (Varga, 1962); Darnsee near Epe, NW Germany (Koste, 1962); Engelbergs Moor, near Druchhorn, NW Germ. (Koste, 1965); Achmer Grasmoor, NW Germany (Koste, 1968b); Peat bogs in the Massif Central, France (Batut, 1965); Volgograd reservoir, R.F. (V'yushkova & Lakhnova, 1974); All over Europe, Caucasus, Caspian area. Cosmopolitan (Bērziņš, 1978); Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); River Ybbarpsån, Sweden (Bērziņš, 1979); Coast of S Finland (Eriksen, 1969); Man-made lake Zegrzynskie, Poland (Dusoge *et al.*, 1985); Alkal. Péterisee, Hungary (Kertesz, 1960); ? Lake Myvatn, Iceland (Adalsteinsson, 1979); River Grabia basin, Poland (Pawlowski, 1968 & 1970); Lake Balaton, Hungary (Zankai, 1968); Mountain Fuji lava caves, Japan (Sudzuki, 1971a); Lake Donk, Overmere, Belgium (Dumont, 1968b); Meuse Liégeoise, Belgium (Baiverlin, 1984); N & W Iceland (De Ridder, 1969b, 1970 & 1972); Peat bogs Chambedaze & La Godivelle, Massif Central, France (Francez & Dévaux, 1985); Waldviertel area, lower Austria (Naidenow & Wawrik, 1984); Nat. Res. Oisterwijkse vennen, NL (De Graaf, 1960); All over the Netherlands (Dresscher, 1976); Hilversumse Wasmear & Leersumse Veld, NL (Leentvaar, 1967b); Artificial ponds near Köln, Germany (Trahms, 1972); Forest pool, Lembeek, Belgium (Van Elslande, 1975); Lembeek, Belgium (De Ridder, 1986); Peat bog Chambedaze, Puy-de-Dôme, France (Francez, 1982); Peat bogs in the Auvergne, France (Francez, 1981 & 1984c); Obretin embanked basin, Danube delta, Romania (Godeanu *et al.*, 1973); River Bistritza & its tributaries, Romania (Miron, 1960); Pond Heinrichsweiher, Bonn, Germany (Reck, 1981); Rés. biol. de Villars-la-Dombes, France (Rostan, 1976); 3 lakes of Sosnowickie, Poland (Radwan, 1969); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Lakes around mountain Fuji, Japan (Sudzuki, 1971b); Mountain Fuji, Japan (Sudzuki, 1978a); Pool, S of Trondheim, Norway (Thomasson, 1979); Lago Trasimeno, Italy (Taticchi, 1968); Serbian section of river Danube (Zivkovic, 1987); Waters near river Bodrog, NE Hungary (Dévai *et al.*, 1972/1973); Spain: Barcelona, Gerona, Orense & Oviedo; Andorra (Velasco, 1990)

- Nearctic region: Mesotrophic fen, Newfoundland, Canada (Bateman & Davis, 1980); Canada (Chengalath, 1977); Illinois, USA (Bērziņš, 1984); Lac Echo, Québec, Canada (Nogrady, 1976); Mt. Tremblant Prov. Park, Canada (Nogrady, 1980); Kingston, Ontario, Canada (Nogrady, 1989); Laurentian Great Lakes (Stemberger, 1979); Northern Michigan inland lakes (Stemberger, 1990)

- Australian region: NSW & Qld, Australia (Shiel & Koste, 1979); Alligator rivers area, NT, Aust. (Tait, Shiel & Koste, 1984); S Tasmania; NSW, Qld & Vic (Koste, Shiel & Tan, 1988); Earlier records from NSW, Qld, Vic. In our material a single record from Scottsdale, Tas (Koste & Shiel, 1991); Westland, New Zealand (Russell, 1960)

- Neotropical region: Surinam (Leentvaar, 1975); Brokopondo Lake, Surinam (Leentvaar, 1979); Paraguay, Argentina, Surinam, Panama & Brazil (Koste & José de Paggi, 1982); Prov. Rio Negro, Argentina (José de Paggi, 1990); Araucarian lakes, E of the Andes, Chile (Thomasson, 1963b)

Notholca Gosse, 1886*Notholca acuminata* (Ehrenberg, 1832)

- Palaearctic region: Luga district of the Leningrad area, R. F. (Kutikova, 1962b); Romania (Rudescu, 1960); Lake Kisajno, Mazurian lakeland, Poland (Klimowicz, 1964); Lake Muy on Texel, NL (Leentvaar, 1967); Lake Vogelmeer in Ymuiden & L. Breedewater, Voorne, NL (Leentvaar, 1963); Delta of river Danube, Romania (Godeanu & Zinevici, 1983; Prunescu-Arion, 1989); Lakes in C Sweden (Pejler, 1965 & 1972); N Swedish Lapland (Pejler, 1962a); Palaearctic, Nearctic & Ethiopian region (Pejler, 1977); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c, 1989d; Pejler & Bērziņš, 1989); Lakes in Estonia (Haberman, 1978); Impoundment Saidenbach, Erzgebirge, Germany (Beuschold, 1961); Pools with fresh & brackish water, S Finland (Björklund, 1972a); Rock pools, fjords etc. in W Norway (Eriksen, 1968); Coast of S Finland (Eriksen, 1969); Espegrend, W Norway (Björklund, 1972b); Swedish Baltic coast (Thane-Fenchel, 1968); Moerdijk-Hollands Diep, NL (Leentvaar, 1980); Steppic waters, Spain (Miracle, 1982); Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1986); Slovenia, ex-Yugoslavia (Markic, 1983); Asiatic Turkey (Dumont & De Ridder, 1987); Lake Donk, Overmere, Belgium (Dumont, 1968b; Claus & Dall'Asta, 1972; Roche, 1987 & 1989); Hortobagy Nat. Park, Hungary (Forro & Ronkay, 1983); Lake Balaton, Hungary (Zankai, 1968 & 1989); Nat. Res. Jursky Sur, CSR (Hudec, 1978); Svalbard (Amren, 1964a & 1964b); Lake Myvatn, Iceland (Adalsteinsson, 1974 & 1979); La Mancha, Castilia, Spain (Armengol *et al.*, 1975); Lake Bodensee, near Konstanz, Germany (Koch-Althaus, 1962); Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); Near Kiel, Germany (Focke, 1961); Lakes, N of Bucarest, Romania (Godeanu, 1969b); Lake Aydat, Puy-de-Dôme, France (Persoone *et al.*, 1968); Lowland brook-pond system, Boom, Belgium (Maes, 1985); Impoundment Helme, near Kelbra, Kyffhäuser, Germany (Heynig, 1968 & 1974); River Elbe near Hamburg, Germany (Caspers & Schulz, 1964); Volga river, R. F. (V'yushkova & Lakhnova, 1974); Lake Baikal, R. F. (Kozhov, 1963; Eggert, 1973); Rivers in W Kazakhstan, R. F. (Petrova, 1976); Lake Ladoga, R. F. (Nikolayev & Petrova, 1978); Lapland State Preserve, R. F. (Ghilarov, 1972); Aral Sea spawning grounds, R. F. (Yerekeyev & Kazakhbayev, 1972); All over Europe; Caucasus, Caspian area, Asia Minor (Bērziņš, 1978); Gulf of Bothnia, Gulf of Finland, Gulf of Riga, Baltic Sea, Belt Sea, Kattegat, Skagerak, N North Sea, S North Sea, Bristol Channel & Irish Sea, S & W Ireland, Norwegian Sea & Barents Sea (Bērziņš, 1960); Kiev reservoir (Polishchuk, 1987); In Spanish reservoirs (de Manuel, 1991); Burdur Lake, Turkey (Emir, 1991); N & W Iceland (De Ridder, 1966a, 1967a, 1969b, 1970, 1972); Sava Lake, ex-Yugoslavia (Kalafatic, 1978); Lake Onega, R. F. (Nikolayev, 1972); Japanese inland waters (Yamamoto, 1960a); Isebekkanal, Hamburg, Germany (Caspers & Schulz, 1960); Lough Erne system, NW Ireland (Gibson *et al.*, 1980); Dübener Heide, N Germany (Wulfert, 1961); Balearic archipelago, Spain (de Manuel *et al.*, 1992); Brackish waters in the Lorraine orientale, France (De Ridder, 1969a); Lake Neusiedlersee, Austria (Donner, 1979); All over Belgium (De Ridder, 1986); Clay pits in Stuivekenskerke, Belgium (Espeel, 1979); Les Moëres-Hondschoote, France (De Maeseneer, 1979); Brabantse Biesbosch, NL (Leentvaar, 1960); Ponds at Mirwart, Belgium (Marlier & Wattiez, 1977); River Danube (Enaceanu & Brezeanu, 1970); River Elbe estuary, Germany (Schulz, 1961); Water-courses in the Bucegi mountains, Rom. (Godeanu, 1963b); Canal Leeds-Liverpool, UK (Galliford, 1960b); Shores of the White Sea, R.F. (Ghilarov, 1967); Obretin embanked basin, Danube delta, Rom. (Godeanu *et al.*, 1973); Small permanent ponds, Bucegi mts., Romania (Godeanu, 1969a); Near Debrecen, Hungary (Dévai, 1972); Shores of dammed or flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); Mouth regions of the Danube branch, & predeltaic area of the Danube in the Black Sea, Rom. (Popescu-Marinescu, 1974); River Danube, from Austria to Romania (Wawrik, 1968); Serbian section of the Danube (Zivkovic, 1968 & 1987); Lac Léman, Fr./CH (Martin, 1961; Balvay *et al.*, 1990; Balvay & Laurent, 1981, 1989, 1990a & 1990b); Lake Tüzer See, Neubrandenburg, Germany (Doll, 1984); All over the Netherlands (Dresscher, 1976); Salt marshes & brackish waters on Majorca, Sp. (De Ridder, 1967c); Canal of river Odra, Poland (Klimowicz, 1979); Near water works at Okocim, Poland (Klimowicz, 1975); River Vistula in the Warsaw area, Poland (Klimowicz, 1981); Anatolia, Turkey (Segers *et al.*, 1992); River Moldova, tributary to the Danube, Rom. (Prunescu-Arion, 1968); Lough Neagh, N Ireland (Andrew & Fitzsimons, 1992); Swedish Lapland (Pejler, 1962b); Lakes in N Sweden (Pejler, 1964); Lac d'Annecy, France (Balvay & Druart, 1992); Black Sea (Rudescu, 1961); Leczna-Wlodawa Lake district, E. Poland (Kowalczyk & Radwan, 1982); River Loire, in St. Laurent-les-Eaux, France (Pourriot *et al.*, 1982); 3 lakes of Sosnowickie, Poland (Radwan, 1969); Gemünderer Maar, Eifel, Germany (Oehms & Seitz, 1992); Hamburg area, Germany (Rühmann, 1961); Middle course of river Loire, France (Lair & Sargos, 1981); River Volga, R. F. (Mordukhai-Boltovskoi, 1979); Ponds in the Paris suburb, France (Pourriot, 1965); Lake Doiran, Macedonia, ex-Yugoslavia (Popovska-Stankovic, 1990); Garden ponds in Tokyo, Japan (Sudzuki, 1975);

Lago Trasimeno, Italy (Taticchi, 1968); Lake Biwa, Japan (Yamamoto, 1967 & 1968); Forest pond, Lembeek, Belgium (Van Elslande, 1975); All over Spain; Portugal: Beja (Velasco, 1990); Nat. Res. Leiemeersen, Assebroek; r. Yzer, Diksmuide, Belgium (De Ridder, 1992); Gravel pits along river Meuse, NL (Wibaut-Isebree Moens, 1964); Rybnik dam reservoir, Poland (Krzanowski, 1979); Impoundment Twistetalsperre, Nordhessen, G. (Meinel *et al.*, 1983); Water works Jungfernheide, Berlin, Germany (Ritterbusch, 1974); Lakes in S Sweden (Arnemo *et al.*, 1968); In meso- & polyhalinic sections of Lake Veerse Meer, NL (Bakker & De Pauw, 1975); Lake Bielersee, CH (Baugerter *et al.*, 1980; Berner-Fankhauser, 1986); Near Hamburg, Germany (Heckman, 1982); "Altes Land" near Hamburg, Germany (Caspers & Heckman, 1982; Heckman, 1986); River Loire, France (Lair, 1980); River Grabia basin, Poland (Pawlowski, 1960, 1968 & 1970); Rügener, Hiddenseer & Darszer Boddengewässer, NE Germany (Schwarz, 1963); Canals in Hran area, CSR (Terek, 1990c); Obretin Lake, Danube delta, Romania (Neagu-Godeanu *et al.*, 1968); Boatracing canal, Gent, Belgium (Vanderbeken, 1977; Coussement, 1982); Meuse Liégeoise, Belgium (Baiverlin, 1984); Akgöl, Selçuk-Izmir, Turkey (Ustaoglu & Balik, 1987); Lake Gebekirse, Izmir, Turkey (Ustaoglu & Balik, 1990b); Camargue, S France (De Ridder, 1960a & 1961); Handzame Canal, Diksmuide, Belgium (De Ridder, 1960b); Koyama-Ike, a coastal pond in Japan (Sudzuki & Fukuta, 1989); Lakes in NW Germany (Koste, 1974c); River Hase, NW Germany (Koste, 1976b); Lake Dümmer, NW Germany (Koste & Poltz, 1983 & 1984); Lake Alfsee, NW Germany (Koste & Poltz, 1987); Fish pond near Warsaw, Poland (Hillbricht-Ilkowska, 1964); Lakes of the Black Sea shore, Romania (Godeanu, 1970b); Karelian inland waters, R. F. (Kutikova, 1965)

- Nearctic region: Jenny Lake, Larix L. & L. Jasper, W N America (Thomasson, 1962); Bay of Quinte, Lake Ontario, Canada (Nogrady, 1988); Lake Ontario, Canada (Nauwerck, 1978); Colorado, USA (Turner, 1988); NE Canada (Chengalath & Koste, 1983); NW Canada (Chengalath & Koste, 1987); Cap Breton Island, Nova Scotia, Canada (Chengalath & Koste, 1988); Arctic N America (Chengalath & Koste, 1989); Kingston, Ontario, Canada (Nogrady, 1989); Milwaukee harbor & Lake Michigan, USA (Stemberger, 1974); Trapper's Lake, Colorado, USA (Pennak, 1966); Near Kingston, Ontario, Canada (Bērziņš, 1961); Lake Wabamun, Alberta, Canada (Gallup & Hickman, 1975); (Horkan *et al.*, 1977); Canada (Chengalath, 1977); Lake Michigan, USA (Sandgren & Lehman, 1990); Kalamazoo river, Michigan, USA (Prins & Davis, 1966); Ontario, Canada (Chengalath, Fernando & George, 1971); Laurentian Great Lakes (Stemberger, 1979); Northern Michigan inland lakes (Stemberger, 1990); Atchafalaya river basin, Louisiana, USA (Holland *et al.*, 1983); Lac Echo, Québec, Canada (Nogrady, 1976); Desaulniers reservoir, Québec, Canada (Pinel-Alloul *et al.*, 1982); Triangle Lake, Portage Cy, Ohio, USA (Havens, 1989 & 1991); Hogans Pond, Newfoundland, Canada (Davis, 1972); Long Lake & Madeline Lake, N Canada (Moore, 1980); Long Pond, St. John's, Newfoundland, Canada (O'Connell & Andrews, 1977)

- Oriental region: Mansbach L. & Anchar L., Kashmir valley, India (Sharma, 1987)

- Neotropical region: Argentina (Koste & José de Paggi, 1982; Modenutti & Claps, 1988); Rio Reconquista, prov. Buenos Aires, Argent. (Kuczynski, 1991b); Prov. Buenos Aires, Santa Cruz & Tierra del Fuego, Argentina; Chile (Olivier, 1965); Prov. Santa Cruz, Rio Negro, La Rioja, Santa Fé & Buenos Aires, Argentina (José de Paggi, 1990); Argentine Patagonia (Kuczynski, 1987b)

Notholca acuminata (Ehrenberg), f. *cincta* Williams, 1991

- Palaearctic region: Chainjoin Lake, N Tibet (Williams, 1991)

Notholca acuminata (Ehrenberg), f. *extensa* (Olofsson, 1918)

- Palaearctic region: poundment Saidenbach, Germany (Althaus, 1976); Spaarnewouder polder ditches, NL (Oosten, 1972)

- Nearctic region: Lake Ontario, Canada (Nauwerck, 1978); Northern Michigan inland lakes (Stemberger, 1990)

Notholca angulata (Daday, 1913)

- Palaearctic region: Palaearctis (Pejler, 1977); Mongolia (Koste, 1978)

Notholca baikalensis Jaschnov, 1922

- Palaearctic region: Palaearctis (Pejler, 1977); Endemic in Lake Baikal (Koste, 1974c); Lake Baikal (Kozhov, 1963); (Vassilieva & Kutikova, 1969)

Notholca bipalium (O.F. Müller, 1786)

- Palaearctic region: Sea and brackish pools in S Finland (Björklund, 1972a); Brackish pools in Norway (Eriksen, 1968; Björklund, 1972b); Coast of S Finland (Eriksen, 1969); Spain, Alps, Carpathes, C Eur. plain, UK, Iceland, Boreal highland & NW Russian taiga (Bērziņš, 1978); Lakes in Soviet Karelia, R. F. (Filimonova, 1976); W Iceland (De Ridder, 1969b, 1970 & 1972); Balearic Archipelago, Spain (de Manuel *et al.*, 1992); Near Kiel, Germany (Focke, 1961); Spain: Tarragona (Velasco, 1990)

- Nearctic region: Cap Breton Island, Nova Scotia, Canada (Chengalath & Koste, 1988); In Florida Saltwater psammon, USA (Turner, 1990b)

Notholca caudata Carlin, 1943

- Palaeartic region: Lakes in S Sweden (Arnemo *et al.*, 1968); Karelian inland waters, R. F. (Kutikova, 1965); Lac de Nantua, Ain, France (Balvay, 1985); Lake Bielersee, CH (Baugerter *et al.*, 1980; Berner-Fankhauser, 1986); Lakes in Estonia (Haberman, 1978); Coast of S Finland (Eriksen, 1969; Björklund, 1972b); Lakes in Sweden (Pejler, 1962a & 1965); 3 lakes in C Sweden (Pejler, 1962e); River Loire, France (Lair, 1980); Impoundment Wahnachtalsperre, near Bonn, G. (Laxhuber & Hartmann, 1988); C & S Sweden (Pejler & Bērziņš, 1989; Bērziņš & Pejler 1987, 1989a, 1989b, 1989c & 1989d); Lake Mälaren, Sweden (Lanner & Pejler, 1973; Grönberg, 1975); Palaeartic region (Pejler, 1977); Lac Léman, Fr./CH (Rougier, 1969; Naef & Martin, 1985; Balvay, 1989; Balvay & Laurent, 1981, 1989, 1990a & 1990b); Soviet Karelia, R. F. (Filimonova, 1976); Alps, C Eur. plain, Boreal highland, N Sweden, NW Russian taiga (Bērziņš, 1978); Waldviertel area, lower Austria (Naidenow & Wawrik, 1984); Lakes in C Sweden (Pejler, 1964); Lac d'Annecy, France (Balvay & Druart, 1992); River Loire in St. Laurent-les-Eaux, France (Pourriot *et al.*, 1982); Middle course of river Loire, France (Lair & Sargos, 1981); River Volga, R. F. (Mordukhai-Bolotovskoi, 1979)

- Nearctic region: Laurentian Great Lakes (Stemberger, 1979)

- Neotropical region: Chile & Argentina (Koste & José de Paggi, 1982); Chilean lakes (Schmid-Araya, 1991); Prov. Rio Negro, Argentina (José de Paggi, 1990); Chile (Löffler, 1962)

Notholca cinetura Skorikov, 1914

- Palaeartic region: Lakes in Estonia (Haberman, 1978); Palaearctic region (Pejler, 1977); Romania (Rudescu, 1960); Soviet Karelia, R. F. (Filimonova, 1976); C & E Eur. plains, UK, Boreal highland, NW Russian taiga (Bērziņš, 1978); Mologa river, R. F. (Riv'yer *et al.*, 1981); Lake Baikal, R. F. Endemic (Kozhov, 1963; Kutikova, 1978); Karelian inland waters, R. F. (Kutikova, 1965)

Notholca cornuta Carlin, 1943

- Palaeartic region: C & E Eur. plains, NW Russian taiga (Bērziņš, 1978); Palaeartic region (Pejler, 1977); Mologa river, R. F. (Riv'yer *et al.*, 1981); Volga river, R. F. (Mordukhai-Boltovskoi, 1979); River Danube (Enaceanu & Brezeanu, 1970)

- Nearctic region: Nearctic (Pejler, 1977)

Notholca foliacea (Ehrenberg 1838)

- Palaeartic region: Lake Erken, Sweden (Nauwerck, 1963); Lake Bodensee, near Konstanz (Althaus, 1962); Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); Scandinavian coastal waters (Thane-Fenchel, 1968); Hamburg area, Germany (Rühmann, 1961); Lakes Quackjeswater & Breedewater on Voorne Island, & Vogelmeer near Ymuiden, NL (Leentvaar, 1963); Lakes Zwanewater in Callantsoog, (NH), Muy on Texel & Oerd on Ameland, NL (Leentvaar, 1967); C Sweden (Pejler, 1972); N Swedish Lapland (Pejler, 1962a); Bear Island, Arctic Ocean (Pejler, 1974); Palaeartic region (Pejler, 1977); Romania (Rudescu, 1960); Lake Balaton, Hungary (Sebestyen, 1974); River Hase, NW Germany (Koste, 1976b); Lake Mälaren, Sweden (Grönberg, 1975); Fish ponds near Warsaw, Poland (Hillbricht-Ilkowska, 1964); Lake Kisajno, Mazurian lakeland, Poland (Klimowicz, 1964); Svalbard (Amren, 1964a, 1964b & 1964c); Lake Myvatn, Iceland (Adalsteinsson, 1974 & 1979); Lake Bielersee, CH (Berner-Fankhauser, 1986); 2 lakes in N Sweden (Axelson, 1961); Lakes in Estonia (Haberman, 1978); Pools in S Finland (Björklund, 1972a); Coast of S Finland (Eriksen, 1969); Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1986); Delta of river Danube, Romania (Godeanu & Zinevici, 1983); Impoundment Helme, near Kelbra, Kyffhäuser, Germany (Heynig, 1968); River Elbe near Hamburg, Germany (Caspers & Schulz, 1964); Lapland State Preserve, R. F. (Ghilarov, 1972); All over Europe; Caspian area (Bērziņš, 1978); Japanese inland waters (Yamamoto, 1960a); Karelian inland waters, R. F. (Kutikova, 1965); Hjarback Fjord, N Jutland, DK (Olrik *et al.*, 1984); In periphyton of mosses & *Myriophyllum* in the Danube & in some Alpine brooks, Austria (Donner, 1964); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); Shores of dammed or flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); Serbian section of river Danube (Zivkovic, 1968 & 1987); Lac Léman, Fr./CH (Martin, 1961; Rougier, 1969; Balvay, 1989; Balvay & Laurent, 1981, 1989, 1990a & 1990b); All over the Netherlands (Dresscher, 1976); Lake Konstanz, Germany (Walz *et al.*, 1987); River Danube (Enaceanu & Brezeanu, 1970); River Elbe estuary, Germany (Schulz, 1961); Knowsley Park, Liverpool, UK (Galliford, 1964); Lake Zürichsee, CH (Nipkow, 1961); River Moldova, tributary to the Danube, Rom. (Prunescu-Arion, 1968); Swedish Lapland (Pejler, 1962b); Lakes in C Sweden (Pejler, 1964); Lac d'Annecy, France (Balvay & Druart, 1992); 3 lakes of Sosnowickie, Poland (Radwan, 1969); S, SW & N Iceland (De Ridder, 1966a, 1967a, 1969b, 1970, 1972); Lake Biwa-ko, Japan (Yamamoto, 1960b); Edgeøya, Svalbard (De Smet *et al.*, 1988b); Bjørnøya (Bear Island), Svalbard (De Smet, 1988); Aylesbury, Bucks., UK (Hollowday & Hussey, 1989); Volga river, R. F. (V'yushkova & Lakhnova, 1974); Gulf of Bothnia, Gulf of Finland, Baltic Sea (Bērziņš, 1960); Inundation area in the Danube delta, Romania (Dorobantu, 1964); River Grabia basin, Poland (Pawlowski, 1968 & 1970); Rügener, Hiddenseer & Darszer Boddengewässer, NE Germany (Schwarz, 1963); Canal Isebek, Hamburg, Germany (Caspers, 1964; Caspers & Schulz, 1960); W Svalbard

(Thomasson, 1961); Lake Piaseczno, E Poland (Radwan *et al.*, 1984)

- Nearctic region: Arctic N America (Chengalath & Koste, 1989); Laurentian Great Lakes (Stemberger, 1979); Northern Michigan inland lakes (Stemberger, 1990); Lake Wabamun, Alberta, Canada (Gallup & Hickman, 1975); Brainard Lake, N Colorado, USA (Thomasson, 1964b); Two Medicine Lake, Waterton L., Grizzly L., (Thomasson, 1962); Larix L., Lower Consolation Lake, Western N America, Nearctic region (Pejler, 1977); Lake Ontario, Canada (Nauwerck, 1978); Canada (Chengalath, 1977); NE Canada (Chengalath & Koste, 1983); NW Canada (Chengalath & Koste, 1987); Milwaukee harbor, L. Michigan, USA (Stemberger, 1974); Trapper's Lake, Colorado, USA (Pennak, 1966); Bay of Quinte, Lake Ontario, Canada (Nogrady, 1988)

- Australian region: Campbell Island, New Zealand (Russell, 1960); Australian region (Pejler, 1977)

- Neotropical region: Chile (Löffler, 1962); Chilean lakes (Schmid-Araya, 1991); Neotropical region (Pejler, 1977); Prov. Rio Negro, Argentina (José de Paggi, 1990); Araucarian lakes, E of the Andes, Chile (Thomasson, 1963b)

Notholca gaigalasi Kutikova, 1970

- Palaearctic region: Russian Federation (Kutikova, 1970); Palaearctic region (Pejler, 1977)

Notholca haueri Thomasson, 1963

- Palaearctic region: Palaearctic region (Pejler, 1977); Lake Baikal, R. F. (Afanés'jeva, 1975; Kutikova, 1978)

- Neotropical region: Chile (Koste & José de Paggi, 1982); Chilean lakes (Schmid-Araya, 1991); Neotropical region (Pejler, 1977); Prov. Chubut, Rio Negro & Neuquen, Argentina (José de Paggi, 1990); Araucarian lakes, W & E of the Andes, Chile (Thomasson, 1963b)

Notholca jasnitskii Tikhomirov, 1929

- Palaearctic region: Palaearctis (Pejler, 1977); Lake Baikal, R. F. (Kozhov, 1963)

Notholca kostei Chengalath, 1978

- Nearctic region: SW basin of Great Slave Lake, Canada (Chengalath, 1978)

Notholca kozhovi Vassilieva & Kutikova, 1969

- Palaearctic region: Lake Baikal, R. F. (Vassilieva & Kutikova, 1969); Palaearctic region (Pejler, 1977)

Notholca lamellifera Vassilieva & Kutikova, 1969

- Palaearctic region: Lake Baikal, R. F. (Vassilieva & Kutikova, 1969); Palaearctic region (Pejler, 1977); Lake Baikal, R. F. Endemic (Kutikova, 1978)

Notholca lamellifera Vassilieva & Kutikova, f. *determinata* Vassilieva & Kutikova, 1969

- Palaearctic region: Lake Baikal, R. F. (Vassilieva & Kutikova, 1969)

Notholca labis Gosse, 1887

- Palaearctic region: Lake Myvatn, Iceland (Adalsteinsson, 1974 & 1979); Romania (Rudescu, 1960); Lake Bodensee, near Konstanz, Germany (Koch-Althaus, 1962); Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Kasprzak & Ronneberger, 1982); Impoundment Saldenbach, Erzgebirge, Germany (Beuschold, 1961); Lake Groszer Müggelsee, Berlin, Germany (Barthelmes, 1960); Lake Bielersee, CH (Bernier-Fankhauser, 1986); 2 lakes in N Sweden (Axelson, 1961); Skopun (Heimara Halsavatn), Faröer (De Smet, 1988); Lakes in Estonia (Haberman, 1978); Coast of S Finland (Björklund, 1972; Eriksen, 1969); S Norway (Björklund, 1972a); River Loire, France (Lair, 1980); Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1986); Delta of river Danube, Romania (Godeanu & Zinevici, 1983); Lake Numasawa, Japan (Sudzuki *et al.*, 1989); Koyama-Ike, a coastal pond in Japan (Sudzuki & Fukuta, 1989); Darnsee near Epe, NW Germany (Koste, 1962); River Hase, NW Germany (Koste, 1976b); Lake Alfsee, NW Germany (Koste & Poltz, 1987); Norfolk Broads, UK (Irvine *et al.*, 1990); Fishponds near Warsaw, Poland (Hillbricht-Ilkowska, 1964); Lac Léman, Fr./CH (Rougier, 1969; Balvay, 1989; Balvay & Laurent, 1981, 1989, 1990a & 1990b); Impoundment Helme, near Kelbra, Kyffhäuser, Germany (Heynig, 1968); River Elbe near Hamburg (Caspers & Schulz, 1964); Lapland State Preserve, R.F. (Ghilarov, 1972); Impoundment Kninicki, CSR (Kubicek, 1964); Lake Mikolajskie & L. Sniardy, Mazurian lakeland, Poland (Kosicki, 1960); ? Lake Muy on Texel, NL (Leentvaar, 1967); N Swedish Lapland (Pejler, 1962a); Palaearctic region (Pejler, 1977); Björnøya (Bear Island), Svalbard (De Smet, 1988); Ellesmere district, UK (Galliford, 1960); River Danube (Enaceanu & Brezeanu, 1970); Europe, R.F. & N Asia (Koste & Shiel, 1987b); Almost all over Europe; Caspian area (Bērziņš, 1978); Small rivers, tributary to Kiev reservoir, R.F. (Polishchuk, 1987); Spanish reservoirs (de Manuel, 1991); River Grabia basin, Poland (Pawlowski, 1968, 1970 & 1973); Impoundment in E Bohemia, CSR (Sladeczkova & Sladeczek, 1960); Camargue, S France (De Ridder, 1960a & 1961); N, SW & W Iceland (De Ridder, 1966a, 1967a, 1969b, 1970 & 1972); River Elbe estuary, Germany (Schulz, 1961); Korea (Turner, 1986); Japanese inland waters (Yamamoto, 1960a); Isebekkanal, Hamburg, Germany (Caspers & Schulz, 1960); Dübener Heide, N Germany (Wulfert, 1961); Waldviertel area, lower Austria (Naidenow & Wawrik, 1984); Les Moères-Hondschoote, France (De Maeseneer, 1979); Lake Konstanz, Germany (Walz *et al.*, 1987); In periphyton of mosses & *Myriophyllum* in the Danube, and in some Alpine

brooks, Austria (Donner, 1964); Shores of dammed or flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); Zuidlaardermeer, Abcoudemeer, Ysselmeer, dune lakes, L. Vijverhof in Nieuwersluis & Loosdrecht lakes, NL (Dresscher, 1976); River Vistula in the Warsaw area, Poland (Klimowicz, 1981); Lake Baikal, R.F. (Kozhov, 1963); Lake Zürichsee, CH (Nipkow, 1961); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); Karelian inland waters, R.F. (Kutikova, 1965); Swedish Lapland (Pejler, 1962b); Pond Heinrichsweiher, Bonn, Germany (Reck, 1981); Ponds in Oltina, SE Dobrogea, Romania (Popescu-Gorj & Costea, 1961); River Loire in St. Laurent-les Eaux, France (Pourriot *et al.*, 1982); 3 lakes of Sosnowickie, Poland (Radwan, 1969); Middle course of river Loire, France (Lair & Sargos, 1981); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Garden ponds in Tokyo, Japan (Sudzuki, 1975); Periphytic biota in sewages & park waters, Jap. (Sudzuki, 1981); Serbian section of river Danube (Zivkovic, 1987); Lake Biwa, Japan (Yamamoto, 1960b & 1967); Reservoir Vrané, 17 km S of Prague, CSR (Sladeczek, 1962); 2 impoundments in Spain (Velasco, 1990)

- Nearctic region: Canada (Chengalath, 1977); Ontario, Canada (Chengalath & Fernando, 1973); NE Canada (Chengalath & Koste, 1983); NW Canada (Chengalath & Koste, 1987); Ontario, Canada (Chengalath, Fernando & Koste, 1971); Laurentian Great Lakes (Stemberger, 1979); Northern Michigan inland lakes (Stemberger, 1990); Adirondack Lakes, NY State, USA (Siegfried *et al.*, 1984); Nearctic region (Pejler, 1977)

- Oriental region: Yamuna river, Delhi, India (Sarma, 1988)

- Australian region: Tasmania (Sudzuki, 1985); A widespread but rare freshwater species. One Tasmanian record (Koste & Shiel, 1987b)

- Neotropical region: Chile (Löffler, 1962); Argentina & Chile (Koste & José de Paggi, 1982); Chilean lakes (Schmid-Araya, 1991); Prov. Tierra del Fuego & Chubut, Argentina (José de Paggi, 1990)

- Neotropical region: (Pejler, 1977); Araucarian lakes, W & E of the Andes, Chile (Thomasson, 1963b)

Notholca labis Gosse, f. *frigida* (Jaschnov, 1922)

- Palaeartic & ? Nearctic region: (Pejler, 1977)

Notholca labis Gosse, f. *limnetica* Levander, 1901

- Palaeartic region: Lac de Pétichet, Isère, France (Gay, 1979); Near Kiel, Germany (Focke, 1961); Soviet Karelia, R.F. (Filimonova, 1976); Sava lake, ex-Yugoslavia (Kalafatic, 1978); Sempachersee, CH (Zimmermann, 1974); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Coast of S Finland (Eriksen, 1969); Shores of dammed or flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); Spaarnwouder polder ditches, NL (Oosten, 1972); Spain: Alicante (Velasco, 1990)

- Nearctic region: Lake Tahoe & Cavell Lake, Western N America (Thomasson, 1962)

- Neotropical region: Chile (Löffler, 1962; Koste & José de Paggi, 1982); Tierra del Fuego, Argentina (José de Paggi, 1990)

Notholca latistyla Olofsson, 1918

- Palaeartic region: Svalbard (Amren, 1964b); Palaeartic region (Pejler, 1977); N Sweden (Bērziņš, 1978); Edgeøya, Svalbard (De Smet *et al.*, 1988b); Bjørnøya (Bear Island), Svalbard (De Smet, 1988); Hopen, Svalbard archipelago (De Smet, 1990)

Notholca laurentiae Stemberger, 1976

- Nearctic region: Lake Huron (Laurentian Great Lakes, N Am.) (Stemberger, 1976); Laurentian Great Lakes (Stemberger, 1979); Bay of Quinte, Lake Ontario, Canada (Nogrady, 1988)

Notholca liepettersoni Björklund, 1972

- Palaeartic region: Coast of S Norway (Björklund, 1972b)

Note: After Björklund, 1972b, several older records have to be reported to *N. liepettersoni*: coast of Norway (Lie-Pettersen, 1906); Japan (Hada, 1939); ? Svalbard (Amren, 1964), Hudson river, NY, USA; brackish waters in Canada (Neal, unpublished).

Notholca lyrata Tikhomirov, 1927

- Palaeartic region: Lake Baikal (Kozhov, 1963); Palaeartic region (Pejler, 1977)

Notholca marina Focke, 1961

- Palaeartic region: Brackish waters in N Germany (Focke, 1961); Espesgrend, W Norway (Björklund, 1972b)

Note: After Björklund, 1972b, several older records have to be reported to *N. marina*: S coast of Finland (Levander, 1894); around Bergen, Norway (Lie-Pettersen, 1906); N Norway (von Hofsten, 1912); brackish water channel in Malmö, Sweden (Carlin, 1943); Lake Cullera, near Valencia, Spain (Miracle & Vicente, 1983); Brackish waters near Bruges, Belgium (De Ridder & Verheye, 1980; De Ridder, 1986); ? L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); Spain: Valencia (Velasco, 1990)

Notholca michiganensis Stemberger, 1990

- Nearctic region: Northern Michigan inland lakes (Stemberger, 1990)

Notholca michiganiensis Stemberger, 1976

- Nearctic region: Burt Lake, Michigan, USA (Stemberger, 1976)

Notholca olchonensis Tikhomirov, 1927

- Palaearctic region: Palaearctis (Pejler, 1977); Lake Baikal, R.F. (Vassilieva & Kutikova, 1969; Kozhov, 1963; Koste, 1974c)

Notholca olchonensis Tikhomirov, f. *deviata* Vassilieva & Kutikova, 1969

- Palaearctic region: Lake Baikal, R.F. (Vassilieva & Kutikova, 1969)

Notholca psammarina Buchholz & Rühmann, 1956

- Palaearctic region: C Eur. plain, Iceland, Boreal highland (Bērziņš, 1978); Pools with brackish water in W Norway (Eriksen, 1968); Id. & brackish water pools in S Finland (Björklund, 1972b); Near Kiel, Germany (Focke, 1961); W Iceland (De Ridder, 1969b & 1972)

Note: old records after Björklund, 1972b: German N coast (Remane, 1929); Id. (Buchholz & Rühmann, 1956); Id. (Focke, 1961); Öresund & Isefjorden, DK (Thane-Fenchel, 1968); Iceland (De Ridder, 1969); Scandinavian coastal waters (Thane-Fenchel, 1968)

- Nearctic region: Greens Lake, Beaver Island, Michigan, USA (Foran & King, 1982)

Notholca rectospina Kutikova, 1964

- Palaearctic region: Palaearctis (Pejler, 1977)

Notholca salina Focke, 1961

- Palaearctic region: Espegrend, S Norway (Björklund, 1972b)

Note: old records after Björklund, 1972b: Germany (Hauer, 1925; Wulfert, 1942; Althaus, 1957); Japan (Hada, 1939); Venice canals (Pasquele, 1940); Adriatic coast (Wulfert, 1943); North Sea & Baltic coast (Focke, 1961); Mallorca (De Ridder, 1967). All these localities have brackish water. Lake Cullera, near Valencia, Spain (Miracle & Vicente, 1983); N Eur. tundra (Bērziņš, 1978); Balearic Archipelago, Spain (de Manuel *et al.*, 1992); Spain: Tarragona & Valencia (Velasco, 1990)

- Nearctic region: N American lakes (Stemberger, 1976); In Florida saltwater psammon, USA (Turner, 1990b)

- Antarctic region: Potter peninsula (José de Paggi, 1982a); Potter peninsula, 25 de Mayo Island, South Shetlands Islands, Antarctica (José de Paggi, 1986); Antarctica & Subantarctica (José de Paggi & Koste, 1984); Antarctica (Dartnall & Hollowday, 1985); (Sudzuki, 1988)

Notholca salina dumonti De Ridder, 1980

- Palaearctic region: Brackish waters near Bruges, Belgium (De Ridder & Verheye, 1980; De Ridder, 1986)

Notholca squamula (O.F. Müller, 1786)

- Palaearctic region: Svalbard (Amren, 1964b & 1964c); Lake Myvatn, Iceland (Adalsteinsson, 1974 & 1979); La Mancha, Castilia, Spain (Armengol *et al.*, 1975); Lakes in S Sweden (Arnemo *et al.*, 1968); Lake Bielersee, CH (Baugerter *et al.*, 1980; Berner-Fankhauser, 1983 & 1986); River Klyas'ma, R.F. (Bogoslowski, 1961); Prov. Heiluntian, China (Bogoslowski, 1962); Lago Scuro Parmense, N Italy (Antonietti *et al.*, 1988); Lake Balaton, Hungary (Zankai & Ponyi, 1970 & 1971a; Zankai, 1989); Edgeøya, Svalbard (De Smet *et al.*, 1988b); In brackish and fresh waters of Pal. reg. (Koste & Shiel, 1987b); C & S Sweden (Pejler & Bērziņš, 1989); Alpine lakes, Sierra Nevada, Spain (Morales-Baquero *et al.*, 1989); Lake Sempachersee, CH (Zimmermann, 1974); Minorca, Spain (de Manuel, 1990); Lake Orog-Nur, Gobi desert, Mongolia (Koste & Wulfert, 1964); River Hase, NW Germany (Koste, 1976b); Lake Dümmer, NW Germany (Koste & Poltz, 1983 & 1984); Lake Mälaren, Sweden (Grönberg, 1975); Lake Alfsee, NW Germany (Koste & Poltz, 1987); Afghanistan (Bērziņš, 1961); Lakes in Estonia (Haberman, 1978); Jotunheimen, Norway high mountains (Blakar & Jacobsen, 1979); Nordish coast & coastal brackish waters (Eriksen, 1968); Norway: high mountains (Björklund, 1972b); River Loire, France (Lair, 1980); Loch Leven, Scotland (May, 1983, 1986 & 1987); Large lakes in Estonia (Haberman, 1983); Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1986); Delta of river Danube, Romania (Prunescu-Arion, 1989; Godeanu & Zinevici, 1983); Impoundments in the river Bistrila valley, Rom. (Corneanu, 1972); Waldviertel area, lower Austria (Naidenow & Wawrik, 1984); Balearic Archipelago, Spain (de Manuel *et al.*, 1992); Brackish waters in the Lorraine orientale, France (De Ridder, 1969a); Lake Neusiedlersee, Austria (Donner, 1972b & 1979); All over Belgium (De Ridder, 1986); River Eau Blanche in Aublain, Belgium (De Ridder, 1980); Lake Konstanz, Germany (Walz *et al.*, 1987); River Danube (Enaceanu & Brezeanu, 1970); River Elbe estuary, Germany (Schulz, 1961); Near Kiel, Germany (Focke, 1961); Peat bog Chambédaze, Puy-de-Dôme, France (Francez, 1982 & 1987); Peat bogs in the Auvergne, France (Francez, 1981 & 1984c); Canal Leeds-Liverpool, UK (Galliford, 1960b); Obretin embanked basin, Danube delta, Rom. (Godeanu *et al.*, 1973); Impoundment Weidatalsperre, E Thüringen, G. (Hoffmann, 1966); Lake Zürichsee, CH (Nipkow, 1961); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); Karelian inland waters, R.F. (Kutikova, 1965); N & W Iceland (De Ridder, 1966a, 1967a, 1969b, 1970 & 1972); Delta of river Danube, Romania (Zinevici

& Teodorescu, 1990); Fishponds near Warsaw, Poland (Hillbricht-Ilkowska, 1964); Lac Léman, Fr./CH (Balvay & Laurent, 1990a & 1990b); Impoundment Helme, near Kelbra, Kyffhäuser, Germany (Heynig, 1968, 1974 & 1980); River Elbe near Hamburg, Germany (Caspers & Schulz, 1964); Volga river, R.F. (V'yushkova & Lakhnova, 1974); Small streams & rivers, Soviet Karelia, R.F. (Filimonova, 1976); Lake Baikal, R.F. (Eggert, 1973); All over Europe, R.F. (Bērziņš, 1978); Small rivers, tributary to Kiev reservoir, R.F. (Polishchuk, 1987); In Spanish reservoirs (de Manuel, 1991); Soviet section of river Danube (Parchuk, 1985); River Mologa, R.F. (Riv'yer *et al.*, 1981); Canal Isebek, Hamburg, Germany (Caspers & Schulz, 1960; Caspers, 1964); Lake Zalkha-gel, Caucasus, R.F. (Kasimov, 1981); Sava Lake, ex-Yugoslavia (Kalafatic, 1978); Lakes in the Kuokkel area, N Swedish Lapland (Persson, 1978); Peat bogs Chambedaze & La Godivelle, Massif Central, France (Francez & Dévaux, 1985); W Svalbard (Thomasson, 1961); Korea (Turner, 1986); Japanese inland waters (Yamamoto, 1960a); Lough Erne system, NW Ireland (Gibson *et al.*, 1980); Dübener Heide, N Germany (Wulfert, 1961); Artificial ponds near Köln, Germany (Trahms, 1972); Near Debrecén, Hungary (Dévai, 1972); In periphyton of mosses and *Myriophyllum* in the Danube and in some Alpine brooks, Austria (Donner, 1964); Shores of dammed and free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); River Salzach & its tributaries, Austria (Donner, 1970); Mouth areas of the Danube branches & predeltaic area of the Danube in the Black Sea, Rom. (Popescu-Marinescu, 1974); Serbian section of river Danube (Zivkovic, 1968 & 1987); Lac Léman, Fr./CH (Martin, 1961; Balvay, 1989; Balvay & Laurent, 1981 & 1989); Peat bogs Chambedaze & La Godivelle, Massif Central, France (Francez, 1988); All over the Netherlands (Dresscher, 1976); Salt marshes on Majorca Island, Spain (De Ridder, 1967c); Brackish waters in the Lorraine orientale, France (De Ridder, 1969a); River Vistula, in the Warsaw area, Poland (Klimowicz, 1981); Canal of river Odra, Poland (Klimowicz, 1979); Near Water works at Okocim, Poland (Klimowicz, 1975); Sewage ponds near Czestochowa, Poland (Klimowicz, 1968); Small water bodies in the Mikolajskie area, Pol. (Klimowicz, 1967); Anatolia, Turkey (Segers *et al.*, 1992); Lake Baikal, R.F. (Kozhov, 1963); Ponds at Mirwart, Belgium (Marlier & Wattiez, 1977); Lowland brook-pond system at Boom, Belgium (Maes, 1985); Lake Czarny & L. Zielony, Tatra mts. Poland (Gliwicz, 1967); Lake Aydat & L. Chambon, Puy-de-Dôme, Fr. (Persoone *et al.*, 1968); River Moldova, tributary to the Danube, Rom. (Prunescu-Arion, 1968); Lac d'Annecy, France (Balvay & Druart, 1992); Black Sea (Rudescu, 1961); Pond Heinrichsweiher, Bonn, Germany (Reck, 1981); Leczna-Wlodawa Lake District, E Poland (Kowalczyk & Radwan, 1982); River Loire in St. Laurent-les Eaux, France (Pourriot *et al.*, 1982); 3 lakes of Sosnowickie, Poland (Radwan, 1969); Weinfelder Maar & Pulvermaar, Eifel, Germany (Oehms & Seitz, 1992); Hamburg area, Germany (Rühmann, 1961); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); River Sambre, in Sassegnies & Hachette, France (Waeyaert, 1972); Ponds in the Paris suburb, France (Pourriot, 1965); Lake Doiran, Macedonia, ex-Yugoslavia (Popovska-Stankovic, 1990); Lago Trasimeno, Italy (Taticchi, 1968); Lake Stechlinsee, Brandenburg, Germany (Ronneberger & Schönborn, 1985); All over Spain; Balears (Velasco, 1990); Lake Biwa-ko, Japan (Yamamoto, 1960b); Waters near river Bodrog, NE Hungary (Dévai *et al.*, 1972/1973); Pools Erpewaaien, near Nijmegen, NL (Leentvaar, 1970); Impoundment Twistetalsperre, Nordhessen, G. (Meinel *et al.*, 1983); Water works Jungfernhöhe, Berlin, Germany (Ritterbusch, 1974); Tap water, Gent, Belgium (De Ridder, 1992); Slovenia, ex-Yugoslavia (Markic, 1983); Sierra Nevada, Spain (Morales-Baquero, 1987); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); Hortobagy Nat. Park, Hungary (Forro & Ronkay, 1983); Man-made lake Zegrzynskie, Poland (Dusoge *et al.*, 1985); Nat. Res. Jursky Sur, CSR (Hudec, 1978); Near Asperg, Württemberg, Germany (Klement, 1960); Lake Kisajno, Mazurian lakeland, Poland (Klimowicz, 1964); Lake Taltowisko, Mazurian lakeland, Poland (Klimowicz, 1972); Impoundment Kninicki, CSR (Kubicek, 1964); Lake Mälaren, Sweden (Lanner & Pejler, 1973); Lake Breedewater, Voorne & Vogelmeer, Ymuiden, NL (Leentvaar, 1963); Broad & peat pits in NW Overijssel, NL (Leentvaar, 1965); N Swedish Lapland (Pejler, 1962a); Palaeartic region (Pejler, 1977); Lunzer Obersee, Austria (Mikschi, 1989); Inundation area of the Danube delta, Romania (Dorobantu, 1964); Hopen, Svalbard archipelago (De Smet, 1990); Lower Silesia, Poland (Pawlowski, 1960); Lake Volvi, Macedonia, Greece (Zarfdjian *et al.*, 1990); River Grabia basin, Poland (Pawlowski, 1968, 1970 & 1973); Rügener, Hiddenseer & Darszer Boddengewässer, N Germany (Schwarz, 1963); Lake Balaton, Hungary (Zankai & Kertesz, 1967; Zankai, 1968); Impoundments in E Bohemia, CSR (Sladeckova & Sladeczek, 1960); Canals in Hran area, CSR (Terek, 1990c); Lake Donk, Overmere, Belgium (Dumont, 1968b); Meuse Liégeoise, Belgium (Baiverlin, 1984); Karagöl, near Izmir, Turkey (Ustaoglu, 1986); Akgöl, Selçuk-Izmir, Turkey (Ustaoglu & Balik, 1987); Lake Kus, Turkey (Ustaoglu & Balik, 1990a); Lake Gebekirse, Izmir, Turkey (Ustaoglu & Balik, 1990b); Camargue, S France (De Ridder, 1960a & 1961) - Nearctic region: Nearctic (Pejler, 1977); Colorado, USA (Turner, 1988); Cap Breton Island, Nova Scotia, Canada (Chengalath & Koste, 1988); NW Canada (Chengalath & Koste, 1987); Arctic N America (Chengalath & Koste, 1989); Cape Herschel, Ellesmere Island, NWT, Canada (Nogrady & Smol, 1989); Canada (Chengalath, 1977); Ontario, Canada (Chengalath & Fernando, 1973); Lake Michigan, USA

(Stemberger & Evans, 1984); L. Michigan & Milwaukee harbor, USA (Stemberger, 1974); Nearctic region (brackish & fresh water) (Koste & Shiel, 1987b); Kingston, Ontario, Canada (Nogrady, 1989); River Ocqueoc, Michigan, USA (Beach, 1960); Ontario, Canada (Chengalath, Fernando & George, 1971); Laurentian Great Lakes (Stemberger, 1979); Northern Michigan inland lakes (Stemberger, 1990); Lac Echo, Québec, Canada (Nogrady, 1976); Bay of Quinte, Lake Ontario, Canada (Nogrady, 1988); Lake Ontario, Canada (Nauwerck, 1978); Northern Ontario Lakes, Canada (Roff & Kwiatkowski, 1977); Waterton Lake, Grizzly L., Larix L., L. Agnes & Cavell L., Western N America (Thomasson, 1962); Mowich Lake, mt. Rainier Nat. Park, Washington State, USA (Larson, 1973)

- Oriental region: India (Sharma & Michael, 1980; Sudzuki, 1989); Indian region (Pejler, 1977); India: Ladak & Kashmir (Sharma, 1987)

- Australian region: In many localities in Australia (Bērziņš, 1982); Lake Purrumbete & L. Elingamite, freshwater Australian crater lakes (Green, 1981); ? Tasmania (Koste & Shiel, 1987); Australian region (Pejler, 1977); Vic, Aust. (Koste & Shiel, 1980c); Notogaea (Vic, Tas, NZ); Campbell Island (Koste & Shiel, 1987b); Boggy Creek, S Tasmania; S Vic, Aust. (Koste, Shiel & Tan, 1988); Akatore Creek & Christchurch, New Zealand; Campbell Island (Russell, 1960)

- Neotropical region: Las Hermanas stream & Arroyo del Medio river, NW Buenos Aires, Argentina (Modenutti & Claps, 1988); Prov. Chubut, Argentina (José de Paggi, 1990); Araucarian lakes, E of the Andes, Chile (Thomasson, 1963b)

- Antarctic region: Signy Island, Antarctica (Dartnall, 1977); Antarctica & Subantarctica (José de Paggi, 1984); Subantarctica (Kerguelen) (Koste & Shiel, 1987b); Antarctica (Sudzuki, 1988); Studer Lake, Kerguelen Archipelago; Novaja Zemlja, N Asia; Taymir peninsula; Pamir: Karakyl Lake, 4000 m altitude (Lair & Koste, 1984)

Notholca squamula (O.F. Müller), f. *frigida* Jaschnov, 1922

- Palaeartic region: Palaeartic & ? Nearctic region (Pejler, 1977); Lake Balaton, Hungary (Zankai, 1984); Lakes in Estonia (Haberman, 1978)

Notholca squamula (O.F. Müller), f. *lapponica* Ruttner-Kolisko, 1966

- Palaeartic region: Törnetrask, Swedish Lapland (Ruttner-Kolisko, 1966); Scandinavia (Koste, 1978); Palaeartic region (Pejler, 1977); Alps & N Sweden (Bērziņš, 1987)

- Nearctic region: NW Canada (Chengalath & Koste, 1987); Arctic N America (Chengalath & Koste, 1989)

Notholca squamula (O.F. Müller), f. *mülleri* Focke, 1961

- Palaeartic region: Brackish waters in N Germany (Focke, 1961); Coast of S Finland (Eriksen, 1969)

Notholca striata (O.F. Müller, 1786)

- Palaeartic region: Svalbard, in brackish waters (Amren, 1964b & 1964c); In meso- and polyhaline sections of L. Veerse Meer, NL (Bakker & De Pauw, 1975); Lakes in Estonia (Haberman, 1978); Coast of S Norway (Björklund, 1972b); All over Europe; Caucasus, Caspian area (Bērziņš, 1978); Gulf of Finland, G. of Riga, Baltic Sea, Belt Sea, Kattegat, Skagerak, N & S North Sea, English Channel West, Bristol Channel & Irish Sea, S & W Ireland, Norwegian Sea, Barents Sea (Bērziņš, 1960); In Spanish reservoirs (de Manuel, 1991); Soviet section of river Danube, R.F. (Parchuk, 1985); Rügener, Hiddenseer & Darszer Boddengewässer, NE Germany (Schwarz, 1963); Lake Balaton, Hungary (Zankai & Kertesz, 1967; Zankai, 1968); River Yzer, Diksmuide, Belgium (De Ridder, 1960b & 1992); W Iceland (De Ridder, 1969b & 1972); Isebekkanal, Hamburg, Germany (Caspers & Schulz, 1960); Lough Erne system, NW Ireland (Gibson *et al.*, 1980); Balearic Archipelago, Spain (de Manuel *et al.*, 1992); Oostende, Belgium (De Ridder, 1986); Lotenhulle, Belgium & les Moères-Hondschoote, France (De Maeseneer, 1979); River Danube (Enaceanu & Brezeanu, 1970); Shores of the White Sea & the Barents Sea, R.F. (Ghilarov, 1967); Lac Léman, Fr./CH (Balvay & Laurent, 1981); Salt marsh on Majorca Island, Spain (De Ridder, 1967c); In all brackish waters of the Netherlands (Dresscher, 1976); Black Sea (Rudescu, 1961); Middle course of river Loire, France (Lair & Sargos, 1981); Scandinavian coastal waters (Thane-Fenchel, 1968); Spain: Oviedo & Tarragona (Velasco, 1990)

- Nearctic region: Hudson river, NY, USA (Björklund, 1972b); Colorado river, USA (Turner, 1977); Canada (Chengalath, 1977); Lake Ontario, Canada (Nauwerck, 1978)

- Neotropical region: Argentina & Chile (Koste & José de Paggi, 1982); Chilean lakes (Schmid-Araya, 1991)

Notholca striata (O.F. Müller), f. *americana* Stemberger, 1974

- Nearctic region: Lake Michigan & Milwaukee harbor, USA (Stemberger, 1974)

Notholca tibetica Williams, 1991

- Palaeartic region: Chaingoin Lake, N Tibet (Williams, 1991)

Notholca triarthroides Skorikov, 1903

- Palaeartic region: Lake Baikal, R.F. Endemic (Kozhov, 1963; Koste, 1974c); Palaeartic region (Pejler, 1977); Soviet Karelia, R.F. (Filimonova, 1976); NW Russian taiga (Bērziņš, 1978); Karelian inland waters, R.F. (Kutikova, 1965)

Notholca verae Kutikova, 1958

- Antarctic region: Antarctic region (Pejler, 1977); Antarctica (Dartnall, 1983); Antarctica & Subantarctica (José de Paggi & Koste, 1984); Antarctica (Everitt, 1981; Sudzuki, 1988); Moss Lake, Signy Island, Antarctica (Priddle & Dartnall, 1978); Ablation Point area, Alexander Island, Antarctica (Heywood, 1977); In 2 lakes in the Bunger Hills, E coast of Antarct. (Kutikova, 1964a & 1964b)

Notholca walterkoste José de Paggi, 1982

- Neotropical region: Lake Titicaca, Peru/Bolivia & Lagunilla Saracocha, Andes (Hollowday & Hussey, 1989)

- Antarctic region: Potter peninsula, 25 de Mayo Island, South Shetlands Islands, Antarctica (José de Paggi, 1982a & 1986); Antarctica & Subantarctica (José de Paggi & Koste, 1984); Antarctica (Sudzuki, 1988); S Orkney Islands, S Georgia, Alexander Island, off the Grahamland peninsula (Hollowday & Hussey, 1989)

Notholca walterkoste José de Paggi, f. *reducta* Dartnall & Hollowday, 1985

- Antarctic region: South Orkney Islands, Antarctica (Dartnall & Hollowday, 1985)

Notholca spec.

- Palaearctic region: Lagoon of Cullera, 35 km of Valencia, Spain (Miracle *et al.*, 1988); Lake Königssee, Bavaria, Germany (Laxhuber, 1987); Lake Bolsena & L. Vici, C Italy (Ferrari, 1972); Lake Blankvatn, near Oslo, Norway (Larsson, 1971); Delta of river Danube, Romania (Prunescu-Arion, 1989); Pond Botanical Garden, Gent, Belgium (Verheye, 1980); Rheinisches Braunkohlenggebiet, near Zülpich, G. (Küsters *et al.*, 1975); Lough Erne system, NW Ireland (Gibson *et al.*, 1980); Estuary of river Elbe, Germany (Giere, 1968); Lakes in Swedish Lapland (Pejler, 1962d); Middle course of river Loire, France (Lair & Sargos, 1981); Dal Lake, Kashmir Himalayan lake (Vass & Zutshi, 1983); Lake Baikal, R.F. (Koshov, 1961)

- Nearctic region: Lake Michigan, USA (Stemberger & Evans, 1984); Lake Huron, USA (Stemberger & Gannon, 1977); Greens Lake, Beaver Island, Michigan, USA (Foran & King, 1982); Borrowpit ponds, N Illinois, USA (Lipseley & Malcom, 1981); Adirondack Lakes, NY State, USA (Siegfried *et al.*, 1984); Desaulniers reservoir, Québec, Canada (Pinel-Alloul *et al.*, 1982); NW Colorado, USA (Cauton & Ward, 1981); The Sacramento-San Joaquin delta estuary, USA (Siegfried & Kopache, 1980); Lake 132, NW Ontario, Canada (Schindler & Novén, 1971); Rhode river estuary, Maryland, USA (Dolan & Gallegos, 1992); Bauline Long pond, Newfoundland, Canada (Davis, 1973)

- Oriental region: Ricefields in North Kriau, Perak, Malaysia (Ali, 1990); Sri Lanka (Mendis & Fernando, 1962; Fernando, 1969)

- Neotropical region: River Parana, Argentina (José de Paggi, 1978a); River Saladillo basin, Argentina (José de Paggi & Koste, 1988); Prov. San Juan, Argentina (José de Paggi, 1990); Lower course of river Uruguay, Argentina (Di Persia & Neiff, 1986); Flooded savanna at Mantecal, Venezuela (Michelangelli *et al.*, 1979/1980)

Notholca (Pseudonotholca) japonica (Marukawa, 1928)

- Palaearctic region: Norwegian Sea, Barents Sea (Bērziņš, 1960)

Notommata Ehrenberg, 1830*Notommata aethis* Myers, 1933

- Palaearctic region: Carpathes (Bērziņš, 1978); Romania (Rudescu, 1960); Peat bogs Poiana Stampei, Bukowina, Rom. (Rudescu, 1966)

- Nearctic region: N America (Bērziņš, 1978)

Notommata allantois Wulfert, 1935

- Palaearctic region: Romania (Rudescu, 1960); Lake Stråken, Aneboda, Sweden (Bērziņš, 1972); C Eur. mountains, Carpathes, C & E Eur. plains, NW Russian taiga (Bērziņš, 1978); Achmer Grasmoor, NW Germany (Koste, 1968b); NW Germany (Koste, 1969d); Peat bogs in the Massif Central, France (Batut, 1965); Aral Sea spawning grounds, R.F. (Yerekeyev & Kazakhbayev, 1972); River Grabia basin, Poland (Pawlowski, 1960); Water-courses in the Bucegi mts., Romania (Godeanu, 1963b); Marshy zones in the Bucegi mts., Romania (Godeanu, 1969a); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); Parczew area peat bogs, Poland (Radwan, 1974); Pelagic zone of the Leczna-Wlodawa lakes, Pol. (Radwan, 1975); Peat bogs Poiana Stampei, Bukowina, Romania (Rudescu, 1966)

- Nearctic region: Arctic N America (Chengalath & Koste, 1989); Kingston, Ontario, Canada (Nogrady, 1989); NE Texas lakes, USA (Shoemaker *et al.*, 1987)

- Oriental region: W & E Malaysia & Singapore (Fernando & Zankai, 1981)

- Neotropical region: Varzea near Santarem, Brazil (Koste, 1974b); Brazil (Koste & José de Paggi, 1982); Mato Grosso, C Brazil (Turner & Da Silva, 1992); Ecuador: Oriente (Koste & Böttger, 1992)

Notommata apochaeta Myers, 1933

- Nearctic region: Canada (Chengalath, 1977)

Notommata aurita (O.F. Müller, 1786)

- Palaearctic region: Canal Leeds-Liverpool, UK (Galliford, 1960b); Impoundment Dreizehnhain, Germany (Althaus, 1976); Romania (Rudescu, 1960); Coast of S Finland (Eriksen, 1969); Nat. Res. Jursky Sur, CSR (Hudec, 1978); Mt. Hoverla, Maramarosch Alps, Hungary (Varga, 1962); Engelbergs Moor, Druchhorn, NW Germany (Koste, 1965); Achmer Grasmoor, NW Germany (Koste, 1968b); River Hase, NW Germany (Koste, 1976b); All over Europe; Caucasus, Asia Minor (Bērziņš, 1978); River Grabia basin, Poland (Pawlowski, 1973); Lake Balaton, Hungary (Zankai, 1968); Mountain Fuji, Japan (Sudzuki, 1971a); Meuse Liégeoise, Belgium (Baiverlin, 1984); Japanese inland waters (Yamamoto, 1960a); River Danube (Enaceanu & Brezeanu, 1970); Dübener Heide, N Germany (Wulfert, 1960b); River Maas, Rijn, Waal & Yssel, NL (Dresscher, 1976); Karelian inland waters, R.F. (Kutikova, 1965); Lake Aydat, Puy-de-Dôme, France (Persoone *et al.*, 1968); Black Sea (Rudescu, 1961); Peat bogs Poiana Stampei, Bukowina, Romania (Rudescu, 1966); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Mountain Fuji area, Japan (Sudzuki, 1978a); Lakes around mountain Fuji, Japan (Sudzuki, 1971b); ? Lago Trasimeno, Italy (Taticchi, 1968); Impoundment Twistetalsperre, Nordhessen, G. (Meinel *et al.*, 1983)

- Nearctic region: Canada (Chengalath, 1977); Laurentian Great Lakes (Stemberger, 1979)

- Australian region: Tasmania (Koste & Shiel, 1987); NSW, Qld, Vic, Aust. (Shiel & Koste, 1979); Early records from NSW, Qld, Vic; recently collected Ryan's billabong, Wodonga, Vic (Koste & Shiel, 1991); Canterbury, mt. Cook, Christchurch & Oamaru, New Zealand (Russell, 1960)

- Neotropical region: Panama (Koste & José de Paggi, 1982); Near Panguana, Peru (Koste, 1988b); ? Near Concepcion, Paraguay (Koste, 1986b); Panama (Collado *et al.*, 1984); Ecuador: Oriente, Sierra & Costa (Koste & Böttger, 1992)

Notommata bennetschi Myers, 1942

- Palaearctic region: C Eur. plain, Boreal highland, N Sweden (Bērziņš, 1978)

Notommata brachyota Ehrenberg 1832

- Palaearctic region: Italy, Alps, C Eur. mts, Carpathes, Pontic prov., C & E Eur. plains, Ireland, UK, Boreal highlands, NW Russian taiga (Bērziņš, 1978); Romania (Rudescu, 1960); Inundation area of the Danube delta, Romania (Dorobantu, 1964)

- Nearctic region: Laurentian Great Lakes (Stemberger, 1979)

Notommata carpatica Rodewald, 1935

- Palaearctic region: Peat bogs Poiana Stampei, Bukowina, Rom. (Rudescu, 1966)

Notommata cerberus (Gosse, 1886)

- Palaearctic region: Dübener Heide, N Germany (Wulfert, 1960a & 1960b); Nat. Res. Oisterwijkse vennen, NL (De Graaf, 1960); Id. + Lake Wijde Blik, NL (Dresscher, 1976); Romania (Rudescu, 1960); Coast of S Finland (Eriksen, 1969); Peat bogs in the Massif Central, France (Batut, 1965); Darnsee near Epe, NW Germany (Koste, 1962); Engelbergs Moor, near Druchhorn, NW Germany (Koste, 1965); Achmer Grasmoor, NW Germany (Koste, 1968b); NW Germany (Koste, 1969d); River Hase, NW Germany (Koste, 1976b); All over Europe; Caucasus. Cosmopolitan (Bērziņš, 1978); River Grabia basin, Poland (Pawlowski, 1960); In acid pools & peat bogs in the Paris suburb, Fr. (Pourriot, 1966); Lake Balaton, Hungary (Zankai, 1968); Peat bogs Chambedaze & la Godivelle, Massif Central, France (Francez & Dévaux, 1985); Peat bog Chambedaze, Puy-de-Dôme, France (Francez, 1982); Peat bogs in the Auvergne, France (Francez, 1981 & 1984c); Water-courses in the Bucegi mts., Romania (Godeanu, 1963b); Marshy zones in the Bucegi mts., Romania (Godeanu, 1969a); Bog pond near Budapest, Hungary (Nogrady, 1962); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); In reed borders of the Danube delta, Romania (Rudescu, 1968); Pelagic zone of the Leczna-Wlodawa lakes, Pol. (Radwan, 1975); Peat bogs in the Paris suburb, France (Pourriot, 1965); Lago Trasimeno, Italy (Taticchi, 1968)

- Nearctic region: NE Canada (Chengalath & Koste, 1983); Cap Breton Island, Nova Scotia, Canada (Chengalath & Koste, 1988); Arctic N America (Chengalath & Koste, 1989); Lac Echo, Québec, Canada (Nogrady, 1976); Laurentian Great Lakes (Stemberger, 1979)

- Australian region: S Tasmania; NSW, Qld & Vic, Aust. (Koste, Shiel & Tan, 1988); NSW & Qld, Aust. (Shiel & Koste, 1979); Early records from NSW, Qld & Vic. Recently collected from a billabong of the Mitta Mitta r., at Tallandoon, Vic (Koste & Shiel, 1991)

- Neotropical region: Panama & Paraguay (Koste & José de Paggi, 1982); Lago Camaleão, Amazonia, Brazil (Koste, Robertson & Hardy, 1984); Panama (Collado *et al.*, 1984)

Notommata cerberus (Gosse), f. *longinus* Wulfert, 1961

- Palaearctic region: Dübener Heide, N Germany (Wulfert, 1961); C Eur. plains (Bērziņš, 1978)

- Australian region: S Tasmania (Koste, Shiel & Tan, 1988)

Notommata codonella Harring & Myers, 1924

- Palaearctic region: W & C Eur. plains (Bērziņš, 1978); ? "Altes Land" near Hamburg, Germany

(Heckman, 1986); In acid pools & peat bogs in the Paris suburb & in the Sologne, France (Pourriot, 1966); Small pool & peat bog in the Paris suburb, Fr. (Pourriot, 1965); Peat bogs in the Auvergne, France (Francez, 1981)

- Nearctic region: N America (Bērziņš, 1978)

Notommata collaris (Ehrenberg, 1832)

- Palaearctic region: Small water bodies in the Mikolajkie area, Mazurian lakeland, Poland (Klimowicz, 1967); Romania (Rudescu, 1960); ? Skopun, moorland, Faröer (De Smet *et al.*, 1988); Coast of S Finland (Eriksen, 1969); Lake Kisajno, Mazurian lakeland, Poland (Klimowicz, 1964); Small water bodies in Soviet Karelia, R.F. (Filimonova, 1976); Almost all over Europe (Bērziņš, 1978); Peat bogs Chambedaze & La Godivelle, Massif Central, France (Francez & Dévaux, 1985); Peat bog Chambedaze, Puy-de-Dôme, France (Francez, 1982); Peat bogs in the Auvergne, France (Francez, 1981 & 1984c); Nat. Res. Oisterwijkse vennen, NL (De Graaf, 1960); Id. + "Het Hol" near Kortenhoeof, NL (Dresscher, 1976); Karelian inland waters, R.F. (Kutikova, 1965); Peat bogs Poiana Stampei, Bukowina, Romania (Rudescu, 1966); In reed borders of the Danube delta, Romania (Rudescu, 1968); 3 lakes of Sosnowickie, Poland (Radwan, 1969); Pond and pool in the Paris suburb, France (Pourriot, 1965)

- Nearctic region: Canada (Chengalath, 1977); Laurentian Great Lakes (Stemberger, 1979); Kingston, Ontario, Canada (Nogrady, 1989)

- Australian region: NSW, Australia (Shiel & Koste, 1979); NW Aust.: Magela Creek area (Koste, 1981b); Alligator rivers area, NT, Aust. (Tait, Shiel & Koste, 1984); NSW & NT, Aust. (Koste & Shiel, 1991)

- Neotropical region: Venezuela (Koste & José de Paggi, 1982); Near Panguana, Peru (Koste, 1988b); Flooded savanna at Mantecal, Venezuela (Michelangelli *et al.*, 1979/1980)

Notommata contorta (Stokes, 1897)

- Palaearctic region: Lake Bodensee, near Konstanz (Althaus, 1962); Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); Lake Stråken, Aneboda, Sweden (Bērziņš, 1972); River Ybbarpsån, Sweden (Bērziņš, 1979); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); NW Germany (Koste, 1969d); Alps, C Eur. mountains, C & E Eur. plains, Boreal highlands, NW Russian taiga (Bērziņš, 1978); Lake Balaton, Hungary (Zankai, 1968); Lake Neusiedlersee, Austria (Donner, 1979); Shores of embanked and free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972)

- Nearctic region: Canada (Chengalath, 1977)

- Australian region: First record Ryan's 1 billabong, Wodonga, Vic (19/09/1990); Ryan's 2 billabong, at a somewhat later date (Koste & Shiel, 1991)

Notommata copeus Ehrenberg 1834

- Palaearctic region: Nat. Res. Oisterwijkse vennen, NL (De Graaf, 1960); Id. + "Het Hol" near Kortenhoeof, NL (Dresscher, 1976); Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); Afghanistan (Bērziņš, 1961); Near Paris, France (Clément & Pourriot, 1977); Coast of S Finland (Eriksen, 1969); Romania (Rudescu, 1960); Lake Kisajno, Mazurian lakeland, Poland (Klimowicz, 1964); Germany, Poland, Hungary, Switzerland, CSR, Italy, UK, Ireland, Finland, Sweden, Norway (Koste, 1969d); Peat bogs in the Massif Central, France (Batut, 1965); All over Europe. Cosmopolitan (Bērziņš, 1978); Lake Monterosi, Latium, Italy (Stella & Margaritora, 1966); River Grabia basin, Poland (Pawłowski, 1968 & 1970); Lake Balaton, Hungary (Zankai, 1968); Peat bogs Chambedaze & La Godivelle, Massif Central, France (Francez & Dévaux, 1985); Peat bog Chambedaze, Puy-de-Dôme, France (Francez, 1982); Peat bogs in the Auvergne, France (Francez, 1981 & 1984c); Knowskey Park, Liverpool, UK (Galliford, 1964); Lakes of the Black Sea shore, Romania (Godeanu, 1970b); Pools in the "Forêt de Sénart", Paris suburb, Fr. (Clément, 1968 & 1969a; Clément & Pourriot, 1973a, 1973b, 1975, 1976a, 1976b & 1979); Dübener Heide, N Germany (Wulfert, 1960a & 1960b); Etang de Pommereau, Loir-et-Cher, France (Tassigny *et al.*, 1970); Sénart forest pool & Lyon University pool, Fr. (Pourriot & Snell, 1983); Small water bodies in the Mikolajkie area, Poland (Klimowicz, 1967); Luga district in the Leningrad area, R.F. (Kutikova, 1962b); Lac d'Annecy, France (Balvay & Druart, 1992); In reed borders of the Danube delta, Romania (Rudescu, 1968); 3 lakes of Sosnowickie, Poland (Radwan, 1969); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Pond, pool & peat bog in the Paris suburb, Fr. (Pourriot, 1965); Waters near river Bodrog, NE Germany (Dévai *et al.*, 1972/1973)

- Nearctic region: USA (Koste, 1969d); NE Canada (Chengalath & Koste, 1983); NW Canada (Chengalath & Koste, 1987); Cap Breton Island, Nova Scotia, Canada (Chengalath & Koste, 1988); Arctic N America (Chengalath & Koste, 1989); ? 9 mountain lakes in W Canada (Anderson & De Henau, 1980); Illinois river, USA (Brown *et al.*, 1989); Kingston, Ontario, Canada (Nogrady, 1989); Laurentian Great Lakes (Stemberger, 1979)

- Oriental region: India (Koste, 1969a; Sharma & Michael, 1980); Andhra Pradesh, India (Dhanapathi, 1975); Singapore (Karunakaran & Johnson, 1978); Malaysia, Singapore, India (Sudzuki, 1989); W & E

Malaysia & Singapore (Fernando & Zankai, 1981)

- Australian region: Australia (Koste, 1969d); NW Aust.: Magela Creek area (Koste, 1981b); Alligator rivers area, NT, Aust. (Koste & Shiel, 1983a; Tait, Shiel & Koste, 1984); River in Aust. (Bērziņš, 1982); NSW, Vic & Qld, Aust. (Shiel & Koste, 1979); NSW, NT, Qld, Vic (Koste & Shiel, 1991)

- Neotropical region: Ecuador: Oriente (Koste & Böttger, 1989); Ecuador: Oriente, Sierra & Costa (Koste & Böttger, 1992); Mato Grosso, Brazil (Turner & Da Silva, 1992); Araucarian lakes, E of the Andes, Chile (Thomasson, 1963b); Paraguay (Koste, 1969d); Galapagos Islands (De Smet, 1987 & 1989); Lago Paroni, Brazil (Koste, 1974a); Amazonia, Brazil (Koste, 1972f); Varzea near Santarem, Brazil (Koste, 1974b); Paraguay, Venezuela, Brazil, Panama (Koste & José de Paggi, 1982); Lago Camaleão, Amazonia, Brazil (Koste & Robertson, 1983; Koste, Robertson & Hardy, 1984); Rio Nhamunda, Amazonia, Brazil (Brandorff, Koste & Smirnov, 1982); Near Panguana, Peru (Koste, 1988b); Near Concepcion, Paraguay (Koste, 1986b); Island of Maraca, Roraima, Brazil (Koste & Robertson, 1990); Prov. Rio Negro, Argentina (José de Paggi, 1990); Panama (Collado *et al.*, 1984)

Notommata cyrtopus Gosse, 1886

- Palaearctic region: Lake Neusiedlersee, Austria (Donner, 1972d & 1979); Romania (Rudescu, 1960); River Danube (Enaceanu & Brezeanu, 1970); River Ybbarpsån, Sweden (Bērziņš, 1979); Coast of S Finland (Eriksen, 1969); Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1986); Asiatic Turkey (Dumont & De Ridder, 1987); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); Lake Kisajno, Mazurian lakeland, Poland (Klimowicz, 1964); In activated sludge, Warsaw, Poland (Klimowicz, 1972b); Bjørnøya (Bear Island), Svalbard (De Smet, 1988); Achmer Grasmoor, NW Germany (Koste, 1968b); NW Germany (Koste, 1969d); River Hase, NW Germany (Koste, 1976b); Lake Dümmer, NW Germany (Koste & Poltz, 1984); Lake Alfsee, NW Germany (Koste & Poltz, 1987); All over Europe. Cosmopolitan (Bērziņš, 1978); Lake Bodensee, near Konstanz (Althaus, 1962); Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); Lower Silesia & river Grabia basin, Poland (Pawlowski, 1960); River Grabia basin, Poland (Pawlowski, 1978); Lake Balaton, Hungary (Zankai, 1968); Lake Donk, Overmere, Belgium (Dumont, 1968b); Meuse Liégeoise, Belgium (Baiverlin, 1984); Dübener Heide, N Germany (Wulfert, 1961); Nat. Res. Oisterwijkse vennen, NL (De Graaf, 1960); In periphyton of mosses and *Myriophyllum*, in the Danube, and in some Alpine brooks, Austria (Donner, 1964); Shores of dammed and free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); River Salzach & its tributaries, Austria (Donner, 1970); Amsterdam; River Maas, Rijn, Waal & Yssel; Oisterwijkse vennen, NL (Dresscher, 1976); Small water bodies in the Mikolajkie area, Mazurian lakeland, Poland (Klimowicz, 1967); Anatolia, Turkey (Segers *et al.*, 1992); Bog pond near Budapest, Hungary (Nogrady, 1962); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); 3 lakes of Sosnowickie, Poland (Radwan, 1969); Peat bogs Poiana Stampei, Bukowina, Rom. (Rudescu, 1966); Spain: Valencia (Velasco, 1990)

- Nearctic region: NE Canada (Chengalath & Koste, 1983); Arctic N America (Chengalath & Koste, 1989); Canada (Chengalath, 1977); Mt. Tremblant Prov. Park, Québec, Canada (Nogrady, 1980); Laurentian Great Lakes (Stemberger, 1979)

- Oriental region: Malaysia (Karunakaran & Johnson, 1978); Kalimantan (Borneo), Indonesia (Koste, 1988a); Malaysia & Indonesia (Sudzuki, 1989)

- Australian region: NSW, Australia (Shiel & Koste, 1979); Single early record from NSW, and a Sept. 1990 record from Ryan's 1 billabong at Wodonga, Vic (Koste & Shiel, 1991)

- Neotropical region: Ecuador: Oriente (Koste & Böttger, 1989 & 1992)

- Antarctic region: Antarctica & Subantarctica (José de Paggi & Koste, 1984; Sudzuki, 1988b)

Notommata diasema Myers, 1936

- Palaearctic region: Delta of river Danube, Romania (Rudescu, 1960); C Eur. mountains, Carpathes, Pontic province (Bērziņš, 1978); Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1986)

- Nearctic region: N America (Bērziņš, 1978)

Notommata doneta Harring & Myers, 1924

- Palaearctic region: Pontic province, C & E Eur. plains (Bērziņš, 1978); Peat bog Chambedaze, Puy-de-Dôme, France (Francez, 1982, 1987 & 1988); River Maas, Rijn, Waal & Yssel, NL (Dresscher, 1976)

- Nearctic region: N America (Bērziņš, 1978); Canada (Changalath, 1977); Arctic N America (Chengalath & Koste, 1989)

- Australian region: ? Humic pool, adjacent to L. Strahan, W Tasm. (Koste & Shiel, 1991)

Notommata endoxa Myers, 1933

- Oriental region: W & E Malaysia & Singapore (Fernando & Zankai, 1981); Malaysia (Sudzuki, 1989)

Notommata epaxia Harring & Myers, 1924

- Palaearctic region: C Eur. plains (Bērziņš, 1978)

- Nearctic region: N America (Changalath, 1977)

- Oriental region: India (Sharma & Michael, 1980; Sudzuki, 1989)

Notommata falcinella Harring & Myers, 1921

- Palaearctic region: C Eur. mountains, Carpathes, C & E Eur. plains, N Sweden, NW Russian taiga (Bērziņš, 1978); Nat. Res. Jursky Sur, CSR (Hudec, 1978); River Grabia basin, Poland (Pawlowski, 1960); Peat bog Laptici, Bucegi mts. Romania (Godeanu, 1970); Luga district of the Leningrad area, R.F. (Kutikova, 1962b)

- Nearctic region: N America (Bērziņš, 1978)

Notommata falcinella Harring & Myers, f. *europaea* Bērziņš, 1949

- Palaearctic region: C Eur. plain (Bērziņš, 1978)

Notommata fasciola Ehrenberg, 1838

- Nearctic region: Kingston, Ontario, Canada (Nogrady, 1989)

Notommata galena Harring & Myers, 1922

- Palaearctic region: C Eur. plain (Bērziņš, 1978)

- Nearctic region: N America (Bērziņš, 1978)

Notommata gisleni Bērziņš, 1949

- Palaearctic region: C Eur. plain (Bērziņš, 1978)

Notommata glyphura Wulfert, 1938

- Palaearctic region: Romania (Rudescu, 1960); Lake Bodensee, near Konstanz (Althaus, 1962); Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); River Ybbarpsån, Sweden (Bērziņš, 1979); Freshwater pools in S Finland (Björklund, 1972a); Slovenia, ex-Yugoslavia (Markic, 1983); Darnsee near Epe, NW Germany (Koste, 1962); River Hase, NW Germany (Koste, 1976b); Lake Dümmer, NW Germany (Koste & Poltz, 1984); Lake Alfsee, NW Germany (Koste & Poltz, 1987); Peat bogs in the Massif Central, France (Batut, 1965); Alps, C Eur. mts., Pontic prov. W, C & E Eur. plains, N Sweden, NW Russian taiga (Bērziņš, 1978); Peat bogs Chambedaze & La Godivelle, Massif Central, France (Francez & Dévaux, 1985); Peat bog Chambedaze, Puy-de-Dôme, France (Francez, 1982); Peat bogs in the Auvergne, France (Francez, 1981 & 1984c); Lake Neusiedlersee, Austria (Donner, 1979); River Danube (Enaceanu & Brezeanu, 1970); Dübener Heide, N Germany (Wulfert, 1960b); In periphyton of mosses and *Myriophyllum*, in the Danube, and in some Alpine brooks, Austria (Donner, 1964); Shores of dammed and free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); River Salzach and its tributaries, Austria (Donner, 1970); In the lower Elbe, Germany (Grimm, 1968); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); Black Sea (Rudescu, 1961); In reed borders of the Danube delta, Romania (Rudescu, 1968); Moats of Castels, ponds & pools in the Paris suburb, France (Pourriot, 1965); Ponds in Botanical Garden, Gent, Belgium (Segers *et al.*, 1991b); Spain: Madrid (Velasco, 1990); Waters near river Bodrog, NE Hungary (Dévai *et al.*, 1972/1973); Water works Traiskirchen, S of Vienna, Austria (Weninger, 1971); Water works Jungfernheide, Berlin, Germany (Ritterbusch, 1974)

- Nearctic region: Canada (Chengalath, 1977); NE Canada (Chengalath & Koste, 1983); NW Canada (Chengalath & Koste, 1987); Cap Breton Island, Nova Scotia, Canada (Chengalath & Koste, 1988); Arctic N America (Chengalath & Koste, 1989); Colorado, USA (Turner, 1988)

- Oriental region: India (Sharma & Michael, 1980); Indonesia & India (Sudzuki, 1989); Kalimantan (Borneo), Indonesia (Koste, 1988a); Impoundment Kinda, C Burma (Koste & Tobias, 1990); Storage reservoir Ajwa, and Nimeta water works, near Baroda, India (Wulfert, 1966)

- Australian region: Vic, Australia (Koste & Shiel, 1980c); Billabongs of the Goulburn & Murray rivers, Vic & Nankeen billabong, Magela Creek, NT (Koste & Shiel, 1991)

- Neotropical region: Ecuador: Oriente, Sierra & Costa (Koste & Böttger, 1989); Ecuador: Oriente (Koste & Böttger, 1992); ? Galapagos Islands (De Smet, 1987 & 1989); Amazonia, Brazil (Koste, 1972f); Varzea near Santarem, Brazil (Koste, 1974b); Brazil (Koste & José de Paggi, 1982); Lago Camaleão, Amazonia, Brazil (Koste, Robertson & Hardy, 1984); Near Panguana, Peru (Koste, 1988b); Near Concepcion, Paraguay (Koste, 1986b); Island of Maraca, Roraima, Brazil (Koste & Robertson, 1990); Mato Grosso, C Brazil (Turner & Da Silva, 1992)

Notommata groenlandica Bergendal, 1892

- Palaearctic region: NW Germany (Koste, 1969d); C Eur. mts., Carpathes, C & E Eur. plains, N Sweden, NW Russian taiga, Greenland (Bērziņš, 1978); Peat bogs in the Auvergne, France (Francez, 1981); Nat. Res. Oisterwijkse vennen, NL (De Graaf, 1960; Dresscher, 1976); Peat bogs Poiana Stampei, Bukowina, Romania (Rudescu, 1966)

Notommata haueri Wulfert, 1939

- Palaearctic region: Shores of embanked and free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); Carpathes & C Eur. plain (Bērziņš, 1978)

Notommata lenis Harring & Myers, 1922

- Palaearctic region: Peat bogs at Grandvaux, Ile-de-France, France (Pourriot, 1965 & 1966); W & C Eur. plains (Bērziņš, 1978)
- Nearctic region: N America (Bērziņš, 1978); Laurentian Great Lakes (Stemberger, 1979)
- Notommata mera*** Donner, 1970
- Palaearctic region: River Salzach and its tributaries, Austria (Donner, 1970); Alps (Bērziņš, 1978)
- Notommata omentata*** Wulfert, 1939
- Palaearctic region: Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); River Hase, NW Germany (Koste, 1976b); Peat Bogs in the Massif Central, France (Batut, 1965); C Eur. mts., C & E Eur. plains (Bērziņš, 1978); Peat bogs Chambedaze & La Godivelle, Massif Central, France (Francez & Dévaux, 1985); Peat bogs in the Auvergne, France (Francez, 1981 & 1984c); Dübener Heide, N Germany (Wulfert, 1960b)
- Notommata pachyura*** (Gosse, 1886)
- Palaearctic region: Coast of S Finland (Eriksen, 1969); Romania (Rudescu, 1960); All over Europe. Cosmopolitan (Bērziņš, 1978); River Grabia basin, Poland (Pawlowski, 1968 & 1970); Peat bogs Chambedaze & La Godivelle, Massif Central, France (Francez & Dévaux, 1985); Peat bog Chambedaze, Massif Central, France (Francez, 1982); Peat bogs in the Auvergne, France (Francez, 1981 & 1984c); Nat. Res. "Het Hol" near Kortenhoeve, NL (Dresscher, 1976); Dübener Heide, N Germany (Wulfert, 1960b); Etang de Pommereau, Loir-et-Cher, France (Tassigny *et al.*, 1970); Small water bodies in the Mikolajkie area, Mazurian lakeland, Poland (Klimowicz, 1967); Bog pond near Budapest, Hungary (Nogrady, 1962); Pool in Fontainebleau forest, Paris suburb, France (Pourriot, 1976); Peat bog Grandvaux, Paris suburb, France (Pourriot, 1965)
- Nearctic region: Canada (Chengalath, 1977); NW Canada (Chengalath & Koste, 1987); Arctic N America (Chengalath & Koste, 1989); Laurentian Great Lakes (Stemberger, 1979)
- Oriental region: Kalimantan (Borneo), Indonesia (Koste, 1988a); Indonesia (Sudzuki, 1989)
- Australian region: Vic, NSW & Qld, Australia (Shiel & Koste, 1979); Tasmania (Koste & Shiel, 1986b); Alligator rivers area, NT, Aust. (Tait, Shiel & Koste, 1984); Early records from NSW, Qld & Vic. In our samples NT & Tas (Koste & Shiel, 1991)
- Neotropical region: Ecuador: Oriente, Sierra & Costa (Koste & Böttger, 1992); Venezuela & Brazil (Koste & José de Paggi, 1982); Rio Nhamunda, Amazonia, Brazil (Brandorff, Koste & Smirnov, 1982); Island of Maraca, Roraima, Brazil (Koste & Robertson, 1990); Flooded savanna at Mantecal, Venezuela (Michelangelli *et al.*, 1979/1980)
- Notommata pachyura*** (Gosse), f. *triangulata* Kirkman, 1906
- Nearctic region: Canada (Chengalath, 1977); NE Canada (Chengalath & Koste, 1983); Cap Breton Island, Nova Scotia, Canada (Chengalath & Koste, 1988)
- Australian region: ? NT, Aust.: Magela Creek area (Koste, 1981b); ? Alligator rivers area, NT, Aust. (Tait, Shiel & Koste, 1984); ? NT Aust. (Shiel & Koste, 1985); Billabong of Magela Creek, NT and W Aust. (Koste & Shiel, 1991)
- Notommata paracyrtopus*** de Beauchamp, 1932
- Palaearctic region: W Eur. plain (Bērziņš, 1978)
- Notommata peridia*** Harring & Myers, 1922
- Nearctic region: NE Canada (Chengalath & Koste, 1983); Mt. Tremblant Prov. Park, Québec, Canada (Nogrady, 1980)
- Neotropical region: Lago Açu, Maranhão, Brazil (Reid & Turner, 1988)
- Notommata pseudocerberus*** de Beauchamp, 1908
- Palaearctic region: Lake Bodensee, near Konstanz (Althaus, 1962); Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); Romania (Rudescu, 1960); Coast of S Finland (Eriksen, 1969); Slovenia, ex-Yugoslavia (Markic, 1983); Mt. Hoverla, Maramarosch Alps, Hungary (Varga, 1962); Darnsee near Epe, NW Germany (Koste, 1962); Engelbergs Moor, near Druchhorn, NW Germ. (Koste, 1965); NW Germany (Koste, 1969d); River Hase, NW Germany (Koste, 1979b); Lake Alfsee, NW Germany (Koste & Poltz, 1987); All over Europe; Caspian area (Bērziņš, 1978); River Grabia basin, Poland (Pawlowski, 1960); Lake Balaton, Hungary (Zankai, 1968); Peat bogs Chambedaze & La Godivelle, Massif Central, France (Francez & Dévaux, 1985); Peat bog Chambedaze, Puy-de-Dôme, France (Francez, 1982); Peat bogs in the Auvergne, France (Francez, 1981 & 1984c); Lakes of the Black Sea shore, Romania (Godeanu, 1970b); Shores of embanked and free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); Peat bogs Poiana Stampei, Bukowina, Romania (Rudescu, 1966); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Ponds and pool in the Paris suburb, France (Pourriot, 1965)
- Nearctic region: N America (Bērziņš, 1978); Canada (Chengalath, 1977); NE Canada (Chengalath & Koste, 1983); Cap Breton Island, Nova Scotia, Canada (Chengalath & Koste, 1988)

- Oriental region: India (Sharma & Michael, 1980; Sudzuki, 1989); Nimeta water works, near Baroda, India (Wulfert, 1966)
- Australian region: S Tasmania (Koste, Shiel & Tan, 1988); A stream near Bicheno, Tas (Koste & Shiel, 1991)
- Neotropical region: Brazil & Panama (Koste & José de Paggi, 1982); Varzea near Santarem, Brazil (Koste, 1974b); Panama (Collado *et al.*, 1984); Ecuador: Oriente, Sierra & Costa (Koste & Böttger, 1992)
- Notommata pygmaea* Harring & Myers, 1922
- Palaearctic region: Lake Balaton, Hungary (Zankai, 1968)
- Notommata saccigera* Ehrenberg, 1832
- Palaearctic region: All over Europe (Bērziņš, 1978); Romania (Rudescu, 1960); Coast of S Finland (Eriksen, 1969); Peat bogs in the Auvergne, France (Francez, 1981); Lake Balaton, Hungary (Zankai, 1968)
- Nearctic region: Canada (Chengalath, 1977); NE Canada (Chengalath & Koste, 1983); Illinois, USA (Bērziņš, 1984); Mt. Temblant, Prov. park, Québec, Canada (Nogrady, 1980)
- Oriental region: W & E Malaysia & Singapore (Fernando & Zankai, 1981); Malaysia (Sudzuki, 1989)
- Australian region: Weston, New Zealand (Russell, 1960)
- Neotropical region: Ecuador: Oriente & Costa (Koste & Böttger, 1992)
- Notommata silpha* (Gosse, 1887)
- Palaearctic region: Lake Stråken, Aneboda, Sweden, Alps, C Eur. mts., Pontic prov., C & E Eur. (Bērziņš, 1972); plains, UK, N Sweden, NW Russian taiga (Bērziņš, 1978)
- Oriental region: Indonesia (Sudzuki, 1989)
- Australian region: NSW, Australia (Shiel & Koste, 1979); Single unconfirmed early record from NSW. Not in our material (Koste & Shiel, 1991)
- Notommata silphoides* de Beauchamp, 1923
- Palaearctic region: W Eur. plain (Bērziņš, 1978)
- Notommata telmata* Harring & Myers, f. *carpatica* Rodewald, 1935
- Palaearctic region: Carpathes (Bērziņš, 1978)
- Notommata tithasa* Harring & Myers, 1922
- Palaearctic region: C Eur. plain (Bērziņš, 1978)
- Nearctic region: N America (Bērziņš, 1978)
- Notommata tripus* Ehrenberg, 1838
- Palaearctic region: Darnsee near Epe, NW Germany (Koste, 1962); Engelbergs Moor, near Druchhorn, NW Germ. (Koste, 1965); Achmer Grasmoor, NW Germany (Koste, 1968b); NW Germany (Koste, 1969d); All over Europe; Caucasus, Asia Minor (Bērziņš, 1978); Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); Afghanistan (Bērziņš, 1961); Coast of S Finland (Eriksen, 1969); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); Mt. Hoverla, Maramarosch Alps, Hungary (Varga, 1962); Lake Balaton, Hungary (Zankai, 1968); Dübener Heide, N Germany (Wulfert, 1961); Peat bogs in the Auvergne, France (Francez, 1981); Small water bodies in the Mikolajkie area, Poland (Klimowicz, 1967)
- Nearctic region: Canada (Chengalath, 1977); NE Canada (Chengalath & Koste, 1983); Cap Breton Island, Nova Scotia, Canada (Chengalath & Koste, 1988); Lac Echo, Québec, Canada (Nogrady, 1976); Mt. tremblant Prov. Park, Québec, Canada (Nogrady, 1980); Kingston, Ontario, Canada (Nogrady, 1989); Laurentian Great Lakes (Stemberger, 1979)
- Oriental region: India (Sharma & Michael, 1980); W & E Malaysia & Singapore (Fernando & Zankai, 1981); Malaysia & India (Sudzuki, 1989)
- Australian region: Tasmania (Koste & Shiel, 1986b); Alligator rivers area, NT, Aust. (Tait, Shiel & Koste, 1984); NSW, Aust. (Shiel & Koste, 1979); NSW, NT, Tas, Vic (Koste & Shiel, 1991); Lincoln, New Zealand (Russell, 1960)
- Neotropical region: Island of Maraca, Roraima, Brazil (Koste & Robertson, 1990); Ecuador: Oriente (Koste & Böttger, 1989); Ecuador: Oriente & Costa (Koste & Böttger, 1992)
- Notommata tripeta* Harring & Myers, 1924
- Palaearctic region: L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978)
- Notommata tyleri* Koste, Shiel & Tan, 1988
- Australian region: Arthur's Lake, S Tasmania (Koste, Shiel & Tan, 1988); Tasmania (Shiel, Koste & Tan, 1989); Endemic. Free living in Arthur's Lake, Tas (Koste & Shiel, 1991)
- Notommata voighti* Donner, 1949
- Palaearctic region: Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); Engelbergs Moor, near Druchhorn, NW Germ. (Koste, 1965); Small water bodies, Soviet Karelia, R.F. (Filimonova, 1976); C Eur. mountains & plains (Bērziņš, 1978); Dübener Heide, N Germany (Wulfert, 1960b & 1961); Etang de Pommereau, Loir-et-Cher, France (Tassigny *et al.*, 1970)

Notommata weberi Voigt, 1957

- Palaearctic region: Alps (Bērziņš, 1978)

Notommata spec.

- Palaearctic region: River Moldova, tributary to the Danube, Rom. (Prunescu-Arion, 1968); Fish ponds near Warsaw, Poland (Hillbricht-Ilkowska, 1964); Aral Sea spawning grounds, R.F. (Yerenkeyev & Kazakhbayev, 1972); Small rivers of the Kola peninsula, R.F. (Kruglova, 1983); River Loire, France (Lair, 1980); Lago Maggiore, Italy (Tonolli, 1962); Brackish waters near Bruges, Belgium (De Ridder & Verheye, 1980); River Elbe estuary, Germany (Schulz, 1961); ? Roscoff, Atlantic coast of Brittany, France (D'Hondt, 1970); Artificial ponds near Köln, Germany (Trahms, 1972); Danube delta, Romania (Popescu-Marinescu & Zinevici, 1967); River Loire in St. Laurent-les-Eaux, France (Pourriot *et al.*, 1982); Periphytic biota in sewage & park waters, Japan (Sudzuki, 1981); Lago Trasimeno, Italy (Taticchi, 1968); Garden ponds in Tokyo, Japan (Sudzuki, 1975)

- Nearctic region: Wisconsin & Illinois, USA (Bērziņš, 1984); Colorado, USA (Turner, 1988); Northern Michigan inland lakes (Stemberger, 1990); Experimental ponds, C Florida, USA (Fry & Osborne, 1980); Mirror Lake, New Hampshire, USA (Strayer, 1985)

- Oriental region: Sri Lanka (Fernando, 1980a); Thailand, Indonesia, Sri Lanka (Sudzuki, 1989); Bung-Borapet, C Thailand (Koste, 1975a); Sri Lanka. Rare, found in small ponds (Chengalath, Fernando & Koste, 1973)

- Australian region: SW Australia (Koste, Shiel & Brock, 1983); NT, Aust.: Magela Creek area (Koste, 1981b); Alligator rivers area, N Aust. (Koste & Shiel, 1983a); In many localities of Australia (Bērziņš, 1982)

- Neotropical region: Ecuador: Oriente (Koste & Böttger, 1989); Lago Paroni, Brazil (Koste, 1974a); Lago Camaleão, Amazonia, Brazil (Koste & Robertson, 1983; Koste, Robertson & Hardy, 1984); Island of Maraca, Roraima, Brazil (Koste & Robertson, 1990); Near Concepcion, Paraguay (Koste, 1986b); Rio Nhamunda, Amazonia, Brazil (Brandorff, Koste & Smirnov, 1982); Chile (Löffler, 1962)

Octotrocha Thorpe, 1893*Octotrocha speciosa* Thorpe, 1893

- Australian region: Alligator rivers area, NT, Aust. (Koste & Shiel, 1983a; Tait, Shiel & Koste, 1984); NT, Aust. (Shiel & Koste, 1985); Bryans billabong, near Albany, NSW (Koste, 1989b)

Octotrocha spec.

- Palaeartic region: Jangtsekiang, China (Koste, 1989b)

- Nearctic region: Wisconsin & Connecticut, USA (Koste, 1989b)

- Neotropical region: Ecuador: Rio Nape (Koste & Böttger, 1989); Brazil (Koste & José de Paggi, 1982); Varzea near Santarem, Brazil (Koste, 1974b); Island of Maraca, Roraima, Brazil (Koste & Robertson, 1990); Brokopondo Lake, Surinam (Leentvaar, 1979)

Paracephalodella* Bērziņš, 1976**Paracephalodella latifulcrum* Bērziņš, 1976**

- Palaearctic region: Aneboda, Sweden (Bērziņš, 1976); C Eur. plain (Bērziņš, 1978)

Paracolurella* Myers, 1936**Paracolurella aemula* (Myers, 1934)**

- Oriental region: Singapore (Karunakaran & Johnson, 1978); Singapore & Indonesia (Sudzuki, 1989)
- Neotropical region: Mato Grosso, C Brazil (Turner & Da Silva, 1992)

***Paracolurella logima* (Myers, 1934)**

- Neotropical region: Brazil & Columbia (Koste & José de Paggi, 1982); Amazonia, Brazil (Koste, 1972f); Rio Nhamunda, Amazonia, Brazil (Brandorff, Koste & Smirnov, 1982)

***Paracolurella pertyi* (Hood, 1895)**

- Palaearctic region: River Grabia basin, Poland (Pawlowski, 1960); All over Europe. Cosmopolitan (Bērziņš, 1978)

Paradicranophorus* Wiszniewski, 1929**Paradicranophorus aculeatus* (Neiswestnova-Shadina, 1935)**

- Palaearctic region: River Grabia basin, Poland (Pawlowski, 1960); C & E Eur. plains (Bērziņš, 1978)

***Paradicranophorus hudsoni* (Glascott, 1893)**

- Palaearctic region: Scandinavian coastal waters (Thane-Fenchel, 1968); Lake Balaton, Hungary (Zankai, 1989); Romania (Rudescu, 1960); River Hase, NW Germany (Koste, 1976b); Lake Dümmer, NW Germany (Koste & Poltz, 1983 & 1984); Ireland, UK, Germany, Poland, CSR, Romania, France, Sweden (Koste & Poltz, 1983); Delta of river Danube, Romania (Zinevici & Teodorescu, 1990); W & C Eur. mts., Pontic prov., W, C & E Eur. plains, Ireland, UK, Boreal highlands (Bērziņš, 1978); River Grabia basin, Poland (Pawlowski, 1960); Interstitial fauna of the Elbe-estuary, Germany (Riemann, 1966); River Maas, Rijn, Waal & Yssel, NL (Dresscher, 1976); River Volga, R.F. (Mordukhai-Boltovskoi, 1979)
- Australian region: Chatham Islands, New Zealand (Russell, 1960; Koste & Poltz, 1983)

***Paradicranophorus sordidus* Donner, 1968**

- Palaearctic region: Lake Neusiedlersee, Austria (Donner, 1968, 1972d & 1979); Hungarian plain (Bērziņš, 1978)

***Paradicranophorus sudzukii* Donner, 1968**

- Palaearctic region: Lake Neusiedlersee, Austria (Donner, 1968, 1972d & 1979); Hungarian plain (Bērziņš, 1978)

***Paradicranophorus verae* Bogoslawski, 1958**

- Palaearctic region: NW Russian taiga (Bērziņš, 1978)

***Paradicranophorus wockei* Koste, 1961**

- Palaearctic region: In the psammon of a brook near Vehs, NW Germ. (Koste, 1961); Hessen, NW Germany (Koste, 1965b); C Eur. plain (Bērziņš, 1978)

Paradicranophorus spec.

- Palaearctic region: Southwest islands of Japan (Sudzuki *et al.*, 1992)

Paranuraeopsis* Koste, 1974**Paranuraeopsis quadriantennata* Koste, 1974**

- Neotropical region: Lago Paroni, Brazil (Koste, 1974a); Brazil & Argentina (Koste & José de Paggi, 1982); Lago do Macaco, Brazil (Koste, 1989a); Suape area, Pernambuco, Brazil (Neumann-Leitao *et al.*, 1992); Rio Negro, Amazonia, Brazil (Schaden, 1977c)

Paralepadella* De Ridder, 1966**Paralepadella vanoyei* De Ridder, 1966**

- Palaearctic region: SW Iceland (De Ridder, 1966a); W Iceland (De Ridder, 1972)

Parencentrum* Wiszniewski, 1953**Parencentrum parvum* (Donner, 1951)**

- Palaearctic region: Mountain Fuji, Japan (Sudzuki, 1971); Mountain Fuji area, Japan (Sudzuki, 1978a)

***Parencentrum saundersiae* (Hudson, 1885)**

- Palaearctic region: Lake Neusiedlersee, Austria (Donner, 1979); Boom, Belgium (De Ridder, 1976); Shores of embanked and free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978)

Note: See also genus *Encentrum*

Parencentrum spec.

- Palaearctic region: Mountain Fuji, Japan (Sudzuki, 1971); Mountain Fuji area, Japan (Sudzuki, 1978a); Iriomote Island, Japan (Sudzuki, 1979a); Ryukyu Shoto, Japan (Sudzuki, 1979b)

Parencentropsis* Sudzuki, 1960**Parencentropsis araii* Sudzuki, 1960**

- Palaearctic region: Tableland in C Japan (Sudzuki, 1960)

***Parencentropsis mitii* Sudzuki, 1960**

- Palaearctic region: Tableland in C Japan (Sudzuki, 1960)

Platyias* Haring, 1913**Platyias leloupi* Gillard, 1957**

- Nearctic region: Experimental ponds, C Florida, USA (Fry & Osborne, 1980)

- Oriental region: Near Nagpur, C India (Arora, 1966a, 1966c, 1966d); India (Sharma & Michael, 1980; Sudzuki, 1989); Nagpur, C India (Sharma, 1987); Delhi, India (Sarma, 1988); Ricefields in NE Thailand (Heckman, 1979)

- Australian region: Pantropical: S America, SE Asia. Not yet known from Australia (Koste & Shiel, 1987b)

- Neotropical region: Ecuador: Oriente & Costa (Koste & Böttger, 1992); Mato Grosso, C Brazil (Turner & Da Silva, 1992); Lago do Macaco, Brazil (Koste, 1989a); Brazil, Antilles, Peru (Koste & José de Paggi, 1982); Lago Camaleão, Amazonia, Brazil (Koste & Robertson, 1983; Koste, Robertson & Hardy, 1984); Rio Nhamunda, Amazonia, Brazil (Brandorff, Koste & Smirnov, 1982); Near Concepcion, Paraguay (Koste, 1986b); Island of Maraca, Roraima, Brazil (Koste & Robertson, 1990); Cosmotropical: Amazonas, Brazil; Mato Grosso do Sul; Esperito Santo, Brazil; Antilles, Paraguay, Peru (Turner, 1990); Gran Chaco, Argentina (José de Paggi, 1990); Caribbean Islands (Collado *et al.*, 1984); Antilles françaises (Pourriot, 1975); Pond in tropical rain forest, Peru (Schlüter, 1984)

***Platyias leloupi* Gillard, f. *laticapularis* Koste, 1974**

- Neotropical region: Lago Paroni, lake near Rio Tapajos, Brazil (Koste, 1974a); Brazil (Koste & José de Paggi, 1982); Lago Camaleão, Amazonia, Brazil (Koste & Robertson, 1983); Island of Maraca, Roraima, Brazil (Koste & Robertson, 1990); Amazon; Mato Grosso do Sul (Turner, 1990); Mato Grosso, C Brazil (Turner & Da Silva, 1992)

***Platyias patulus* (O.F. Müller, 1786)**

- Palaearctic region: C & S Sweden (Bērziņš & Pejler, 1989a); Romania (Rudescu, 1960); Darnsee near Epe, NW Germany (Koste, 1962); Fishponds near Warsaw, Poland (Hillbricht-Ilkowska, 1964); Volga river, R.F. (V'yushkova & Lakhnova, 1974); Fish-fattening ponds in the Ukraina (Krazhan *et al.*, 1976); Aral Sea spawning grounds, R.F. (Yerekeyev & Kazakhbayev, 1972); Lower Volga, R.F. (Chuykov & Merkulov, 1986); All over Europe; Caucasus, Caspian area, Asia Minor. Cosmopolitan (Bērziņš, 1978); "*var. Leopoldi*" van Oye: Heiluntian province, China (Bogoslawski, 1962); "Altes Land" near Hamburg, Germany (Caspers & Heckman, 1982); Middle course of river Po, Italy (Ferrari *et al.*, 1986); Afghanistan (Bērziņš, 1961); Delta of river Danube, Romania (Godeanu & Zinevici, 1983; Prunescu-Arion, 1989); Slovenia, ex-Yugoslavia (Markic, 1983); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989c & 1989d); District Ostrava, CSR (Dvorakova, 1960b); Hortobagy Nat. Park, Hungary (Forro & Ronkay, 1983); Lake Kisajno, Mazurian lakeland, Poland (Klimowicz, 1964); Lake Quackjeswater, Voorne, NL (Leentvaar, 1963); Palaearctic, Nearctic, Ethiopian & Netropical reg. (Pejler, 1977); Po river, Italy (Ferrari *et al.*, 1989); Brackish water Labicko, middle Elbe, CSR (Straskraba, 1965); River Grabia basin, Poland (Pawlowski, 1970); Obretin Laka, Danube delta, Romania (Neagu-Godeanu *et al.*, 1968); Camargue, S France (De Ridder, 1960a & 1961); Lake Bialskie, E Poland (Radwan *et al.*, 1984); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Pond in the Paris suburb, France (Pourriot, 1965); Lake Doiran, Macedonia,

ex-Yugoslavia (Popovska-Stankovic, 1990); Fens in Genk, Belgium (Schepens, 1960); Lago Trasimeno, Italy (Taticchi, 1968); Serbian section of river Danube (Zivkovic, 1987); Spain: Tarragona (Velasco, 1990); Lake Biwa-ko, Japan (Yamamoto, 1960b); Lake Kinneret, Israel (Serruya & Pollinger, 1984); Waters near river Bodrog, NE Hungary (Dévai *et al.*, 1972/1973); Southwest islands of Japan (Sudzuki *et al.*, 1992); Dübener Heide, N Germany (Wulfert, 1961); River Danube (Enaceanu & Brezeanu, 1970); Obretin embanked basin, Danube delta, Rom. (Godeanu *et al.*, 1973); Dune lakes in NL; Ysselmeer; Lindevallei (Dresscher, 1976); In the lower Danube in Romania (Enaceanu, 1964); Small water bodies in the Mikolajkie area, Poland (Klimowicz, 1967); Karelian inland lakes, R.F. (Kutikova, 1965); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); Rés. biol. de Villars-la-Dombes, France (Rostan, 1976)

- Nearctic region: N & S America; Europe, Asia, Africa (Dumont, 1983); Kingston, Ontario, Canada (Nogrady, 1989); Northern Michigan inland lakes (Stemberger, 1990); Lake Wabamun, Alberta, Canada (Gallup & Hickman, 1975); Atchafalaya river basin, Louisiana, USA (Holland *et al.*, 1983); Lakes at Santee, California, USA (Nogrady, 1982); Lac Echo, Québec, Canada (Nogrady, 1976); Everglades Nat. Park, Florida, USA (Nogrady, 1983); Kalamazoo river, Michigan, USA (Prins & Davis, 1966); Lake Sangris, Illinois, USA (Harmsworth, 1975); Laurentian Great Lakes (Stemberger, 1979); Near Monroe, Louisiana, USA (Gallagher, 1966); Stoneman Lake, Arizona, USA (Green, 1986); Ontario, Canada (Chengalath *et al.*, 1971; Chengalath & Fernando, 1973); Canada (Chengalath, 1977); Milwaukee harbor, USA (Stemberger, 1974); Deggs Lake, Highlands L., Little Swede n° 1 L., Colorado, USA (Pennak, 1966); Illinois & Kentucky, USA (Bērziņš, 1984); Illinois river, USA (Brown *et al.*, 1989); Colorado, USA (Turner, 1988)

- Oriental region: Kerala, S India (Nayar & Nair, 1969); Java (Serruya & Pollinger, 1984); West Bengal, NE India (Sharma, 1979a); Punjab State, NW India (Sharma, 1976 & 1980); Local pond in Delhi, India (Sarma & Rao, 1987 & 1991); Lake Surinsar, Yammu, (J & K), India (Jyoti & Sehgal, 1979); Yammu (J & K), India (Jyoti & Sehgal, 1980); Ricefields in NE Thailand (Heckman, 1979); Sri Lanka (Fernando, 1969 & 1980a); Singapore. Cosmopolitan (Sudzuki, 1991); Thailand (Boonsom, 1984b); Andhra Pradesh, India (Dhanapathi, 1974b); W & E Malaysia & Singapore (Fernando & Zankai, 1981); Rice paddy in Vientiane, Laos (Heckman, 1974); Impoundment Kinda, C Burma (Koste & Tobias, 1990); Orissa, E India (Sharma, 1978c); 2 sewage channels of Gwalior, India (Saksena & Kulkarni, 1986); Lake Mangnao, Palawan, The Philippines (Davies & Green, 1990); Kalimantan (Borneo), Indonesia (Koste, 1988a); In rice-fields of N Kriau, Perak, Malaysia (Ali, 1990); Sri Lanka. Very common in ponds and in littoral samples of lakes (Chengalath, Fernando & Koste, 1973); Near Nagpur, C India (Arora, 1966a, 1966b & 1966c); Oxidation pond near Nagpur, C India (Arora, 1966d); India (Sharma & Michael, 1980; Sharma, 1983); Philippines (Mamaril & Fernando, 1978); Singapore & Malaysia (Karunakaran & Johnson, 1978)

- Australian region: Billabongs of Magela Creek, N Aust. (Shiel & Koste, 1983); NSW & Qld, Aust. (Shiel & Koste, 1979); Lakes & billabongs, E Aust., NT (Shiel, 1983); River Murray, Aust. (Koste, 1979b); Cosmopolitan, eurytherm. Benthic on detritus and sediments. Pancontinental in Aust., uncommon (Koste & Shiel, 1987b); NW Aust.: Magela Creek area (Koste, 1981b); Alligator rivers area, NT, Aust. (Tait, Shiel & Koste, 1984); Billabongs of the Murray-Darling system, Aust. (Shiel, 1986); Murray river, SE Aust. (Koste & Shiel, 1980); Bromfield swamp, tropical Qld. Aust. crater lake (Green, 1981)

- Neotropical region: Caribbean section of the Neotropis (De Ridder, 1977); Antilles françaises (Pourriot, 1975); Laguna del Tesoro, Cuba (Alonso, 1984); L. Owain, Rio Snia Missu, Mato Grosso, Brazil (Green, 1972); Surinam (Leentvaar, 1972); River Parana, Argentina (Paggi & José de Paggi, 1974; José de Paggi, 1978a & 1985); River Saladillo basin, Argentina (José de Paggi & Koste, 1988); Argentina (Modenutti & Claps, 1988); Ecuador: Oriente (Koste & Böttger, 1989); River Orinoco basin, Venezuela (Vasquez, 1984a); Lower Orinoco and its basin, Venezuela (Vasquez & Rey, 1989); Arroya Rodriguez, prov. of Buenos Aires, Arg. (Modenutti, 1987); Lago Parõni, Brazil (Koste, 1974a); Amazonia, Brazil (Hauer, 1965b; Gillard, 1967; Thomasson, 1971; Koste, 1972f); Paraguay, Brazil, Argentina, Antilles, Bolivia, Venezuela & Panama (Koste & José de Paggi, 1982); Argentine Patagonia (Kuczynski, 1987b); Lago de Valencia, Venezuela (De Infante, 1975 & 1980); Reconquista river, Argentina (Kuczynski, 1991); Flooded savanna at Mantecal, Venezuela (Michelangelli *et al.*, 1979-1980); Prov. Buenos Aires, Argentina (Olivier, 1965); Lago Castanho, Amazonia, Brazil (Serruya & Pollinger, 1984); L. Redondo & L. Jacaretinga, Amaz. Centr., Braz. (Hardy, 1980); Lake Cocibolca, Nicaragua (Moreno *et al.*, 1992); Ecuador: Oriente & Costa (Koste & Böttger, 1992); Mato Grosso, C Brazil (Turner & Da Silva, 1992); Lago di Camaleão, Amazonia, Brazil (Koste & Robertson, 1983; Koste, Robertson & Hardy, 1984); Near Panguana, Peru (Koste, 1988b); Near Concepcion, Paraguay (Koste, 1986b); Island of Maraca, Roraima, Brazil (Koste & Robertson, 1990); Chilean lakes (Schmid-Araya, 1991); Prov. Chubut, Tucuman, Santiago del Estero, Chaco, Corrientes, Santa Fé & Buenos Aires, Arg. (José de Paggi, 1990); Lago do Macaco, Brazil (Koste, 1989a); Provinces in NW Argentina (José de Paggi, 1989); Varzea near Santarem, Brazil (Koste, 1974b)

Platyias patulus (O.F. Müller), f. *balatonicus* Varga, 1962

- Palaearctic region: Lake Balaton, Hungary (Zankai, 1968); Hungarian plain & Pontic province (Bērziņš, 1978)

Platyias patulus (O.F. Müller), f. *felicitas* Wulfert, 1956

- Palaearctic region: C Eur. mountains (Bērziņš, 1978)

Platyias patulus (O.F. Müller), f. *macracanthus* Daday, 1905

- Palaearctic region: Hungarian plain (Bērziņš, 1978); Southwest islands of Japan (Sudzuki *et al.*, 1992)

- Nearctic region: Florida, USA (Koste, 1972f)

- Oriental region: Kalimantan (Borneo), Indonesia (Koste, 1988a); Malaysia, Singapore, Philippines (Sudzuki, 1989); Megalaya State, NE India (Sharma, 1987); W & E Malaysia & Singapore (Fernando & Zankai, 1981)

- Australian region: Neotropics. Polystenotherm. Single record from NT (Koste & Shiel, 1987b)

- Neotropical region: Amazonia, Brazil; Guatemala, Panama, Paraguay (Koste, 1972f); Paraguay, Brazil, Argentina, Antilles, Venezuela, Surinam, Honduras, Panama (Koste & José de Paggi, 1982); Lago Camaleão, Amazonia, Brazil (Koste & Robertson, 1983); Island Maraca, Roraima, Brazil (Koste & Robertson, 1990); Rio Nhamunda, Amazonia, Brazil (Brandorff, Koste & Smirnov, 1982); Near Panguana, Peru (Koste, 1988b); Near Concepcion, Paraguay (Koste, 1986b); Surinam (Leentvaar, 1975); Lago do Macaco, Brazil (Koste, 1989a); Varzea near Santarem, Brazil (Koste, 1974b); Paraguay, Brazil, Argentina, Antilles, Venezuela, Surinam, Honduras, Panama & Guatemala (Turner, 1990); Prov. Corrientes & Santa Fé, Argentina (José de Paggi, 1990); Lago Paroni, Brazil (Koste, 1974a); Ecuador: Oriente (Koste & Böttger, 1989); Orinoco river basin, Venezuela (Vasquez, 1984a); Lower Orinoco & its delta, Venezuela (Vasquez & Rey, 1989); Amazonia, Brazil (Hauer, 1965b; Thomasson, 1971); Brokopondo Lake, Surinam (Leentvaar, 1979); Reconquista river, Argentina (Kuczynski, 1991); Flooded savanna at Mantecal, Venezuela (Michelangelli *et al.*, 1979/1980); Antilles françaises (Pourriot, 1975); Mato Grosso, C Brazil (Turner & Da Silva, 1992); Suape area, Pernambuco, Brazil (Neumann-Leitao *et al.*, 1992); Rio Tocantins, Amazonia, Brazil (Schaden, 1977c); Lake Castanho, L. Redondo & L. Jacaretinga, Amazonia, Brazil (Serruya & Pollinger, 1984)

Platyias polyacanthus Ehrenberg, 1834

- Palaearctic region: Romania (Rudescu, 1960); S Coast of S Finland (Eriksen, 1969); Palaearctic region (Pejler, 1977); Europe (Dumont, 1983); Lake Balaton, Hungary (Zankai, 1968); Sphagnum bogs in the Sologne, France (de Beauchamp & Pourriot, 1961); Nat. Res. Neeruti Lakes, NE Estonia (Mäemets A & A, *s.d.*); Italy, E Balkan, C Eur. mts., Carpathes, Pontic province, NW Russian taiga, Caucasus, Iberic peninsula (Bērziņš, 1978); Canals in the Hran area, CSR (Terek, 1990c); River Danube (Enaceanu & Brezeanu, 1970); Peat bogs in the Paris suburb, France (Pourriot, 1965); Serbian section of river Danube (Zivkovic, 1987)

- Nearctic region: Nearctic (Pourriot, 1977); N America (Dumont, 1983)

- Oriental region: Singapore & Malaysia (Karunakaran & Johnson, 1978); Malaysia & Singapore (Sudzuki, 1989)

- Australian region: Rare; benthic in habitat. Not yet recorded from Australia (Koste & Shiel, 1987b)

- Neotropical region: Not yet recorded from the Neotropis (Turner, 1990)

Platyias quadricornis (Ehrenberg, 1832)

- Palaearctic region: All over the Netherlands (Dresscher, 1976); Romania (Rudescu, 1960); Norfolk Broads, UK (Irvine *et al.*, 1990); Fishponds near Warsaw, Poland (Hillbricht-Ilkowska, 1964); Lac d'Aydat, Massif Central, France (Oulad Ali *et al.*, 1990); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989c & 1989d; Pejler & Bērziņš, 1989); Volga river & Volgograd reservoir, R.F. (V'yushkova & Lakhnova, 1974); Fish-fattening ponds in the Ukraina (Krazhan *et al.*, 1976); Aral Sea spawning grounds, R.F. (Yerekeyev & Kazakhbayev, 1972); All over Europe; Caucasus, Caspian Sea, Asia Minor. Cosmopolitan (Bērziņš, 1978); In Spanish reservoirs (de Manuel, 1991); Lower Volga, R.F. (Chuykov & Merkulov, 1986); Engelbergs Moor, near Druchhorn, NW Germ. (Koste, 1965); Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1986); Lake Cullera, near Valencia, Spain (Miracle & Vicente, 1983); Delta of river Danube, Romania (Godeanu & Zinevici, 1983; Prunescu-Arion, 1989); Asiatic Turkey (Dumont & De Ridder, 1987); District Ostrava, CSR (Dvorakova, 1960b); Pool in Fontainebleau Forest, France (Pourriot, 1976); In reed borders of the Danube delta, Romania (Rudescu, 1968); Bulgarian bank of river Danube (Naidenow, 1963); Rés. biol. de Villars-la-Dombes, France (Rostan, 1976); Hamburg area, Germany (Rühmann, 1961); Hamburg harbour, Germany (Rühmann, 1962); Middle course of river Loire, France (Lair & Sargos, 1981); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Pond in the Paris suburb, France (Pourriot, 1965); Lake Doiran, Macedonia, ex-Yugoslavia (Popovska-Stankovic, 1990); Ponds in the Botanical Garden, Gent, Belgium (Segers *et al.*, 1991b); Lakes around mountain Fuji, Japan (Sudzuki, 1971b); Mountain Fuji area, Japan (Sudzuki, 1978a); Pool S of Trondheim, Norway (Thomasson, 1979); Lago Trasimeno, Italy (Taticchi, 1968); Serbian section of river Danube (Zivkovic, 1968 & 1987); Lake Biwa-ko, Japan (Yamamoto, 1960b); Lake Biwa, Japan

(Yamamoto, 1967); Spain: Huelva, Orence, Tarragona & Valencia (Velasco, 1990); Waters near river Bodrog, NE Hungary (Dévai *et al.*, 1972-1973); Latorica, E Slovakia lowland, CSR (Terek, 1990a); Canals in Hran area, CSR (Terek, 1990c); Mountain Fuji lava caves, Japan (Sudzuki, 1971a); Obretin lake, Danube delta, Romania (Neagu-Godeanu *et al.*, 1968); Lake Akgöl, Selçuk-Izmir, Turkey (Ustaoglu & Balik, 1987); Lake Marmara, Turkey (Ustaoglu, in press); Camargue, S France (De Ridder, 1960a & 1961); Marismas, Spain (De Ridder, 1962b); Peat bogs Chambedaze & La Godivelle, Massif Central, France (Francez & Dévaux, 1985); Peat bogs in the Auvergne, France (Francez, 1981 & 1984c); Lake Donk, Overmere, Belgium (Dumont, 1968b); Inundation area of Danube delta, Romania (Dorobantu, 1964); Lake Balaton, Hungary (Zankai, 1968); Lake Volvi, Macedonia, Greece (Zarfdjian *et al.*, 1990); River Grabia basin, Poland (Pawlowski, 1968, 1970 & 1973); Southwest islands of Japan (Sudzuki *et al.*, 1992); Waldviertel area, lower Austria (Naidenow & Wawrik, 1984); Lake Neusiedlersee, Austria (Donner, 1979); Boom & Overmere, Belgium (De Ridder, 1986); River Danube (Enaceanu & Brezeanu, 1970); River Elbe estuary, Germany (Schulz, 1961); Ellesmere district, UK (Galliford, 1960); Lakes of the Black Sea shore, Romania (Godeanu, 1970b); Obretin embanked basin, Danube delta, Rom. (Godeanu *et al.*, 1973); Near water works at Okocim, Poland (Klimowicz, 1975); Small water bodies in the Mikolajkie area, Pol. (Klimowicz, 1967); River Bistritza and its tributaries, Romania (Miron, 1960); Lowland brook-pond system in Boom, Belgium (Maes, 1985); Danube delta, Romania (Popescu-Marinescu & Zinevici, 1967); Luga district in the Leningrad area, R.F. (Kutikova, 1962b); River Moldova, tributary to the Danube, Rom. (Prunescu-Arion, 1968); Lake Ösbysjön, near Stockholm, Sweden (Pejler, 1961); Hartobagy Nat. Park, Hungary (Forro & Ronkay, 1983); Nat. Res. Jursky Sur, CSR (Hudec, 1978); Lake Kisajno, Mazurian lakeland, Poland (Klimowicz, 1964); Lake Muy (Texel) & Lake Oerd (Ameland), NL (Leentvaar, 1967); Lake Quackjeswater, Voorne, NL (Leentvaar, 1963); Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); Impoundment "Eisernes Tor", Danube, Romania (Brezeanu & Petén, 1973); "Altes Land" near Hamburg, Germany (Caspers & Heckman, 1981 & 1982); Afghanistan (Bērziņš, 1961); Coast of S Finland (Eriksen, 1969); River Loire, France (Lair, 1980); Darnsee near Epe, NW Germany (Koste, 1962); Göreme-Nevsehir, Turkey (Emir, 1991)

- Nearctic region: Crater Lake, Arizona, USA (Green, 1986); Massey L., 16 km N of Beaumont, Texas, USA (Marsh *et al.*, 1978); Altiplanicio Central, Mexico (Vilaclara & Sladeczek, 1989); Colorado, USA (Turner, 1988); Cap Breton Island, Nova Scotia, Canada (Chengalath & Koste, 1988); Arctic N America (Chengalath & Koste, 1989); Kingston, Ontario, Canada (Nogrady, 1989); Great Dismal Swamp, border Virginia - N Carolina, USA (Anderson, Benfield & Buikema, 1977); Milwaukee harbor, USA (Stemberger, 1974); 3 lakes in N Carolina, USA (Lemly & Dimmick, 1982); Deggs Lake & Fentruss L., Colorado, USA (Pennak, 1966); Kentucky, USA (Bērziņš, 1984); Ross Lake, Florida, USA (Bienert, 1986); Illinois river, USA (Brown *et al.*, 1989); Canada (Chengalath, 1977); Northern Michigan inland lakes (Stemberger, 1990); Atchafalaya river basin, Louisiana, USA (Holland *et al.*, 1983); Laurentian Great Lakes (Stemberger, 1979); Near Monroe, Louisiana, USA (Gallagher, 1966); Long pond, St. John's, Newfoundland, Canada (O'Connell & Andrews, 1977); Experimental ponds near Bakersfield, Kern Cy, California, USA (Hurlbert *et al.*, 1972); Everglades Nat. Park, Florida, USA (Nogrady, 1983); Walker Lake, Arizona, USA (Green, 1986)

- Oriental region: In ricefields of N Kriau, Perak, Malaysia (Ali, 1990); Victoria Lake, Sri Lanka (Piyasiri & Jayakody, 1991); Hussain Sagar reservoir, Hyderabad, Andhra Pradesh, S India (Dhanapathi, 1974a); Kalimantan (Borneo), Indonesia (Koste, 1988a); Philippines (Mamaril & Fernando, 1978); Andhra Pradesh, India (Dhanapathi, 1974b); W & E Malaysia & Singapore (Fernando & Zankai, 1981); Sri Lanka: very common in ponds. Also in littoral samples from lakes (Chengalath, Fernando & Koste, 1973); Impoundment Kinda, C Burma (Koste & Tobias, 1990); 2 sewage channels of Gwalior, India (Saksena & Kulkarni, 1986); Ricefields in Thailand (Heckman, 1979); 2 Kumaun Himalayan lakes, U. P., India (Sharma & Pant, 1985); Jammu (J & K), India (Jyoti & Sehgal, 1980); Lake Surinsar, Jammu (J & K), India (Jyoti & Sehgal, 1979); Punjab State, NW India (Sharma, 1976 & 1980a); West Bengal, NE India (Sharma, 1979a); Orissa, E India (Sharma, 1980b); Sri Lanka (Mendis & Fernando, 1962; Fernando, 1969); Kerala, S India (Nayar & Nair, 1969); Sri Lanka (Fernando, 1980a); Singapore & Malaysia (Karunakaran & Johnson, 1978); India (Sharma & Michael, 1980); Taiwan, Malaysia, Singapore, Indonesia, Sri Lanka, India, Philippines (Sudzuki, 1989); Fishponds in Thailand (Boonsom, 1984a); Thailand (Boonsom, 1984b)

- Australian region: NW Australia: Magela Creek area (Koste, 1981b); Alligator rivers area, NT, Aust. (Koste & Shiel, 1983a; Tait, Shiel & Koste, 1984); Billabongs of the Murray-Darling system, Aust. (Shiel, 1986); SW Aust. (Koste, Shiel & Brock, 1983); NSW, Qld, Vic, Aust. (Shiel & Koste, 1979); Cosmopolitan in tropical fresh and slightly saline athalassic water; widespread in tropical regions. Rare in Aust.: NSW, NT, Qld, S & W Aust., Vic (Shiel & Koste, 1987); Taylors Lake, Victoria, Aust. (Bērziņš, 1963)

- Neotropical region: Galapagos Islands (De Smet, 1987 & 1989); Chilean lakes (Schmid-Araya, 1991); Lago Paroni, Brazil (Koste, 1974a); Amazonia, Brazil. Cosmopolitan in warm waters (Koste, 1972f);

Argentina, Venezuela, Colombia, Paraguay, Brazil, Antilles, Panama, Surinam, Costa Rica (Koste & José de Paggi, 1982); Lago Camaleão, Amazonia, Brazil (Koste & Robertson, 1983; Koste, Robertson & Hardy, 1984); Rio Nhamunda, Amazonia, Brazil (Brandorff, Koste & Smirnov, 1982); Near Panguana, Peru (Koste, 1988b); Near Conoception, Paraguay (Koste, 1986b); Mato Grosso, C Brazil (Turner & Da Silva, 1992); Araucarian lakes, W of the Andes, Chile (Thomasson, 1963b); Amazonia, Brazil (Hauer, 1965b; Thomasson, 1971); Nearly all over Argentina (José de Paggi, 1990); Brokopondo Lake, Surinam (Leentvaar, 1979); Flooded savanna at Mantecal, Venezuela (Michelangelli *et al.*, 1979/1980); Prov. Buenos Aires & Mendoza, Argentina; Brazil; Paraguay (Olivier, 1965); Island of Gouadeloupe (Pourriot, 1975); Rio Reconquista, prov. Buenos Aires, Argentina (Kuczynski, 1991b); Lake Cocibolca, Nicaragua (Moreno *et al.*, 1992); Brazil, Argentina, Venezuela, Antilles, Surinam, Panama, Columbia, Paraguay (Turner, 1990); Surinam (Leentvaar, 1975); River Parana, Argentina (Paggi & José de Paggi, 1974; José de Paggi, 1978a & 1985); Ecuador: Costa (Koste & Böttger, 1989); Argentina (Modenutti & Claps, 1988); Lower Orinoco and its delta, Venezuela (Vasquez & Rey, 1989); Lago do Macaco, Brazil (Koste, 1989a); Arroyo Rodriguez, prov. of Buenos Aires, Arg. (Modenutti, 1987); Provinces in NW Argentina (José de Paggi, 1989); Rivers in the E plain of Venezuela (Sanchez *et al.*, 1985); Costa Rica, Haiti, Jamaica, Panama & Trinidad (Collado *et al.*, 1984); Argentine Patagonia (Kuczynski, 1987b); Suape area, Pernambuco, Brazil (Neumann-Leitao *et al.*, 1992); Ecuador: Oriente (Koste & Böttger, 1992)

Platyias quadricornis (Ehrenberg), f. *andhraensis* Dhanapathi, 1974

- Oriental region: Andhra Pradesh, India (Dhanapathi, 1974a; Sharma, 1987); Malaysia & India (Sudzuki, 1989)

Platyias quadricornis (Ehrenberg), f. *brevispinus* Daday, 1905

- Palaearctic region: C Eur. mountains, Carpathes (Bērziņš, 1978)

- Neotropical region: Ecuador: Costa (Koste & Böttger, 1989); Ecuador: Oriente & Costa (Koste & Böttger, 1992); River Orinoco basin, Venezuela (Vasquez, 1984a); Varzea near Santarem, Brazil (Koste, 1974b); Paraguay, Brazil, Peru & Panama (Koste & José de Paggi, 1982); Lago Camaleão, Amazonia, Brazil (Koste & Robertson, 1983; Koste, Robertson & Hardy, 1984); Near Panguana, Peru (Koste, 1988b); Recife & Mato grosso do Sul; Amazonia, Brazil (Turner, 1990c); Pond in tropical rain forest, Peru (Schlüter, 1984); Mato Grosso, C Brazil (Turner & Da Silva, 1992); Lago Cigana, Amazonia, Brazil (Schaden, 1977c); Lake Jacaretinga, Amazonia Central, Brazil (Hardy, 1980)

Platyias quadricornis (Ehrenberg), f. *galapagoensis* De Smet, 1987

- Neotropical region: Galapagos Islands (De Smet, 1987 & 1989)

Platyias quadricornis (Ehrenberg), f. *hexagona* Wulfert, 1956

- Palaearctic region: C Eur. mountains (Bērziņš, 1978); 3 lakes of Sosnowickie, Poland (Radwan, 1968 & 1969); Dusnатыnskie lakes, Poland (Kowalczyk & Radwan, 1962); Parczew area peat bogs, Poland (Radwan, 1974)

Platyias spec.

- Palaearctic region: Rivers in Kazakhstan, R.F. (Petrova, 1976); Etang de Soustons, SW France (De Ridder, 1967b); Garden ponds in Tokyo, Japan (Sudzuki, 1975)

- Nearctic region: Indiana, USA (Whitman *et al.*, 1988); Severson Lake, Minnesota, USA (Comita, 1972); The Sacramento-San Joaquin delta estuary, USA (Siegfried & Kopache, 1980)

- Oriental region: Thailand (Boonsom, 1984b); Jamwa Ramgard freshwater reservoir, Rajasthan, India (Jopal *et al.*, 1981); River Yamuna, India (Rai, 1974); Suraj Kund, India (Sarkar & Rai, 1964)

- Neotropical region: Lake Izabal, Guatemala (Binson & Nordlie, 1975)

Pleurotrocha Ehrenberg, 1830

Pleurotrocha altila Myers, 1940

- Palaearctic region: C Eur. plain (Bērziņš, 1978)

- Nearctic region: N America (Bērziņš, 1978)

Pleurotrocha atlantica Myers, 1936

- Palaearctic region: Italy & Dinaric W Balkan (Bērziņš, 1978)

- Nearctic region: N America (Bērziņš, 1978)

Pleurotrocha aurea Zavadovsky, 1916

- Palaearctic region: E Eur. plain (Bērziņš, 1978)

Pleurotrocha channa Myers, 1933

- Palaearctic region: C Eur. plain (Bērziņš, 1978)

Pleurotrocha constricta (Ehrenberg, 1832)

- Palaearctic region: Peat bogs Poiana Stampei, Bukowina, Rom. (Rudescu, 1966); In reed borders of the

Danube delta, Romania (Rudescu, 1968); C Eur. mountains, Carpathes, Pontic province, C & E Eur. plains, UK (Bērziņš, 1978)

Pleurotrocha hyalina Wulfert, 1939

- Palaeartic region: C Eur. mts., Pontic prov., C & E Eur. plains, Baltic province (Bērziņš, 1978); River Ybbarpsån, Sweden (Bērziņš, 1979); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b & 1989d)

Pleurotrocha larvarum Vlastov, 1956

- Palaeartic region: C Eur. plain (Bērziņš, 1978)

Pleurotrocha multispinosa Fadeev, 1925

- Palaeartic region: Pontic province, C & E Eur. plains (Bērziņš, 1978)

Pleurotrocha petromyzon Ehrenberg, 1830

- Palaeartic region: Hamburg harbour, Germany (Tent, 1981); Dübener Heide, N Germany (Wulfert, 1960b & 1961); W Iceland (De Ridder, 1969b & 1972); Karelian inland waters, R.F. (Kutikova, 1965); Lake Bodensee, near Konstanz (Althaus, 1962); Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); Romania (Rudescu, 1960); Impoundment Neunzehnhain, Germany (Althaus, 1976); Coast of S Finland (Eriksen, 1969); Slovenia, ex-Yugoslavia (Markic, 1983); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); Lake Kisajno, Mazurian lakeland, Poland (Klimowicz, 1964); Lake Mikolajskie, Mazurian lakeland, Poland (Klimowicz, 1972a); In activated sludge, Warsaw, Poland (Klimowicz, 1972b); Mt. Hoverla, Maramarosch Alps, Hungary (Varga, 1962); Darnsee near Epe, NW Germany (Koste, 1962); Engelbergs Moor, near Druchhorn, NW Germ. (Koste, 1965); River Hase, NW Germany (Koste, 1976b); Lake Dümmer, NW Germany (Koste & Poltz, 1983 & 1984); Lake Alfsee, NW Germany (Koste & Poltz, 1987); All over Europe. Cosmopolitan (Bērziņš, 1978); Lake Ladoga, R.F. (Nikolayev & Petrova, 1978); River Grabia basin, Poland (Pawlowski, 1960 & 1973); Lake Balaton, Hungary (Zankai, 1968); Meuse Liégeoise, Belgium (Baiverlin, 1984); Balearic archipelago, Spain (de Manuel *et al.*, 1992); Lake Neusiedlersee, Austria (Donner, 1972d & 1979); River Danube (Enaceanu & Brezeanu, 1970); Canal Leeds-Liverpool, UK (Galliford, 1960b); In periphyton of mosses and *Myriophyllum* in the Danube and in some Alpine brooks, Austria (Donner, 1964); Shores of embanked and free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); River Salzach & its tributaries, Austria (Donner, 1970); River Vistula in the Warsaw area, Poland (Klimowicz, 1981); Canal of river Odra, Poland (Klimowicz, 1979); Small water bodies in the Mikolajskie area, Pol. (Klimowicz, 1967); Anatolia, Turkey (Segers *et al.*, 1992); Lac d'Annecy, France (Balvay & Druart, 1992); In reed borders of the Danube delta, Romania (Rudescu, 1968); Pond Heinrichsweiher, Bonn, Germany (Reck, 1981); River Loire in St. Laurent-les-Eaux, France (Pourriot *et al.*, 1982); 3 lakes of Sosnowickie, Poland (Radwan, 1969); Ponds in the Paris suburb, France (Pourriot, 1965); Ponds in the Botanical Garden, Gent, Belgium (Segers *et al.*, 1991b)

- Nearctic region: Arctic N America (Chengalath & Koste, 1989); Kingston, Ontario, Canada (Nogrady, 1989); Laurentian Great Lakes (Stemberger, 1979)

- Oriental region: Singapore (Karunakaran & Johnson, 1978); Kalimantan (Borneo), Indonesia (Koste, 1988a); Singapore & Indonesia (Sudzuki, 1989)

- Australian region: Creek in Australia (Bērziņš, 1982); NSW & Vic, Aust. (Shiel & Koste, 1979); Tasmania (Koste & Shiel, 1986b); Rare. NSW, Tas, Vic (Koste & Shiel, 1991)

- Neotropical region: Ecuador: Sierra & Costa (Koste & Böttger, 1992)

Pleurotrocha robusta (Glascott, 1893)

- Palaeartic region: River Grabia basin, Poland (Pawlowski, 1970); Lake Balaton, Hungary (Zankai, 1968); Reed belt of Lake Neusiedlersee, Austria (Donner, 1975)

- Neotropical region: Haiti (Collado *et al.*, 1984)

Pleurotrocha trypeta Haring & Myers, 1922

- Palaeartic region: Reed belt of Lake Neusiedlersee, Austria (Donner, 1975 & 1979)

Pleurotrocha vernalis Wulfert, 1935

- Palaeartic region: C Eur. mountains, C & E Eur. plains (Bērziņš, 1978)

Pleurotrocha spec.

- Palaeartic region: In the lower Elbe, Germany (Grimm, 1968); ? Garden ponds in Tokyo, Japan (Sudzuki, 1975)

- Nearctic region: The Sacramento-San Joaquin delta estuary, USA (Siegfried & Kopache, 1980)

- Antarctic region: Antarctica & Subantarctica (José de Paggi & Koste, 1984); (Sudzuki, 1988b)

Pleurotrochopsis Bērziņš, 1973

Pleurotrochopsis anebodica Bērziņš, 1973

- Palaearctic region: Aneboda, Sweden (Bērziņš, 1973); C Eur. plain (Bērziņš, 1978)
- Nearctic region: Kingston, Ontario, Canada (Nogrady, 1989)

Ploesoma Herrick, 1885

Ploesoma hudsoni (Imhof, 1891)

- Palaearctic region: Romania (Rudescu, 1960); In Spanish reservoirs (Guiset, 1977); Lakes in Estonia (Haberman, 1978); Coast of S Finland (Eriksen, 1969); Cerdanya, E part of the Pyrenees, Spain (Miracle, 1981); Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1986); Delta of river Danube, Romania (Godeanu & Zinevici, 1983); Lake Glubokoje, near Moskow, R.F. (Matveeva, 1983, 1986 & 1991); Lakes in Estonia (Mäemets, 1983); Lakes Buchseen, Bodensee, CH (Einsle, 1966); Lake Mindelsee, Bodensee, CH (Einsle, 1967); Lake Maggiore, Italy (Tonolli, 1962; Goldman *et al.*, 1968); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); L. Stechlinsee & L. Nehmitzsee, Brandenburg, G. (Kasprzak & Ronneberger, 1982); Nat. Res. Neeruti Lakes, Estonia (Mäemets, A. & A., *s.d.*); Knowsley Park, Liverpool, UK (Galliford, 1964); Lakes in C Sweden (Pejler, 1964 & 1965); Lake Numasawa, Japan (Sudzuki *et al.*, 1989); Lake Mälaren, Sweden (Grönberg, 1975); Lac Léman, Fr./CH (Martin, 1961; Balvay, 1989; Balvay & Laurent, 1981, 1989, 1990a & 1990b); Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); Impoundments Saidenbach & Neunzehnhain, G. (Althaus, 1976); Lakes in S Sweden (Arnemo *et al.*, 1968); Lake Bielersee, CH (Baugerter *et al.*, 1980; Berner-Fankhauser, 1986); Small lakes in Estonia (Haberman & Mäemets, 1987); Lago Scuro Parmense, N Italy (Antonietti *et al.*, 1988); Lake Derwart, near Tournai, Belgium (Bogaert, 1988; Bogaert & Dumont, 1989); 2 lakes in Karelia, R.F. (Vardapetyan, 1972); Grassmere Lake, Lake District, UK (Elliott, 1977); Lake in N Sweden (Axelson, 1961); Tingvall Loch, Mainland, Shetland (Bērziņš, 1982a); Lake Kisajno, Mazurian lakeland, Poland (Klimowicz, 1964); L. Mikolajskie, Mazurian lakeland, Poland (Klimowicz, 1972); Impoundment Kninicki, CSR (Kubicek, 1964); Fish fattening ponds in the Ukraina (Krazhan *et al.*, 1976); Lake Ladoga, R.F. (Nikolayev & Petrova, 1978); All over Europe; Caspian area (Bērziņš, 1978); Lower Volga, R.F. (Chuykov & Merkulov, 1986); Lake Tarasm, lake of Onega basin, R.F. (Kryglova, 1981); Volga river + Volgograd reservoir, R.F. (V'yushkova & Lakhnova, 1974); Soviet Karelia, R.F. (Filimonova, 1976); Lapland State Preserve, R.F. (Ghilarov, 1972); Gulf of Finland & Gulf of Bothnia (Bērziņš, 1960); Lake Prosece & L. Kozjak, Croatia, ex-Yugoslavia (Erben, 1991); Japanese inland waters (Yamamoto, 1960a); Lake Biwa-ko, Japan (Yamamoto, 1960b); Lake Biwa, Japan (Yamamoto, 1967); River Svatka, CSR (Kubicek, 1968); Lake Balaton, Hungary (Zankai, 1968); Etang du Brochet, Rambouillet, France (Pourriot *et al.*, 1969); Lake Tyrifjord, Norway (Langeland, 1974); N & W Iceland (De Ridder, 1972); Lake Gjersjøen, S Norway (Faafeng & Nilssen, 1981); Dübener Heide, N Germany (Wulfert, 1961); Waldviertel area, lower Austria (Naidenow & Wawrik, 1984); Lake Konstanz, Germany (Kiefer, 1968; Walz *et al.*, 1987); Obretin embanked basin, Danube delta, Rom. (Godeanu *et al.*, 1973); Nat. Res. Oisterwijkse vennen, NL (De Graaf, 1960); L Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); Lakes in NE Norway (Saeter, 1971); Lac de Nantua, Ain, France (Balvay, 1985); Brabantse Biesbosch, NL (Dresscher, 1976); Bolshoe Lake, White Sea, R.F. (Ghilarov, 1965); New impoundments in the CSR (Kubicek, 1968); Lake Baikal, R.F. (Koshov, 1963); Lake Zürichsee, CH (Nipkov, 1961); Karelian inland waters, R.F. (Kutikova, 1965); Lakes in the Puy-de-Dôme, France (Persoone *et al.*, 1968); Lac d'Annecy, France (Balvay & Druart, 1992); River Loire in St. Laurent-les-Eaux, France (Pourriot *et al.*, 1982); Middle course of river Loire, France (Lair & Sargos, 1981); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Ponds in the Paris suburb, France (Pourriot, 1965); Fukushima Prefecture, Japan (Sudzuki, 1982); Serbian section of river Danube (Zivkovic, 1987); All over Spain (Velasco, 1990); Rybnik dam reservoir, Poland (Krzanowski, 1979)
- Nearctic region: R. Opinaca & small Opinaca, James Bay area, N Québec, Canada (Armengol *et al.*, 1983); Lake Ontario, Canada (Nauwerck, 1978); Bay of Quinte, Lake Ontario, Canada (Nogrady, 1988); Lakes in the Churchill Falls area, Labrador, Can. (Duthie & Ostrovsky, 1974); Pyramid Lake, W North America (Thomasson, 1962); Old Woman Creek, Ohio, USA (Havens, 1991); NE Canada (Chengalath & Koste, 1983); NW Canada (Chengalath & Koste, 1987); Arctic N America (Chengalath & Koste, 1989); Canada (Chengalath, 1977); Ontario, Canada (Chengalath & Fernando, 1973); Colorado, USA (Turner, 1988); Laurentian Great Lakes (Stemberger, 1979); Northern Michigan inland lakes (Stemberger, 1990); Mt. Tremblant Prov. Park, Québec, Canada (Nogrady, 1980); Beaverskin Lake, Kejunkujik Nat. Park, Nova Scotia, Canada (Blouin *et al.*, 1984); Newfoundland lakes, Canada (Chengalath *et al.*, 1984); James Bay area, Canada (Pinel-Alloul *et al.*, 1979)
- Oriental region: ? Taiwan (Sudzuki, 1989)
- Neotropical region: Panama (Koste & José de Paggi, 1982)

***Ploesoma lenticulare* Herrick, 1885**

- Palaearctic region: Romania (Rudescu, 1960); All over Europe (Bērziņš, 1978); Lac Léman, Fr./CH (Balvay *et al.*, 1990); (Balvay & Laurent, 1989, 1990a & 1990b); Coast of S Finland (Eriksen, 1969); Lake Kisajno, Mazurian lakeland, Poland (Klimowicz, 1964); N Swedish Lapland (Pejler, 1962a); W Iceland (De Ridder, 1972); Japanese inland waters (Yamamoto, 1960a); Dübener Heide, N Germany (Wulfert, 1961); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); Lac d'Annecy, France (Balvay & Druart, 1992); In reed borders of the Danube delta, Romania (Rudescu, 1968); Peat bogs Poiana Stampei, Bukowina, Romania (Rudescu, 1966); River Volga, R.F. (Mordukhai-Boltovskoi, 1979)

- Nearctic region: Canada (Chengalath, 1977); Ontario, Canada (Chengalath, Fernando & George, 1971; Chengalath & Fernando, 1973); NE Canada (Chengalath & Koste, 1983); NW Canada (Chengalath & Koste, 1987); Cap Breton Island, Nova Scotia, Canada (Chengalath & Koste, 1988); Lake Michigan & Milwaukee harbor, USA (Stemberger, 1974); Laurentian Great Lakes (Stemberger, 1979); Northern Michigan inland lakes (Stemberger, 1990); Ontario, Canada & Wisconsin, USA (Bērziņš, 1984); Ross Lake, Florida, USA (Bienert, 1986); Kingston, Ontario, Canada (Nogrady, 1989); Lac Echo, Québec, Canada (Nogrady, 1976); Mt. Tremblant Nat. Park, Québec, Canada (Nogrady, 1980); Lake 362, Exper. Lake area, NW Ontario, Canada (Malley & Chang, 1991); Newfoundland lakes, Canada (Chengalath *et al.*, 1984); Adirondack Lakes, NY State, USA (Siegfried *et al.*, 1984); Lake Wabamun, Alberta, Canada (Gallup & Hickman, 1975); Atchafalaya river basin, Louisiana, USA (Holland *et al.*, 1983); Swan Lake, near Sudbury, Ontario, Canada (Yan & Geiling, 1985); Silver Lake, Adirondack mts., NY State, USA (Siegfried, 1991); Crecy Lake, New Brunswick, Canada (Smith, 1969)

- Oriental region: W & E Malaysia & Singapore (Fernando & Zankai, 1981); Malaysia (Sudzuki, 1989)

- Australian region: NSW, Australia (Shiel & Koste, 1979); Tasmania (Koste & Shiel, 1987)

- Neotropical region: Lower Orinoco river & its delta, Venezuela (Vasquez & Rey, 1989); Lago Paroni, Brazil (Koste, 1974a); Amazonia, Brazil (Hauer, 1965b; Thomasson, 1971; Koste, 1972f); Brazil & Argentina (Koste & José de Paggi, 1982); Lago Camaleão, Amazonia, Brazil (Koste, Robertson & Hardy, 1984); Rio Nhamunda, Amazonia, Brazil (Brandorff, Koste & Smirnov, 1982); Rio Jatapu & Rio Uatumã, Amazonia, Brazil (Koste & Hardy, 1984); Prov. Entre Rios, Argentina (José de Paggi, 1990); Ecuador: Oriente (Koste & Böttger, 1992)

***Ploesoma lenticulare* Herrick, f. *rotundum* Sudzuki, 1960**

- Palaearctic region: Tableland in C Japan (Sudzuki, 1960)

***Ploesoma peipsiense* Mäemets & Kutikova, 1979**

- Palaearctic region: Lake Peipsi, Estonia (Mäemets & Kutikova, 1979)

***Ploesoma triacanthum* (Bergendal, 1892)**

- Palaearctic region: Dwingelose Heide, Drente, NL (Dresscher, 1976); Lake Bielersee, CH (Berner-Fankhauser, 1986); Coast of S Finland (Eriksen, 1969); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989c & 1989d); Lake Kisajno, Mazurian lakeland, Poland (Klimowicz, 1964); Nat. Res. Neeruti Lakes, Estonia (Mäemets A & A, *s.d.*); N Swedish Lapland (Pejler, 1962a); Lac Léman, Fr./CH (Balvay & Laurent, 1981, 1989, 1990a & 1990b); Skopun (Nordara Halsavatn), Faröer (De Smet *et al.*, 1988); Ogochi reservoir, NW Tokyo, Japan (Urabe, 1990); Japanese inland waters (Yamamoto, 1960a); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); Karelian inland waters, R.F. (Kutikova, 1965); Lac d'Annecy, France (Balvay & Druart, 1992); Pelagic zone of the Leczna-Wlodawa lakes, Pol. (Radwan, 1975); River Volga, R.F. (Mordukhai-Boltovskoi, 1979)

- Nearctic region: Canada (Chengalath, 1977); Ontario, Canada (Chengalath, Fernando & George, 1971; Chengalath & Fernando, 1973); NE Canada (Chengalath & Koste, 1983); Cap Breton Island, Nova Scotia, Canada (Chengalath & Koste, 1988); Arctic N America (Chengalath & Koste, 1989); Northern Michigan inland lakes (Stemberger, 1990); Papoose Lake & Jasper L., W North America (Thomasson, 1962)

***Ploesoma truncatum* (Levander, 1894)**

- Palaearctic region: Etang de Pommereau, Loir-et-Cher, France (Tassigny *et al.*, 1970); Romania (Rudescu, 1960); La Mancha, Castell. Spain (Armengol *et al.*, 1975); Heiluntsian province, China (Bogoslowski, 1962); Lake Numasawa, Japan (Sudzuki *et al.*, 1983 & 1989); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); Lake Bracciano & L. Vico, C Italy (Ferrari, 1982); Lago Maggiore, Italy (Tonolli, 1962; Goldman *et al.*, 1968); Lake Biwa, Japan (Yamamoto, 1968; Hillbricht-Ilkowska, 1983a); Delta of river Danube, Romania (Prunescu-Arion, 1989); Lakes in C Sweden (Pejler, 1964 & 1965); Darnsee near Epe, NW Germany (Koste, 1962); NW Germany (also: tropics & subtropics) (Koste, 1982b); Lac Léman, Fr./CH (Martin, 1961; Rougier, 1969; Balvay, 1989; Balvay & Laurent, 1981, 1989, 1990a & 1990b); River Volga & Volgograd reservoir, R.F. (V'yushkova & Lakhnova, 1974); Soviet Karelia, R.F. (Filimonova, 1976); Dniester estuary, R.F. (Polishchuk, 1976); Lake Ladoga, R.F. (Nikolayev & Petrova, 1978); Lapland State Preserve, R.F. (Ghilarov, 1972); All over Europe (Bērziņš, 1978); Gulf of Finland

(Bērziņš, 1960); Lake Tarasm, Lake Onega basin, R.F. (Kruglova, 1981); Small rivers of the Kola peninsula, R.F. (Kruglova, 1983); Lakes in Estonia (Haberman, 1978); Coast of S Finland (Eriksen, 1969); Mountain Fuji lava caves, Japan (Sudzuki, 1971a); Lakes around mountain Fuji, Japan (Sudzuki, 1971b); Mountain Fuji area, Japan (Sudzuki, 1978a); Fukushima Prefecture, Japan (Sudzuki, 1982); N & W Iceland (De Ridder, 1969b & 1972); Japanese inland waters (Yamamoto, 1960a); Waldviertel area, lower Austria (Naidenow & Wawrik, 1984); Bazel, Belgium (De Ridder, 1986); Lago Maggiore, Italy (Edmondson, 1960); Lake Konstanz, Germany (Kiefer, 1968; Walz *et al.*, 1987); River Danube (Enaceanu & Brezeanu, 1970); Nat. Res. Oisterwijkse vennen, NL (De Graaf, 1960); Id. + Het Hol near Kortenhoef, NL (Dresscher, 1976); Shores of embanked and free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); Lake Baikal, R.F. (Koshov, 1963); Lake Zürichsee, CH (Nipkow, 1961); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); Karelian inland waters, R.F. (Kutikova, 1965); Lac d'Annecy, France (Balvay & Druart, 1992); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Aegean lakes, Macedonia, ex-Yugoslavia (Serafimova-Hadzisce, 1974); Tarn in Värmland, Sweden (Thomasson, 1970); Small lakes, W of Yamagata, Japan (Ueno *et al.*, 1961); Lake Ohrid, Balkan peninsula (Stankovic, 1960); Serbian section of river Danube (Zivkovic, 1987); Lake Biwa, Japan (Yamamoto, 1960b & 1967); Spain: Ciudad real (Velasco, 1990)

- Nearctic region: Lake Ontario, Canada (Nauwerck, 1978); Bay of Quinte, Lake Ontario, Canada (Nogrady, 1988); Lake Michigan, USA (Sandgren & Lehman, 1990); NW Canada (Chengalath & Koste, 1987); Cap Breton Island, Nova Scotia, Canada (Chengalath & Koste, 1988); Arctic N America (Chengalath & Koste, 1989); Lakes Adirondack, NY State, USA (Siegfried *et al.*, 1984 & 1989); Acid lake in Maine, USA (Brett, 1989); Kingston, Ontario, Canada (Nogrady, 1989); Canada (Chengalath, 1977); Ontario, Canada (Chengalath, Fernando & George, 1971; Chengalath & Fernando, 1973); NE Canada (Chengalath & Koste, 1983); Lake Michigan & Milwaukee harbor, USA (Stemberger, 1974); Ontario, Canada & Wisconsin, USA (Bērziņš, 1984); Ross Lake, Florida (Bienert, 1986); Northern Michigan inland lakes (Stemberger, 1990); Newfoundland lakes, Canada (Chengalath *et al.*, 1984); Greens Lake, Beaver Island, Michigan, USA (Foran & King, 1982); Lac Echo, Québec, Canada (Nogrady, 1976); Mt. Tremblant Prov. Park, Québec, Canada (Nogrady, 1980); Laurentian Great Lakes (Stemberger, 1979); Bare Lake, Alaska (Edmondson, 1960); Long Lake, N Colorado, USA (Thomasson, 1964b); Lake Waccama, N Colorado, USA (Thomasson, 1963a); Everglades Nat. Park, Florida, USA (Nogrady, 1983)

- Australian region: S Tasmania (Koste, Shiel & Tan, 1988)

- Neotropical region: Suape area, Pernambuco, Brazil (Neumann-Leitao *et al.*, 1992); River Parana, Argentina (Paggi & José de Paggi, 1974; José de Paggi, 1978a & 1985); River Santa Fé, Argentina (José de Paggi, 1976b); Orinoco river basin, Venezuela (Vasquez, 1984a); Caroni river basin, Venezuela (Vasquez, 1984b); Lago do Macaco, Brazil (Koste, 1989a); Amazonia, Brazil (Hauer, 1965b; Gillard, 1967; Thomasson, 1971; Koste, 1972f); Brazil, Argentina, Panama (Koste & José de Paggi, 1982); Rio Nhamunda, Amazonia, Brazil (Brandorff, Koste & Smirnov, 1982); Prov. Chubut, Rio Negro, Chaco & Santa Fé, Argentina (José de Paggi, 1990); Argentine Patagonia (Kuczynski, 1987b); River Parana, Brazil (Bonetto, 1986)

Ploesoma spec.

- Palaearctic region: Delta of river Danube, Romania (Prunescu-Arion, 1989); Middle course of river Loire, France (Lair & Sargos, 1981); Fukushima Prefecture, Japan (Sudzuki, 1982); Small lakes, W of Yamagata, Japan (Ueno *et al.*, 1961)

- Nearctic region: Little Rock Lakes, Wisconsin, USA (Frost & Montz, 1988); Adirondack Lakes, NY State, USA (Siegfried *et al.*, 1984); In borrow-pit ponds, N Illinois, USA (Lipsey & Malcom, 1981); Desaulniers reservoir, Québec, Canada (Pinel-Alloul *et al.*, 1982)

- Oriental region: In ricefields in N Kriau, Perak, Malaysia (Ali, 1990)

- Neotropical region: Prov. Neuquen, Argentina (José de Paggi, 1990); Flooded savanna at Mantecal, Venezuela (Michelangelli *et al.*, 1979/1980); Amazonia, Brazil (Hauer, 1965b; Thomasson, 1971); Araucarian lakes, E of the Andes, Chile (Thomasson, 1963b)

Polyarthra Ehrenberg, 1834

Polyarthra dolichoptera Idelson, 1925

- Palaearctic region: Romania (Rudescu, 1960); Po river, Italy (Ferrari *et al.*, 1989); Lunzer Obersee, Austria (Pivoda, 1977; Ruttner-Kolisko, 1975 & 1977; Mikschi, 1989); Alpine lakes in Sierra Nevada, Spain (Morales-Baquero *et al.*, 1989); Lake Numasawa, Japan (Sudzuki *et al.*, 1989); Lake Konstanz, Germany (Walz *et al.*, 1987; Pauli, 1989); Koyama-Ike, a coastal pond in Japan (Sudzuki & Fukuta, 1989); Carp ponds in S Poland (Zurek, 1980); Lake Sempachersee, CH (Zimmermann, 1974); Minorca, Spain (de

Manuel, 1990); Darnsee near Epe, NW Germany (Koste, 1962); River Hase, NW Germany (Koste, 1976b); Lake Dümmer, NW Germany (Koste & Poltz, 1983 & 1984); Lake Alfsee, NW Germany (Koste & Poltz, 1987); Lake Mälaren, Sweden (Lanner & Pejler, 1973; Grönberg, 1975); Delta of river Danube, Romania (Godeanu & Zinevici, 1983; Prunescu-Arion, 1989; Zinevici & Teodorescu, 1990); Norfolk Broads, UK (Irvine *et al.*, 1990); Small lakes in SW Sweden (Stenson, 1982); Lake Mikolajskie, Mazurian lakeland, Poland (Karabin, 1978); Grasmere Lake, Lake District, UK (Elliott, 1977); 2 lakes in N Sweden (Axelson, 1961); Skopun (Heimara Halsavatn), Faröer (De Smet *et al.*, 1988a); In spanish reservoirs (Guiset, 1977); Lakes in Estonia (Haberman, 1978 & 1983); Water purification plant near Köln, Germany (Bick & Scholtyssek, 1960); Jotunheimen, high mountain range in Norway (Blakar & Jacobsen, 1979); S coast of Finland (Eriksen, 1979); River Loire, France (Lair, 1980); Lake Neusiedlersee, Austria (Herzig, 1983); Lake Lilla Stockelidsvatten, SW Sweden (Stenson, 1983); Loch Leven, Scotland (May, 1983, 1985, 1986 & 1987); Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1986); Lake Cullera, near Valencia, Spain; Banyoles Lake; Laguna de la Cruz & Lagunello negro, near Cuenca (Miracle & Vicente, 1983); River Danube (Enaceanu & Brezeanu, 1970); Impoundment Kninicki & river Svatka, CSR (Kubicek, 1964); L. Mikolajskie & L. Sniardny, Maz.lakel., Pol. (Kosicki, 1960); Lakes in C Sweden (Pejler, 1965); Bear Island, Arctic Ocean (Pejler, 1974); Edgeöya, Svalbard (De Smet *et al.*, 1988b); Bjørnøya (Bear Island), Svalbard (De Smet, 1988); Lake Hazar, Turkey (Tokat, 1976); Lago Maggiore, Italy (Tonolli, 1962); Slovenia, ex-Yugoslavia (Markic, 1983); Lake Glubokoje, near Moscow, R.F. (Matveeva, 1983); Lakes in Estonia (Mäemets, 1983); Asiatic Turkey (Dumont & De Ridder, 1987); Sierra Nevada, Spain (Morales-Baquero, 1987); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); Lake Königssee, Bavaria, Germany (Laxhuber, 1987); District Ostrava, CSR (Dvorakova, 1960b); C Finland (Eloranta, 1982b); Lake Bolsena, L. Bracciano & L. Vico, C Italy (Ferrari, 1972); Hortobagy Nat. Park, Hungary (Forro & Ronkay, 1983); Lake Balaton, Hungary (Zankai, 1989); Nat. Res. Jursky Sur, CSR (Hudec, 1978); Lake Biwa, Japan (Hillbricht-Ilkowska, 1983a & 1983b); L. Stechlinsee & L. Nehmitzsee, Brandenburg, G. (Kasprzak & Ronneberger, 1982); Svalbard (Amren, 1964a & 1964b); Near Trebon, S Bohemia, CSR (Albertova, 1960); Lake Myvatn, Iceland (Adalsteinsson, 1974 & 1979); Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); Impoundments Saidenbach & Neunzehnhain, G. (Althaus, 1976); Lakes in S Sweden (Arnemo *et al.*, 1968); Lake Bielersee, CH (Baugerter *et al.*, 1980; Berner-Fankhauser, 1986 & 1987); Middle course of river Loire, France (Lair & Sargos, 1981); River Sambre, near the Belgian-French border (Waeyaert, 1972); Ponds, moats of castle, canals & peat bogs in the Paris suburb, France (Pourriot, 1965); Lake Doiran, Macedonia, ex-Yugoslavia (Popovska-Stankovic, 1990); Garden ponds in Tokyo, Japan (Sudzuki, 1975); Tarn in Värmland, Sweden (Thomasson, 1970); Serbian section of river Danube (Zivkovic, 1987); All over Spain; Portugal: Beja, Evora, Portalegre & Setubal (Velasco, 1990); Experimental ponds at Golycz, Poland (Zürek, 1974); Waters near river Bodrog, NE Hungary (Dévai *et al.*, 1972-1973); Impoundment Twistetalsperre, Nordhessen, G. (Meinel *et al.*, 1983); Lake Laacher See, Eifel, Germany (Eckartz-Nolden & Nolden, 1992); Ellesmere district, UK (Galliford, 1960); Lac de Pétichet, Isère, France (Gay, 1979); Lakes, N of Bucarest, Romania (Godeanu, 1969b); Lakes of the Black Sea shore, Romania (Godeanu, 1970b); High mt. lakes & ponds of Sierra Nevada, Spain (Morales-Baquero *et al.*, 1988); Alderfen Broad, Norfolk, UK (Cryer & Townsend, 1988); Lake Gersjoen, SE Norway (Hessen & Nilssen, 1985); New impoundments in the CSR (Kubicek, 1968); River Vistula in the Warsaw area, Poland (Klimowicz, 1981); Canal of river Odra, Poland (Klimowicz, 1979); Small water bodies in the Mikolajskie area, Pol. (Klimowicz, 1967); Side-arm of river Danube near Bratislava, CSR (Lichardova, 1984); Anatolia, Turkey (Segers *et al.*, 1992); Ponds at Mirwart, Belgium (Marlier & Wattiez, 1977); L. Czarny & L. Zielony, Tatra mts., Poland (Gliwicz, 1967); L. Drachensee, L. Schwarzsee & L. Gossen-köllersee, Tyrolean alpine lakes, Austria (Nauwerck, 1966); Lake Victoria, Oltenia area, Romania (Marx *et al.*, 1967); Lake Zürichsee, CH (Nipkov, 1961); Lake Erken, Sweden (Nauwerck, 1963); District Luga, Leningrad area, R.F. (Kutikova, 1962b); Danube delta, Romania (Popescu-Marinescu & Zinevici, 1967); River Luga, Leningrad area, R.F. (Kutikova, 1962a); Lough Neagh, N Ireland (Andrew & Fitzsimons, 1992); Lake Ösbysjön, near Stockholm, Sweden (Pejler, 1961); Lakes in C Sweden (Pejler, 1964); Lac d'Annecy, France (Balvay & Druart, 1992); Ponds in Gif-sur-Yvette, France (Pourriot & Leborgne, 1970); Pond in Gif-sur-Yvette, France (Pourriot, 1972); Pond Heinrichsweiher, Bonn, Germany (Reck, 1981); 3 lakes of Sosnowickie, Poland (Radwan, 1969); Etang des Monts Rosés, Sivry, Belgium (De Ridder, 1980); Brackish waters near Bruges, Belgium (De Ridder & Verheye, 1980); Lake Neujahrsloch in Hessen, Germany (Menzel, 1968); Obretin embanked basin, Danube delta, Rom. (Godeanu *et al.*, 1973); Nat. Res. Oisterwijkse vennen, NL (De Graaf, 1960); Shores of embanked and free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); Predeltaic area of the Danube river in the Black Sea, Romania (Popescu-Marinescu, 1974); River Danube (from Austria to Romania) (Wawrik, 1968); Lac Léman, Fr./CH (Balvay, 1989 & 1991; Balvay & Laurent, 1981, 1989, 1990a & 1990b); Lakes in NE

Norway (Saeter, 1971); Lake Aydât, Massif Central, France (Lair, 1990); Lac de Nantua, Ain, France (Balvay, 1985); Impoundment Helme, near Kelbra, Kyffhäuser, Germany (Heynig, 1974 & 1980); Amsterdam; Nat. Res. Oisterwijkse vennen; Maria- & Helenapeel, NL (Dresscher, 1976); Rés. biol. de Villars-la-Dombes, France (Rostan, 1976); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Camargue, S France (De Ridder, 1960a & 1961); Pools in the Upper Elbe area, CSR (Dvorakova, 1961); Nat. Res. Neeruti Lakes, Estonia (Mäemets, A & A, *s.d.*); Canal Isebek, Hamburg, Germany (Caspers & Schulz, 1960; Caspers, 1964); In small water bodies of mt. Arlberg, Tyrol, Austria (Wawrik, 1966); In several lakes in Turkey (Emir, 1991); N & W Iceland (De Ridder, 1970 & 1972); Pond Vasikkalampi, C Finland (Eloranta, 1981); 3 lakes in N Germany (Godeanu, 1978); Rheinisches Braunkohlengebiet near Zülpich, G. (Küsters *et al.*, 1975); Lake Baikal, R.F. (Kutikova, 1978); Lake Lunzer Obersee, Austria (Ruttner-Kolisko, 1975); River Svatka, CSR (Kubicek, 1968); Lake Glubokoje, near Moscow, R.F. (Matveeva, 1986); ? Lake Nemi, Italy (Parise, 1962); W Svalbard, Norway (Thomasson, 1961); In acid ponds of lower Austria (Wawrik, 1972); Etangs de Mirwart, Belgium (Wattiez, 1978); Korea (Turner, 1986); Balearic Archipelago, Spain (de Manuel *et al.*, 1992); Waldviertel area, lower Austria (Naidenow & Wawrik, 1984); Lake Neusiedlersee, Austria (Donner, 1979); All over Belgium (De Ridder, 1986); Impoundment of river Vierre, Suxy, Belgium (De Maeseneer, 1979); Heiluntian province, China (Bogoslowski, 1962); Impoundment "Eisernes Tor", r. Danube, Rom. (Brezeanu & Petén, 1973); Albufera de Valencia, Spain (Oltre & Miracle, 1984); Lake Bodensee, Germany (Walz, 1986); Lago Scuro Parmense, N Italy (Antonietti *et al.*, 1988); Etang de Virelles, Belgium (Moureau *et al.*, 1988); Middle course of river Po, Italy (Ferrari *et al.*, 1986); Slapy reservoir, CSR (Brandl & Fernando, 1981); 2 lakes in Tatra mts., border Poland-CSR (Gliwicz & Rowan, 1984); L. Goggaussee, Carinthia, Austria (Herzig & Moog, 1976); Fishponds near Warsaw, Poland (Hillbricht-Ilkowska, 1964); Impoundment Helme, near Kelbra, Kyffhäuser, G. (Heynig, 1968); Lake Donk, Overmere, Belgium (Martens, 1965; Dumont, 1968b; Coussement, 1976); Kolyrna Indigirka tundra lakes, R.F. (Kirillova & Sokolova, 1972); All over Europe (Bērziņš, 1978); Gulf of Riga, S North Sea & E Baltic Sea (Bērziņš, 1960); Lake Proscje & L. Kozjak, Croatia, ex-Yugoslavia (Erben, 1991); "Grote vijver" fort 8, Hoboken (Antwerp, Belg.) (De Smet *et al.*, 1988); "Kleine vijver" fort 8, Hoboken (Antwerp, Belg.) (De Smet *et al.*, 1989); Moat of fort Merkssem (Antwerp, Belgium) (De Smet *et al.*, 1987); Small rivers, tributary to the Kiev reservoir, R.F. (Polishchuk, 1987); Neva Bay, Gulf of Finland, R.F. (Telesh, 1986); Lower Volga, R.F. (Chuykov & Merkulov, 1986); Mologa river, R.F. (Riv'ger *et al.*, 1981); River Grabia basin, Poland (Radwan, 1960); ? Lake Volvi, Macedonia, Greece (Zarfdjian *et al.*, 1990); Impoundments in E Bohemia, CSR (Sladeckova & Sladeczek, 1960); Canals in the Hran area, CSR (Terek, 1990c); Obretin Lake, Danube delta, Romania (Neagu-Godeanu *et al.*, 1968); Boatracing canal, Gent, Belgium (De Maeseneer, 1971; Vanderbeken, 1977; Coussement, 1982); Forest pond in Lembeek, Belgium (Van Elslande, 1975; Deronde *et al.*, 1984)

- Nearctic region: Grace Lake, Long L. & Madeline L., N Canada (Moore, 1980); Lake Ontario, Canada (Nauwerck, 1978); Bay of Quinte, Lake Ontario, Canada (Nogrady, 1988); Star Lake, Vermont, USA (Bogdan & Gilbert, 1982); Northern Ontario lakes, Canada (Roff & Kwiatkowski, 1977); Lakes in the Churchill Falls area, Labrador, Can. (Dutrie & Ostrovsky, 1974); Walker Lake & Stoneman L., Arizona, USA (Green, 1986); Lake Louise, W North America (Thomasson, 1962); Redrock Lake, N Colorado, USA (Thomasson, 1964b); Silver Lake, Adirondack mts., NY State, USA (Siegfried, 1991); Bayou de Siard, Monroe, Louisiana, USA (Gallagher, 1965); Ontario, Canada (Chengalath, Fernando & Koste, 1971; Chengalath & Koste, 1973); Lake 382, experim. lake area, NW Ontario, Can. (Malley & Chang, 1991); Fayetteville Green Lake, NY, USA (Culver & Brunskill, 1969); Small eutrophic lake in Norwich, Vermont, USA (Bogdan *et al.*, 1980); Canada (Chengalath, 1977); NE Canada (Chengalath & Koste, 1983); NW Canada (Chengalath & Koste, 1987); Cap Breton Island, Nova Scotia, Canada (Chengalath & Koste, 1988); Arctic N America (Chengalath & Koste, 1989); Cape Herschel, Ellesmere Island, NWT, Canada (Nogrady & Smol, 1989); Small pond in Vermont, USA (Gilbert, 1985); Star Lake, Norwich, Vermont, USA (Gilbert & Bogdan, 1981; Bogdan & Gilbert, 1982); Illinois & Kentucky, USA (Bērziņš, 1984); Little Rock Lake, Wisconsin, USA (Frost & Montz, 1988); Acid lake in Maine, USA (Brett, 1989); Kingston, Ontario, Canada (Nogrady, 1989); Laurentian Great Lakes (Stemberger, 1979); Northern Michigan inland lakes (Stemberger, 1990); Newfoundland lakes, Canada (Chengalath *et al.*, 1984); Adirondack Lakes, NY State, USA (Siefried *et al.*, 1984); Greens Lake, Beaver Island, Michigan, USA (Foran & King, 1982); Lac Echo, Québec, Canada (Nogrady, 1976)

- Oriental region: Sri Lanka (Fernando, 1980a); Taiwan (Sudzuki, 1988); Taiwan & Sri Lanka (Sudzuki, 1989); Village pool & rice paddy at Patan, Nepal (Daems & Dumont, 1974); Sri Lanka. Rare. Found in lakes and ponds (Chengalath, Fernando & Koste, 1973); Montane lakes of Bali, Indonesia (Green *et al.*, 1978); Bali (Serruya & Pollinger, 1984)

- Australian region: Billabongs river Murray, SE Aust. (Shiel & Koste, 1983); SW Aust. (Koste, Shiel & Brock, 1983); Reservoirs SE Aust. (Shiel *et al.*, 1987); Tasmania (Koste & Shiel, 1987); Farm dams near

Gloucester, NSW, Aust. (Sudzuki & Timms, 1980); NSW, Aust. (Shiel & Koste, 1979); Lower Murray, S Aust. (Shiel, Walker & Williams, 1982); Coliban reservoir, Aust. (Bērziņš, 1982); S Tasmania (Koste, Shiel & Tan, 1988); Lakes in Tasmania (Shiel, Koste & Tan, 1989); Rivers & reservoirs of the Murray-Darling syst. (Shiel, 1986); Lake Sorell, Tasmania (Sudzuki, 1967)

- Neotropical region: Provinces in NW Argentina (Hauer, 1965b; Thomasson, 1971; Koste, 1972f); Argentina, Brazil, Surinam (Koste & José de Paggi, 1982); Galapagos Islands (De Smet, 1987 & 1989); Chilean lakes (Schmid-Araya, 1991); Lake Todos los Santos, Chile (Campos *et al.*, 1990); Prov. Chubut, Rio Negro, Neuquen, La Rioja, Tucumare, Cordoba & Santiago del Estero, Arg. (José de Paggi, 1990); ? Brokopondo Lake, Surinam (Leentvaar, 1979); Argentina (Olivier, 1965); Lake Ranco, Chile (Campos *et al.*, 1992); San Cristobal & Santa Cruz, Galapagos Islands (Segers, 1990); Araucarian lakes, W of the Andes & Araucarian pools & ponds, Chile (Thomasson, 1963b); Mato Grosso, C Brazil (Turner & Da Silva, 1992)

Polyarthra dolichoptera Idelson, f. *aptera* (Hood, 1893)

- Palaearctic region: Lake Volvi, Macedonia, Greece (Zarfdjian *et al.*, 1990); 3 lakes of Sosnowickie, Poland (Radwan, 1968 & 1969); Lake Balaton, Hungary (Zankai, 1968); Fishponds near Warsaw, Poland (Hillbricht-Ilkowska, 1964); Svalbard (Amren, 1964a & 1964b); Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963); Shores of embanked and free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); River Danube, from Austria to Romania (Wawrik, 1968); Lake Zürichsee, CH (Nipkov, 1961); ? Garden ponds in Tokyo, Japan (Sudzuki, 1975)

Polyarthra dolichoptera Idelson, f. *brachyptera* Bartos, 1947

- Palaearctic region: New impoundments in the CSR (Kubicek, 1968); 3 lakes of Sosnowickie, Poland (Radwan, 1966 & 1969)

- Nearctic region: Illinois, USA (Bērziņš, 1984)

Polyarthra euryptera (Wierzejski, 1893)

- Palaearctic region: Romania (Rudescu, 1960); Darnsee near Epe, NW Germany (Koste, 1962); River Hase, NW Germany (Koste, 1976b); Lake Mälaren, Sweden (Grönberg, 1975); Fishponds near Warsaw, Poland (Hillbricht-Ilkowska, 1964); Soviet Karelia, R.F. (Filimonova, 1976); Volga river & Volgograd reservoir, R.F. (V'yushkova & Lakhnova, 1974); Oligotrophic mesoacid & polyacid lakes in NW R.F. (Salazkin, 1971); All over Europe; Caucasus, Caspian area (Bērziņš, 1978); "Grote vijver" fort 8, Hoboken (Antwerp, Belg.) (De Smet *et al.*, 1986); "Kleine vijver" fort 8, Hoboken (Antw. Belgium) (De Smet *et al.*, 1989); Rybinsk reservoir, R.F. (Kartasheva & Lebedeva, 1981); Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1986); Laguinillo negro, near Cuenca, Spain (Miracle & Vicente, 1983); Delta of river Danube, Romania (Godeanu & Zinevici, 1983; Prunescu-Arion, 1989); Slovenia, ex-Yugoslavia (Markic, 1983); Lake Glubokoje, near Moskow, R.F. (Matveeva, 1983 & 1986); Lakes in Estonia (Mäemets, 1993); Asiatic Turkey (Dumont & De Ridder, 1987); C & S Sweden (Bērziņš & Pejler, 1987, 1989b, 1989c & 1989d); Loch Leven, Scotland (May, 1987); District Ostrava, CSR (Dvorakova, 1960b); Bamberg-Höchststadt area, Germany (Halbach, 1973); Impoundment Kninicki, CSR (Kubicek, 1964); Nat. Res. Neeruti Lakes, NE Estonia (Mäemets A & A, *s.d.*); Lakes in C Sweden (Pejler, 1964 & 1965); Lago Maggiore, Italy (Tonolli, 1962); Po river, Italy (Ferrari *et al.*, 1989); Eutrophic waters in E Poland (Radwan & Popiolek, 1989); Lake Sempachersee, CH (Zimmermann, 1974); Canal de Séclin, Nord, France (Angeli, 1972); Lakes in S Sweden (Arnemo *et al.*, 1968); River Klyas'ma, R.F. (Bogoslowski, 1961); Lake Ösbysjön, near Stockholm, Sweden (Pejler, 1961); 2 lakes in Upland, C Sweden (Pejler, 1962d); Ponds in Oltina, SE Dobrogea, Romania (Popescu-Gorj & Costea, 1961); Rés. biol. de Villars-la-Dombes, France (Rostan, 1976); 3 lakes of Sosnowickie, Poland (Radwan, 1969); Middle course of river Loire, France (Lair & Sargos, 1981); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Ponds in the Paris suburb, France (Pourriot, 1965); Lake Doiran, Macedonia, ex-Yugoslavia (Popovska-Stankovic, 1990); Aegean lakes, Macedonia, Greece (Serafimova-Hadzisce, 1974); Fukushima Prefecture, Japan (Sudzuki, 1982); Serbian section of river Danube (Zivkovic, 1987); Lake Biwa, Japan (Yamamoto, 1960b & 1967); Spain: Cuenca & Sevilla; Portugal: Beja, Evora, Portalegre & Setubal (Velasco, 1990); Lake Donk, Overmere, Belgium (Dumont, 1968b; De Ridder, 1986; Roche, 1989); Lake Kus, Turkey (Ustaoglu & Balik, 1990a); Impoundment Lake Batlava, CSR (Jankovic, 1975); Southwest islands of Japan (Sudzuki *et al.*, 1992); Waldviertel area, lower Austria (Naidenow & Wawrik, 1984); River Danube (Enaceanu & Brezeanu, 1970); Nat. Res. Oisterwijkse vennen, NL (De Graaf, 1960); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); Etang de Pommereau, Loir-et-Cher, France (Tassigny *et al.*, 1970); Prov. Groningen, Lake Barlose Kolk, Oisterw. vennen, NL (Dresscher, 1976); New impoundments in the CSR (Kubicek, 1968); Lake Baikal, R.F. (Koshov, 1963); River Luga, Leningrad area, R.F. (Kutikova, 1962a); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); Karelian inland waters (Kutikova, 1965); "Grote vijver" fort 8, Hoboken (Antwerp, Belg.) (De Smet *et al.*, 1988); In Spanish reservoirs (Guiset, 1977); Lakes in Estonia (Haberman, 1978); Coast of S Finland (Eriksen, 1969); Experimental fishponds near Warsaw, Poland (Spodniewska *et al.*, 1966); Leczna-Wlodawa Lake district, E Poland (Kowalczyk & Radwan, 1982; Radwan, 1984); Lake Volvi,

Macedonia, Greece (Zarfdjian *et al.*, 1990); Luka nad Olzon, near Ostrava, Silesia, CSR (Sladeczek, 1969); Japanese inland waters (Yamamoto, 1960a); Latorica, E Slovakia lowland, CSR (Terek, 1990a); Etang du Brochet, Rambouillet, France (Pourriot *et al.*, 1969); Small lakes SE of Gothenburg, W Sweden (Marling & Pejler, 1990)

- Nearctic region: Adirondack lakes, NY State, USA (Siegfried *et al.*, 1984); Marion Lake, B. C., Canada (Wissmar & Wetzel, 1978); Laurentian Great Lakes (Stemberger, 1979); Lake Wabamun, Alberta, Canada (Gallup & Hickman, 1975); ? in borrow-pit ponds, N Illinois, USA (Lipsey & Malcom, 1981); Near Monroe, Louisiana, USA (Gallagher, 1966); Bay of Quinte, Lake Ontario, Canada (Nogrady, 1988); Northern Ontario Lakes, Canada (Roff & Kwiatkowski, 1977); Massey Lake, 16 km of Beaumont, Texas, USA (Marsh *et al.*, 1978); Lake Waccama, N Carolina, USA (Thomasson, 1963a); River Ocqueoc, Michigan, USA (Beach, 1960); Small, eutrophic lake in Norwich, Vermont, USA (Bogdan *et al.*, 1980); Canada (Chengalath, 1977); Ontario, Canada (Chengalath, Fernando & George, 1971; Chengalath & Fernando, 1973); 2 lakes in Ontario, Canada (Brandl & Fernando, 1984); Ontario, Canada; Wisconsin & Illinois, USA (Bērziņš, 1984); Hellertown res., Northampton County, Pa, USA (Williamson *et al.*, 1989); Lakes Adirondack, NY State, USA (Siegfried *et al.*, 1989); Colorado, USA (Turner, 1988); Acid lake in Maine, USA (Brett, 1989); Arctic N America (Chengalath & Koste, 1989); Star Lake, Norwich, Vermont, USA (Gilbert, 1989); Northern Michigan inland lakes (Stemberger, 1990); Laurentian Great Lakes (Stemberger, 1979); Clearwater Lake, near Sudbury, Ontario, Canada (Yan & Geiling, 1985); Newfoundland lakes, Canada (Chengalath *et al.*, 1984); Paradise Lake, E Canada (George & Fernando, 1969)

- Oriental region: Singapore & Malaysia (Karunakaran & Johnson, 1978); India (Sharma & Michael, 1980); Malaysia, Singapore & India (Sudzuki, 1989)

***Polyarthra longiremis* Carlin, 1943**

- Palaearctic region: Fishponds near Warsaw, Poland (Hillbricht-Ilkowska, 1964); Soviet Karelia, R.F. (Filimonova, 1976); Fishfattening ponds in the Ukraina (Krazhan *et al.*, 1976); Rivers in W Kazakhstan, R.F. (Petrova, 1976); Italy, Eur. plains, Baltic prov., Iceland, NW Russian taiga (Bērziņš, 1978); Kiev reservoir, R.F. (Polishchuk, 1987); Terek delta, Astrakhan peninsula, R.F. (Chuykov & Deneskin, 1985); Lake Dümmer, NW Germany (Koste & Poltz, 1984); Lake Alfsee, NW Germany (Koste & Poltz, 1987); Lakes N of Bucarest, Romania (Godeanu, 1969b); Lakes in Estonia (Haberman, 1978); Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1986); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989c & 1989d); Lake Balaton, Hungary (Zankai, 1989); Delta of river Danube, Romania (Prunescu-Arion, 1989); Obretin Lake, Danube delta, Romania (Neagu-Godeanu *et al.*, 1968); N, S & W Iceland (De Ridder, 1972); Rheinisches Braunkohlengebiet near Zülpich, G. (Küsters *et al.*, 1975); Korea (Turner, 1986); Waldviertel area, lower Austria (Naidenow & Wawrik, 1992); River Danube (Enaceanu & Brezeanu, 1970); Romania (Godeanu, 1961); Lakes of the Black Sea shore, Romania (Godeanu, 1970b); Obretin embanked basin, Danube delta, Romania (Godeanu *et al.*, 1973); Shores of embanked and free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); R. Maas, Rijn, Waal & Yssel,; prov. Limburg, NL (Dresscher, 1976); River Luga, Leningrad area, R.F. (Kutikova, 1962b); Dusnатыnskie lakes, Poland (Kowalczyk & Radwan, 1962); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Spain: Gerona, Madrid, Vitoria & Zaragosa (Velasco, 1990); Waters near river Bodrog, NE Hungary (Dévai *et al.*, 1972/1973)

- Nearctic region: Arctic N America (Chengalath & Koste, 1989); Laurentian Great Lakes (Stemberger, 1979)

- Oriental region: India (Sharma & Michael, 1980); Singapore & Malaysia (Karunakaran & Johnson, 1978); ? Malaysia, Singapore & India (Sudzuki, 1989); 2 Kumaun Himalayan lakes, UP, India (Sharma & Pant, 1985); South India (Naidu, 1967)

- Australian region: Qld & Vic, Australia (Shiel & Koste, 1979); ? Tasmania (Koste & Shiel, 1986b); ? Lake Okaro, New Zealand (Forsyth & James, 1991)

- Neotropical region: Amazonia, Brazil (Hauer, 1965b; Thomasson, 1971; Koste, 1972f); Orinoco river basin, Venezuela (Vasquez, 1984a); Brazil (Koste & José de Paggi, 1982); Mato Grosso, C Brazil (Turner & Da Silva, 1992)

***Polyarthra major* Burckhardt, 1900**

- Palaearctic region: Romania (Rudescu, 1960); Lakes in Estonia (Haberman, 1978); 3 reservoirs in river Guardiana, Spain (Armengol *et al.*, 1988); S coast of Finland (Eriksen, 1969); Lake Biel, CH (Baugerter *et al.*, 1980; Berner-Fankhauser, 1983, 1986 & 1987); Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1986); Delta of river Danube, Romania (Godeanu & Zinevici, 1983); Slovenia, ex-Yugoslavia (Markic, 1983); Lake Glubokoje, near Moscow, R.F. (Matveeva, 1983 & 1986); Lakes in Estonia (Mäemets, 1983); Sierra Nevada, Spain (Morales-Baquero, 1987); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b; 1989c & 1989d); Lake Donk, Overmere, Belgium (Dumont, 1968b; Coussement, 1976; Roche, 1987 & 1989; De Ridder, 1986); Egham, Surrey, UK (Saunders & Pontin, 1987); Loch Leven, Scotland (May,

- 1986); District Ostrava, CSR (Dvorakova, 1960b); River Luga, Leningrad area, R.F. (Kutikova, 1962a); Lakes in C Sweden (Pejler, 1964); Lac d'Annecy, France (Balvay, 1972; Balvay & Druart, 1992); Ponds in Oltina, SE Dobrogea, Romania (Popescu-Gorj & Costea, 1961); Lac Léman, Fr./CH (Rougier, 1969); Rés. biol. de Villars-la-Dombes, France (Rostan, 1976); River Loire, in St. Laurent-les-Eaux, France (Pourriot *et al.*, 1982); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Lake Doiran, Macedonia, ex-Yugoslavia (Popovska-Stankovic, 1990); Serbian section of river Danube (Zivkovic, 1987); Spain: Badajoz, Gerona, Granada, Léon, Sevilla & Zamora; Portugal: Beja & Evora (Velasco, 1990); Waters near river Bodrog, NE Hungary (Dévai *et al.*, 1972/1973); Lake Kisajno, Mazurian lakeland, Poland (Klimowicz, 1964); Impoundment Kninicki & r. Svratka, CSR (Kubicek, 1964); Lake Blankvatn, near Oslo, Norway (Larson, 1971); Bicaz water power station, Romania (Battes *et al.*, 1971); C Sweden (Pejler, 1972); Lakes in C Sweden (Pejler, 1965); Impoundment on river Guardiana, Spain (Armengol, 1982); Lakes in S Sweden (Arnemo *et al.*, 1968); Small lakes in Estonia (Haberman & Mäemets, 1987); Lunzer Untersee, Austria (Ruttner-Kolisko, 1977); Lunzer Obersee, Austria (Ruttner-Kolisko & Malicky, 1988); Artificial crater lake near Tournai, Belgium (Bogaert, 1988); Slapy reservoir, CSR (Brandl & Fernando, 1981); Lake Balaton, Hungary (Zankai & Ponyi, 1970 & 1971a); Grasmere Lake, Lake District, UK (Elliott, 1977); Tingvall Loch, Mainland, Shetland (Bērziņš, 1982a); In Spanish reservoirs (Guiset, 1977); Lake Palaestomi, Georgia, R.F. (Haberman & Laugaste, 1982); Po river, Italy (Ferrari *et al.*, 1989); Lake Konstanz, Germany (Walz *et al.*, 1987; Pauli, 1989); Upland reservoirs in S Poland (Zurek, 1980); Lake Sempachersee, CH (Zimmermann, 1974); Lake Dümmer, NW Germany (Koste & Poltz, 1984); Lake Mälaren, Sweden (Grönberg, 1975); Fish ponds near Warsaw, Poland (Hillbricht-Ilkowska, 1964); Soviet Karelia, R.F. (Filimonova, 1976); Kolyrna Indigirka tundra lakes, R.F. (Kirillova & Sokolova, 1972); All over Europe (Bērziņš, 1978); Dniester reservoir, R.F. (Koval'chuk, 1990); Soviet section of river Danube, R.F. (Parchuk, 1985); Peat bogs Chambédaze & la Godivelle, Massif Central, France (Francez & Dévaux, 1985); Lac Aydat, Massif central, France (Lair, 1978); Lake Nemi, Italy (Parise, 1962); Inundation area of Danube delta, Romania (Dorobantu, 1964); River Grabia basin, Poland (Pawlowski, 1960, 1970 & 1973); Lake Volvi, Macedonia, Greece (Zarfdjian *et al.*, 1990); Etang du Bout, Rambouillet, France (Pourriot *et al.*, 1969); Small lakes SE of Gothenburg, W Sweden (Morling & Pejler, 1990); Obretin Lake, Danube delta, Romania (Neagu-Godeanu *et al.*, 1968); Lake Marmara, Turkey (Ustaoglu, in press); Southwest islands of Japan (Sudzuki *et al.*, 1992); Waldviertel area, lower Austria (Naidenow & Wawrik, 1984); River Danube (Enaceanu & Brezeanu, 1970); Peat bogs in the Auvergne, France (Francez, 1981 & 1984a); Lac de Pétichet, Isère, France (Gay, 1979); Lake Hecklan, C Sweden (Olsson *et al.*, 1992); Obretin embanked basin, Danube delta, Romania (Godeanu *et al.*, 1973); Lake Barlose Kolk, near Wijlre, Drente, NL (Dresscher, 1976); Shores of embanked or free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); River Salzach and its tributaries, Austria (Donner, 1970); Lake Lauerzersee, CH (Odermatt, 1970); Lakes in NE Norway (Saeter, 1971); Lake Nobel, Ukraina (Polishchuk, 1991); New impoundments in the CSR (Kubicek, 1968); Small water bodies in the Mikolajkie area, Poland (Klimowicz, 1967); Lake Zürichsee, CH (Nipkow, 1961); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); Lake Ösbysjön, near Stockholm, Sweden (Pejler, 1961); Two lakes in Upland, C Sweden (Pejler, 1962d); Ponds in the Paris suburb, France (Pourriot, 1965); Fukushima Prefecture, Japan (Sudzuki, 1982)
- Nearctic region: Newfoundland lakes, Canada (Chengalath *et al.*, 1984); Lake Ontario, Canada (Nauwerck, 1978); Bay of Quinte, Lake Ontario, Canada (Nogrady, 1988); Two Medicine L. & L. Bradley, W N America (Thomasson, 1962); Silver L., Adirondack mts., NY State, USA (Siegfried, 1991); NW Canada (Chengalath & Koste, 1987); Cap Breton Island, Nova Scotia, Canada (Chengalath & Koste, 1988); Arctic N America (Chengalath & Koste, 1989); Kingston, Ontario, Canada (+ f. *major proloba*) (Nogrady, 1989); Lake Michigan, USA (Stemberger & Evans, 1984; Stemberger, 1985; Sandgren & Lehman, 1990); Canada (Chengalath, 1977); Whitacre pond, Northampton County, Pa (Williamson, 1987); In 3 lakes in Ontario, Canada (Brandl & Fernando, 1979); Wisconsin & Illinois, USA (Bērziņš, 1984); Alaska, USA (Turner, 1987); Little Rock Lake, Wisconsin, USA (Frost & Montz, 1988); Lakes Adirondack, NY State, USA (Siegfried *et al.*, 1989); Colorado, USA (Turner, 1988); Altiplanicie Central, Mexico (Vilaclara & Sladeczek, 1989); Near Kingston, Ontario, Canada (Bērziņš, 1961); Laurentian Great Lakes (Stemberger, 1979); Northern Michigan inland lakes (Stemberger, 1990); Lac Echo, Québec, Canada (Nogrady, 1976); Mt. Tremblant Prov. park, Québec, Canada (Nogrady, 1980)
- Oriental region: Kashmir Valley & high mts. of Kashmir Himalaya (Zutshi *et al.*, 1980); Singapore. Distribution: warm waters (Sudzuki, 1991)
- Australian region: Reservoir & lake in Australia (Bērziņš, 1982); Kyneton & Lake Catini, Aust. (Shiel & Koste, 1985)
- Neotropical region: South Brazil (Arcifa, 1984); Amazonia, Brazil (Gillard, 1967; Thomasson, 1971; Koste, 1972f); Brazil & Argentina (Koste & José de Paggi, 1982); Lago do Castanho, C Amazonia, Brazil

(Schaden, 1977b); Lago Moratu, Amazonia, Brazil (Schaden, 1977c)

Polyarthra major Burckhardt, f. *aptera reducta* Nipkow, 1961

- Palaearctic region: Lake Zürichsee, CH (Nipkow, 1961)

Polyarthra minor Voigt, 1904

- Palaearctic region: River Luga, Leningrad area, R.F. (Kutikova, 1962a); Achmer Grasmoor, NW Germany (Koste, 1968b); Delta of river Danube, Romania (Zinevici & Teodorescu, 1990); Peat bogs in the Massif Central, France (Batut, 1965); Small water bodies in Soviet Karelia, R.F. (Filimonova, 1976); Lapland State preserve, R.F. (Ghilarov, 1972); All over Europe (Bērziņš, 1978); Neva Bay, Gulf of Finland, R.F. (Telesh, 1986); Soviet section of the Danube (Parchuk, 1985); Lake Stråken, Aneboda, Sweden (Bērziņš, 1972); Lakes in Estonia (Haberman, 1978; Mäemets, 1983); Coast of S Finland (Eriksen, 1969); Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1986); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); Hortobagy Nat. Park, Hungary (Forro & Ronkay, 1983); Lake Stechlinsee, Brandenburg, Germany (Kasprzak & Ronneberger, 1982; Ronneberger & Schönborn, 1985); L. Mikolajskie & L. Sniardny, Maz. lakeland, Pol. (Kosicki, 1960); N Swedish Lapland (Pejler, 1962a); Engelbergs Moor, Druchhorn, NW Germany (Koste, 1965); Peat bogs Chambedaze & La Godivelle, Massif Central, France (Francez & Dévaux, 1985); Mountain Fuji lava caves, Japan (Sudzuki, 1971a); Small lakes SE of Gothenburg, W Sweden (Morling & Pejler, 1990); Perchpike lakes in N Poland (Mikulski, 1964); Waldviertel area, lower Austria (Naidenow & Wawrik, 1984); River Danube (Enaceanu & Brezeanu, 1970); Peat bog Chambedaze, Puy-de-Dôme, France (Francez, 1982, 1987 & 1988); Peat bogs in the Auvergne, France (Francez, 1981 & 1984c); Lakes N of Bucarest, Romania (Godeanu, 1969b); Obretin embanked basin, Danube delta, Romania (Godeanu *et al.*, 1973); Nat. Res. Oisterwijkse vennen, NL (De Graaf, 1960); Id. + de Gerritsfles near Kootwijk; Ysselmeer; Lake "Grote Huisven", NL (Dresscher, 1976); Dübener Heide, N Germany (Wulfert, 1960a); Small water bodies in the Mikolajkie area, Poland (Klimowicz, 1967); Karelian inland waters, R.F. (Kutikova, 1965); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); Peat bogs Poiana Stampei, Bukowina, Romania (Rudescu, 1966); Middle course of river Loire, France (Lair & Sargos, 1981); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Mountain Fuji area, Japan (Sudzuki, 1978a); Lakes around mountain Fuji, Japan (Sudzuki, 1971); Tarn in Värmland, Sweden (Thomasson, 1970); Serbian section of river Danube (Zivkovic, 1987)

- Nearctic region: Lake 122, NW Ontario, Canada (Schindler & Novén, 1971); Lake Ontario, Canada (Nauwerck, 1978); Canada (Chengalath, 1977); NE Canada (Chengalath & Koste, 1983); Cap Breton Island, Nova Scotia, Canada (Chengalath & Koste, 1988); Arctic N America (Chengalath & Koste, 1989); Standley Lake, Colorado (Pennak, 1966); Illinois, USA (Bērziņš, 1984); Colorado, USA (Turner, 1988); Newfoundland lakes, Canada (Chengalath *et al.*, 1984); Adirondack lakes, NY State, USA (Siegfried *et al.*, 1984); Lac Echo, Québec, Canada (Nogrady, 1976); Mt. Tremblant Prov. park, Québec, Canada (Nogrady, 1980); Near Monroe, Louisiana, USA (Gallagher, 1966)

- Oriental region: Taiwan (Sudzuki, 1988); Taiwan & Singapore (Sudzuki, 1989)

- Australian region: NT, Aust.: Magela Creek area (Koste, 1981b); Alligator rivers area, NT, Aust. (Tait, Shiel & Koste, 1984); NT, Aust. (Shiel & Koste, 1985); Creek & pool in Aust. (Bērziņš, 1982); Westland, New Zealand (Russell, 1960)

Polyarthra multiappendiculata Arora, 1962

- Oriental region: Nagpur, C India (Arora, 1962a & 1966d); Rajasthan, India (Nayar, 1968); India (Sharma & Michael, 1980; Sudzuki, 1989)

Polyarthra proloba Wulfert, 1941

- Palaearctic region: River Grabia basin, Poland (Pawlowski, 1960); Obretin Lake, Danube delta, Romania (Neagu-Godeanu *et al.*, 1968); N, SW & W Iceland (De Ridder, 1966a, 1967a, 1969b, 1970 & 1972); Romania (Godeanu, 1961a & 1961b); Lake Lauerzersee, CH (Odermatt, 1970); Lake Watergraafsmeer, NL (Dresscher, 1976); Lake Zürichsee, CH (Nipkow, 1961); Serbian section of river Danube (Zivkovic, 1987); Waters near river Bodrog, NE Hungary (Dévai *et al.*, 1972/1973); River Danube (Enaceanu & Brezeanu, 1970); Ponds in the Paris suburb, France (Pourriot, 1965)

Polyarthra proloba Wulfert, f. *reducta* Nipkow, 1961

- Palaearctic region: Lake Zürichsee, CH (Nipkow, 1961)

Polyarthra remata Skorikov, 1896

- Palaearctic region: Romania (Rudescu, 1960); Lakes in S Sweden (Arnemo *et al.*, 1968); Impoundment "Eisernes Tor", Danube, Rom. (Brezeanu & Petén, 1973); Small lakes in Estonia (Haberman & Mäemets, 1987); Lake Kinneret, N Israel (Berman *et al.*, 1972); "Altes Land" near Hamburg, Germany (Caspers & Heckman, 1981 & 1982); Lake Biel, CH (Bernier-Fankhauser, 1986 & 1987); Etang de Virelles, Belgium (Moureau *et al.*, 1988); Banyoles Lake, NE Spain (Miracle 1974, 1975 & 1977); Tingvall Loch, Mainland, Shetland (Bērziņš, 1982a); Skopun (Nordara Halsavatn), Faröer (De Smet *et al.*, 1988); In Spanish reservoirs (Guiset, 1977); Lake Palaeostomi, Georgia, R.F. (Haberman, 1982; Haberman & Laugaste,

1978); Lakes in Estonia (Haberman, 1978); Delta of river Danube (Godeanu & Zinevici, 1983; Prunescu-Arion, 1989; Zinevici & Teodorescu, 1990); Loch Rusky, Scotland (Romo, 1990); Lac d'Aydat, Massif Central, France (Lair & Ayadi, 1989; Oulad Ali *et al.*, 1990; Lair, 1990 & 1991); Lakes in Soviet Karelia, R.F. (Filimonova, 1976); Fish-fattening ponds in the Ukraina (Krazhan *et al.*, 1976); Aral Sea spawning grounds, R.F. (Yerekeyev & Kazakhbayev, 1972); All over Europe; Caspian area, Asia Minor. Cosmopolitan (Bērziņš, 1978); Small water bodies in the Mikolajkie area, Poland (Klimowicz, 1967); Lake Donk, Overmere, Belgium (Dumont, 1968b); Akgöl, Selçuk-Izmir, Turkey (Ustaoglu & Balik, 1987); Camargue, S France (De Ridder, 1960a & 1961); Handzame Canal, Diksmuide, Belgium (De Ridder, 1960b); N & W Iceland (De Ridder, 1967a, 1969b, 1970 & 1972); Pond Vasikkalampi, C Finland (Eloranta, 1981); Near Lappeenranta, Finland (Järnefelt, 1961); Lakes in the Kuokkel area, N Swedish Lapland (Persson, 1978); Dübener Heide, N Germany (Wulfert, 1961); Waldviertel area, lower Austria (Naidenow & Wawrik, 1984); Brackish waters in the Lorraine orientale, France (De Ridder, 1969a); 3 localities in Belgium (De Ridder, 1986); Grand Etang in Epioux, Belgium (De Maeseneer, 1979); Etang des Monts Rosés, Sivry, Belgium (De Ridder, 1980); Brackish waters near Bruges, Belgium (De Ridder & Verheyne, 1980); River Danube (Enaceanu & Brezeanu, 1970); Lake Brebu, Romania (Fesci, 1969); Lac de Pétichet, Isère, France (Gay, 1979); Lakes, N of Bucarest, Romania (Godeanu, 1969b); Lakes of the Black Sea shore, Romania (Godeanu, 1970b); Obretin embanked basin, Danube delta, Romania (Godeanu *et al.*, 1973); Nat. Res. Oisterwijkse vennen, NL (De Graaf, 1960); New impoundments in the CSR (Kubicek, 1968); In periphyton of mosses and *Myriophyllum*, in the Danube, at the German-Austrian border (Donner, 1964); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); Predeltaic area of Danube in the Black Sea (Popescu-Marinescu, 1974); Lake Lauerzersee, CH (Odermatt, 1970); Etang de Pommereau, Loir-et-Cher, France (Tassigny *et al.*, 1970); Noordzeekanaal; Amsterdam; Lake Watergraafsmeer; Biesbosch & surroundings; river Maas, Rijn, Waal & Yssel; Nat. Res. Oisterwijkse vennen; Kortenhof; Maria- & Helenapeel; Brackish waters; Prov. Limburg, NL (Dresscher, 1976); Lake Zürichsee, CH (Nipkow, 1961); River Luga, Leningrad area, R.F. (Kutikova, 1962a); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); Lake Ösbysjön, near Stockholm, Sweden (Pejler, 1961); Lakes in C Sweden (Pejler, 1964); Lac d'Annecy, France (Balvay & Druart, 1992); Pond Heinrichsweiher, Bonn, Germany (Reck, 1981); Dusatynskie Lakes, Poland (Kowalczyk & Radwan, 1962); Parczew area peat bogs, Poland (Radwan, 1974); Middle course of river Loire, France (Lair & Sargos, 1981); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Ponds & pool in the Paris suburb, France (Pourriot, 1965); Fens in Genk, Belgium (Schepens, 1960); Pool, S of Trondheim, Norway (Thomasson, 1979); Lago Trasimeno, Italy (Taticchi, 1968); Serbian section of river Danube (Zivkovic, 1987); Spain: Gerona, Huelva, Madrid & Sevilla (Velasco, 1990); Waters near river Bodrog, NE Hungary (Dévai *et al.*, 1972/1973); Impoundment Twistetalsperre, Nordhessen, G. (Meinel *et al.*, 1983); Gulf of Finland, Gulf of Riga, S North Sea (Bērziņš, 1960); Lake Ros, NE Poland (Davidowicz & Pijanowska, 1991); "Grote Vijver" fort 8, Hoboken (Antwerp, Belg.) (De Smet *et al.*, 1986); Moat of fort Merkssem (Antwerp, Belgium) (De Smet *et al.*, 1987); Peat bogs in Finland (Selin & Koskinen, 1988); S coast of Finland (Eriksen, 1969); Ponds near Darmstadt, Germany (Menzel & Roth, 1972); Reservoirs in Spain (Miracle, 1982); Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1986); Slovenia, ex-Yugoslavia (Markic, 1983); Lakes in Estonia (Mäemets, 1983); Asiatic Turkey (Dumont & De Ridder, 1987); Sierra Nevada, Spain (Morales-Baquero, 1987); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); Central Finland (Eloranta, 1962b); Man-made lake Zegrzynskie, Poland (Dusoge *et al.*, 1985); Lago Maggiore, Italy (Goldman *et al.*, 1968); Nat. Res. Jursky Sur, CSR (Hudec, 1978); Lake Kisajno, Mazurian lakeland, Poland (Klimowicz, 1964); Impoundment Kninicki & river Svratka, CSR (Kubicek, 1964); Lake Mälaren, Sweden (Lanner & Pejler, 1973; Grönberg, 1975); C Sweden (Pejler, 1972); Lakes in C Sweden (Pejler, 1965); Lake Sempachersee, CH (Zimmermann, 1974); Minorca, Spain (de Manuel, 1990); River Hase, NW Germany (Koste, 1976b); Karatas Lake, Turkey (Emir, 1991); Lake Glubokoje, near Moscow, R.F. (Matveeva, 1986); Inundation area of the Danube delta, Romania (Dorobantu, 1964); Etang du Brochet, Rambouillet, France (Pourriot *et al.*, 1969); Small lakes SE of Gothenburg, W Sweden (Morling & Pejler, 1990); Obretin Lake, Danube delta, Romania (Neagu-Godeanu, 1968); Balearic Archipelago, Spain (de Manuel *et al.*, 1992)

- Nearctic region: Jackson Lake, W North America (Thomasson, 1962); ? Lake 122 & L. 132, NW Ontario, Canada (Schindler & Novén, 1971); Lake Mitchell, Sharon, Vermont, USA (Stemberger & Gilbert, 1985a); Silver Lake, Adirondack mts., NY State, USA (Siegfried, 1991); Whiteacre pond, Black river, USA (Williamson & Butler, 1986); Mesotrophic fen, Newfoundland, Canada (Bateman & Davis, 1980); Canada (Chengalath, 1977); NE Canada (Chengalath & Koste, 1983); Arctic N America (Chengalath & Koste, 1989); Pond in Thetford, Vermont, USA (Gilbert, 1987); Lake Michigan, USA (Stemberger & Evans, 1984; Stemberger, 1985); Near Kingston, Ontario, Canada (Bērziņš, 1961); Ontario, Canada; Wisconsin, Illinois & Kentucky, USA (Bērziņš, 1984); Old Woman Creek, Ohio, USA (Havens, 1991a); Old Woman Creek estuary, Huron, Ohio, USA (Havens, 1991b); Lake 382, Experimental Lake Area, NW Ontario, Canada

(Malley & Chang, 1991); Little Rock Lake, Wisconsin, USA (Frost & Montz, 1988); Cap Breton Island, NW Ontario, Canada (Malley *et al.*, 1988); Cape Herschel, Ellesmere Island, NWT, Canada (Nogrady & Smol, 1989); Hellertown Reserve, Northampton County, USA (Williamson *et al.*, 1989); Lakes Adirondack, NY State, USA (Siegfried *et al.*, 1989); Acid lake in Maine, USA (Brett, 1989); Kingston, Ontario, Canada (+ f. *remata proloba*) (Nogrady, 1989); 18 arctic & subarctic lakes in Canada (Moore, 1978); Lakes & pools near Hanover, N Hampshire, USA (Gilbert, 1988); Northern Michigan inland lakes (Stemberger, 1990); Lake Wabamun, Alberta, Canada (Gallup & Hickman, 1975); Lac Echo, Québec, Canada (Nogrady, 1976); Laurentian Great Lakes (Stemberger, 1979); Lakes in Santee, California, USA (Nogrady, 1982 & 1983); Greens Lake, Beaver Island, Michigan, USA (Foran & King, 1982); Grace Lake, Long L. & Madeline L., N Canada (Moore, 1980); Canadian Subarctic (Moore, 1978); Lake Ontario, Canada (Nauwerck, 1978); Bay of Quinte, Lake Ontario, Canada (Nogrady, 1988)

- Oriental region: Suraj Kund, India (Sarkar & Rai, 1964); Singapore & India (Sudzuki, 1989); River Yamuna, India (Dvorakova, 1963; Rai, 1974); Fishpond at Barrackpore, W Bengal State, India (Michael, 1968); Impoundment Kinda, C Burma (Koste & Tobias, 1990); Ricefields in NE Thailand (Heckman, 1979)

- Australian region: Taylor's Lake, Vic, Aust. (Bērziņš, 1963); Vic, Aust. (Shiel & Koste, 1979); Tasmania (Koste & Shiel, 1987); Westland, New Zealand (Russell, 1960)

- Neotropical region: Ecuador: Oriente (Koste & Böttger, 1989); Ecuador: Oriente, Sierra & Costa (Koste & Böttger, 1992); Orinoco river basin, Venezuela (Vasquez, 1984a); Lower Orinoco river & its delta, Venezuela (Vasquez & Rey, 1989); ? Lago Paroni, Brazil (Koste, 1974a); ? Amazonia, Brazil (Koste, 1972f); Brazil, Venezuela & Nicaragua (Koste & José de Paggi, 1982); Rio Yatapu & r. Uatuma, Amazonia, Brazil (Koste & Hardy, 1984); Lago Camaleão, Amazonia, Brazil (Koste, Robertson & Hardy, 1984); ? Rio Nhamunda, Amazonia, Brazil (Brandorff, Koste & Smirnov, 1982); Near Panguana, Peru (Koste, 1988b); Chilean lakes (Schmid-Araya, 1991); Caribbean section of the Neotropis (De Ridder, 1977); Caribbean Islands & Nicaragua (Collado *et al.*, 1984); Lago de Valencia, Venezuela (De Infante, 1980 & 1982); Laguna Masaya, Nicaragua (De Ridder, 1966b); Brokopondo Lake, Surinam (Leentvaar, 1979); Mato Grosso, C Brazil (Turner & Da Silva, 1992); Lago Jacaretinga, Lago Yurucui, L. Moratu & L. Tafé, Amazonia, Brazil (Schäden, 1977c)

Polyarthra remata Skorikov, f. *aptera* Hood, 1893

- Palearctic region: Lakes of the Black Sea shore, Romania (Godeanu, 1970b); Lake Zürichsee, CH (Nipkow, 1961)

Polyarthra* group *dolichoptera* - *vulgaris

- Palearctic region: Peat bog Chambedaze, Massif Central, France (Francez, 1988); River Loire in St. Laurent-les-Eaux, France (Pourriot *et al.*, 1982); Lowland brook-pond system in Boom, Belgium (Maes, 1985)

Polyarthra "platyptera"* and *"trigla"

- Palearctic region: Lake Suwa, Japan (Hanazato *et al.*, 1989); Impoundment Saidenbach, Erzgebirge, Germany (Beuschold, 1961); River Klyas'ma, R.F. (Bogoslawski, 1961); Lake Banyoles, NE Spain (Miracle, 1974 & 1977); Lake Zicksee, Burgenland, Austria (Peschek, 1961); Ponds in Japan (Hanazato & Yasimo, 1990); Lac d'Aydat, Massif Central, France (Oulad Ali *et al.*, 1990); Lake Ladoga, R.F. (Nikolayev & Petrova, 1978); Japanese inland waters (Yamamoto, 1960a); Lake Biwa-ko, Japan (Yamamoto, 1960b); Impoundment Batlava, CSR (Jankovic, 1975); Lav Pavin & Lac de Tazenat, Massif Central, Fr. (Lair, 1975); Isebekkanal, Hamburg, Germany (Caspers & Schulz, 1960); Southwest islands of Japan (Sudzuki *et al.*, 1992); Lakes Vechtplassen, NL (Leentvaar, 1969); River Danube (Enaceanu & Brezeanu, 1970); Ellesmere District, UK (Galliford, 1960); District Hoge Venen, Belgium (Gijssels *et al.*, 1976); Lac Luitel, Isère, France (Joly, 1960); Impoundment Weidatalsperre, E Thüringen, G. (Hoffmann, 1966); Near Bautzen, Oberlausitz, Germany (Walter, 1961); Lower Danube in Romania (Enaceanu, 1964); Lake Kummerower See, Mecklenburg, Germ. (Kalbe *et al.*, 1965); Rhine waters near Wiesbaden, Germany (Noll, 1972); Impoundment Riveris near Trier, Germany (Schnitzler, 1971); Lac Léman, Fr./CH (Martin, 1961); River Warnow, near Rostock, Germany (Keil *et al.*, 1963); Lake Lauerzersee, CH (Odermatt, 1970); Lac Pavin, Massif Central, France (Omaly, 1968); Lake Tüzer See, Neubrandenburg, Germany (Doll, 1984); All over the Netherlands (Dresscher, 1976); Lake Baikal, R.F. (Koshov, 1963); Impoundment on r. Warche, Robertville, Belgium (Mommaerts, 1966); Lac de Tazenat, Massif Central, France (Omaly, 1969); 7 lakes in the Puy-de-Dôme, France (Persoone *et al.*, 1968); Lac d'Annecy, France (Balvay & Druart, 1992); Pool in Fontainebleau forest, France (Pourriot, 1976); Bulgarian bank of river Danube (Naidenow, 1963); Lake Chenhu, Changjiang basin, China (Wau, 1992); Aegean lakes, Macedonia, ex-Yugoslavia & Greece (Serafimova-Hadzisce, 1974); Lake Ohrid, Balkan peninsula (Stankovic, 1960); Waters of the Szecezecin Lagoon, Poland (Wiktor, 1960); Waters near river Bodrog, NE Hungary (Dévai *et al.*, 1972/1973); Lakes in Hokuriki District, Japan (Kanetsuna, 1973)

- Nearctic region: Crecy Lake, New Brunswick, Canada (Smith, 1969); Experimental ponds near Bakersfield,

Kern Co, California (Hurlbert *et al.*, 1972); River Ocqueoc, Michigan, USA (Beach, 1960)

- Oriental region: India (Sharma & Michael, 1980)

- Neotropical region: River Parana, Argentina (Paggi & José de Paggi, 1974; José de Paggi, 1978a); Eutrophic water, Santa Fé, Argentina (José de Paggi, 1976a); River Santa Fé, Argentina (José de Paggi, 1976b); Panama (Collado *et al.*, 1984); Lower course of river Uruguay, Argentina (Di Persia & Neiff, 1986); River Parana, Brazil (Bonetto, 1986); Prov. Buenos Aires, Rio Negro & Tierra del Fuego, Argentina (Olivier, 1965)

Note: For the sake of completeness, we give these references, although they probably refer to different valid species

Polyarthra vulgaris Carlin, 1943

- Palaearctic region: Romania (Rudescu, 1960); Inundation area of Danube delta, Romania (Dorobantu, 1964); River Grabia basin, Poland (Pawlowski, 1960, 1968 & 1970); Lake Volvi, Macedonia, Greece (Zarfdjian *et al.*, 1990); Ogochi reservoir, NW Tokyo, Japan (Urabe, 1990); Lake Balaton, Hungary (Zankai & Ponyi, 1970, 1971a, 1972 & 1973; Zankai & Kertesz, 1967; Zankai, 1968, 1984 & 1989); Luka nad Olzou, near Ostrava, Silesia, CSR (Sladeczek, 1969); Latorica, E Slovakia lowland, CSR (Terek, 1990a); Canals in Hran area, CSR (Terek, 1990c); Mountain Fuji lava caves, Japan (Sudzuki, 1971a); Lakes around mountain Fuji, Japan (Sudzuki, 1971b); Garden ponds in Tokyo, Japan (Sudzuki, 1975); Mountain Fuji area, Japan (Sudzuki, 1978a); Periphytic biota in sewages & park waters, Jap. (Sudzuki, 1981); Fukushima Prefecture, Japan (Sudzuki, 1982); Ponds & pool in the Paris suburb, France (Pourriot *et al.*, 1969); Small lakes SE of Gothenburg, W Sweden (Morling & Pejler, 1990); Fishponds near Warsaw, Poland (Hillbricht-Ilkowska, 1964 & 1965); Lac Léman, Fr./CH (Balvay & Laurent, 1990a & 1990b; Rougier, 1969; Lair, 1978); Lac d'Aydat, Massif Central, France (Oulad Ali *et al.*, 1990; Balvay, 1991); Sphagnum bogs in the Sologne, France (de Beauchamp & Pourriot, 1961); Lake Erken & L. Mälaren, Sweden (Blomquist & Pejler, 1980); Volga river & Volgograd reservoir, R.F. (V'yushkova & Lakhnova, 1974); Fish-fattening ponds in the Ukraina (Krazhan *et al.*, 1976); Dniester estuary, R.F. (Polishchuk, 1976); Lapland State Preserve, R.F. (Ghilarov, 1972); All over Europe; Caucasus, Caspian area, Asia Minor. Cosmopolitan (Bērziņš, 1978); Gulf of Bothnia, Gulf of Finland, Gulf of Riga, Belt Sea (Bērziņš, 1960); Lake Konstanz, CH (Pauli, 1989; Stout, 1991); "Grote vijver" fort 8, Hoboken (Antwerp, Belg.) (De Smet *et al.*, 1986); "Kleine vijver" fort 8, Hoboken (Antwerp, Belg.) (De Smet *et al.*, 1989); Moat of Fort Merkssem (Antwerp, Belgium) (De Smet *et al.*, 1987); Medium-size & small rivers, tributary to Kiev reservoir (Polishchuk, 1987); Coal mine reservoir & r. Swinka, Lublin coal basin, E Poland (Radwan *et al.*, 1991); Volgograd reservoir, R.F. (V'yushkova, 1985); Soviet section of river Danube (Parchuk, 1985); Cherepet' power plant, S of Moscow, R.F. (Kuznetsova, 1982); Lakes in C Sweden (Pejler, 1964); Man-made lake Zegrzynskie, Poland (Dusoge *et al.*, 1985); Lago Maggiore, Italy (Goldman *et al.*, 1968); Lake Palaeostomi, Georgia, R.F. (Haberman, 1982; Haberman & Laugaste, 1982); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); Lake Biwa, Japan (Yamamoto, 1967 & 1968; Narita & Mori, *s.d.*; Hillbricht-Ilkowska, 1983a & 1983b); Stechlinsee & Nehmitzsee, Brandenburg, Germ. (Kasprzak & Ronneberger, 1982); Lake Kisajno, Mazurian lakeland, Poland (Klimowicz, 1964); Lake Mikolajskie & L. Taltowisko, Poland (Klimowicz, 1972); Alkal. Péteri-See, Hungary (Kertesz, 1960); Impoundment Kninicki & r. Svratika, CSR (Kubicek, 1964); Lake Mälaren, Sweden (Lanner & Pejler, 1973); Lake Blankvatn, near Oslo, Norway (Larsson, 1971); Lake Mikolajskie & L. Sniardny, Poland (Kosicki, 1960); ? Broads & peat pits, NW Overijssel, NL (Schroevers, 1965); Altiplanicio Central, Mexico (Vilaclara & Sladeczek, 1989); Pyrenean lakes & Alpine lakes in the Alps (Miracle, 1978); Bicz water power reservoir, Romania (Battes *et al.*, 1971); C Sweden (Pejler, 1972); Lakes in C Sweden (Pejler, 1965); Ponds in Surrey, UK (Pontin, 1989); Canal de Séclin, Nord, France (Angeli, 1972); Impoundment on r. Guadiana, C Spain (Armengol, 1982); Lake Bodensee near Konstanz, Germany (Walz, 1986; Althaus, 1962); Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); Impoundments Saidenbach & Neunzehnhain, G. (Rudolf, 1966; Althaus, 1976); Lakes in C Sweden (Arnemo *et al.*, 1968); Lake Biel, CH (Baugerter *et al.*, 1980; Berner-Fankhauser, 1983, 1986 & 1987); Heiluntsian province, China (Bogoslawski, 1962); Albufera de Valencia, Spain (Oltra & Miracle, 1984); Lunzer Untersee, Austria (Ruttner-Kolisko, 1975b & 1977a; Ruttner-Kolisko & Malicky, 1988); Lago Scuro Parmense, N Italy (Antonietti *et al.*, 1988); River Moldova, tributary to the Danube, Rom. (Prunescu-Arion, 1988); 3 lakes of Sosnowickie, Poland (Radwan, 1969); Parzew area peat bogs, Poland (Radwan, 1974); Lake Jorzec, Mazurian lakeland, Poland (Radwan *et al.*, 1985); Pelagic zone of 3 lakes in the Leczna-Wlodawa area, Poland (Radwan & Popiolek, 1977); Gemünderer Maar, Weinfelder M. & Pulvermaar, Eifel, Germany (Oehms & Seitz, 1992); Middle course of river Loire, France (Lair & Sargos, 1981); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Ponds in the Paris suburb, France (Pourriot, 1965); Lake Doiran, Macedonia, ex-Yugoslavia (Popovska-Stankovic, 1990); Tarn in Värmland, Sweden (Thomasson, 1970); Pool, S of Trondheim, Norway (Thomasson, 1979); Serbian section of river Danube (Zivkovic, 1987); Forest pond in Lembeek, Belgium (Van Elslande, 1975); All over Spain;

Portugal: Beja, Evora, Faro, Portalegre & Setubal (Velasco, 1990); Lake Mikolajskie, Poland (Spodniewska *et al.*, 1973); Rybnik reservoir, Poland (Krzanowski, 1979); Waters near river Bodrog, NE Hungary (Dévai *et al.*, 1972/1973); Impoundment Twistetalsperre, Nordhessen, G. (Meinel *et al.*, 1983); Bickcze Lake & Brzeziczno L., Poland (Brzek *et al.*, 1975); Lake Laacher See, Eifel, Germany (Eckartz-Nolden & Nolden, 1992); Lac de Nantua, France (Balvay, 1985); Amsterdam; river Maas, Rijn, Waal & Yssel; L. Barlose Kolk & "De Wieden"; Nat. Res. in Wanneperveen, NW Overijssel; Nat. Res. Oisterwijkse vennen; Nat. Res. Kortenhoef; Wijlmermeer & Filosofendal, Nijmegen; Maria- & Helenapeel; L. de Wijde Blik; Lindevallei; Flevopolder: station near Lelystad; Loosdrecht Lakes, NL (Dresscher, 1976); El Ghab area, Syria (De Ridder, 1965); Artificial ponds near Köln, Germany (Trahms, 1972); River Lausitzer Neisze & Oder, Germany (Walter & Scharf, 1961); Shores of dammed and free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); River Salzach & its tributaries, Austria (Donner, 1970); River Danube (from Austria to Romania) (Wawrik, 1968); Hudsons Bay & Hoveton Great Broad, E Anglia, UK (Timms & Moss, 1984); Lake Lauerzersee, CH (Odermatt, 1970); Funade-ike pond, Chiba, Japan (Urabe, 1992); L. Lumar, L. Aubert & L. Orédon, Pyr. Centr., Fr. (Rey, 1988a); Anatolia, Turkey (Segers *et al.*, 1992); Lac de Créteil, Paris suburb, France (Lescher-Moutoué *et al.*, 1985); Lake Zürichsee, CH (Nipkow, 1961); Lake Erken, Sweden (Nauwerck, 1963); River Luga, Leningrad area, R.F. (Kutikova, 1962a); Karelian inland waters, R.F. (Kutikova, 1965); Lac Pavin & L. Montcineyre, Puy-de-Dôme, Fr. (Persoone *et al.*, 1968); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); Lake Ösbysjön, near Stockholm, Sweden (Pejler, 1961); Lac d'Annecy, France (Balvay & Druart, 1992); Black Sea (Rudescu, 1961); Pond Heinrichsweiher, Bonn, Germany (Reck, 1981); Ponds in Oltina, SE Dobrogea, Romania (Popescu-Gorj & Costea, 1961); Po river, Italy (Ferrari *et al.*, 1989); Lake Numasawa, Japan (Sudzuki *et al.*, 1983 & 1989); Koyama-ite, a coastal pond in Japan (Sudzuki & Fukuta, 1989); Carp ponds & lowland reservoir in S Poland (Zurek, 1980); Lake Sempachersee, CH (Zimmermann, 1974); Darnse near Epe, NW Germany (Koste, 1962); Engelbergs Moor, Druchhorn, NW Germany (Koste, 1965); Achmer Grasmoor, NW Germany (Koste, 1968b); River Hase, NW Germany (Koste, 1976b); Lake Dümmer, NW Germany (Koste & Poltz, 1984); Lake Mälaren, Sweden (Grönberg, 1975); Lake Alfsee, NW Germany (Koste & Poltz, 1987); Near Cambridge, UK (Jenkin, 1982); In several lakes in Turkey (Emir, 1991); Lake Donk, Overmere, Belgium (Dumont, 1968b; Coussement, 1976; Martens, 1985; Roche, 1989); Obretin Lake, Danube delta, Romania (Neagu-Godeanu *et al.*, 1968); Boatracing Canal, Gent, Belgium (Coussement, 1982); Karagöl, near Izmir, Turkey (Ustaoglu, 1986); N & W Iceland (De Ridder, 1972); Near Lappeenrauta, Finland (Järnefelt, 1961); Quéntar reservoir, Sierra Nevada near Granada, Spain (Leighton, 1981); Experimental Fish Culture ponds, catchment area of the Upper Vistula river, Poland (Lewkowicz, 1984); Lakes of the Kuokkel area, N Swedish Lapland (Persson, 1978); Lakes in E Poland (Radwan, 1978); Lake Mälaren, Sweden (Willén, 1975); Experimental fishponds in Golycz, Poland (Wrobel, 1972); River Svatka, CSR (Kubicek, 1968); Lake Glubokoje, near Moscow, R.F. (Matveeva, 1983 & 1986); Lake Nemi, Italy (Parise, 1962); Leczna-Wlodawa Lake District, E Poland (Kowalczyk & Radwan, 1982; Radwan, 1984); Bullhousen pond, Bisley, Surrey, UK (Pontin & Pontin, 1980); "Altes Land" near Hamburg, Germany (Caspers & Heckman, 1981 & 1982; Heckman, 1986); Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1986); Lake Cullera, near Valencia; L. Banyoles, NE Sp. (Miracle & Vicente, 1983); Laguna de la Cruz, near Cuenca, Spain (Vicente, 1983); Delta of river Danube, Romania (Godeanu & Zinevici, 1983); Slovenia, ex-Yugoslavia (Markic, 1983); Sierra Nevada, Spain, Alps & Pyrenees (Morales-Baquero, 1987); Lake Königssee, Bavaria, Germany (Laxhuber, 1987); Priest Pot, Lake District, UK (Stewart & George, 1987; Hewitt & George, 1987); Lake Siggeforasjön, Sweden (Grundström, 1987); Loch Leven, Scotland (May, 1987); District Ostrava, CSR (Dvorakova, 1960b); Lake Bolsena, L. Bracciano & L. Vico, C Italy (Ferrari, 1972); Hortobagy Nat. Park, Hungary (Forro & Ronkay, 1983); Afghanistan (Bērziņš, 1961); Tingwall Loch, Mainland, Scotland (Bērziņš, 1982a); Lakes in Estonia (Haberman, 1978); 3 reservoirs on river Guadiana, Spain (Armengol *et al.*, 1988); Peat pits in Finland (Selin & Koskinen, 1988); Jotunheimen, Norway's high mountains (Blakar & Jacobsen, 1979); Coast of S Finland (Eriksen, 1969); Lakes in the Pyrenees (Miracle, 1981); ? Moerdijk-Hollands Diep, NL (Leentvaar, 1980); River Loire, France (Lair *et al.*, 1978; Lair, 1980); Lake Lilla Stockelidsvatten, SW Sweden (Stenson, 1983); Lakes & reservoirs in high mountains, Spain (Miracle, 1982); Artificial crater lake near Tournai, Belgium (Bogaert, 1988; Bogaert & Dumont, 1989); Middle course of river Po, Italy (Ferrari *et al.*, 1986); Small lakes in SW Sweden (Stenson, 1982); Grasmere Lake, Lake District, UK (Elliott, 1977); 2 lakes in N Sweden (Axelson, 1961); Lago Maggiore, Italy (Tonolli, 1962); Rés. biol. de Villars-la-Dombes, France (Rostan, 1976); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Ponds in the Paris suburb, France (Pourriot, 1965); Experimental ponds at Golysz, Poland (Lewkowicz, 1971; Zurek, 1974); Windermere N & S basin, Eastwaite water & Blelham Tarn, Lake District, UK (Edmondson, 1965); Korea (Turner, 1986); Impoundment at Robertville, Belgium (Mommaerts, 1966); Meuse Liégeoise, Belgium (Baiverlin, 1984); Lake Pluszsee, N Germany (Hofmann, 1975 & 1985); Lake Ørre Heimdalsvatn, C Norway (Larsson, 1972);

Southwest islands of Japan (Sudzuki *et al.*, 1992); Dübener Heide, N Germany (Wulfert, 1961); Balearic Archipelago, Spain (de Manuel *et al.*, 1992); Waldviertel area, lower Austria (Naidenow & Wawrik, 1984); Lake Neusiedlersee, Austria (Donner, 1979); 5 localities in Belgium (De Ridder, 1986); Lake Konstanz, Germany (Kiefer, 1968; Walz *et al.*, 1987); River Danube (Enaceanu & Brezeanu, 1970); Peat bog Chambedaze, Puy-de-Dôme, France (Francez, 1982 & 1987); Lake Hecklan, C Sweden (Olsson *et al.*, 1992); Obretin embanked basin, Danube delta, Rom. (Godeanu *et al.*, 1973); Nat. Res. Oisterwijkse vennen, NL (De Graaf, 1960); New impoundments in the CSR (Kubicek, 1968); River Vistula in the Warsaw area, Poland (Klimowicz, 1981); Canal of river Odra, Poland (Klimowicz, 1979); Near water works at Okocim, Poland (Klimowicz, 1975); Sewage ponds near Czestochowa, Poland (Klimowicz, 1968); Small water bodies in the Mikolajkie area, Poland (Klimowicz, 1967); River Woluwe valley, Brussels, Belgium (Lamaye, 1975); Side-arm of river Danube near Bratislava, CSR (Lichardova, 1964); Lac Léman, Fr./CH (Balvay, 1989; Balvay & Laurent, 1981 & 1989;; Naef & Martin, 1985; Gawler *et al.*, 1988); Lakes in NE Norway (Saeter, 1971); Canal de Séclin, Nord, France (Angeli, 1975); Etang de Pommereau, Loir-et-Cher, France (Tassigny *et al.*, 1970)

- Nearctic region: Clearwater Lake & Swan L., near Sudbury, Ontario, Canada (Yan & Geiling, 1985); Lakes in Florida, USA (Dawes *et al.*, 1987); Hogars pond, Newfoundland, Canada (Davis, 1972); Long Lake, Washington, USA (Saltero *et al.*, 1975); Greens Lake, Beaver Island, Michigan, USA (Foran & King, 1982); Lake Wabamun, Alberta, Canada (Gallup & Hickman, 1975); Atchafalaya river basin, Louisiana, USA (Holland *et al.*, 1983); L. Whitney, Cumberland Isl. Nat. Seashore, USA (Stoneburger & Schmock, 1980); James Bay area, Canada (Pinel-Alloul *et al.*, 1979); River Opinaca & Small Opinaca, James Bay area, N Québec, Canada (Armengol *et al.*, 1983); Near Monroe, Louisiana, USA (Gallagher, 1966); Triangle Lake, NE Ohio, USA (Havens, 1989 & 1990); Etang de Desbiens & Et. de St. Gédéon, Québec, Canada (Lalancette, 1987); Grace Lake, Long L. & Madeline L., N Canada (Moore, 1980); Lake Ontario, Canada (Nauwerck, 1978); Bay of Quinte, Lake Ontario, Canada (Nogrady, 1988); Lake Erie, Canada (Davis, 1969); Bauline Long pond, Newfoundland, Canada (Davis, 1973); Everglades Nat. Park, Florida, USA & San Francisco, USA (Nogrady, 1983); Mirror L., West Thornton, New Hampshire, USA (Likens & Gilbert, 1970; Makarewicz & Likens, 1975 & 1979; Wissman & Wetzal, 1978); Carter Lake, Redrock L. & Long L., N Colorado, USA (Thomasson, 1964b); Lake Tahoe, Crater L., Papoose L., Jenny Lake, Two Medicine L. & Pyramid L., W N America (Thomasson, 1962); Lake Waccama, N Carolina, USA (Thomasson, 1963a); Lakes & ponds near Hanover, New Hampshire, USA (Kirk & Gilbert, 1990); Lake 122 & L. 132, NW Ontario, Canada (Schindler & Novén, 1971); Star Lake, Norwich, Vermont, USA (Williamson & Gilbert, 1980; Gilbert & Stemberger, 1965b; Bogdan & Gilbert, 1982 & 1987); 18 arctic & subarctic lakes in Canada (Moore, 1978); Patricia Lake & Celestine L., in Jasper Nat. Park, Alberta, Canada (Anderson, 1970b); Acid lakes in Maine, USA (Brett, 1989); NE Canada (Chengalath & Koste, 1983); NW Canada (Chengalath & Koste, 1987); Cap Breton Island, Nova Scotia, Canada (Chengalath & Koste, 1988); Arctic N America (Chengalath & Koste, 1989); Kingston, Ontario, Canada (Nogrady, 1989); Lancaster Lake, Michigan, USA (Fairchild *et al.*, 1977); Lake St. George, King Township, Ontario, Can. (Malone & Mc Queen, 1983); Lake Michigan, USA (Stemberger & Evans, 1984; Stemberger, 1985); Gwendoline Lake, near Vancouver, B.C. (Neill, 1984); 3 lakes in N Carolina, USA (Lemley & Dimick, 1982); Deggs Lake, Highland L., Little Swede n° 1 L., Standley L., Haydn's L., Redrock L., Shadow mountain reservoir, Granley reservoir, USA (Pennak, 1966); Near Kingston, Ontario, Canada & Lilian L., near Wilmer, B.C., Canada (Bērziņš, 1961); Ontario, Canada & Wisconsin, Illinois & Kentucky, USA (Bērziņš, 1984); Nat. Parks in B.C. and Alberta, Canada (Anderson, 1977); Lake Huron, USA (Stemberger & Gannon, 1977); Lake Wabamun, Alberta, Canada (Horkan *et al.*, 1977); Alaska, USA (Turner, 1987); Ross Lake, Florida, USA (Bienert, 1986); Little Rock Lake, Wisconsin, USA (Frost & Montz, 1988); Lake 227, NW Ontario, Canada (Malley *et al.*, 1988); Hellerton reservoir, Northampton Co, Pa, USA (Williamson *et al.*, 1989); Lake Brooker, Florida, USA (Scheda & Cowell, 1988); Washington, Seattle (Allen, 1968); Alberta, Canada (Stewart & Green, 1975 & 1976); Great Dismal Swamp, Virginia - N Carolina border, USA (Anderson, Benfield & Buikema, 1977); Waterton Lakes, Alberta, Canada (Anderson & Green, 1975 & 1976); Canada (Chengalath, 1977); Ontario, Canada (Chengalath & Fernando, 1973; Chengalath, Fernando & George, 1971); Lake Ainslie, Nova Scotia, Canada (Gregory *et al.*, 1983); Colorado, USA (Turner, 1988); Illinois river, USA (Brown *et al.*, 1989); Sunfish Lake, Ontario, Canada (George & Fernando, 1970); Lakes Adirondack, NY State, USA (Siegfried *et al.*, 1984 & 1989); Lake O'Woods, W Virginia, USA (Havens & Costa, 1987); Lake 382, exper. lake area, NW Ontario, Canada (Malley & Chang, 1991); Lake Michigan, USA (Sandgren & Lehman, 1990); Lake Weir, Florida, USA (Beaver & Crisman, 1990); Kalamazoo river, Michigan, USA (Prins & Davis, 1966); Lakes in NE Pennsylvania, USA (Havens & Da Costa, 1988); Northern Michigan inland lakes (Stemberger, 1990); Beaverskin Lake, Kejumkiyik Nat. Park, Nova Scotia, Canada (Blouin *et al.*, 1984); Smith mountain Lake, Virginia, USA

(Buikema & Loeffelman, 1978); Pandapas pond, Jefferson nat. Forest, Virginia, (Buikema, Müller & Younge, 1978); USA (Knauer & Buikema, 1984); Newfoundland lakes, Canada (Chengalath *et al.*, 1984); Rogers Lake, Connecticut, USA (Deevey, 1964); Labrador Lakes, Canada (Davis, 1978); Sunfish & Paradise lakes, E Canada (George & Fernando, 1979); N American Great Lakes (Gannon, 1981); Lake Sanchris, Illinois, USA (Harmsworth, 1975); Lakes in Santee, California, USA (Nogrady, 1982); Lac Echo, Québec, Canada (Nogrady, 1976); Mt. Tremblant Prov. Park, Québec, Canada (Nogrady, 1980); Desaulniers reservoir, Québec, Canada (Pinel-Alloul *et al.*, 1982); Triangle Lake, Portage Cy, Ohio, USA (Havens, 1991); Laurentian Great Lakes (Stemberger, 1979); Larimore Pond, Vermilion Co, Illinois, USA (Vanni, 1986)

- Oriental region: Sri Lanka: common in lakes, ponds & ricefields (Chengalath, Fernando & Koste, 1973); Singapore & Malaysia (Karunakaran & Johnson, 1978); Lake Parakrama, Sri Lanka (Fernando, 1984); Philippines (Mamaril & Fernando, 1978); Sri Lanka (Fernando, 1980a); Girikbe-Tank, Sri Lanka (Bērziņš, 1982a); Lake Lano, Island Mindanao, Philippines (Lewis, 1977); Java (Green & Oey, 1974); Taiwan, Thailand, Malaysia, Singapore, Indonesia, Sri Lanka, India, Philippines (Sudzuki, 1989); Kalimantan (Borneo), Indonesia (Koste, 1988a); Taiwan. Cosmopolitan (Sudzuki, 1991); Fishponds in Thailand (Boonsom, 1984a); Thailand (Boonsom, 1984b); Fishpond in Barrackpore, W Bengal State, India (Michael, 1968); Punjab State, NW India (Sharma & Sharma, 1984; Sharma, 1976); Kashmir valley, Himalaya, India (Zutshi *et al.*, 1980); W & E Malaysia & Singapore (Fernando & Zankai, 1981); Roshanara tank; Naini Lake; Indranagar tank; Stocking tank & Nursery pond, Delhi, India (George, 1966); Impoundment Kinda, C Burma (Koste & Tobias, 1990); 2 sewage channels of Gwalior, India (Saksena & Kulkarni, 1986); Parakrama Samudra, Sri Lanka (Fernando & Rajapaksa, 1983); ? Ricefields in NE Thailand (Heckman, 1979); West Bengal, NE India (Sharma, 1979b); Orissa, E India (Sharma, 1980b); Bangkok & pool in Xieng Mai, Thailand (De Ridder, 1971); Sri Lanka (Mendis & Fernando, 1962; Fernando, 1969); Lake Manguao, Palawan, The Philippines (Davies & Green, 1990); Dag Lake, Kashmir Himalaya Lake, India (Vass & Zutshi, 1983); Lake Govindgach & L. Lanao (Serruya & Polingher, 1984)

- Australian region: NW Aust.: Magela Creek area (Koste, 1981b); Alligator rivers area, NT, Aust. (with doubt: Koste & Shiel, 1983a; with certainty: Tait, Shiel & Koste, 1984); E Australia (Koste & Shiel, 1980); Tasmania (Koste & Shiel, 1987; Koste, Shiel & Tan, 1989); In many localities in Aust. (Bērziņš, 1982); Lake Manapowic, South Island, New Zealand (Bērziņš, 1982a); Billabongs of r. Murray, SE Aust. & billabongs of Magela Creek, NT, Australia (Shiel & Koste, 1983); SW Aust. (Koste, Shiel & Brock, 1983); Reservoirs in SE Aust. (Shiel *et al.*, 1987); Farm dams near Gloucester, NSW, Aust. (Sudzuki & Timms, 1980); NSW, Qld, Vic & S Aust. (Shiel & Koste, 1979); Lower river Murray, S Aust. (Shiel, Walker & Williams, 1982); Sheepwash billab., near Molesworth, Vic, Aust. (Shiel, 1983); Tasmania & New Zealand (Sudzuki, 1985); River Darling, S Aust. (Shiel & Walker, *s.d.*); Rivers, billabongs & reservoirs of the Murray-Darling system, Aust. (Shiel, 1986); Billabongs of r. Murray floodplain, NSW, Aust. (Hillman & Shiel, 1991); Lake Grasmere, South Island, New Zealand (Stout, 1972 & 1991); Lake Bullenmeri, slightly saline (=alkaline), Aust. (Timms, 1981); Lakes in the mt. area of Canterbury, N Zealand (Stout, 1969); Lake Orbell, SW New Zealand (Stout, 1975); Lake Pukaki, L. Tekayio, L. Ohau & L. Benmore, South Island, New Zealand (Stout, 1978); Lake Ohau, South Island, New Zealand (Stout, 1981); L. Grasmere & L. Pearson, South Isl., N Zealand (Stout, 1984); Several localities in New Zeal. & Campbell Island (Russell, 1960); Lake Sorell, Tasmania (Sudzuki, 1967); Sidney reservoir, NSW, Aust. (Thomasson, 1973); River Murray at Mannum, S Aust. (Shiel, 1979)

- Neotropical region: Lake Monte Alegre, SE Brazil (Arcifa *et al.*, 1992); Lago Playa Blanca, L. Orsinera, L. Jobera, L. Lagoven & L. Rio Claro, Orinoco floodplain lakes, Venezuela (Vasquez & Rey, 1992); Laguna La Orsinera, a floodplain lake, Venezuela (Twornbly & Lewis Jr., 1987); Brokopondo Lake, Surinam (Leentvaar, 1979); L. Tinco & L. Aguillera, 2 Orinoco floodplain lakes, Venezuela (Hamilton *et al.*, 1990); Lake Valencia, Venezuela (Saunders & Lewis, 1988); Flooded savanna at Mantecal, Venezuela (Michelangelli *et al.*, 1979/1980); Antilles françaises (Pourriot, 1975); Araucarian lakes, W & E of the Andes, Chile (Thomasson, 1963b); Mato Grosso, C Brazil (Turner & da Silva, 1992); Lago do Castanho, C Amazonia, Brazil (Schaden, 1977b); Embalse rio Tercero Fish Culture Station, prov. Cordoba, Argentina (Marinone & Zagarese, 1991); Chile (Löffler, 1962); Lago do Passarinho, L. Jacaretinga, L. Jurucui, L. Moratu, L. Tefé, Rio Negro, L. Castanho & L. Redondo, Amazonia, Brazil (Schaden, 1977c); Lago Castanho, L. Redondo & L. Jacaretinga, Amazonia, Brazil (Serruya & Pollingher, 1984); Lago Castanho, Amazonia C, Brazil (Hardy, 1980); Lake Xiloa, Nicaragua (Moreno *et al.*, 1992); Ecuador: Oriente & Costa (Koste & Böttger, 1989); Ecuador: Oriente, Sierra & Costa (Koste & Böttger, 1992); Lake Escondido, prov. Rio Negro, Argentina (Balseiro & Modenutti, 1990); Over nearly all Argentina (José de Paggi, 1990); Lake Coca-Cola, near Rio de Janeiro, Brazil (Turner, 1990a); Chilean lakes (Schmid-Araya, 1991); 5 reservoirs in the Middle Trete river, S Paulo State, Brazil (Tundisi *et al.*, 1991); Samuel reservoir, Rondonia, Brazil (Matsumara-Tundisi *et al.*, 1991); Lake Rio Claro, a floodplain lake of the lower Orinoco, Venezuela

(Vasquez & Medina, 1991); Island Lake, L. Hemmen & Crescent L., Rio Snia Missu, Mato Grosso, C Brazil (Green, 1972); Lake Llanquihuc, Chile (Campos *et al.*, 1988); River Parana, Argentina (Paggi, 1980; José de Paggi, 1985); River Saladillo basin, Argentina (José de Paggi & Koste, 1988); Argentina (Modenutti & Claps, 1988); Orinoco river basin, Venezuela (Vasquez, 1984a); Caroni river basin, Venezuela (Vasquez, 1984b); Lower Orinoco and its delta, Venezuela (Vasquez & Rey, 1989); S Brazil (Arcifa, 1984); Rapel reservoir, C Chile (Soto *et al.*, 1984); Arroya Rodriguez, prov. of Buenos Aires, Arg. (Modenutti, 1987); Provinces in Argentina (José de Paggi, 1989); Lago Viana Canal, Maranhão, Brazil (Reid & Turner, 1988); ? Amazonia, Brazil (Koste, 1972f); Varzea near Santarem, Brazil (Koste, 1974b); Brazil, Argentina, Venezuela, Chile, Antilles, Peru, Surinam, Honduras, Panama, Costa Rica (Koste & José de Paggi, 1982); Rio Yatapu & r. Uatuma, Amazonia, Brazil (Koste & Hardy, 1984); Lago Camaleão, Amazonia, Brazil (Koste & Robertson, 1983; Koste, Robertson & Hardy, 1984); ? Rio Nhamunda, Amazonia, Brazil (Brandorff, Koste & Smirnov, 1982); Near Concepcion, Paraguay (Koste, 1968b); Caribbean Islands, Costa Rica, Cuba, El Salvador, Panama (Collado *et al.*, 1984); Argentine Patagonia (Kuczynski, 1987b); Apure river, W Venezuela (Saunders & Lewis, 1988); Amazonia, Brazil (Hauer, 1965b; Gillard, 1967; Thomasson, 1971); Caribbean section of the Neotropical region (De Ridder, 1977)

Polyarthra vulgaris Carlin, f. *aptera* Nipkow, 1952

- Palaearctic region: Lake Volvi, Macedonia, Greece (Zarfdjian *et al.*, 1990); Shores of dammed or free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972)

- Nearctic region: Sunfish Lake, Ontario, Canada (George & Fernando, 1970)

Polyarthra vulgaris Carlin, f. *aptera reducta* Nipkow, 1952

- Palaearctic region: Lake Zürichsee, CH (Nipkow, 1961)

Polyarthra vulgaris Carlin, f. *aspina* Pourriot, 1965

- Neotropical region: Antilles françaises (Pourriot, 1975)

Polyarthra vulgaris Carlin, f. *dissimulans* Nipkow, 1952

- Palaearctic region: River Luga, Leningrad area, R.F. (Kutikova, 1962a); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); Lakes in Estonia (Haberman, 1978); L. Stechlinsee & Nehmitzsee, Brandenburg, G. (Kasprzak & Ronneberger, 1982); Nat. Res. Neeruti Lakes, NE Estonia (Mäemets A. & A., *s.d.*); Alps, Baltic province, NW Russian taiga (Bērziņš, 1978); Lake Neusiedlersee, Austria (Donner, 1979); In periphyton of mosses and *Myriophyllum* in the Danube, and in some Alpine brooks, Austria (Donner, 1964); Shores of embanked or free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); River Volga, R.F. (Mordukhai-Boltovskoi, 1979)

- Nearctic region: Lake Ontario, Canda (Stemberger, 1979)

Polyarthra vulgaris Carlin, f. *luminosa* Kutikova, 1962

- Palaearctic region: River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Lakes in Estonia (Haberman, 1978; Mäemets, 1983); Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1986); Man-made lake Zegrzynskie, Poland (Dusoge *et al.*, 1985); NW Russian taiga (Bērziņš, 1978); Neva Bay, Gulf of Finland, R.F. (Telesh, 1986); Lower Volga, R.F. (Chuykov & Merkulov, 1986); Lake Krasnoye (Karelian isthmus), R.F. (Aleksandrov & Kutikova, 1985); Rybinsk reservoir, R.F. (Kartasheva & Lebedeva, 1981); Lake Onega, R.F. (Nikolaev, 1972); River Luga, Leningrad area, R.F. (Kutikova, 1962a)

- Nearctic region: Bay of Quinte, Lake Ontario, Canada (Nogrady, 1988); Kingston, Ontario, Canada (Nogrady, 1989)

Polyarthra vulgaris Carlin, f. *proloba* Wulfert, 1941

- Palaearctic region: Near Trebon, S Bohemia, CSR (Albertova, 1960); Pools in the Upper Elbe area, CSR (Dvorakova, 1961); Mining waters in E Poland (Radwan & Paleolog, 1983); Lake Ormijärvi, S Finland (Cajander, 1983); Shores of dammed or free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972)

- Nearctic region: Illinois, USA (Bērziņš, 1984)

Polyarthra spec.

- Palaearctic region: River Elbe estuary, Germany (Schulz, 1961); Reservoir Sedlice, near Zeliv, Bohemia, CSR (Sladeckova, 1960); Impoundment in E Bohemia, CSR (Sladeckova & Sladeczek, 1960); Latorica, E Bohemia plain, CSR (Terek, 1990a); Lake Donk, Overmere, Belgium (Claus & Dall'Asta, 1972); Boatracing canal, Gent, Belgium (De Maeseneer, 1972, 1973, 1976 & 1978); Lake Greifensee, CH (Bürgi *et al.*, 1979); Small lakes in Estonia (Haberman & Mäemets, 1987); Lake Stugnsjön, Sweden (Langeland, 1988); Near Hamburg, Germany (Berghahn, 1979); Dystrophic lake in S Finland (Arvola *et al.*, 1987); Lake Glubokoje, near Moscow, R.F. (Ghilarov, 1976; Matveeva, 1991); Mikolajskie Lake, Mazurian lakeland, Poland (Hillbricht-Ilkowska *et al.*, 1975); Lake Kinneret, Israel (Landau *et al.*, 1988); Lake in Japan (Hanazato & Yasmuno, 1988); Lakes in Estonia (Mäemets, 1983); Asiatic Turkey (Dumont & De Ridder, 1987);

Buchseen, Bodensee (Einsle, 1966); Mindelsee, Bodensee (Einsle, 1967); Zwanewater, Callantssoog; Muy, Texel; Oerd, Ameland; Van Hunenplak, Terschelling, NL (Leentvaar, 1967); Canal Leeds-Liverpool, UK (Galliford, 1960b); L. Quackjeswater & Breedewater, Voorne, NL (Leentvaar, 1963); Broads and peat pits in NW Overijssel, NL (Schroever, 1965; Leentvaar, 1965); Mountain Everest & surroundings (Löffler, 1969); Nat. Res. Neeruti Lakes, NE Estonia (Mäemets A. & A., *s.d.*); Jordan reservoir, Bohemia, CSR (Mitiska *et al.*, 1962); Blelham Tarn, Cumbria, UK (Ferguson *et al.*, 1982); N Karelia, R.F. (Vardapetyan *et al.*, 1972); Lake Nemi, C Italy (Stella, Ferrero & Margaritora, 1978); Lake Zwemlust, prov. Utrecht, NL (Van Donk, Gulati & Grimm, 1990); Azibo reservoir, near Porto, Portugal (Vascoucelos, 1990); Lake Kasumigaura, Japan (Hanazato, 1990); Mazurian lakeland, Poland (Hillbricht-Ilkowska & Weglenska, 1970); Brabantse Biesbosch, NL (Leentvaar, 1960); Knowsley Park, Liverpool, UK (Galliford, 1964); Acid lakes in S Finland (Arvola *et al.*, 1990); Lac d'Aydat, Massif Central, France (Oulad Ali *et al.*, 1990); River Elbe near Hamburg, Germany (Caspers & Schulz, 1964); Lake Derwart, near Tournai, Belgium (Bogaert & Dumont, 1989); Carp nursery pond in the S Urals, R.F. (Lyubimova, 1974); Aral Sea spawning grounds, R.F. (Yerekeyev & Kazakhbayev, 1972); Lake Pluszsee, N Germany (Hofmann & Krambeck, 1991); Lake Nimetön, S Finland (Arvola *et al.*, 1987); Test Field Wielenbach, Bavaria, Germany (Kucklantz, 1991); Lake Lukomul, Belorussia, R.F. (Mitrakovich *et al.*, 1983); Cherepet' power plant, S of Moscow, R.F. (Kuznetzova, 1982); Saratov reservoir, R.F. (Popchenko *et al.*, 1981); Lake Randsfjord & surroundings, Norway (Elgmark, 1966); Lake Monterosi, Latium, Italy (Stella & Margaritora, 1966); Canal de Séclin, Nord, France (Angeli, 1972); Lake Kus, Turkey (Ustaoglu & Balik, 1990a); Lake Mikolajskie & L. Taltowisko, Poland (Gliwicz *et al.*, 1978); Sava Lake, ex-Yugoslavia (Kalafatic, 1978); Lake Giulianello, Latium, Italy (Stella & Margaritora, 1972); Lakes Frederiksborg, Slotssø & Mossø, DK (Jørgensen *et al.*, 1980); Isebekkanal, Hamburg, Germany (Caspers & Schulz, 1960); Lough Erne system, NW Ireland (Gibson *et al.*, 1980); River Oder, Germany (Günther & Scharf, 1961); Sewage-purification plant West, A'dam, NL (Dresscher, 1960); Lago Santo Parmense, N Apennines, Italy (Ferrari, 1976); Backwater Labicki, Middle Elbe, CSR (Straskraba, 1965); Lake Poletskoye, 73 km W of Moscow, R.F. (Smirnov, 1961); Highly dystrophic lake Smolak & highly eutrophic lake Czarna Kuta, Poland (Brinska *et al.*, 1976); Loosdrecht Lakes, NL (Gulati *et al.*, 1992; Van Tongeren *et al.*, 1992); Waldviertel area, lower Austria (Naidenow & Wawrik, 1992); Lake Neusiedlersee, Austria (Donner, 1972d); Etang de Moliets, SW France (De Ridder, 1967b); Clay pits in Stuivekenskerke, Belgium (Espeel, 1979); Lake Meeuwenven, near Nijmegen, NL (Geelen, 1969); Obretin embanked basin, Danube delta, Rom. (Godeanu *et al.*, 1973); Lower course of river Sambre, Belgium (Dumont & van Vessel, 1973); Lake Donk, Overmere, Belgium (Dumont *et al.*, 1975); Side-arm of river Danube near Bratislava, CSR (Lichardova, 1964); Brundall, Norfolk Broads, UK (Leah *et al.*, 1980); Lake in Leersumse veld & Bakkerskooi, Wanneperveen, Overijssel, NL (Leentvaar, 1967b); River Oder, Germany (Walter & Scharf, 1961); River Salzach & its tributaries, Austria (Donner, 1970); Estuary of river Elbe, Germany (Giere, 1968); In the lower Elbe, Germany (Grimm, 1968); Serbian section of river Danube (Zivkovic, 1968); River Danube and its tributaries (Bothar, 1982); Lac Léman, Fr./CH (Balvay, 1989); Lake Nimetön, S Finland (Arvola *et al.*, 1986); Lake Naardermeer; river Drentse A; Biesbosch estuary; Ameland, Lelystad, Nijmegen & Tjeukemeer, NL (Dresscher, 1976); SW Iceland (De Ridder, 1966a); Etang de Soustons, SW France (De Ridder, 1967b); Hamburg area, Germany (Rühmann, 1961 & 1965a); Water sheets in the Hamburg area, Germany (Rühmann, 1964); River Alster in Hamburg, Germany (Rühmann, 1967); Fens in Genk, Belgium (Schepens, 1960); Fukushima Prefecture, Japan (Sudzuki, 1982); Gravel pits along river Meuse, NL (Wibaut-Isebree Moens, 1964); Pond in the Paris suburb, France (Pourriot & Leborgne, 1970); Lake Tyrifjord, Norway (Langeland, 1974); Lake Mikolajskie & L. Taltowisko, Poland (Ejsmont-Karabin, 1974); Pools Erpewaaijen, near Nijmegen, NL (Leentvaar, 1970) - Nearctic region: 12 large lakes in Saskatchewan (Rawson, 1960); Center Hill reservoir, Tennessee, USA (Haynard & Van de Avyle, 1986); Green Bay, Lake Michigan, USA (Richman *et al.*, 1984); Adirondack Lakes, NY State, USA (Siegfried *et al.*, 1984); South Platte river, C Colorado, USA (Ward, 1975); NW Colorado, USA (Cauton & Ward, 1981); Lake Mead, Nevada-Arizona, USA (Sollberger & Paulson, 1992); The Sacramento-San Joaquin delta estuary, USA (Siegfried & Kopache, 1980); Mirror Lake, New Hampshire, USA (Strager, 1985); Severson Lake, Minnesota, USA (Comita, 1972); Lake Mendota, Wisconsin, USA (Pedros-Alio & Brock, 1983); Lake Erie & Bauline Long pond, Newfoundland, Canada (Davis, 1969 & 1973); Lake Hodges, San Diego County, California, USA (Nogrady, 1983); Little Rock Lake, Wisconsin, USA (Gonzalez, Frost & Montz, 1990; Gonzalez & Frost, 1992); Norwich Lake, mountain Rainier Nat. Park, Washington State, USA (Larson, 1973); Lake Oglethorpe, Georgia, USA (Sanders *et al.*, 1989; Orcutt & Pace, 1984); Lake St. George, Ontario, Canada (Stephenson *et al.*, 1984); 18 arctic & subarctic lakes in Canada (Moore, 1978); Lake Arlington, Texas, USA (Sterner, 1990); 5 small mountain lakes in Alberta, Canada (Anderson, 1968); Lake Michigan & Milwaukee Harbor, USA (Stemberger, 1974); Reservoir near Aiken, S Carolina, USA (Taylor & Mahoney, 1988); Experimental ponds, C Florida, USA (Fry & Osborne, 1980); Small reservoir near Malad, Idaho, USA (Miller & Rabe,

1969); Hogans Pond, Newfoundland, USA (Davis, 1972)

- Oriental region: Malacca peninsula (Dunn, 1970); Lake Surinsar, Yammu (J & K), India (Jyoti & Sehgal, 1979); Parakrama Samudra reservoir, Sri Lanka (Duncan & Gulati, 1981 & 1983; Duncan, 1984); Buckingham Canal, Madras, India (Ravichandran *et al.*, 1988); High altitude Kashmir lakes, India (Zutshi *et al.*, 1972); Thailand (Boonsom, 1984b); Perennial pond at Chatnagpur, India (Srivastava, 1981); Lake Sat Tal, Utar Pradesh, India (Pant *et al.*, 1985); Blairidevarkop pond, Kamataka State, India (Patil & Gouder, 1985); Near Patiala, Punjab, India (Vasisht & Jindal, 1980); Storage reservoir Ajwa & Nimeta water works, near Baroda, India (Wulfert, 1966); Sagar Lake, Sagar, India (Saksena & Adoni, 1973); Lakes mountain Everest (Serruya & Pollingher, 1984)

- Australian region: Nihotiym reservoir, near Auckland, New Zealand (Green, 1974)

- Neotropical region: Bolivian section of Lake Titicaca (Pinto, 1992); Surinam (Leentvaar, 1975); Ecuador: Costa (Koste & Böttger, 1989); Broa reservoir, Sao Carlos, Sao Paulo State, Brazil (Matsumara-Tundisi & Tundisi, 1976); Amazonia, Brazil (Hauer, 1965b; Thomasson, 1971; Koste, 1972f); Rio Nhamunda, Amazonia, Brazil (Brandorff, Koste & Smirnov, 1982); Island of Maraca, Roraima, Brazil (Koste & Robertson, 1990); Laguna del Tesoro, Cuba (Alonso, 1984); S Brazil (Arcifa, 1984); Billings reservoir, Sao Paulo, Brazil (Sendacz, 1984); In a floodplain lake of the lower Orinoco, Venez. (Vasquez *et al.*, 1991); Lake Cristalino & L. Taruma-Mirim, Brazil (Serruya & Pollingher, 1984); Lake Redondo, L. Jacaretinga, L. Cristalino, L. Taruma-Mirim, Amazonia Central, Brazil (Hardy, 1980); Pond UCA, Nicaragua (Moreno *et al.*, 1992); Ecuador: Sierra & Costa (Koste & Böttger, 1992)

Pompholyx Gosse, 1851

Pompholyx complanata Gosse, 1851

- Palaearctic region: Romania (Rudescu, 1960); L. Stechlinsee & Nehmitzsee, Brandenburg, G. (Kasprzak & Ronneberger, 1982); Broad & peat pits, NW Overijssel, NL (Leentvaar, 1965); Delta of river Danube, Romania (Godeanu & Zinevici, 1983; Prunescu-Arion, 1989); Lago Maggiore, Italy (Tonolli, 1962); Lake Biwa, Japan (Hillbricht-Ilkowska, 1963a; Yamamoto, 1967 & 1968); Eutrophic lake Mikolajskie & mesotrophic lake Taltowisko, Poland (Hillbricht-Ilkowska & Weglenska, 1970); River Klyas'ma, R.F. (Bogoslowski, 1961); Heiluntian province, China (Bogoslowski, 1962); Coast of S Finland (Eriksen, 1969); Pools of the Upper Elbe area, CSR (Dvorakova, 1961); Lake Balaton, Hungary (Zankai, 1968 & 1989; Zankai & Kertesz, 1967); Lac Léman, Fr./CH (Balvay, 1989; Balvay & Laurent, 1981, 1989, 1990a & 1990b); Volga river & Volgograd reservoir, R.F. (V'yushkova & Lakhnova, 1974); All over Europe; Caucasus, Caspian area & Asia Minor (Bērziņš, 1978); Kiev reservoir, R.F. (Polishchuk, 1987); Cherepet' power plant, S of Moscow, R.F. (Kuznetsova, 1982); Barabinskaja power plant, near Novosibirsk, R.F. (Volgin *et al.*, 1982); Inundation area of Danube delta, Romania (Dorobantu, 1964); River Grabia basin, Poland (Pawlowski, 1960, 1970 & 1973); Obretin Lake, Danube delta, Romania (Neagu-Godeanu *et al.*, 1968); Lake Donk, Overmere, Belgium (Dumont, 1968b; Martens, 1985; De Ridder, 1986); Japanese inland waters (Yamamoto, 1960a); Waldviertel area, lower Austria (Naidenow & Wawrik, 1984); Brackish waters in the Lorraine orientale, France (De Ridder, 1969a); Lake Konstanz, Germany (Walz *et al.*, 1987); River Danube (Enaceanu & Brezeanu, 1970); Lakes, N of Bucarest, Romania (Godeanu, 1969b); Lakes of the Black Sea shore, Romania (Godeanu, 1970b); Obretin embanked basin, Danube delta, Romania (Godeanu *et al.*, 1973); New impoundments in the CSR (Kubicek, 1968); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); Predeltaic area of the Black Sea, Romania (Popescu-Marinescu, 1974); Hudsons Bay & Hoveton Great Broad, E Anglia, UK (Timms & Moss, 1984); All over the Netherlands (Dresscher, 1976); Lake of Lindre, Moselle, France, & brackish waters in the Lorraine orientale, France (De Ridder, 1969a); Lake Victoria, Oltenia area, Romania (Marx *et al.*, 1967); Lake Erken, Sweden (Nauwerck, 1963); Lake Chambon, Puy-de-Dôme, France (Persoone *et al.*, 1968); River Moldova, tributary of the Danube, Rom. (Prunescu-Arion, 1968); Lac d'Annecy, France (Balvay & Druart, 1992); Pond Heinrichsweiher, Bonn, Germany (Reck, 1981); Leczna-Wlodawa lake district, E Poland (Kowalczyk & Radwan, 1982); 3 lakes of Sosnowickie, Poland (Radwan, 1969); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Lake Doiran, Macedonia, ex-Yugoslavia (Popovska-Stankovic, 1990); Aegean lakes, Macedonia, ex-Yugoslavia & Greece (Serafimova-Hadzisce, 1974); Serbian section of river Danube (Zivkovic, 1987); Lake Stechlinsee, Brandenburg, Germany (Ronneberger & Schönborn, 1985); Lake Biwa-ko, Japan (Yamamoto, 1960b); Waters near river Bodrog, NE Hungary (Dévai *et al.*, 1972/1973)

- Nearctic region: Canada (Chengalath, 1977); Standley Lake & Hayden's Lake, Colorado (Pennak, 1966); Altiplanicio Central, Mexico (Vilaclara & Sladeczek, 1989); Colorado, USA (Turner, 1988)

- Oriental region: Malaysia (Ueno, 1966); Thailand, Malaysia, Sri Lanka, India (Sudzuki, 1989); India (Sharma & Michael, 1980); Lake Parakrama, Sri Lanka (Fernando, 1984); Sri Lanka (Fernando, 1980a);

Thailand (Boonsom, 1984b); W & E Malaysia & Singapore (Fernando & Zankai, 1981); Ajwa reservoir, near Baroda, Gujarat, India (Jayangoudar, 1980); Impoundment Kinda, C Burma (Koste & Tobias, 1990); Parakrama Samudra, Sri Lanka (Fernando & Rajapaksa, 1983); Pool in Xieng Mai, Thailand (De Ridder, 1971); Reservoir Ajwa & Nimeta water works, near Baroda, India (Wulfert, 1966); Lake Nilnag (Serruya & Pollinger, 1984)

- Australian region: Billabongs river Murray, SE Aust. (Shiel & Koste, 1983); Reservoirs in SE Aust. (Shiel *et al.*, 1987); Tasmania (Koste & Shiel, 1987); Qld, NSW, S Aust., Vic (Shiel & Koste, 1979); Lower river Murray, S Aust. (Shiel, Walker & Williams, 1982); Alligator rivers area, NT, Aust. (Tait, Shiel & Koste, 1984); As *P. tubulosa* Bērziņš, 1982 in Vic (Shiel & Koste, 1985); Billabongs & reservoirs of the Murray-Darling system, Australia (Shiel, 1986); Lake Okaro, New Zealand (Forsyth & James, 1991); Lake Pearson, New Zealand (Russell, 1960); Murray river, Aust. (Serruya & Pollinger, 1984); Murray river at Mannum, S Aust. (Shiel, 1979)

- Neotropical region: Chilean lakes (Schmid-Araya, 1991); River Parana, Argentina (Paggi & José de Paggi, 1974; José de Paggi, 1978a & 1985); River Santa Fé, Argentina (José de Paggi, 1976b); Provinces in NW Argentina (José de Paggi, 1989); Prov. Chubut, San Luis, Tucuman, Santiago del Estero, Chaco, Santa Fé & Buenos Aires (José de Paggi, 1990); Chile, Argentina, Peru, Bolivia, Brazil & Panama (Koste & José de Paggi, 1982); Rio Nhamunda, Amazonia, Brazil (Brandorff, Koste & Smirnov, 1982); Rapelreservoir, C Chili (Soto *et al.*, 1984); Costa Rica, Cuba, El Salvador & Haiti (Collado *et al.*, 1984); Argentine Patagonia (Kuczynski, 1987b); Prov. Buenos Aires & Tierra del Fuego, Argent. (Olivier, 1965); Ecuador: Sierra (Koste & Böttger, 1989)

Pompholyx sulcata Hudson, 1885

- Palaearctic region: Romania (Rudescu, 1960); Eutrophic waters in E Poland (Radwan & Popiolek, 1989); Lake Konstanz, Germany (Kiefer, 1968; Walz *et al.*, 1987; Pauli, 1989); Koyama-Ike, a coastal pond in Japan (Sudzuki & Fukuta, 1989); Carp ponds in S Poland (Zurek, 1980); Lake Balaton, Hungary (Zankai & Kertesz, 1967; Zankai, 1968, 1984, 1989; Zankai & Ponyi, 1970, 1971a, 1972 & 1973); Lake Sempachersee, CH (Zimmermann, 1974); Darnsee near Epe, NW Germany (Koste, 1962); River Hase, NW Germany (Koste, 1976b); Lake Dümmer, NW Germany (Koste & Poltz, 1984); Lake Mälaren, Sweden (Grönberg, 1975); Lake Alfsee, NW Germany (Koste & Poltz, 1987); Lac Léman, Fr./CH (Balvay, 1989; Balvay & Laurent, 1981, 1989, 1990a & 1990b; Rougier, 1969); Lake Erken & L. Mälaren, Sweden (Blomquist & Pejler, 1980); River Elbe near Hamburg, Germany (Caspers & Schulz, 1964); Lake Derwart, near Tournai, Belgium (Bogaert, 1988; Bogaert & Dumont, 1989); Lake Donk, Overmere, Belgium (Coussement, 1976; Roche, 1987 & 1989); Volga river, R.F. (V'yushkova & Lakhnova, 1974); Lake Terenkul, S Ural, R.F. (Drabkova *et al.*, 1979); Near Trebon, S Bohemia, CSR (Albertova, 1960); Lake Groszer Müggelsee, Berlin, Germany (Barthelmes, 1960); Lake Bielersee, CH (Baugerter *et al.*, 1980; Berner-Fankhauser, 1983 & 1986); Lake Mikolajskie, Mazurian lakeland, Poland (Hillbricht-Ilkowska *et al.*, 1975; Karabin, 1978); Spanish reservoirs (Guiset, 1977); Lakes in Estonia (Mäemets, 1983; Haberman, 1978); Coast of S Finland (Eriksen, 1969); 3 small lakes in E Poland (Radwan, 1980); River Loire, France (Lair, 1990); Loch Leven, Scotland (May, 1983 & 1986); Lake Ormijärvi, S Finland (Cajander, 1983); Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1983); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); Lago do Mergozzo, Italy (Edmondson, 1960); Lake Buchseen, Bodensee (Einsle, 1966); Lake Mindelsee, Bodensee (Einsle, 1967); Man-made lake Zegrzynskie, Poland (Dusoge *et al.*, 1985); L. Stechlinsee & L. Nehmitzsee, Brandenburg, G. (Kasprzak & Ronneberger, 1978); Lake Kisajno, Mazurian lakeland, Poland (Klimowicz, 1964); Lake Mikolajskie & L. Taltowisko, Poland (Klimowicz, 1972); Impoundment Kninicki & r. Svratka, CSR (Kubicek, 1964); L. Mikolajskie & L. Sniardny, Maz. lakel., Pol. (Kosicki, 1960); Lake Zwanewater, Callantsoog, NL (Leentvaar, 1967); Lake Breedewater, Voorne & L. Vogelmeer, Ymuiden, NL (Leentvaar, 1963); Broads & peat pits in NW Overijssel, NL (Leentvaar, 1965); Delta of river Danube, Romania (Prunescu-Arion, 1989); Lakes of S Sweden (Pejler, 1965); All over Europe; Caucasus, Caspian area (Bērziņš, 1978); "Grote vijver" fort 8, Hoboken (Antwerp, Belg.) (De Smet *et al.*, 1986); "Kleine vijver" fort 8, Hoboken (Antwerp, Belg.) (De Smet *et al.*, 1989); Moat of fort Merksem, (Antwerp, Belgium) (De Smet *et al.*, 1987); Lake Lukomul, Belorussia, R.F. (Mitrakovich *et al.*, 1983); River Ybbarpsån, Sweden (Bērziņš, 1979); Leżna-Włodawa Lake District, E Poland (Kowalczyk & Radwan, 1982; Radwan, 1984); River Lieve, Gent, Belgium (De Smet & Evens, 1970); Japanese inland waters (Yamamoto, 1960a); Lake Volvi, Macedonia, Greece (Zarfdjian *et al.*, 1990); Ponds in Rambouillet, France (Pourriot *et al.*, 1969); Boatracing canal, Gent, Belgium (De Maeseneer, 1972, 1973 & 1976; De Maeseneer *et al.*, 1978; Vanderbeken, 1977; Coussement, 1982); Karagöl, near Izmir, Turkey (Ustaoglu, 1986); Lake Mikolajskie & L. Taltowisko, Poland (Gliwicz *et al.*, 1978); Impoundment on Lake Batlava, CSR (Jankovic, 1975); Sava Lake, ex-Yugoslavia (Kalafatic, 1978); Loosdrecht Lakes, NL (Van Tongeren *et al.*, 1992); Loch Leven, Scotland (May, 1985); Lake Bialskie, E Poland (Radwan *et al.*, 1984); Highly eutrophic lake Czerna Kuta, Poland (Brinska *et al.*, 1976); Waldviertel area, lower Austria (Naidenow &

Wawrik, 1992); 6 localities in Belgium (De Ridder, 1986); River Danube (Enaceanu & Brezeanu, 1970); River Elbe estuary, Germany (Schulz, 1961); Ellesmere District, UK (Galliford, 1960); Lake Gjersjoen, SE Norway (Hessen & Nilssen, 1985); New impoundments in the CSR (Kubicek, 1968); River Vistula in the Warsaw area, Poland (Klimowicz, 1981); Side-arm of r. Danube near Bratislava, CSR (Lichardova, 1964); Anatolia, Turkey (Segers *et al.*, 1992); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); Serbian section of river Danube (Zivkovic, 1968 & 1987); Lac de Nantua, Ain, France (Balvay, 1985); All over the Netherlands (Dresscher, 1976); Lowland brook-pond system in Boom, Belgium (Maes, 1985); Lake Victoria, Oltenia area, Romania (Marx *et al.*, 1967); Lake Zürichsee, CH (Nipkow, 1961); Lake Erken, Sweden (Nauwerck, 1963); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); Karelian inland waters, R.F. (Kutikova, 1965); Lake Chambon, Puy-de-Dôme, France (Persoone *et al.*, 1968); Lakes in S Sweden (Pejler, 1964); Lac d'Annecy, France (Balvay & Druart, 1992); Lake Laacher See, Eifel, Germany (Eckartz-Nolden & Nolden, 1992); Pond in Gif-sur-Yvette, France (Pourriot, 1972); Black Sea (Rudescu, 1961); Pond Heinrichsweiher, Bonn, Germany (Reck, 1981); Rés. biol. de Villars-la-Dombes, France (Rostan, 1976); River Loire in St. Laurent-les-Eaux, France (Pourriot *et al.*, 1982); 3 lakes in Sosnowickie, Poland (Radwan, 1969); Lakes in the Leczna-Wlodawa area, E Poland (Radwan, 1976); Gemünderer Maar, Weinfelder M. & Pulvermaar, Germany (Oehms & Seitz, 1992); Hamburg area, Germany (Rühmann, 1961); Middle course of river Loire, France (Lair & Sargos, 1981); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Ponds & canal in the Paris suburb, France (Pourriot, 1965); Aegean lakes, Macedonia, ex-Yugoslavia & Greece (Serafimova-Hadzisce, 1974); Pool, S of Trondheim, Norway (Thomasson, 1979); Lago Trasimeno, Italy (Taticchi, 1968); Lake Stechlinsee, Brandenburg, Germany (Ronneberger & Schönborn, 1985); Forest pond, Lembeek, Belgium (Van Elslande, 1975); Spain: Huelva, Madrid, Sevilla; Portugal: Beja, Evora, Portalegre & Setubal (Velasco, 1990); Experimental ponds at Golycz, Poland (Lewkowicz, 1971 & 1984; Zurek, 1974); Gravel pits along river Meuse, NL (Wibaut-Isebree Moens, 1964); Rybnik dam reservoir, Poland (Krzanowski, 1979); Lake Taltowisko, Poland (Ejsmont-Karabin, 1974)

- Nearctic region: Lakes in the Churchill Falls area of Labrador, Can. (Dutrie & Ostrovsky, 1974); 3 lakes in Ontario, Canada (Brandl & Fernando, 1979); 2 lakes in S ontario, Canada (Brandl & Fernando, 1984); 3 lakes in N Carolina, USA (Lemly & Demmick, 1982); Hayden's Lake, Colorado, USA (Pennak, 1966); Illinois & Kentucky, USA (Bērziņš, 1984); Lake Huron, USA (Stemberger & Gannon, 1977); Canada (Chengalath, 1977); Ontario, Canada (Chengalath, Fernando & George, 1971; Chengalath & Fernando, 1973); Lake Michigan, USA (Stemberger, 1974); Colorado, USA (Turner, 1988); Laurentian Great Lakes (Stemberger, 1979); Northern Michigan inland lakes (Stemberger, 1990); Swan Lake, near Sudbury, Ontario, Canada (Yan & Geiling, 1985); Paradise Lake, E Canada (George & Fernando, 1969); Atchafalaya river basin, Louisiana, USA (Holland *et al.*, 1983); Desaulniers reservoir, Québec, Canada (Pinel-Alloul *et al.*, 1982); Hastings Lake, C Alberta, Canada (Baker, 1979a); Lake Ontario, Canada (Nauwerck, 1978); Bay of Quinte, Lake Ontario, Canada (Nogrady, 1988)

- Oriental region: Taiwan, Malaysia, Singapore, Indonesia & India (Sudzuki, 1989); Kalimantan (Borneo), Indonesia (Koste, 1988a); Lake Danan, Celebes (Bērziņš, 1982a); India (Sharma & Michael, 1980); Singapore (Karunakaran & Johnson, 1978); Taiwan (Sudzuki, 1988); Panjab State, NW India (Sharma, 1976; Sharma & Sharma, 1984); Taiwan. Cosmopolitan (Sudzuki, 1991); W & E Malaysia & Singapore (Fernando & Zankai, 1981); Fishpond at Barrackpore, W Bengal, India (Michael, 1968); Lake Ranu Lamongau, Indonesia (Green *et al.*, 1976); Montane lakes of Bali, Indonesia (Green *et al.*, 1978); West Bengal, NE India (Sharma, 1979b); Lake Govindgarh & L. Lamongau (Serruya & Pollingher, 1984)

- Australian region: Tasmania (Koste & Shiel, 1987); Farm dams near Gloucester, NSW, Aust. (Sudzuki & Timms, 1980); NSW & Vic, Aust. (Shiel & Koste, 1979); Lower river Murray, S Aust. (Shiel, Walker & Williams, 1982); River Murray at Mannum, S Aust. (Shiel, 1979); Lake Alice, New Zealand (Russell, 1960); Lake Judd & L. Sorell, Tasmania (Sudzuki, 1967)

- Neotropical region: Chile (Löffler, 1962); Chilean lakes (Schmid-Araya, 1991); Lake Todos los Santos, Chile (Campos *et al.*, 1990); Lake Llanquihuc, Chile (Campos *et al.*, 1988); River Saladillo basin, Argentina (José de Paggi & Koste, 1988); Ecuador: Sierra (Koste & Böttger, 1989); Patagonia tableland, S Argentina (Paggi, 1981); Argentina (Modenutti & Claps, 1988); Rapelreservoir, C Chile (Soto *et al.*, 1984); Argentina, Venezuela & Chile (Koste & José de Paggi, 1982); Lake Escondido, Rio Negro, Argentina (Balseiro & Modenutti, 1990); Prov. Tierra del Fuego, Chubut, Rio Negro, Neuquen & Santa Fé, Argentina (José de Paggi, 1990); Araucarian lakes, W & E of the Andes, Chile (Thomasson, 1963b); Embalse Rio tercero Fish Culture Station, Cordoba province, Argentina (Morinone & Zagaresi,

Pompholyx triloba Pejler, 1957

- Palaearctic region: C Eur. plain (Bērziņš, 1978)

- Nearctic region: Cap Breton Island, Nova Scotia, Canada (Chengalath & Koste, 1988)

Pompholyx spec.

- Palaearctic region: Middle course of river Po, Italy (Ferrari *et al.*, 1986); Po river, Italy (Ferrari *et al.*,

1989); Norfolk Broads, UK (Irvine *et al.*, 1990); Fish-fattening ponds in the Ukraina (Krazhan *et al.*, 1976); Delta of river Danube, Romania (Prunescu-Arion, 1989); Lake Balaton, Hungary (Zankai, 1968); Lac Léman, Fr./CH (Balvay, 1989); Lake Slotterplas; Biesbosch estuary; Lake Barlose kolk; Lake Venematen, NL (Dresscher, 1976)

- Nearctic region: Colorado, USA (Turner, 1988)

- Oriental region: Malaysia (Sudzuki, 1989)

- Neotropical region: S Brazil (Arcifa, 1984); Bolivian section of Lake Titicaca (Pinta, 1992)

Proales Gosse, 1886

Proales alba Wulfert, 1939

- Palaeartic region: C Eur. mountains, C & E Eur. plains, Baltic province, N Sweden (Bērziņš, 1978); River Ybbarpsån, Sweden (Bērziņš, 1979); Lake Neusiedlersee, Austria (Donner, 1979); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978)

- Nearctic region: Lac Echo, Québec, Canada (Nogrady, 1976); Mt. Tremblant Nat. park, Québec, Canada (Nogrady, 1980)

Proales baradlana Varga, 1959

- Palaeartic region: Hungarian plain (Bērziņš, 1978)

Proales brevipes Haring & Myers, 1924

- Palaeartic region: Romania (Rudescu, 1960); Carpathes, Pontic province, C Eur. plain (Bērziņš, 1978); Lake Balaton, Hungary (Zankai, 1968); Peat bogs Poiana Stampei, Bukowina, Romania (Rudescu, 1966)

- Nearctic region: Mesotrophic fen in Newfoundland, Canada (Bateman & Davis, 1980)

Proales commutata Althaus, 1957

- Palaeartic region: E Balkan & W Eur. plain (Bērziņš, 1978); Black Sea (Rudescu, 1961)

Proales cryptopus Wulfert, 1935

- Palaeartic region: C Eur. mts., C & E Eur. mountains & plains; Asia Minor (Bērziņš, 1978); Mountain Fuji lava caves, Japan (Sudzuki, 1971a); Lakes around mountain Fuji, Japan (Sudzuki, 1971b); Mountain Fuji area, Japan (Sudzuki, 1978a)

- Neotropical region: Brokopondo Lake, Surinam (Leentvaar, 1979); Surinam (Koste & José de Paggi, 1982)

Proales daphnicola Thompson, 1892

- Palaeartic region: Small pond & pools in the Paris suburb, France (Pourriot, 1965); Romania (Rudescu, 1960); Slovenia, ex-Yugoslavia (Markic, 1983); European R.F., Germany, Denmark, Poland, CSR, Romania, England (Koste, 1968c); NW Germany (Koste, 1970b); River Hase, NW Germany (Koste, 1976b); Lake Dümmer, NW Germany (Koste & Poltz, 1984); Almost all over Europe (Bērziņš, 1978); River Grabia basin, Poland (Pawlowski, 1960); Ellesmere district, UK (Galliford, 1960); Lowland brook-pond system in Boom, Belgium (Maes, 1985); Boom, Belgium (De Ridder, 1986)

- Nearctic region: N America (Bērziņš, 1978)

- Oriental region: Singapore (Karunakaran & Johnson, 1978; Sudzuki, 1989)

- Australian region: Pool in Australia (Bērziņš, 1982); Vic, Aust. (Shiel & Koste, 1979); River Murray, Aust. (Koste, 1979b); R. Murray billabongs, near Albury-Wodonga, A. (Koste & Shiel, 1990b)

Proales decipiens (Ehrenberg, 1832)

- Palaeartic region: Nat. Res. Oisterwijkse vennen, NL (De Graaf, 1960); River Vistula in the Warsaw area, Poland (Klimowicz, 1981); Small water bodies in the Mikolajkie area, Poland (Klimowicz, 1967); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); Dübener Heide, N Germany (Wulfert, 1960a & 1961); Pool near Ichun, China (Wulfert, 1968); Nat. Res. Oisterwijkse vennen; Nat. Res. "Het Hol" near Kortenhoeft; river Maas; Channel Zuidwillemsvaart, NL (Dresscher, 1976); Bog pond near Budapest, Hungary (Nogrady, 1962); Romania (Rudescu, 1960); Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); River Ybbarpsån, Sweden (Bērziņš, 1979); Freshwater tarns in S Finland (Björklund, 1972a); Coast of S Finland (Eriksen, 1969); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); Lake Kisajno, Mazurian lakeland, Poland (Klimowicz, 1964); In activated sludge, Warsaw, Poland (Klimowicz, 1972b); Darnsee near Epe, NW Germany (Koste, 1962); Engelbergs Moor, Druchhorn, NW Germany (Koste, 1965); Achmer Grasmoor, NW Germany (Koste, 1968b); All over Europe; Asia Minor (Bērziņš, 1978); Lake Stråken, Aneboda, Sweden (Bērziņš, 1972); Lake Balaton, Hungary (Zankai, 1968); Lake Donk, Overmere, Belgium (Dumont, 1968b); Peat bogs Chambedaze & la Godivelle, Massif Central, France (Francez & Dévaux, 1985); Peat bogs in the Auvergne, France (Francez, 1981 & 1984a); Balearic Archipelago, Spain (de Manuel *et al.*, 1992)

- Nearctic region: Kingston, Ontario, Canada (Nogrady, 1989); Mesotrophic fen in Newfoundland, Canada (Bateman & Davis, 1980); Canada (Chengalath, 1977); NE Canada (Chengalath & Koste, 1983); Cap Breton

Island, Nova Scotia, Canada (Chengalath & Koste, 1988); Arctic N America (Chengalath & Koste, 1989); Laurentian Great Lakes (Stemberger, 1979)

- Oriental region: India (Sharma & Michael, 1980; Sudzuki, 1989)

- Australian region: In many localities in Aust. (Bērziņš, 1982); ? Tasmania (Koste & Shiel, 1987); NSW, Aust. (Shiel & Koste, 1979); NW Aust.: Magela Creek area (Koste, 1981b); Alligator rivers area, NT, Aust. (Tait, Shiel & Koste, 1984); River Murray, Aust. (Koste, 1979b); Cosmopolitan among vegetation, in small water bodies, billabongs, ponds. Rare in Aust.: Tas & Vic (Koste & Shiel, 1990b); Canterbury, New Zealand (Russell, 1960)

- Neotropical region: Ecuador: Costa & Sierra (Koste & Böttger, 1989); Ecuador: Orienta, Sierra & Costa (Koste & Böttger, 1992); Near Panguana, Peru (Koste, 1988b); Mato Grosso, C Brazil (Turner & Da Silva, 1992)

Proales doliaris (Rousselet, 1895)

- Palaearctic region: Engelbergs Moor, Druchhorn, NW Germany (Koste, 1965); Peat bogs in the Massif Central, France (Batut, 1965); C Eur. mountains, Carpathes, Pontic province, C & E Eur. plains, Baltic province, UK (Bērziņš, 1978); Inundation area of Danube delta, Romania (Dorobantu, 1964); Gerritsflesch near Kootwijk, NL (Dresscher, 1976); Peat bogs in the Auvergne, France (Francez, 1981); In reed borders of the Danube delta, Romania (Rudescu, 1968); Peat bog Grandvaux, near Brinon s/Sauldre, Ile-de-France, France (Pourriot, 1965)

- Nearctic region: N America (Bērziņš, 1978); Canada (Chengalath, 1977); NE Canada (Chengalath & Koste, 1983); Cap Breton Island, Nova Scotia, Canada (Chengalath & Koste, 1988); Mt. Tremblant Prov. park, Québec, Canada (Nogrady, 1980)

- Australian region: Creek in Sunbury, Vic, Aust. (Bērziņš, 1982); Vic, Aust. (Shiel & Koste, 1985); Widespread (Europe, N America, New Zealand, Asia). Not seen in our material. Bērziņš (1982) recorded it from Sunbury, Vic (Koste & Shiel, 1990b); Wellington, New Zealand (Russell, 1960)

Proales fallaciosa Wulfert, 1937

- Palaearctic region: Peat bogs in the Auvergne, France (Francez, 1981 & 1984c); Peat bog Chambedaze, Massif Central, France (Francez, 1982, 1987 & 1988); Nat. Res. Oisterwijkse vennen, NL (De Graaf, 1960; Dresscher, 1976); In periphyton of mosses and *Myriophyllum* in the Danube, and in some Alpine brooks, Austria (Donner, 1964); Shores of dammed and free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1970); Dübener Heide, N Germany (Wulfert, 1960a & 1960b); Etang de Pommereau, Loir-et-Cher, France (Tassigny *et al.*, 1970); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); Ponds & peat bog in the Paris suburb, France (Pourriot, 1965); Mountain Fuji area, Japan (Sudzuki, 1978a); Mountain Fuji lava caves, Japan (Sudzuki, 1971a); Periphytic biota in sewage and park waters, Jap. (Sudzuki, 1981); Pelagic zone of the Leczna-Włodawa lakes, Pol. (Radwan, 1975); Lake Bodensee, near Konstanz (Althaus, 1962); Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); Impoundment Saidenbach, Germany (Althaus, 1976); River Ybbarpsån, Sweden (Bērziņš, 1979); Slovenia, ex-Yugoslavia (Markic, 1983); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); All over Europe (Bērziņš, 1978); Darnsee near Epe, NW Germany (Koste, 1962); Engelbergs Moor, Druchhorn, NW Germany (Koste, 1965); Achmer Grasmoor, NW Germany (Koste, 1968b); River Hase, NW Germany (Koste, 1976b); Lake Dümmer, NW Germany (Koste & Poltz, 1984); Lake Alfsee, NW Germany (Koste & Poltz, 1987); Courland Spit, R.F. (Zhadin *et al.*, 1972); River Grabia basin, Poland (Pawłowski, 1960); Peat bogs Chambedaze & la Godivelle, Massif Central, France (Francez & Dévaux, 1985); Balearic Archipelago, Spain (de Manuel *et al.*, 1992); Lake Neusiedlersee, Austria (Donner, 1979); River Danube (Enaceanu & Brezeanu, 1970)

- Nearctic region: NE Canada (Chengalath & Koste, 1983); Arctic N America (Chengalath & Koste, 1989); Colorado, USA (Turner, 1988); Mt. Tremblant Prov. park, Québec, Canada (Nogrady, 1980); Kingston, Ontario, Canada (Nogrady, 1989)

- Oriental region: Malaysia (Sudzuki, 1989)

- Australian region: Roadside pools near Stratgordon Road & Lake Fenton, Tasmania (Koste & Shiel, 1968b); Alligator rivers area, NT, Aust. (Tait, Shiel & Koste, 1984); NT, Aust. (Koste & Shiel, 1980); Cosmopolitan in alkaline to slightly acid water. Only known from Tasmania (Koste & Shiel, 1990b)

- Neotropical region: Venezuela (Koste & José de Paggi, 1982); Suape area, Pernambuco, Brazil (Neumann-Leitao *et al.*, 1992)

Proales germanica Tzschaschel, 1979

- Palaearctic region: Island Sylt, North Sea (Tzschaschel, 1979, 1980 & 1983)

Proales gigantea (Glascott, 1893)

- Palaearctic region: Groszes Heiliges Meer, N Germany; Ireland, France, near Charkow, R.F. (Koste, 1972f); W, C & E Eur. plains, Ireland, UK; Caspian area (Bērziņš, 1978)

- Nearctic region: USA (Koste, 1972d)
- Australian region: New Zealand (Koste, 1972f); Christchurch, New Zealand (Russell, 1960); Qld, Aust. (Shiel & Koste, 1979); Poned stream near Rollingstone, Qld, Aust. (Koste & Shiel, 1990b)
- Proales gladia*** Myers, 1933
 - Palaearctic region: C Eur. plain (Bērziņš, 1978)
 - Nearctic region: N America (Bērziņš, 1978)
- Proales globulifera*** (Hauer, 1921)
 - Palaearctic region: River Hase, NW Germany (Koste, 1976b); Lake Alfsee, NW Germany (Koste & Poltz, 1987); Italy, Alps, C Eur. mts., C & E Eur. plains, Ireland (Bērziņš, 1978); River Danube (Enaceanu & Brezeanu, 1970); In periphyton of mosses and *Myriophyllum* in the Danube, and in some Alpine brooks, Austria (Donner, 1964); Shores of dammed and free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); River Salzach & its tributaries, Austria (Donner, 1970)
- Proales gonothyraeae*** Remane, 1929
 - Palaearctic region: Roscoff, Atlantic coast of Brittany, France (D'Hondt, 1970)
- Proales halophila*** Remane, 1929
 - Palaearctic region: Romania (Rudescu, 1960); Sea & pools with brackish water, S Finland (Björklund, 1972a); Nordish coast (Eriksen, 1968); Island Sylt, North Sea (Tzschaschel, 1979, 1980 & 1983); Pontic province, C Eur. plain, Ireland, NW Russian taiga (Bērziņš, 1978); Rügener, Hiddenseer & Darszer Boddengewässer, NE Germany (Schwarz, 1963); Black Sea (Rudescu, 1961)
- Proales indirae*** Wulfert, 1966
 - Oriental region: Nimeta water works, near Baroda, India (Wulfert, 1966); India (Sharma & Michael, 1960; Sudzuki, 1989)
- Proales kostei*** Nogrady & Smol, 1989
 - Nearctic region: Cape Herschel, Ellesmere Island, NWT, Canada (Nogrady & Smol, 1989)
- Proales latrunculus*** Pénard, 1904
 - Palaearctic region: Alps & Iceland (Bērziņš, 1978)
- Proales lenta*** Vlastov, 1956
 - Palaearctic region: E Eur. plain (Bērziņš, 1978)
- Proales lobatus*** Rodewald, 1935
 - Palaearctic region: Peat bogs Poiana Stampei, Bukowina, Romania (Rudescu, 1966)
- Proales longidactyla*** Edmondson, 1948
 - Australian region: Lake Katrine, New Zealand (Russell, 1960)
- Proales longipes*** Remane, 1929
 - Palaearctic region: C Eur. plain (Bērziņš, 1978)
- Proales macrura*** Myers, 1933
 - Palaearctic region: C Eur. plain & Baltic province (Bērziņš, 1978)
- Proales micropus*** (Gosse, 1886)
 - Palaearctic region: Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); Romania (Rudescu, 1960); Coast of S Finland (Eriksen, 1969); Man-made lake Zegrzynskie, Poland (Dusoge *et al.*, 1985); All over Europe (Bērziņš, 1978); River Maas, Rijn, Waal & Yssel, NL (Dresscher, 1976); Peat bogs Poiana Stampei, Bukowina, Romania (Rudescu, 1966)
 - Australian region: Qld, Aust. (Shiel & Koste, 1979); Rare in periphyton, on *Chara* in ponds and lakes. Europe, N America. Not seen in our material. Single unconfirmed record from Qld. by Colledge (1911):(Koste & Shiel, 1990b)
 - Neotropical region: Paraguay (Koste & José de Paggi, 1982)
- Proales minima*** (Montet, 1915)
 - Palaearctic region: Bog pond near Budapest, Hungary (Nogrady, 1962); Nat. Res. Oisterwijkse vennen, NL (De Graaf, 1960); Lake Stråken, Aneboda, Sweden (Bērziņš, 1972); C & S Sweden (Bērziņš & Pejler, 1978, 1989a, 1989b, 1989c & 1989d); Lake Kisajno, Mazurian lakeland, Poland (Klimowicz, 1964); Engelbergs Moor, Druchhorn, Germany (Koste, 1965); River Hase, NW Germany (Koste, 1976b); All over Europe (Bērziņš, 1978); Romania (Rudescu, 1960); River Grabia basin, Poland (Pawlowski, 1960); Lakes of Sosnowickie, Poland (Radwan, 1968 & 1969); Lake Balaton, Hungary (Zankai, 1968); Peat bog Laptici, Bucegi mountains, Romania (Godeanu, 1970); Peat bogs Poiana Stampei, Bukowina, Romania (Rudescu, 1966); River Cerna basin, Romania (Brezeanu & Marinescu-Popescu, 1964)
 - Nearctic region: Vinton County, Ohio, USA (Evans, 1984); Lac Echo, Québec, Canada (Nogrady, 1976)
- Proales oculata*** Tzschaschel, 1979
 - Palaearctic region: Sylt Island, North Sea (Tzschaschel, 1979 & 1980)

- Proales ornata*** Myers, 1933
 - Palaeartic region: C Eur. plain (Bērziņš, 1978)
 - Nearctic region: N America (Bērziņš, 1978)
- Proales paguri*** Thane-Fenchel, 1965
 - Palaeartic region: Swedish & Danish coast of Helgoland (Thane-Fenchel, 1965); Roscoff, Atlantic coast of Brittany, France (D'Hondt, 1970)
- Proales parasita*** (Ehrenberg, 1938)
 - Palaeartic region: Coast of S Finland (Eriksen, 1969); Romania (Rudescu, 1960); Italy, C Eur. mts., Carpathes, Pontic province, C Eur. plain, UK, NW Russian taiga (Bērziņš, 1978); Dübener Heide, N Germany (Wulfert, 1960b)
 - Nearctic region: Laurentian Great Lakes (Stemberger, 1979)
 - Australian region: Europe, America, Asia. Not seen in our material. Recorded by Whitelegge (1889) from NSW and by Colledge (1914) from Qld. (Koste & Shiel, 1990b); ? Christchurch, New Zealand (Russell, 1960)
 - Neotropical region: Ecuador: Oriente (Koste & Böttger, 1992)
- Proales producta*** (Gosse, 1887)
 - Palaeartic region: Boreal highland (Bērziņš, 1978)
- Proales provida*** Wulfert, 1938
 - Palaeartic region: Carpathes & E Eur. plain (Bērziņš, 1978); Lake Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978)
 - Oriental region: Malaysia (Sudzuki, 1989)
- Proales pugio*** Nogrady, 1983
 - Nearctic region: Lake Hodges, San Diego County, California, (Nogrady, 1983); & San Francisco, USA
- Proales quadrangularis*** (Glascott, 1893)
 - No recent records
- Proales reinhardti*** (Ehrenberg, 1834)
 - Palaeartic region: Romania (Rudescu, 1960); Sea & brackish water pools in S Finland (Björklund, 1972a); Coast of W & N Norway (Eriksen, 1968); Coast of S Finland (Eriksen, 1969); All over Europe; Caspian area (Bērziņš, 1978); Rügener, Hiddenseer & Darszer Boddengewässer, Germany (Schwarz, 1963); Meuse Liégeoise (Baiverlin, 1984); Balearic Archipelago (de Manuel *et al.*, 1992); River Danube (Enaceanu & Brezeanu, 1970); Roscoff, Atlantic coast of Brittany, France (D'Hondt, 1970); Baltic Sea (Jansson, 1967); Karelian inland waters, R.F. (Kutikova, 1965); Black Sea (Rudescu, 1961); Ostend harbour, Belgium (Persoone, 1964); Volga river, R.F. (Mordukhai-Boltovskoi, 1979); Adriatic Sea (Riedl, 1970); Scandinavian coastal waters (Thane-Fenchel, 1968)
 - Nearctic region: Kingston, Ontario, Canada (Nogrady, 1989); Frobisher Bay, NWT, Canada (Chengalath, 1985)
 - Antarctic region: Vest old Hills & Bungor Hills, E coast of Antarctica (Kutikova, 1964b); Antarctica & Subantarctica (José de Paggi & Koste, 1984; Sudzuki, 1988)
- Proales segnis*** Myers, 1938
 - Palaeartic region: C Eur. plain (Bērziņš, 1978)
 - Nearctic region: N America (Bērziņš, 1978)
- Proales sigmoidea*** (Skorikov, 1896)
 - Palaeartic region: European R.F., Germany, France (Koste, 1968c); River Hase, NW Germany (Koste, 1970a & 1976b); Minorca, Spain (de Manuel, 1990); C Eur. plain & Baltic province (Bērziņš, 1978); Balearic Archipelago, Spain (de Manuel *et al.*, 1992); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); Spain: Tarragona (Velasco, 1990)
 - Nearctic region: Kingston, Ontario, Canada (Nogrady, 1989)
- Proales similis*** de Beauchamp, 1907
 - Palaeartic region: Romania (Rudescu, 1960); Sea & brackish water pools, S Finland (Björklund, 1972a); Lake Balaton, Hungary (Zankai, 1968 & 1989); All over Europe (Bērziņš, 1978); Rügener, Hiddenseer & Darszer Boddengewässer, Germany (Schwarz, 1963); Balearic Archipelago (de Manuel *et al.*, 1992); Black Sea (Rudescu, 1961)
 - Oriental region: ? Kalimantan (Borneo); Indonesia (Koste, 1988a); Indonesia (Sudzuki, 1989)
 - Australian region: Saline basin near St. Helens, Tasmania. Saltwater in Europe, Africa, N & S America (Koste & Shiel, 1986b); Halophile. Europe, N America. Single record from Diana's basin, near St. Helens, Tasmania (Koste & Shiel, 1990b); WS Aust. (Koste, Shiel & Brock, 1983); W Aust. (Shiel & Koste, 1979)
- Proales sordida*** Gosse, 1886
 - Palaeartic region: Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn,

1985); Coast of S Finland (Eriksen, 1969); C & S Sweden (Bērziņš & Pejler, 1987, 1989a & 1989d); Nat. Res. Jursky Sur, CSR (Hudec, 1978); Darnsee near Epe, NW Germany (Koste, 1962); Engelbergs Moor, Druchhorn, NW Germany (Koste, 1965); Volga river, R.F. (V'yushkova & Lakhnova, 1974); Courland Spit, R.F. (Zhadin *et al.*, 1972); All over Europe (Bērziņš, 1978); River Grabia basin, Poland (Pawlowski, 1960); Lakes of Sosnowickie, Poland (Radwan, 1968 & 1969); Parczew area peat bogs, Poland (Radwan, 1974); Hamburg area, Germany (Rühmann, 1961); Peat bogs Poiana Stampei, Bukowina, Romania (Rudescu, 1966)

- Nearctic region: Canada (Chengalath, 1977); Laurentian Great Lakes (Stemberger, 1979)

- Oriental region: Indonesia (Sudzuki, 1989)

- Australian region: Wellington, New Zealand (Russell, 1960); River in Australia (Bērziņš, 1982); Qld, Aust. (Shiel & Koste, 1979); Cosmopolitan in periphyton and diatom films. Not seen in our material. Recorded from Qld by Colledge (1911) and Evans (1951) from Vic (Koste & Shiel, 1990b)

- Neotropical region: Panama (Koste & José de Paggi, 1982; Collado *et al.*, 1984)

Proales syltensis Tzschaschel, 1979

- Palaearctic region: Island Sylt, North Sea (Tzschaschel, 1979, 1980 & 1983)

Proales theodora (Gosse, 1887)

- Palaearctic region: Romania (Rudescu, 1960); Lake Bodensee, near Konstanz (Althaus, 1962); C & S Sweden (Bērziņš & Pejler, 1987 & 1989b); N Swedish Lapland (Pejler, 1962a); River Hase, NW Germany (Koste, 1976b); Rivers in Soviet Karelia, R.F. (Filimonova, 1976); All over Europe (Bērziņš, 1978); Lower Silesia, Poland (Pawlowski, 1960); River Grabia basin, Poland (Pawlowski, 1973); River Danube (Enaceanu & Brezeanu, 1970); In periphyton of mosses & *Myriophyllum*, in the Danube, and in some Alpine brooks, Austria (Donner, 1964); Shores of embanked & free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); River Salzach and its tributaries (Donner, 1970); River & valley in the Tatra mts., Poland (Madalinski, 1961); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); Black Sea (Rudescu, 1961); River Loire in St. Laurent-les-Eaux, France (Pourriot *et al.*, 1982); Impoundments in Spain (Velasco, 1990); River Cerna basin, Romania (Brezeanu & Marinescu-Popescu, 1964)

- Nearctic region: Arctic N America (Chengalath & Koste, 1989); Bay of Quinte, Lake Ontario, Canada (Nogrady, 1988); Kingston, Ontario, Canada (Nogrady, 1989)

Proales tyrphosa Bērziņš, 1949

- Palaearctic region: C Eur. plain (Bērziņš, 1978)

Proales uroglenae de Beauchamp, 1947

- Palaearctic region: W & C Eur. mts. & plains, Pontic province (Bērziņš, 1978); Etang de Pommereau, Loir-et-Cher, France (Tassigny *et al.*, 1970)

Proales wernicki (Ehrenberg, 1834)

- Palaearctic region: Romania (Rudescu, 1960); Coast of S Finland (Eriksen, 1969); River Hase, NW Germany (Koste, 1976b); All over Europe; Caucasus (Bērziņš, 1978); Lake Balaton, Hungary (Zankai, 1968)

- Nearctic region: Laurentian Great Lakes (Stemberger, 1979); Kingston, Ontario, Canada (Nogrady, 1989)

- Australian region: NSW, Aust. (Shiel & Koste, 1979); Parasitic in filaments of *Vaucheria* spp. Europe, N America. Two Australian records: Sidney & NSW (Koste & Shiel, 1990b)

Proales wesenbergi Wulfert, 1960

- Palaearctic region: Dübener Heide, N Germany (Wulfert, 1960b); C Eur. plain (Bērziņš, 1978)

Proales spec.

- Palaearctic region: River Moldova, tributary of the Danube, Rom. (Prunescu-Arion, 1968); Lake Bielersee, CH (Berner-Fankhauser, 1986); Croatia, ex-Yugoslavia (Erben, 1987); Delta of river Danube, Romania (Prunescu-Arion, 1989); Bjørnøya (Bear Island), Svalbard (De Smet, 1988); Fish-fattening ponds in the Ukraina, R.F. (Krazhan *et al.*, 1976); 2 spec. in mountain Fuji lava caves, Japan (Sudzuki, 1971a); Lakes around mountain Fuji, Japan (Sudzuki, 1971b); In an inland sea around Kasado Island, Japan (Sudzuki, 1976a & 1976b); Sandy beach, Bay of Tokyo, Japan (Sudzuki, 1977b); Garden ponds in Tokyo, Japan (Sudzuki, 1975); Mountain Fuji area, Japan (Sudzuki, 1978a); Periphytic biota in sewages & park waters, Jap. (Sudzuki, 1981); Ryukyu Shoto, Japan (Sudzuki, 1982); Lago Trasimeno, Italy (Taticchi, 1968); Southwest islands of Japan (Sudzuki *et al.*, 1992); Peat bog Laptici, Bucegi mts., Romania (Godeanu, 1970); Shores of the White Sea & Barents Sea, R.F. (Ghilarov, 1967); ? Inundation area of r. Danube, Vienna, Austria (Donner, 1971); In the lower Danube in Romania (Enaceanu, 1964); Danube delta, Romania (Popescu-Marinescu & Zinevici, 1967)

- Nearctic region: Milwaukee harbor, USA (Stemberger, 1974); Northern Michigan inland lakes (Stemberger, 1990); Lakes in Santee, California, USA (Nogrady, 1982); Mirror Lake, New Hampshire, USA (Strayer, 1985); Rhode river estuary, Maryland, USA (Dolan & Gallegos, 1992)

- Oriental region: Waltair coast, Madras, India (Rao & Ganapati, 1968); Malaysia, Singapore, Indonesia (Sudzuki, 1989)
- Australian region: In many localities in Aust. (Bērziņš, 1982); NW Aust.: Magela Creek area (Koste, 1981b)
- Neotropical region: Chile (Löffler, 1962); Varzea near Santarem, Brazil (Koste, 1974b)

Proalides de Beauchamp, 1907

Proalides digitus Donner, 1978

- Palaearctic region: L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); Europe. Not known from Australia (Koste & Shiel, 1987b)

Proalides subtilis Rodewald, 1940

- Palaearctic region: Spain: Tarragona (Velasco, 1990); Romania (Rudecu, 1960); Pontic prov., Hungarian plain, W & E Eur. plain (Bērziņš, 1978); Asiatic Turkey (Dumont & De Ridder, 1987); ? Garden ponds in Tokyo, Japan (Sudzuki, 1975); Europe, E Asia, Aust. Probably cosmopolitan (Koste & Shiel, 1987b)
- Oriental region: Delhi, India (Sarma, 1988)
- Australian region: Vic, Aust. (Koste & Shiel, 1980c); Tasmania (Koste & Shiel, 1987a)

Proalides tentaculatus de Beauchamp, 1907

- Palaearctic region: Lakes in C Sweden (Pejler, 1964 & 1965); Romania (Rudescu, 1960); Lake Balaton, Hungary (Zankai, 1989); Southwest islands of Japan (Sudzuki *et al.*, 1992); Paris, France (de Beauchamp, 1966); W & C Eur. mts., Pontic prov., W, C & E Eur. plain, UK (Bērziņš, 1987b); Europe, N America. Not known from Australia (Koste & Shiel, 1987b); River Grabia basin, Poland (Pawlowski, 1960); Obretin Lake, Danube delta, Romania (Neagu-Godeanu *et al.*, 1968); Dübener Heide, N Germany (Wulfert, 1961); Obretin embanked basin, Danube delta, Rom. (Godeanu *et al.*, 1973); River Loire in St. Laurent-les-Eaux, France (Pourriot *et al.*, 1982)
- Nearctic region: Everglades Nat. Park, Florida, USA (Nogrady, 1983); Lakes in Santee, California, USA (Nogrady, 1982); Bay of Quinte, Lake Ontario, Canada (Nogrady, 1988); Altiplanicio Central, Mexico (Vilaclara & Sladeczek, 1989)
- Neotropical region: Brazil (Koste & José de Paggi, 1982); Lago do Castanho, C Amazonia, Brazil (Schaden, 1977c)

Proalides tentaculatus de Beauchamp, f. *wulferti* Sudzuki, 1959

- Palaearctic region: C Eur. plain (Bērziņš, 1978); Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1986)

Proalides spec.

- Palaearctic region: Lake Numasawa, Japan (Sudzuki, 1983 & 1989)

Proalinopsis Weber, 1918

Proalinopsis caudatus (Collins, 1872)

- Palaearctic region: Lake Ösbysjön, near Stockholm, Sweden (Pejler, 1961); Peat bogs Poiana Stampei, Bukowina, Romania (Rudescu, 1966); Nat. Res. Oisterwijkse vennen, NL (De Graaf, 1960); Id. + Nat. Res. Het Hol near Kortenhoeve, NL (Dresscher, 1976); Luga district of the Leningrad area, R.F. (Kutikova, 1962a); Romania (Rudescu, 1960); Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); River Ybbarpsån, Sweden (Bērziņš, 1979); Lake Stråken, Aneboda, Sweden (Bērziņš, 1972); Coast of S Finland (Eriksen, 1969); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); N Swedish Lapland (Pejler, 1962a); Darnsee near Epe, NW Germany (Koste, 1962); Engelbergs Moor, Druchhorn, NW Germany (Koste, 1965); Peat bogs in the Massif Central, France (Batut, 1965); All over Europe (Bērziņš, 1978); Peat bogs Chambedaze & La Godivelle, Massif Central, France (Francez & Dévaux, 1985); Peat bog Chambedaze, Puy-de-Dôme, France (Francez, 1982); Peat bogs in the Auvergne, France (Francez, 1981 & 1984c)
- Nearctic region: Lac Echo, Québec, Canada (Nogrady, 1976); Mt. Tremblant Prov. park, Québec, Canada (Nogrady, 1980); Cap Breton Island, Nova Scotia, Canada (Chengalath & Koste, 1988)
- Australian region: NSW, Australia (Shiel & Koste, 1979); SW Aust. (Koste, Shiel & Brock, 1983); S Tasmania, NSW, W Aust. (Koste, Shiel & Tan, 1988); Probably cosmopolitan in slightly acid waters, *Sphagnum* pools. Rare in Aust.: NSW & W Aust. (Koste & Shiel, 1990b)

Proalinopsis gracilis Myers, 1933

- Palaearctic region: Coast of S Finland (Eriksen, 1969); C Eur. plain, NW Russian taiga (Bērziņš, 1978)

Proalinopsis lobatus Rodewald, 1935

- Palaearctic region: Romania (Rudescu, 1960); C Eur. mountains & Carpathes (Bērziņš, 1978)

***Proalinopsis montanus* Godeanu, 1963**

- Palaearctic region: Pool in the Bucegi mountains, Romania (Godeanu, 1963a); Water-courses in the Bucegi mts., Romania (Godeanu, 1963b); Temporary waters in the Bucegi mts., Romania (Godeanu, 1969a); Carpathes (Bērziņš, 1978)

***Proalinopsis squamipes* Hauer, 1935**

- Palaearctic region: C Eur. mts. & plains (Bērziņš, 1978)
- Nearctic region: N America (Bērziņš, 1978)

***Proalinopsis staurus* Haring & Myers, 1924**

- Palaearctic region: River Ybbarpsån, Sweden (Bērziņš, 1979); C Eur. plain, UK (Bērziņš, 1978)
- Australian region: S Tasmania (Koste, Shiel & Tan, 1988); L. Fidler (Gordon r.) and stock dam at Golden Valley, Tas (Koste & Shiel, 1990b)
- Neotropical region: Mato Grosso, C Brazil (Turner & Da Silva, 1992)

***Proalinopsis trisegmentata* Sudzuki, 1960**

- Palaearctic region: Tableland in C Japan (Sudzuki, 1960)

Proalinopsis spec.

- Palaearctic region: Mountain Fuji lava caves, Japan (Sudzuki, 1971a); Lakes around mountain Fuji, Japan (Sudzuki, 1971b); Mountain Fuji area, Japan (Sudzuki, 1978a)
- Nearctic region: Mirror Lake, New Hampshire, USA (Strayer, 1985)

Pseudoeuchlanis* Dhanapathi, 1978**Pseudoeuchlanis longipedis* Dhanapathi, 1978**

- Oriental region: India (Sharma & Michael, 1980; Sudzuki, 1989)

Pseudoharringia* Fadeev, 1925**Pseudoharringia romanica* Rodewald, 1937**

- Palaearctic region: Romania (Rudescu, 1960); Pontic province (Bērziņš, 1978)

***Pseudoharringia similis* Fadeev, 1925**

- Palaearctic region: Romania (Rudescu, 1960); Pontic province & E Eur. plain (Bērziņš, 1978); 3 lakes of Sosnowickie, Poland (Radwan, 1966 & 1969); River Volga, R.F. (Mordukhai-Boltovskoi, 1979)

Pseudonotholca* Mirakawa, 1928**Pseudonotholca bifurca* Hada, 1939**

- Palaearctic region: Akkeshi Bay, E District of Hokkaido, Japan (Hada, 1972)

***Pseudonotholca japonica* Mirakawa, 1928**

- Palaearctic region: Akkeshi Bay, E District of Hokkaido, Japan (Hada, 1972)

Pseudoploesoma* Myers, 1938**Pseudoploesoma formosa* (Myers, 1934)**

- Nearctic region: Crater Lake, Arizona, USA (Green, 1986); ? Lake 122 & L. 132, NW Ontario, Canada (Schindler & Novén, 1971)

Ptygura* Ehrenberg, 1832**Ptygura agassizi* Edmondson, 1948**

- Palaearctic region: W Eur. plain (Bērziņš, 1978)

***Ptygura barbata* Edmondson, 1939**

- Nearctic region: Mud pond, New Hampshire, USA (Wallace, 1977a)
- Australian region: Stock dam near Triabunna, Tasmania (Koste & Shiel, 1986b)
- Neotropical region: Varzea near Santarem, Amazonia, Brazil (Koste, 1974b); Brazil (Koste & José de Paggi, 1982); Rio Nhamunda, Amazonia, Brazil (Brandorff, Koste & Smirnov, 1982); Island of Maraca, Roraima, Brazil (Koste & Robertson, 1990); Ecuador: Oriente (Koste & Böttger, 1989 & 1992)

***Ptygura beauchampi* Edmondson, 1940**

- Palaearctic region: River Vistula in the Warsaw area, Poland (Klimowicz, 1981); On water plants, Kreis Bersenbrück, NW Germ. (Koste, 1970a); River Hase, NW Germany (Koste, 1976b); Lake Dümmer, NW

Germany (Koste & Poltz, 1983 & 1984); Lake Alsee, NW Germany (Koste & Poltz, 1987); Alps, C Eur. mts. & plains, Baltic prov., UK (Bērziņš, 1978); Southwest islands of Japan (Sudzuki *et al.*, 1992); Reed belt of Lake Neusiedlersee, Austria (Donner, 1975 & 1979); River Danube (Enaceanu & Brezeanu, 1970); Peat bogs Chambedaze & la Godivelle, Puy-de-Dôme, France (Francez, 1984b); Peat bogs Graspets (Cantal) et la Plaine Jacquot, Puy-de-Dôme, France (Francez, 1984a); Pond Heinrichsweiher, Bonn, Germany (Reck, 1981); In periphyton of mosses and *Myriophyllum*, in the Danube, and in some Alpine brooks, Austria (Donner, 1964); ? Shores of embanked & free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); River Salzach & its tributaries, Austria (Donner, 1970)

- Nearctic region: Mud pond, New Hampshire, USA (Wallace, 1975 & 1977a; Wallace & Starkweather, 1985)

- Neotropical region: Peru (Koste & José de Paggi, 1982); Near Panguana, Peru (Koste, 1988b); ? Pond in tropical rain forest, Peru (Schlüter, 1984)

Ptygura brachiata (Hudson, 1886)

- Palaeartic region: Lago Trasimeno, Italy (Taticchi, 1968); Frankenland, Germany (Tiefenbacher, 1972); Peat bogs Jassy & La Plaine Jacquot, Puy-de-Dôme, France (Francez, 1984a); Peat bogs Chambedaze & La Godivelle, Puy-de-Dôme, France (Francez, 1984b); Nat. Res. "Het Hol" near Kortenhoef, NL (Dresscher, 1976); Bog pond near Budapest, Hungary (Nogrady, 1962); Peat bogs Poiana Stampei, Bukowina, Romania (Rudescu, 1966); Darnsee near Epe, NW Germany (Koste, 1962); Achmer Grasmoor, NW Germany (Koste, 1968b); NW Germany (Koste, 1970g); Alps, C Eur. mts., Carpathes, Hungarian plain, C & E Eur. plain, Baltic province, Ireland, UK, Boreal highland (Bērziņš, 1978); Southwest islands of Japan (Sudzuki *et al.*, 1992); Lake Neusiedlersee, Austria (Donner, 1979)

- Nearctic region: Canada (Chengalath, 1977); NE Canada (Chengalath & Koste, 1983); Arctic N America (Chengalath & Koste, 1989)

- Oriental region: Thailand & Indonesia (Sudzuki, 1989); Bung-Borapet, C Thailand (Koste, 1975a)

- Australian region: Qld, Aust. (Shiel & Koste, 1979); Tasmania (Koste & Shiel, 1986b); Alligator rivers area, NT, Aust. (Tait, Shiel & Koste, 1984)

- Neotropical region: Brazil (Koste & José de paggi, 1982); ? Amazonia, Brazil (Hauer, 1965b); Varzea near Sanarem, Brazil (Koste, 1974b); Near Concepcion, Paraguay (Koste, 1986b); Ecuador: Oriente (Koste & Böttger, 1989 & 1992)

Ptygura brachiata (Hudson) f. *bispicata* Edmondson, 1944

- Palaeartic region: Darnsee near Epe, NW Germany (Koste, 1962); Engelbergs Moor, Druchhorn, NW Germany (Koste, 1965)

Ptygura brevis (Rousselet, 1893)

- Palaeartic region: W Balkan, C Eur. mts., Hungarian plain, C & E Eur. plains, Ireland, UK (Bērziņš, 1978); Romania (Rudescu, 1960); Lake Balaton, Hungary (Zankai, 1968); Lake Donk, Overmere, Belgium (Dumont, 1968b); Overmere & St. Job-in-'t Goor, Belgium (De Ridder, 1986)

- Australian region: NW Aust.: Magela Creek area (Koste, 1981b)

Ptygura cephaloceros Summerfield-Wright, 1957

- Palaeartic region: Engelbergs Moor, Druchhorn, NW Germany (Koste, 1965); Achmer Grasmoor, NW Germany (Koste, 1986b); C Eur. plain, UK (Bērziņš, 1978)

Ptygura cephaloceros Summerfield-Wright, f. *grande* Koste, 1970

- Palaeartic region: In *Sphagnum*, Hahlener Moor, NW Germany (Koste, 1970a); NW Germany (Koste, 1970g); C Eur. plain (Bērziņš, 1978)

Ptygura cristata (Murray, 1913)

- Nearctic region: Wisconsin, USA (Koste, 1974d)

- Australian region: Waters near Sidney, Aust. (Koste, 1974d); NSW, Aust. (Shiel & Koste, 1979)

- Neotropical region: ? Amazonia, Brazil (Koste, 1972f); Varzea near Santarem, Brazil (Koste, 1974b); Pond near Rio de Janeiro, Brazil (Koste, 1974d); Brazil & Panama (Koste & José de Paggi, 1982)

Ptygura crystallina (Ehrenberg, 1834)

- Palaeartic region: All over Europe; Caucasus, Caspian area (Bērziņš, 1978); Romania (Rudescu, 1960); Darnsee near Epe, NW Germany (Koste, 1962); Engelbergs Moor, Druchhorn, NW Germany (Koste, 1965); Achmer Grasmoor, NW Germany (Koste, 1968b); NW Germany (Koste, 1970g); River Hase, NW Germany (Koste, 1976b); Lake Dümmer, NW Germany (Koste & Poltz, 1984); Lake Alsee, NW Germany (Koste & Poltz, 1987); Coast of S Finland (Eriksen, 1969); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); Reservoir Sedlice, near Zeliv, Bohemia, CSR (Sladeckova, 1960; Sladeckova & Sladeczek, 1963); Lake Balaton, Hungary (Zankai, 1968); Lake Donk, Overmere, Belgium (Dumont, 1968b; De Ridder, 1986); Lakes of the Black Sea shore, Romania (Godeanu, 1970b); Nat. Res. Oisterwijkse vennen, NL (De Graaf, 1960); Id. + rivers Maas, Rijn, Waal & Yssel, NL (Dresscher, 1976); Shores of dammed and free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); Hamburg harbour,

Germany (Tent, 1981); Frankenland, Germany (Tiefenbacher, 1972)

- Nearctic region: NE Canada (Chengalath & Koste, 1983); Arctic N America (Chengalath & Koste, 1989); Mud pond, S Grafton County, New Hampshire, (Wallace, 1977a); USA (Wallace & Starkweather, 1983 & 1985); Laurentian Great Lakes (Stemberger, 1979)

- Australian region: NSW, Qld, Vic, Aust. (Shiel & Koste, 1979); Alligator rivers area, NT, Aust. (Tait, Shiel & Koste, 1984); Tasmania (Koste & Shiel, 1986b); Christchurch, New Zealand (Russell, 1960)

- Neotropical region: Ecuador: Oriente & Costa (Koste & Böttger, 1989); Ecuador: Sierra (Koste & Böttger, 1992); Varzea near Santarem, Brazil (Koste, 1974b); Near Concepcion, Paraguay (Koste, 1986b); Near Panguana, Peru (Koste, 1988b); Brazil, Peru & Bolivia (Koste & José de Paggi, 1982)

- Antarctic region: Moss Lake, Signy Island, Antarctica (Priddle & Dartnall, 1978); Antarctica & Subantarctica (José de Paggi & Koste, 1984); Antarctica (Dartnall & Hollowday, 1985)

Ptygura elsteri elsteri Koste, 1972

- Oriental region: Bung-Borapet, C Thailand (Koste, 1975a); Thailand & Singapore (Sudzuki, 1989)

- Neotropical region: Varzea near Santarem, Brazil (Koste, 1972h & 1974b); Brazil & Panama (Koste & José de Paggi, 1982); Ecuador: Sierra (Koste & Böttger, 1989)

Ptygura elsteri thailandensis Koste, 1975

- Oriental region: Impoundment Bung-Borapet, C Thailand (Koste, 1975a); Taiwan, Thailand & Singapore (Sudzuki, 1989); Singapore. Distribution: Thailand & Singapore (Sudzuki, 1991)

Ptygura furcillata (Kellicott, 1889)

- Palaearctic region: Lake Alfsee, NW Germany (Koste & Poltz, 1987); C Eur. plain & UK (Bērziņš, 1978); Ponds in Botanical Garden, Gent, Belgium (Segers *et al.*, 1991b); Anatolia, Turkey (Segers *et al.*, 1992)

- Nearctic region: Kingston, Ontario, Canada (Nogrady, 1989); Illinois, USA (Bērziņš, 1984)

- Oriental region: India (Sharma & Michael, 1980); Indonesia, Singapore & India (Sudzuki, 1989); Bung-Borapet, C Thailand (Koste, 1975a); Storage reservoir, Ajwa & Nimeta water works, near Baroda, India (Wulfert, 1966); Ajwa reservoir, near Baroda, Gujarat, W India (Jayangaudar, 1980); Impoundment Kinda, C Burma (Koste & Tobias, 1990); Lake Ranu Lamongau, Indonesia (Green *et al.*, 1976)

- Australian region: Vic, Aust. (Koste & Shiel, 1980c)

- Neotropical region: Rio Nhamunda, Amazonia, Brazil (Brandorff, Koste & Smirnov, 1982); Varzea near Santarem, Amazonia, Brazil (Koste, 1974b); Brazil & Panama (Koste & José de Paggi, 1982); Ecuador: Oriente & Sierra (Koste & Böttger, 1989); Ecuador: Oriente (Koste & Böttger, 1992)

Ptygura furcillata (Kellicott), f. *variabilis* Koste, 1975

- Oriental region: Bung-Borapet, C Thailand (Koste, 1975a); Thailand (Sudzuki, 1989)

Ptygura intermedia (Davis, 1867)

- Palaearctic region: Lake Stråken, Aneboda, Sweden (Bērziņš, 1972); C Eur. mountains & plains, UK (Bērziņš, 1978); Rivers Maas, Rijn, Waal & Yssel, NL (Dresscher, 1976)

- Australian region: Australia (Bērziņš, 1978); NSW & Vic, Aust. (Shiel & Koste, 1979)

Ptygura lacunosa Summerfield-Wright, 1957

- Palaearctic region: UK (Bērziņš, 1978)

Ptygura libera Myers, 1934

- Palaearctic region: ? Southwest islands of Japan (Sudzuki *et al.*, 1992)

- Nearctic region: Lac Echo, Québec, Canada (Nogrady, 1976); Everglades Nat. Park, Florida, USA (Nogrady, 1983); Silver Lake, Adirondack mts., NY State, USA (Siegfried, 1991); Lakes in Florida (Dawes *et al.*, 1987); Northern Michigan inland lakes (Stemberger, 1990)

- Neotropical region: Lake Monte Alegre, SE Brazil (Arcifa *et al.*, 1992); Lago Rio Claro, Orinoco floodplain l., Venezuela (Vasquez & Rey, 1992); Lake Asososca, Nicaragua (Moreno *et al.*, 1992); Amazonia, Brazil; USA (Koste, 1972f); Brazil, Argentina, Surinam & Panama (Koste & José de Paggi, 1982); Rio Nhamunda, Amazonia, Brazil (Brandorff, Koste & Smirnov, 1982); Laguna del Tesoro, Cuba (Alonso, 1984); Orinoco river basin, Venezuela (Vasquez, 1984a); Caroni river basin, Venezuela (Vasquez, 1984b); Broa reservoir, Sao Carlos, Sao Paulo, Brazil (Matsumara *et al.*, 1989); Lago do Macaco, Brazil (Koste, 1989a); Prov. Chaco & Corrientes, Argentina (José de Paggi, 1990)

Ptygura linguata Edmondson, 1939

- Nearctic region: N America (Brandorff, Koste & Smirnov, 1982)

- Neotropical region: Brazil (Koste & José de Paggi, 1982); Rio Nhamunda, Amazonia, Brazil (Brandorff; Koste & Smirnov, 1982); Lago Camaleão, Amazonia, Brazil (Koste & Robertson, 1983); Island of Maraca, Roraima, Brazil (Koste & Robertson, 1990)

Ptygura longicornis (Davis, 1867)

- Palaearctic region: Frankenland, Germany (Tiefenbacher, 1972); Dübener Heide, N Germany (Wulfert, 1960b); Overmere, Belgium (De Ridder, 1986); Peat bog Chambedaze, Puy-de-Dôme, France (Francez,

1982); Peat bogs Chambedaze & La Plaine Jacquot, Puy-de-Dôme, France (Francez, 1984a); Lake Neusiedlersee, Austria (Donner, 1979); Coast of S Finland (Eriksen, 1969); C Eur. mts. & plains, UK, NW Russian taiga (Bērziņš, 1978); Reservoir Sedlice, near Zeliv, Bohemia, CSR (Sladeckova, 1960; Sladeckova & Sladeczek, 1963)

- Nearctic region: N America (Bērziņš, 1978); Laurentian Great Lakes (Stemberger, 1979)
- Australian region: Australia (Bērziņš, 1978); NSW & Vic, Aust. (Shiel & Koste, 1979)
- Neotropical region: Island of Maraca, Roraima, Brazil (Koste & Robertson, 1990); Ecuador: Oriente (Koste & Böttger, 1989)

Ptygura longicornis (Davis), f. *bispicata* Edmondson, 1944

- Palaearctic region: C Eur. plain & UK (Bērziņš, 1978); NW Germany (Koste, 1969b)
- Nearctic region: Mud pond, New Hampshire, USA (Wallace, 1977a)

Ptygura longicornis (Davis), f. *socialis* (Weber, 1888)

- Palaearctic region: Rivers Rijn, Maas, Waal & Yssel, NL (Dresscher, 1976)
- Australian region: Ardgowan, New Zealand (Russell, 1960)

Ptygura longipes (Wills, 1878)

- Palaearctic region: In reed borders of the Danube delta, Romania (Rudescu, 1968); Peat bog Grandvaux, Paris suburb, France (Pourriot, 1965); C Eur. mts., Pontic prov., C & E Eur. plain, UK (Bērziņš, 1978); Romania (Rudescu, 1960)

- Nearctic region: Canada (Chengalath, 1977); Laurentian Great Lakes (Stemberger, 1979)
- Neotropical region: Panama (Koste & José de Paggi, 1982; Collado *et al.*, 1984)

Ptygura melicerta melicerta Ehrenberg, 1832

- Palaearctic region: River Ybbarpsån, Sweden (Bērziņš, 1979); Romania (Rudescu, 1960); Darnsee near Epe, NW Germany (Koste, 1962); Achmer Grasmoor, NW Germany (Koste, 1968b); Lake Dümmer, NW Germany (Koste & Poltz, 1984); Lake Donk, Overmere, Belgium (Dumont, 1968b; Dumont *et al.*, 1977; Coussement & De Henau, 1975; Coussement, 1976; De Ridder, 1986); All over Europe (Bērziņš, 1978); Reservoir Sedlice, near Zeliv, Bohemia, CSR (Sladeckova, 1960; Sladeckova & Sladeczek, 1963); Southwest islands of Japan (Sudzuki, 1990; Sudzuki *et al.*, 1992); Reed belt of Lake Neusiedlersee, Austria (Donner, 1975 & 1979); Shores of embanked and free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978)

- Nearctic region: N America (Bērziņš, 1978); Canada (Chengalath, 1977); Laurentian Great Lakes (Stemberger, 1979)

- Oriental region: Delhi, India (Sarma, 1988); Bung-Borapet, C Thailand (Koste, 1975a); Thailand (Sudzuki, 1989); Impoundment Kinda, C Burma (Koste & Tobias, 1990)

- Australian region: NSW, Australia (Shiel & Koste, 1979); Alligator rivers area, NT, Aust. (Tait, Shiel & Koste, 1984); Christchurch, New Zealand (Russell, 1960)

- Neotropical region: Ecuador: Oriente & Sierra (Koste & Böttger, 1989); Ecuador: Sierra (Koste & Böttger, 1992); ? Amazonia, Brazil (Koste, 1972f); Varzea near Santarem, Brazil (Koste, 1974b); Brazil & Venezuela (Koste & José de Paggi, 1982); Lago Camaleão, Amazonia, Brazil (Koste, Robertson & Hardy, 1984); Near Panguana, Peru (Koste, 1988b); ? Near Concepcion, Paraguay (Koste, 1986b); Lago de Valencia, Venezuela (De Infante, 1980)

- Antarctic region: Moss Lake, Signy Island, Antarctica (Priddle & Dartnall, 1978); Antarctica (Dartnall, 1983; Dartnall & Hollowday, 1985); Antarctica & Subantarctica (José de Paggi & Koste, 1984; Sudzuki, 1988)

Ptygura melicerta ctenoida Koste & Tobias, 1990

- Oriental region: Impoundment Kinda, C Burma (Koste & Tobias, 1990)

Ptygura melicerta Ehrenberg, f. *socialis* (Weber, 1888)

- Australian region: Botanical Gardens Pond, Hobart, Tasmania (Koste & Shiel, 1986b)
- Neotropical region: Brazil (Koste & José de Paggi, 1982)

Note: See also *Ptygura socialis* (Weber, 1888)

Ptygura mucicola (Kellicott, 1888)

- Palaearctic region: Romania (Rudescu, 1960); Darnsee near Epe, NW Germany (Koste, 1962); Engelbergs Moor, Druchhorn, NW Germany (Koste, 1965); Lake Alfsee, NW Germany (Koste & Poltz, 1987); C Eur. mts., Carpathes, Pontic prov., W, C & E Eur. plains, Baltic prov., Ireland, UK, Iceland (Bērziņš, 1978); N Iceland (De Ridder, 1972); Southwest islands of Japan (Sudzuki *et al.*, 1992); Freshwater l. in the dunes of Voorne Island, NL (Dresscher, 1976)

- Nearctic region: Arctic N America (Chengalath & Koste, 1989); Mud pond, New Hampshire, USA (Wallace, 1977a); Laurentian Great Lakes (Stemberger, 1979)

- Oriental region: Bung-Borapet, C Thailand (Koste, 1975a); Impoundment Kinda, C Burma (Koste & Tobias, 1990)

- Australian region: NW Aust.: Magela Creek area (Koste, 1971b); Vic, Aust. (Koste & Shiel, 1980c)
- Neotropical region: Varzea near Santarem, Brazil (Koste, 1974b); Brazil (Koste & José de Paggi, 1982); Near Concepcion, Paraguay (Koste, 1986b); Island of Maraca, Roraima, Brazil (Koste & Robertson, 1990)
- Ptygura pectinifera*** (Murray, 1913)
- Neotropical region: Panama (Collado *et al.*, 1984)
- Ptygura pedunculata*** Edmondson, 1939
- Palaeartic region: Between *Sphagnum* and *Utricularia minor* in an acid moor, NW Germany (Koste, 1970f); NW Germany (Koste, 1970g); C Eur. plain (Bērziņš, 1978)
- Neotropical region: Amazonia, Brazil (Koste, 1972f); Varzea near Santarem, Brazil (Koste, 1974b); Brazil (Koste & José de Paggi, 1982); Laguna do Magelhaes, Amazonia, Brazil (Schaden, 1976)
- Ptygura pilula*** (Cubitt, 1872)
- Palaeartic region: Romania (Rudescu, 1960); Coast of S Finland (Eriksen, 1969); C & S Sweden (Bērziņš & Pejler, 1987); Mt. Hoverla, Maramarosch Alps, Hungary (Varga, 1962); Darnsee near Epe, NW Germany (Koste, 1962); Engelbergs Moor, Druchhorn, NW Germany (Koste, 1965); Achmer Grasmoor, NW Germany (Koste, 1968b); NW Germany (Koste, 1969b & 1970g); Peat bog "Musikantenteich", Bohemia, CSR: gives interesting distribution records (Sladeczek, 1963); Lake Donk, Overmere, Belgium (Dumont, 1968b); Peat bog Chambedaze, La Godivelle, Jassy & La Plaine Jacquot, Puy-de-Dôme, France (Francez, 1984a); Peat bogs Chambedaze & La Godivelle, Puy-de-Dôme, France (Francez, 1984b); Peat bog Chambedaze, Puy-de-Dôme, France (Francez, 1982); Small water bodies in the Mikolajkie area, Poland (Klimowicz, 1967); Frankenland, Germany (Tiefenbacher, 1972); Lake Ketelven, near Nijmegen, NL (Dresscher, 1976); In reed borders of the Danube delta, Romania (Rudescu, 1968); Peat bogs in the Paris suburb, France (Pourriot, 1965); All over Europe (Bērziņš, 1978)
- Nearctic region: NE Canada (Chengalath & Koste, 1983); Mud Pond, S Grafton Co, New Hampshire, USA (Wallace, 1977a; Wallace & Starkweather, 1980 & 1983); Kingston, Ontario, Canada (Nogrady, 1989)
- Australian region: NSW, Australia (Shiel & Koste, 1979); NW Aust.: Magela Creek area (Koste, 1981b); Alligator rivers area, NT, Aust. (Tait, Shiel & Koste, 1984); S Tasmania; NSW & NT, Aust. (Koste, Shiel & Tan, 1988)
- Neotropical region: Ecuador: Oriente & Sierra (Koste & Böttger, 1992)
- Ptygura rotifer*** Stenroos, 1898
- Palaeartic region: Coast of S Finland (Eriksen, 1969); C Eur. plain, UK, Boreal highland, NW Russian taiga (Bērziņš, 1978)
- Nearctic region: Canada (Chengalath, 1977)
- Ptygura rotifer*** Stenroos, f. *conica* Bērziņš, 1949
- Palaeartic region: C Eur. plain (Bērziņš, 1978)
- Ptygura seminans*** Edmondson, 1939
- Palaeartic region: C Eur. plain (Bērziņš, 1978)
- Ptygura socialis*** (Weber, 1888)
- Palaeartic region: Nat. Res. Jursky Sur, CSR (Hudec, 1978); Alps, C Eur. mts. & plains, Pontic prov., UK, NW Russian taiga (Bērziņš, 1978)
- Neotropical region: Amazonia, Brazil (Gillard, 1967 (with doubt); Thomasson, 1971); Lago do Rei, Amazonia, Brazil (Schaden, 1977c)
- Note: See also *Ptygura melicerta*, f. *socialis*
- Ptygura spongicola*** Bērziņš, 1950
- Palaeartic region: Romania (Rudescu, 1960); Carpathes, C Eur. plain (Bērziņš, 1978); In reed borders of the Danube delta, Romania (Rudescu, 1968)
- Neotropical region: ? In phytotelmata on Jamaica (Koste *et al.*, 1991)
- Ptygura stephanion*** (Anderson, 1889)
- Oriental region: India (Sharma & Michael, 1980; Sudzuki, 1989)
- Ptygura stygis*** (Gosse, 1886)
- Palaeartic region: C Eur. mts., Hungarian plain, C & E Eur. plains, UK (Bērziņš, 1978); Lake Balaton, Hungary (Zankai, 1968)
- Nearctic region: Canada (Chengalath, 1977)
- Ptygura tacita*** Edmondson, 1970
- Oriental region: Delhi, India (Sarma, 1988)
- Australian region: Vic, Aust. (Koste & Shiel, 1980c); NW Aust.: Magela Creek area (Koste, 1981b); Stock Dam, S of Hobart, Tasmania (Koste & Shiel, 1986b); Alligator rivers area, NT, Aust. (Tait, Shiel & Koste, 1984)
- Neotropical region: Ecuador: Oriente (Koste & Böttger, 1989 & 1992); Orinoco river basin, Venezuela

(Vasquez, 1984a); Varzea near Santarem, Brazil (Koste, 1974b); Brazil (Koste & José de Paggi, 1982); Lago Camaleão, Amazonia, Brazil (Koste & Robertson, 1983; Koste, Robertson & Hardy, 1984); Island of Maraca, Roraima, Brazil (Koste & Robertson, 1990); Rio Nhamunda, Amazonia, Brazil (Brandorff, Koste & Smirnov, 1982)

Ptygura tihanyensis Varga, 1937

- Palaearctic region: Lake Balaton, Hungary (Zankai, 1968); Romania (Rudescu, 1960); Carpathes & Hungarian plain (Bērziņš, 1978)

Ptygura tridorsicornis Summerfield-Wright, 1957

- Palaearctic region: UK (Bērziņš, 1978)

Ptygura velata (Gosse, 1851)

- Palaearctic region: Lac Léman, Fr./CH (Balvay & Laurent, 1981); River Maas, Rijn, Waal & Yssel, NL (Dresscher, 1976); River Oude Waal near Nijmegen, NL (Delbecque & Suykerbuyk, 1988); In acid waters, NW Germany (Koste, 1970a); Darnsee near Epe, NW Germany (Koste, 1962); NW Germany (Koste, 1969b & 1970g); River Hase, NW Germany (Koste, 1976b); Peat bog Chambedaze, Puy-de-Dôme, France (Francez, 1982); Peat bogs Chambedaze & La Godivelle, *ibid.* (Francez, 1984b); Peat bogs Bourdouze, Chambedaze & La Godivelle, *ibid.* (Francez, 1984a); In reed borders of the Danube delta, Romania (Rudescu, 1968); Ponds in Olțina, SE Dobrogea, Romania (Popescu-Gorj & Costea, 1961); Garden ponds in Tokyo, Japan (Sudzuki, 1975)

- Nearctic region: Lac Echo, Québec, Canada (Nogrady, 1976); Mt. Temblant Prov. park, Québec, Canada (Nogrady, 1980)

- Australian region: Mt. Cook & Christchurch, New Zealand (Russell, 1960)

- Neotropical region: Near Concepcion, Paraguay (Koste, 1986b & 1988c); Varzea near Santarem, Brazil (Koste, 1974b); Brazil (Koste & José de Paggi, 1982)

Ptygura wilsonii (Anderson & Shephard, 1892)

- Palaearctic region: Italy, Alps, C Eur. mts., Pontic prov., W, C & E Eur. plains, Ireland, UK, Boreal highland (Bērziņš, 1978)

- Australian region: Vic, Australia (Shiel & Koste, 1979)

Ptygura spec.

- Palaearctic region: Middle course of river Loire, France (Lair & Sargos, 1981); Lakes around mountain Fuji, Japan (Sudzuki, 1971b); Mountain Fuji area, Japan (Sudzuki, 1978a); Periphytic biota in sewages & park waters, Jap. (Sudzuki, 1981); Mountain Fuji lava caves, Japan (Sudzuki, 1971a); Danube delta, Romania (Popescu-Marinescu & Zinevici, 1967); Afghanistan (Bērziņš, 1961); Lake Stråken, Aneboda, Sweden (Bērziņš, 1972); River Ybbarpsån, Sweden (Bērziņš, 1979); Lake Palaeostomi, Georgia, R.F. (Haberman & Laugaste, 1982); Impoundment Kninicki, CSR (Kubicek, 1964); Hopen, Svalbard Archipelago (De Smet, 1990); Edgeøya, Svalbard (De Smet *et al.*, 1988b); Bjørnøya (Bear Island), Svalbard (De Smet, 1988); Fish-fattening ponds in the Ukraina (Krazhan *et al.*, 1976); Reservoir Sedlice, near Zeliv, Bohemia, CSR (Sladeckova, 1960); Etang de Moliets, SW France (De Ridder, 1967b); Shores of embanked and free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); L. Wallsee & r. Lobau, Austrian Danube delta (Donner, 1978); Rivers Maas, Rijn, Waal & Yssel, NL (Dresscher, 1976)

- Nearctic region: Ontario, Canada & Illinois, USA (Bērziņš, 1984); Fayetteville, Onondaga County, NT, USA (Jackson, 1972); Experimental ponds, C Florida, USA (Fry & Osborne, 1980)

- Oriental region: Parakrama Samudra reservoir, Sri Lanka (Duncan, 1983a & 1984; Dancan & Gulati, 1981 & 1983a); Taiwan (Sudzuki, 1988); Taiwan & Singapore (Sudzuki, 1989); Kalimantan (Borneo), Indonesia (Koste, 1988); South India (Naidu, 1967); Storage reservoir Ajwa, near Baroda, India (Wulfert, 1966)

- Australian region: Creek & river in Aust. (Bērziņš, 1982); NW Aust.: Magela Creek area (Koste, 1981b)

- Neotropical region: Ecuador: Oriente & Sierra (Koste & Böttger, 1992); Broa reservoir, Sao Paulo State, Brazil (Matsumara-Tundisi & Tundisi, 1976); S Brazil (Tundisi, 1976; Arcifa, 1984); Lower Orinoco and its delta, Venezuela (Vasquez & Rey, 1989); Lago Açu, Maranhão, Brazil (Reid & Turner, 1988); Lago Paroni, Brazil (Koste, 1974a); Lago Camaleão, Amazonia, Brazil (Koste & Robertson, 1983; Koste, Robertson & Hardy, 1984); Rio Nhamunda, Amazonia, Brazil (Brandorff, Koste & Smirnov, 1982); Near Panguana, Peru (Koste, 1988b); Galapagos Islands (De Smet, 1987 & 1989); Amazonia, Brazil (Hauer, 1965b; Gillard, 1967; Thomasson, 1971); In phytotelmata on Jamaica (Koste *et al.*, 1991); Brokopondo Lake, Surinam (Leentvaar, 1979); ? Araucarian lakes, W of the Andes, Chile (Thomasson, 1963b)

- Antarctic region: Antarctica (Everitt, 1981)

Resticula Harring & Myers, 1924*Resticula anceps* Harring & Myers, 1924

- Palaearctic region: C Eur. plain (Bērziņš, 1978)
- Nearctic region: N America (Bērziņš, 1978)

Resticula gelida (Harring & Myers, 1922)

- Palaearctic region: Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1986); Romania (Rudescu, 1960); Slovenia, ex-Yugoslavia (Markic, 1983); River Hase, NW Germany (Koste, 1976b); Small water bodies in Soviet Karelia, R.F. (Filimonova, 1976); Alps, C Eur. mts., Pontic prov., C Eur. plains (Bērziņš, 1978); Korea (Turner, 1986); Water courses in the Bucegi mts., Romania (Godeanu, 1963b); Temporary waters & small permanent pools, *ibid.* (Godeanu, 1969a); Lowland brook-pond system in Boom, Belgium (Maes, 1985); Boom, Belgium (De Ridder, 1986); Shores of dammed and free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); River Salzach and its tributaries, Austria (Donner, 1970); In reed borders of the Danube delta, Romania (Rudescu, 1968); Pond in the Paris suburb, France (Pourriot, 1965); Rock-pools E of Ballancourt, 40 km S of Paris, (Pourriot, 1974); France
- Nearctic region: N America (Bērziņš, 1978); Lac Echo, Québec, Canada (Nogrady, 1976); Kingston, Ontario, Canada (Nogrady, 1989)
- Australian region: SW Australia (Koste, Shiel & Brock, 1983); Southwest W Aust. (Shiel & Koste, 1985); Single record, from Yarnup Swamp, W Aust. (Koste & Shiel, 1991a)
- Neotropical region: Ecuador: Oriente (Koste & Böttger, 1989); Ecuador: Oriente & Sierra (Koste & Böttger, 1992)
- Antarctic region: Antarctica (Dartnall, 1983; Dartnall & Hollowday, 1985); Antarctica & Subantarctica (José de Paggi & Koste, 1984; Sudzuki, 1988b); Signy Island, South Orkney Islands (Dartnall, 1992)

Reticula lestes Wulfert, 1935

- Palaearctic region: C Eur. mountains & plains (Bērziņš, 1978)

Resticula melandocus (Gosse, 1887)

- Palaearctic region: Peat bogs Poiana Stampei, Bukowina, Romania (Rudescu, 1966); Pond in the Paris suburb, France (Pourriot, 1965); Romania (Rudescu, 1960); Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); Engelbergs Moor, Druchhorn, NW Germany (Koste, 1965); River Hase, NW Germany (Koste, 1976b); In reed borders of the Danube delta, Romania (Rudescu, 1968); Alps, C Eur. mts. & plains, UK, Asia Minor. Cosmopolitan (Bērziņš, 1978); Lake Neusiedlersee, Austria (Donner, 1979); Shores of dammed and free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); River Salzach & its tributaries, Austria (Donner, 1970)
- Nearctic region: Canada (Chengalath, 1977); Cap Breton Island, Nova Scotia, Canada (Chengalath & Koste, 1988); Arctic N America (Chengalath & Koste, 1989)
- Oriental region: Kalimantan (Borneo), Indonesia (Koste, 1988a); Indonesia (Sudzuki, 1989)
- Australian region: Qld, Australia (Shiel & Koste, 1979); Tasmania (Koste & Shiel, 1986b); Alligators river area, NT, Aust. (Koste & Shiel, 1983a; Tait, Shiel & Koste, 1984); Rare: NT, Qld, Tas, Vic (Koste & Shiel, 1991)
- Neotropical region: Ecuador: Costa (Koste & Böttger, 1989); Ecuador: Oriente (Koste & Böttger, 1992); Lago Camaleão, Amazonia, Brazil (Koste, Robertson & Hardy, 1984); Near Panguana, Peru (Koste, 1988b); Near Concepcion, Paraguay. Cosmopolitan. No records for Africa (Koste, 1986b); Island of Maraca, Roraima, Brazil (Koste & Robertson, 1990); Costa Rica (Collado *et al.*, 1984)

Resticula nyssa Harring & Myers, 1924

- Palaearctic region: Peat bogs Poiana Stampei, Bukowina, Romania (Rudescu, 1966); Lake Bodensee near Konstanz, Brandenburg, G. (Althaus, 1963; Ronneberger & Schönborn, 1985); Bjørnøya (Bear Island), Svalbard (De Smet, 1988); Engelbergs Moor, Druchhorn, NW Germany (Koste, 1965); Achmer Grasmoor, NW Germany (Koste, 1968b); River Hase, NW Germany (Koste, 1976b); Lake Alfsee, NW Germany (Koste & Poltz, 1987); Soviet Karelia, R.F. (Filimonova, 1976); Alps, C Eur. mts. & plains, Hungarian plain (Bērziņš, 1978); Peat bogs Chambedaze & La Godivelle, Massif Central, France (Francez & Dévaux, 1985); Lake Neudiedlersee, Austria (Donner, 1972d & 1975); Peat bog Chambedaze, Puy-de-Dôme, France (Francez, 1982); Peat bogs in the Auvergne, France (Francez, 1981 & 1984c)
- Nearctic region: N America (Bērziņš, 1978); NE Canada (Chengalath & Koste, 1983); Cape Herschel, Ellesmere Island, NWT, Canada (Nogrady & Smol, 1989); Kingston, Ontario, Canada (Nogrady, 1989)
- Australian region: S Tasmania (Koste, Shiel & Tan, 1988); Lake Garcia, W Tasmania (Koste & Shiel, 1991)

***Resticula plicata* Wulfert, 1935**

- Palaearctic region: Lake Alfsee, NW Germany (Koste & Poltz, 1987); Romania (Rudescu, 1960); C Eur. mountains & plains (Bērziņš, 1978); Dübener Heide, N Germany (Wulfert, 1961)
- Nearctic region: Kingston, Ontario, Canada (Nogrady, 1989)

***Resticula vermiculus* Wulfert, 1935**

- Palaearctic region: C Eur. mountains & plains (Bērziņš, 1978); Romania (Rudescu, 1960)

Resticula spec.

- Palaearctic region: ? Garden ponds in Tokyo, Japan (Sudzuki, 1975)

Rhinoglena* Ehrenberg, 1853**Rhinoglena fertoensis* (Varga, 1928)**

- Palaearctic region: Seewinkel & Darscholacke, Burgenland, Austria (Peschek, 1961); Neusiedlersee, Austria (Herzig, 1983); Neusiedlersee & several saltw. lakes in C Europe (Koste, 1972c); C Eur. mountains & plains (Bērziņš, 1978)
- Antarctic region: Bunge Hills, coast of Antarctica (Kutikova, 1964b); Antarctica (Sudzuki, 1988)

***Rhinoglena frontalis* (Ehrenberg, 1853)**

- Palaearctic region: Water purification plant Horrem, near Köln, G. (Bick & Scholtyssek, 1960); Coast of S Finland (Eriksen, 1969); Mine waters in E Poland (Radwan & Paleolog, 1983); Bjørnøya (Bear Island), Svalbard (De Smet, 1988); NW Germany (Koste, 1972c); River Hase, NW Germany (Koste, 1976b); Lake Alfsee, NW Germany (Koste & Poltz, 1987); Norfolk Broads, UK (Irvine *et al.*, 1990); Peat bogs in the Massif Central, France (Batut, 1965); River Elbe near Hamburg, Germany (Caspers & Schulz, 1964); River Elbe estuary, Germany (Schulz, 1961); Canal Isebek, Hamburg, Germany (Caspers & Schulz, 1960; Caspers, 1964); Hamburg area, Germany (Rühmann, 1961); Hamburg harbour, Germany (Rühmann, 1962); Fish-fattening ponds in the Ukraina, R.F. (Krazhan *et al.*, 1976); Nearly all over Europe (Bērziņš, 1978); Lakes of Sosnowickie, Poland (Radwan, 1968 & 1969); Lake Donk, Overmere, Belgium (Dumont, 1968b); Meuse Liégeoise, Belgium (Baiverlin, 1984); Balearic Archipelago, Spain (de Manuel *et al.*, 1992); 3 localities in Belgium (De Ridder, 1986); ? Waldviertel area, lower Austria (Naidenow & Wawrik, 1984); Canal Leeds-Liverpool, UK (Galliford, 1960b); Knowsley Park, Liverpool, UK (Galliford, 1964); River Vistula in the Warsaw area, Poland (Klimowicz, 1981); Small water bodies in the Mikolajkie area, Poland (Klimowicz, 1967); Lowland brook-pond system in Boom, Belgium (Maes, 1985); Lake Watergraafsmeer; river Maas, Rijn, Waal & Yssel; Loosdrecht Lakes, NL (Dresscher, 1976); Lac Léman, Fr./CH (Balvay *et al.*, 1990); River Loire in St. Laurent-les-Eaux, France (Pourriot *et al.*, 1982); Moats of Château & pond in the Paris suburb, Fr. (Pourriot, 1965)
- Nearctic region: Bayou de Siard, Monroe, La, USA (Gallagher, 1965)
- Oriental region: 2 Kumaun Himalayan lakes, UP, India (Sharma & Pant, 1984 & 1985)
- Australian region: Weston, New Zealand (Russell, 1960); Vic, Aust. (Shiel & Koste, 1979; Koste & Shiel, 1980c); Cosmopolitan. Rare. Vic (Koste & Shiel, 1987b); S Tasmania (Koste, Shiel & Tan, 1988)
- Antarctic region: Antarctica & Subantarctica (José de Paggi & Koste, 1984)

***Rhinoglena tokioensis* Sudzuki, 1975**

- Palaearctic region: Garden ponds in Tokyo, Japan (Sudzuki, 1975)

Rhinoglena spec.

- Palaearctic region: River Loire, France (Lair, 1980); Middle course of river Loire, France (Lair & Sargos, 1981)

Rousseletia* Haring, 1913**Rousseletia corniculata* Haring, 1913**

- Nearctic region: Experimental ponds, C Florida, USA (Fry & Osborne, 1980)

***Rousseletia parrotti* (Russell, 1947)**

- Australian region: Christchurch, New Zealand (Russell, 1960); Myall Lake, NSW, Aust. (Sudzuki & Timms, 1977); NSW, Aust. (Shiel & Koste, 1979)

Scaridium Ehrenberg, 1830*Scaridium bostjani* Daems & Dumont, 1974

- Oriental region: Lakelet Tau Daha, Kathmandu valley, Nepal (Daems & Dumont, 1974)
- Antarctic region: Antarctica (Dartnall, 1983; Darnall & Hollowday, 1985; Sudzuki, 1988b)

Scaridium longicaudum (O.F. Müller, 1786)

- Palaearctic region: Lac Bourdouze, Puy-de-Dôme, France (Persoone *et al.*, 1968); Peat bogs in the Auvergne, France (Francez, 1981); Peat bogs Chambedaze, Puy-de-Dôme, France (Francez, 1982 & 1987); Romania (Rudescu, 1960); Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1961); River Klyas'ma, R.F. (Bogoslowski, 1961); "Altes Land" near Hamburg, Germany (Caspers & Heckman, 1981/1982); Middle course of river Po, Italy (Ferrari *et al.*, 1986); Po river, Italy (Ferrari *et al.*, 1989); Lake Bansee near Seon, Bavaria, Germany (Preisler, 1977a); Lake Stråken, Aneboda, Sweden (Bērziņš, 1972); Afghanistan (Bērziņš, 1961); Coast of S Finland (Eriksen, 1969); Lake Numasawa, Japan (Sudzuki *et al.*, 1983); Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1986); Lake in the Danube delta, Romania (Godeanu & Zinevici, 1983); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b & 1989d); Lake Kisajno, Mazurian lakeland, Poland (Klimowicz, 1964); Lake Quackjeswater, Voorne, NL (Leentvaar, 1963); Broads & peat pits in NW Overijssel, NL (Leentvaar, 1965); N Swedish Lapland (Pejler, 1962a); Darnsee near Epe, NW Germany (Koste, 1962); Engelbergs Moor, Druchhorn, NW Germany (Koste, 1965); River Hase, NW Germany (Koste, 1976b); Fishponds near Warsaw, Poland (Hillbricht-Ilkowska, 1964); Volgograd reservoir, R.F. (V'yushkova & Lakhnova, 1974); All over Europe; Caucasus, Caspian area. Cosmopolitan (Bērziņš, 1978); River Grabia basin, Poland (Pawlowski, 1968 & 1970); Lake Balaton, Hungary (Zankai, 1968); Lake Neusiedlersee, Austria (Donner, 1979); Lago Trasimeno, Italy (Taticchi, 1968); Serbian section of river Danube (Zivkovic, 1987); Pool near Ichun, China (Wulfert, 1968); Spain: Lerida, Orense & Tarragona (Velasco, 1990); Waters near river Bodrog, NE Hungary (Dévai *et al.*, 1972/1973); Canals in Hran area, CSR (Terek, 1990c); Obretin Lake, Danube delta, Romania (Neagu-Godeanu *et al.*, 1968); Lake Donk, Overmere, Belgium (Dumont, 1968b); Lake Marmara, Turkey (Ustaoglu, in press); N & W Iceland (De Ridder, 1969b, 1970 & 1972); Japanese inland waters (Yamamoto, 1960a); Waldviertel area, lower Austria (Naidenow & Wawrik, 1984); Eeklo, Belgium (De Maeseneer, 1979; De Ridder, 1986); Obretin embanked basin, Danube delta, Rom. (Godeanu *et al.*, 1973); Nat. Res. Oisterwijkse vennen, NL (De Graaf, 1960); Small water bodies in the Mikolajkie area, Poland (Klimowicz, 1967); Aantolia, Turkey (Segers *et al.*, 1992); River Bistritza & its tributaries, Romania (Miron, 1960); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); Dübener Heide, N Germany (Wulfert, 1960b & 1961); Etang de Pommereau, Loir-et-Cher, France (Tassigny *et al.*, 1970); Peat bog Chambedaze, Puy-de-Dôme, France (Francez, 1988); Nat. Res. "Het Hol" near Kortenhoef; Lake Venematen; Lakes in NW Overijssel; Dune waters Quackjeswater, Breedewater & Vogelmeer; Lakes Zuidelijke vechtplassen; River Maas; Old branch cut off from river Waal; Channel Zuid-Willemsvaart, NL (Dresscher, 1976); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); In reed borders of the Danube delta, Romania (Rudescu, 1968); Rés. biol. de Villars-la-Dombes, France (Rostan, 1976); Parczew area peat bogs, Poland (Radwan, 1974); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Pond in the Paris suburb, France (Pourriot, 1965); Lake Doiran, Macedonia, ex-Yugoslavia (Popovska-Stankovic, 1990); Fens in Genk, Belgium (Schepens, 1960); Pool, S of Trondheim, Norway (Thomasson, 1979)
- Nearctic region: NE Canada (Chengalath & Koste, 1983); NW Canada (Chengalath & Koste, 1987); Cap Breton Island, Nova Scotia, Canada (Chengalath & Koste, 1988); Arctic N America (Chengalath & Koste, 1989); Lac Echo, Québec, Canada (Nogrady, 1976); Kingston, Ontario, Canada (Nogrady, 1989); Cape Herschell, Ellesmere Island, NWT, Canada (Nogrady & Smol, 1989); Colorado, USA (Turner, 1988); Canada (Chengalath, 1977); Degg's Lake, Colorado, USA (Pennak, 1966); Illinois & Kentucky, USA (Bērziņš, 1984); Laurentian Great Lakes (Stemberger, 1979); Northern Michigan inland lakes (Stemberger, 1990); Lake Wabamun, Alberta, Canada (Gallup & Hickman, 1975); Atchafalaya river basin, Louisiana, USA (Holland *et al.*, 1983); Mirror Lake, New Hampshire, USA (Strayer, 1985); Near Monroe, Louisiana, USA (Gallagher, 1966); Crater Lake & Walker Lake, Arizona, USA (Green, 1986)
- Oriental region: India (Wulfert, 1966); Sri Lanka (Mendis & Fernando, 1962; Fernando, 1969 & 1980a); Singapore (Karunakaran & Johnson, 1978); Malaysia, Singapore, Indonesia, Sri Lanka & India (Sudzuki, 1989); Kalimantan (Borneo), Indonesia (Koste, 1988a); Sri Lanka. Found in ponds and littoral of lakes (Chengalath, Fernando & Koste, 1973); Lakelet Tau Daha, Kathmandu valley, Nepal (Daems & Dumont, 1974); Singapore. Cosmopolitan (Sudzuki, 1991); W & E Malaysia & Singapore (Fernando & Zankai, 1981); Impoundment Kinda, C Burma (Koste & Tobias, 1990); Lake Ranu Lamongau, Indonesia (Green *et al.*, 1976); Ricefields in NE Thailand (Heckman, 1979); West Bengal, NE India (Sharma, 1979b)
- Australian region: NW Aust.: Magela Creek area (Koste, 1981b); Alligator rivers area, NT, Aust. (Koste

& Shiel, 1983a; Tait, Shiel & Koste, 1984); SW Aust. (Koste, Shiel & Brock, 1983); Tasmania (Koste & Shiel, 1987); NSW, Qld & Vic, Aust. (Shiel & Koste, 1979); Pancontinental (Koste & Shiel, 1991); Mt. Cook, New Zealand (Russell, 1960)

- Neotropical region: Ecuador: Orienta & Costa (Koste & Böttger, 1989 & 1992); River Saladillo basin, Argentina (José de Paggi & Koste, 1988); Lago do Macaco, Brazil (Koste, 1989a); Lago Paroni, Brazil (Koste, 1974a); Varzea near Santarem, Brazil (Koste, 1974b); Paraguay, Argentina, Brazil, Venezuela, Panama (Koste & José de Paggi, 1982); Lago Camaleão, Brazil (Koste & Robertson, 1983; Koste, Robertson & Hardy, 1984); Near Panguana, Peru (Koste, 1988b); Near Concepcion, Paraguay (Koste, 1986b); Island of Maraca, Roraima, Brazil (Koste & Robertson, 1990); Prov. Rio Negro, Chaco & Santa Fé, Argentina (José de Paggi, 1990); Panama (Collado *et al.*, 1984); Flooded savanna at Mantecal, Venezuela (Michelangelli *et al.*, 1979/1980); Araucarian ponds & pools, Chile (Thomasson, 1963b); Mato Grosso, C Brazil (Turner & Da Silva, 1992)

- Antarctic region: Signy Island, Antarctica (Dartnall, 1977); Moss Lake, Signy Island, Antarctica (Priddle & Dartnall, 1978); Antarctica & Subantarctica (José de Paggi & Koste, 1984)

Scaridium spec.

- Palaearctic region: Fukushima Prefecture, Japan (Sudzuki, 1982)

Sinantherina Bory de St. Vincent, 1826

Sinantherina ariprepes Edmondson, 1939

- Palaearctic region: Canada (Chengalath, 1977); Mud Pond, S Grafton Co, New Hampshire, USA (Wallace & Starkweather, 1985)

- Australian region: NT, Australia (Shiel & Koste, 1985)

- Neotropical region: Uruguay, Argentina & Brazil (Koste & José de Paggi, 1982); Varzea near Santarem, Brazil (Koste, 1974b); Prov. Santa Fé, Argentina (José de Paggi, 1990); Ecuador: Oiente (Koste & Böttger, 1989 & 1992)

Sinantherina procera (Thorpe, 1893)

- Oriental region: W & E Malaysia & Singapore (Fernando & Zankai, 1981); Malaysia (Sudzuki, 1989)

- Neotropical region: Varzea near Santarem, Brazil (Koste, 1974b); Brazil (Koste & José de Paggi, 1982)

Sinantherina semibullata (Thorpe, 1889)

- Palaearctic region: R.F., Italy, CH, Germany, China (Koste, 1972f); Alps & C Eur. mountains. Cosmopolitan (Bērziņš, 1978); Lower delta of river Volga, R.F. (Chuykov, 1981); Lower Volga, R.F. (Chuykov & Merkulov, 1986)

- Nearctic region: Bay of Quinte, Lake Ontario, Canada (Nogrady, 1988); Kingston, Ontario, Canada (Nogrady, 1989)

- Oriental region: Sri Lanka (Mendis & Fernando, 1962; Fernando, 1969 & 1980a; Sudzuki, 1989); Sri Lanka. Found in ricefields; abundant in this habitat (Chengalath, Fernando & Koste, 1973)

- Australian region: Australia & New Guinea (Koste, 1972f); Qld, Aust. (Shiel & Koste, 1979); ? E Aust. (Koste & Shiel, 1980b)

- Neotropical region: Ecuador: Oriente (Koste & Böttger, 1992); Brazil (Koste, 1972f); Lago Açu, Maranhão, Brazil (Reid & Turner, 1988); Uruguay, Brazil & Venezuela (Koste & José de Paggi, 1982); Lago Camaleão, Amazonia, Brazil (Koste, Robertson & Hardy, 1984); Rio Nhamunda, Amazonia, Brazil (Brandorff, Koste & Smirnov, 1982); Flooded savanna at Mantecal, Venezuela (Michelangelli *et al.*, 1979/1980); Lago do Castanho, C Amazonia, Brazil (Schaden, 1977b); Rio Negro & Lago do Castanho, Amaz., Brazil (Schaden, 1977c)

Sinantherina socialis (L., 1758)

- Palaearctic region: Romania (Rudescu, 1960); Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); River Loire, France (Lair *et al.*, 1978; Lair, 1980; Champ & Pourriot, 1977); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989c & 1989d); Lake Kisajno, Mazurian lakeland, Poland (Klimowicz, 1964); Europe & China (Koste, 1972f); Almost all over Europe. Cosmopolitan (Bērziņš, 1978); River Grabia basin, Poland (Pawlowski, 1970); Lake Balaton, Hungary (Zankai, 1968); Latorica, E Slovakia lowland, CSR (Terek, 1990a); Middle course of river Loire, France (Champ & Pourriot, 1977b); Brugge & St. Job in 't Goor, Belgium (De Ridder, 1986); Brackish waters near Brugge, Belgium (De Ridder & Verheye, 1980); River Loire, between Orléans & St. Vincent-le-Vieil, France (Champ, 1978); Frankenland, Germany (Tiefenbacher, 1972); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); River Loire in St. Laurent-les-Eaux, France (Pourriot *et al.*, 1982); 3 lakes of Sosnowickie, Poland (Radwan, 1969); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Waters near river Bodrog, NE Hungary (Dévai *et al.*, 1972/1973)

- Nearctic region: Canada (Chengalath, 1977); NE Canada (Chengalath & Koste, 1983); Buffalo Lake, Marquette Co, Wisconsin, USA (Wallace, 1980; Wallace & Starkweather, 1985); Kingston, Ontario, Canada (Nogrady, 1989); N America (Koste, 1972f); Laurentian Great Lakes (Stemberger, 1979)
- Oriental region: India (Sharma & Michael, 1980); Thailand, Singapore, India (Sudzuki, 1989); Bung-Borapet, C Thailand (Koste, 1975a); Kalimantan (Borneo), Indonesia (Koste, 1968a); India & Sri Lanka (Koste, 1972f); Impoundment Kinda, C Burma (Koste & Tobias, 1990)
- Australian region: Australia (Koste, 1972f); Qld, Aust. (Shiel & Koste, 1979); ? Tasmania (Koste & Shiel, 1968b)
- Neotropical region: Brazil; Amazonia, Brazil (Koste, 1972f); Varzea near Santarem, Brazil (Koste, 1974b); Uruguay & Brazil (Koste & José de Paggi, 1982); Rio Yatapu & rio Uatuma, Amazonia, Brazil (Koste & Hardy, 1984); Lago Camaleão, Amazonia, Brazil (Koste & Robertson, 1983; Koste, Robertson & Hardy, 1984); Rio Nhamunda, Amazonia, Brazil (Brandorff, Koste & Smirnov, 1982); Brokopondo Lake, Surinam (Leentvaar, 1979); Ecuador: Oriente (Koste & Böttger, 1992)

Sinantherina spinosa (Thorpe, 1893)

- Palaearctic region: R.F., CH, China (Koste, 1972f); Treatment ponds in Astrakan province, R.F. (Chuykov, 1979); Near city of Astrakan, lower Volga, R.F. (Chuykov, 1981); Alps. Cosmopolitan (Bērziņš, 1978); Southwest islands of Japan (Sudzuki *et al.*, 1992); ? Garden ponds in Tokyo, Japan (Sudzuki, 1975)
- Nearctic region: N America (Koste, 1972f)
- Oriental region: Near Nagpur, C India (Arora, 1963 & 1966c); India (Sharma & Michael, 1980); Philippines (Mamaril & Fernando, 1978); Sri Lanka (Fernando, 1980a); Malaysia, Indonesia, Sra Lanka, India & Philippines (Sudzuki, 1989); Indonesia (Koste, 1972f); Kalimantan (Borneo), Indonesia (Koste, 1988a); Sri Lanka. Found abundantly in ricefields (Chengalath, Fernando & Koste, 1973); W & E Malaysia & Singapore (Fernando & Zankai, 1981); Impoundment Kinda, C Burma (Koste & Tobias, 1990)
- Australian region: Qld, Australia (Shiel & Koste, 1979); NW Aust.: Magela Creek area, NT, Aust. (Koste, 1981b); Alligator rivers area, NT, Aust. (Tait, Shiel & Koste, 1984)
- Neotropical region: Parana Media r. environments, Argentina (José de Paggi, 1982); River Parana, Argentina (José de Paggi, 1985); Orinoco river basin, Venezuela (Vasquez, 1984a); S America (Koste, 1972f); Lago Paroni, Brazil (Koste, 1974a); Varzea near Santarem, Brazil (Koste, 1974b); Paraguay, Brazil, Venezuela, Surinam & Panama (Koste & José de Paggi, 1982); Lago Camaleão, Amazonia, Brazil (Koste & Robertson, 1983; Koste, Robertson & Hardy, 1984); Rio Nhamunda, Amazonia, Brazil (Brandorff, Koste & Smirnov, 1982); Island of Maraca, Roraima, N Brazil (Koste & Robertson, 1990); Samuel reservoir (Brazil, Rondônia) (Matsumara-Tundisi *et al.*, 1991); Province Santa Fé, Argentina (José de Paggi, 1990); Panama (Collado *et al.*, 1984); Amazonia, Brazil (Hauer, 1965; Thomasson, 1971); Brokopondo Lake, Surinam (Leentvaar, 1967 & 1969); Surinam (Leentvaar, 1967 & 1969); Mato Grosso, C Brazil (Turner & Da Silva, 1992); Flooded savanna at Mantecal, Venezuela (Michelangelli *et al.*, 1979/1980)

Sinantherina triglandularis Arora, 1963

- Oriental region: Near Nagpur, India (Arora, 1963 & 1966c); India (Sharma & Michael, 1980; Sudzuki, 1989)

Sinantherina spec.

- Palaearctic region: Waldviertel area, lower Austria (Naidenow & Wawrik, 1984)
- Nearctic region: Illinois, USA (Bērziņš, 1984); Lake Wabamun, Alberta, Canada (Gallup & Hickman, 1975)
- Oriental region: Girikbe-Tank, Sri Lanka (Bērziņš, 1982a)
- Neotropical region: Brokopondo Lake, Surinam (Leentvaar, 1969); Surinam (Leentvaar, 1975); S Brazil (Arcifa, 1984); River Parana, Argentina (José de Paggi, 1985); Ecuador: Oriente (Koste & Böttger, 1989 & 1992); Lake Izabal, Guatemala (Brinson & Nordlie, 1975); Suape area, Pernambuco, Brazil (Neumann-Leitao *et al.*, 1992)

Sphyrias Harring, 1913

Sphyrias lofuana (Rousselet, 1910)

- Palaearctic region: Ponds in Botanical Garden, Gent, Belgium (Segers *et al.*, 1991b)

Squatinella Bory de St. Vincent, 1826

Squatinella aurita Wulfert, 1950

- Palaearctic region: C Eur. mountains & Carpathes (Bērziņš, 1978); Peat bogs Poiana Stampei, Bukowina, Romania (Rudescu, 1966)

Squatinella bifurca (Bolton, 1884)

- Palaeartic region: Romania (Rudescu, 1960); Coast of S Finland (Eriksen, 1969); Darnsee near Epe, NW Germany (Koste, 1962); Engelbergs Moor, Druchhorn, NW Germany (Koste, 1965); Peat bogs in the Massif Central, France (Batut, 1965); Almost all over Europe (Bērziņš, 1978); N & W Iceland (De Ridder, 1969b, 1970 & 1972); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); In reed border of the Danube delta, Romania (Rudescu, 1968); Dübener Heide, N Germany (Wulfert, 1960b & 1961); Etang de Pommereau, Loir-et-Cher, France (Tassigny *et al.*, 1970; Pourriot, 1971); Nat. Res. "Het Hol" near Kortenhoef; Lindevallei, NL (Dresscher, 1976); Lipowy pond & Wizni III pond, Poland (Lewkowicz, 1972)

Squatinella bifurca Bolton, f. *gigantea* Pourriot, 1971

- Palaeartic region: Pond in the Sologne, France (Pourriot, 1971)

Squatinella bisetata (Ternetz, 1892)

- Palaeartic region: Alps, C Eur. plain (Bērziņš, 1978)

Squatinella donneri Wulfert, 1961

- Palaeartic region: C Eur. mountains & plains (Bērziņš, 1978)

Squatinella geleii Varga, 1933

- Palaeartic region: Hungarian plain (Bērziņš, 1978); Lake Balaton, Hungary (Zankai, 1968)

Squatinella lamellaris (O.F. Müller, 1786)

- Palaeartic region: Romania (Rudescu, 1960); River Klys'ma, R.F. (Bogoslowski, 1961); Afghanistan (Bērziņš, 1961); Coast of S Finland (Eriksen, 1969); Broads & peat pits in NW Overijssel, NL (Schroevers, 1965); N Swedish Lapland (Pejler, 1962a); Mt. Hoverla, Maramarosch Alps, Hungary (Varga, 1962); River Grabia basin, Poland (Pawlowski, 1968 & 1970); Lake Balaton, Hungary (Zankai, 1968); NW Overijssel; Z. Vechtplassen; old branch cut off from river Waal; Nat. Res. "Het Hol" near Kortenhoef, NL (Dresscher, 1976); Hamburg area, Germany (Rühmann, 1961)

Squatinella lamellaris (O.F. Müller), f. *mutica* (Ehrenberg)

- Palaeartic region: Anatolia, Turkey (Segers *et al.*, 1992); Lakes in NW Overijssel; Nat. Res. "Het Hol" near Kortenhoef; Nat. Res. Gerritsfles near Kootwijk; province Drente, NL (Dresscher, 1976); Ponds in Botanical Garden, Gent, Belgium (Segers *et al.*, 1991b)

Squatinella leydigii (Zacharias, 1886)

- Palaeartic region: N Swedish Lapland (Pejler, 1962a); Engelbergs Moor, Druchhorn, NW Germany (Koste, 1965); W & C Eur. mountains, Pontic province, C Eur. plain, Ireland (Bērziņš, 1978); Dübener Heide, N Germany (Wulfert, 1961); In reed border of the Danube delta, Romania (Rudescu, 1968)

- Nearctic region: Mt. Tremblant Prov. park, Québec, Canada (Nogrady, 1980); Cap Breton Island, Nova Scotia, Canada (Chengalath & Koste, 1988)

- Australian region: ? Near Lake Garcia, S Tasmania (Koste, Shiel & Tan, 1988)

- Neotropical region: Ecuador: Oriente (Koste & Böttger, 1992)

Squatinella leydigii (Zacharias), f. *longiseta* Pourriot, 1971

- Palaeartic region: Pond in the SE part of Chambord Parc, France (Pourriot, 1971); Engelbergs Moor, Druchhorn, NW Germany (Koste, 1965)

- Nearctic region: Ross Lake, Florida, USA (Bienert, 1986)

- Australian region: W Tasmania (Koste & Shiel, 1989)

Squatinella leydigii (Zacharias), f. *variegata* (Levander, 1894)

- Palaeartic region: Luga district of the Leningrad area, R.F. (Kutikova, 1962b)

Squatinella longispinata (Tatem, 1867)

- Palaeartic region: Coast of S Finland (Eriksen, 1969); Romania (Rudescu, 1960); C & S Sweden (Bērziņš & Pejler, 1987 & 1989d); N Swedish Lapland (Pejler, 1962a); Engelbergs Moor, Druchhorn, NW Germany (Koste, 1965); Achmer Grasmoor, NW Germany (Koste, 1968b); All over Europe (Bērziņš, 1978); River Grabia basin, Poland (Pawlowski, 1970); Lake Balaton, Hungary (Zankai, 1968); N Iceland (De Ridder, 1970 & 1972); Obretin embanked basin, Danube delta, Rom. (Godeanu *et al.*, 1973); Province Drente, NL (Dresscher, 1976); Peat bogs Poiana Stampei, Bukowina, Romania (Rudescu, 1966); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Periphytic biota in sewages & park waters, Jap. (Sudzuki, 1981); Lago Trasimeno, Italy (Taticchi, 1968)

- Nearctic region: Canada (Chengalath, 1977); Kingston, Ontario, Canada (Nogrady, 1989)

- Oriental region: Singapore (Karunakaran & Johnson, 1978); Malaysia (Sudzuki, 1989)

- Australian region: NSW, Aust. (Shiel & Koste, 1979); NSW & Vic, Aust. (Koste & Shiel, 1989)

Squatinella microdactyla (Murray, 1906)

- Palaeartic region: Alps, Carpathes, C & E Eur. plains, Baltic prov., UK, Boreal highland, N Eur. tundra, NW Russian taiga (Bērziņš, 1978); Peat bog Laptici, Bucegi mountains, Romania (Godeanu, 1970)

- Nearctic region: Mesotrophic fen in Newfoundland, Canada (Bateman & Davis, 1980)

Squatinnella minor Wulfert, 1961

- Palaearctic region: Dübener Heide, N Germany (Wulfert, 1961); C Eur. plain (Bērziņš, 1978)

Squatinnella mutica (Ehrenberg, 1832)

- Palaearctic region: Nat. Res. Oosterwijkse vennen, NL (De Graaf, 1960); "Altes Land" near Hamburg, Germany (Heckman, 1986); Lake Stråken, Aneboda, Sweden (Bērziņš, 1972); Romania (Rudescu, 1960); Coast of S Finland (Eriksen, 1969); District Ostrava, CSR (Dvorakova, 1960b); All over Europe; Caucasus (Bērziņš, 1978); Lake Balaton, Hungary (Zankai, 1968); Peat bogs Chambedaze & La Godivelle, Massif Central, France (Francez & Dévaux, 1985); Dragon ponds, Gyokusen-dô cave, Japan (Sudzuki & Hosoyama, 1991); Southwest islands of Japan (Sudzuki *et al.*, 1992); Balearic Archipelago, Spain (de Manuel *et al.*, 1992); Peats in the Caucasus (Tarnogradsky, 1961); Peat bogs in the Auvergne, France (Francez, 1984c); Pond Heinrichsweiher, Bonn, Germany (Reck, 1981); Peat bogs Poiana Stampei, Bukowina, Romania (Rudescu, 1966); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Lipowy pond, Poland (Lewkowicz, 1972)

- Nearctic region: Canada (Chengalath, 1977); Near Kingston, Ontario, Canada (Bērziņš, 1961); Kingston, Ontario, Canada (Nogrady, 1989); Everglades Nat. Park, Florida, USA (Nogrady, 1983); Laurentian Great Lakes (Nogrady, 1983); Experimental ponds, C Florida, USA (Fry & Osborne, 1980)

- Oriental region: India (Sharma & Michael, 1980); Singapore (Karunakaran & Johnson, 1978); Singapore, Indonesia & India (Sudzuki, 1989); Kalimantan (Borneo), Indonesia (Koste, 1988a); Impoundment Kinda, C Burma (Koste & Tobias, 1990)

- Australian region: River & lake in Australia (Bērziņš, 1982); Vic, Aust. (Koste & Shiel, 1980c); Tasmania (Koste & Shiel, 1986b); NW Aust.: Magela Creek area (Koste, 1981b); Alligator rivers area, NT, Aust. (Tait, Shiel & Koste, 1984); New Zealand, NSW, NT, Tas & Vic, Aust. (Koste & Shiel, 1989)

- Neotropical region: Lago Paroni, Brazil (Koste, 1974a); Brazil & Panama (Koste & José de Paggi, 1982); Panama (Collado *et al.*, 1984); Ecuador: Costa (Koste & Böttger, 1992)

Squatinnella mutica (Ehrenberg), f. *tridentata* (Fresenius, 1858)

- Palaearctic region: Lago Trasimeno, Italy (Taticchi, 1968); Serbian section of river Danube (Zivkovic, 1987); Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); Waters near river Bodrog, NE Hungary (Dévai *et al.*, 1972/1973); Romania (Rudescu, 1960); Bjørnøya (Bear Island), Svalbard (De Smet, 1988); Hortobagy Nat. Park, Hungary (Forro & Ronkay, 1983); Darnsee near Epe, NW Germany (Koste, 1962); Engelbergs Moor, Druchhorn, NW Germany (Koste, 1965); Achmer Grasmoor, NW Germany (Koste, 1968b); Ponds in Botanical Garden, Gent, Belgium (Segers *et al.*, 1991b); Coast of S Finland (Eriksen, 1969); C Eur. mts., Carpathes, Hungarian plain, C & E Eur. plains, Baltic prov., UK, Ireland, NW Russian taiga (Bērziņš, 1978); Lake Balaton, Hungary (Zankai, 1968); Obretin Lake, Danube delta, Romania (Neagu-Godeanu, 1968); N & W Iceland (De Ridder, 1970 & 1972); Peat bogs in the Auvergne, France (Francez, 1981); Obretin embanked basin, Danube delta, Rom. (Godeanu *et al.*, 1973); Bog pond near Budapest, Hungary (Nogrady, 1962); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); In reed borders of the Danube delta, Romania (Rudescu, 1968); Pond Heinrichsweiher, Bonn, Germany (Reck, 1981); Rés. biol. de Villars-la-Dombes, France (Rostan, 1976); Peat bogs Poiana Stampei, Bukowina, Rom. (Rudescu, 1966); Garden ponds in Tokyo, Japan (Sudzuki, 1975)

- Nearctic region: Mesotrophic fen in Newfoundland, Canada; nom. form. + f. *minor* (Wulfert) + f. *aurita* (Wulfert): (Bateman & Davis, 1980); Kingston, Ontario, Canada (Nogrady, 1989); Canada (Chengalath, 1977); Northern Michigan inland lakes (Stemberger, 1990); Lac Echo, Québec, Canada (Nogrady, 1976); Mt. Tremblant Prov. park, Québec, Canada (Nogrady, 1980); Lakes in Santee, California, USA (Nogrady, 1982)

- Australian region: NSW, Qld & Vic, Aust. (Shiel & Koste, 1979); Qld, NSW & Vic, Aust. (Koste & Shiel, 1989); Auckland & South Canterbury, New Zealand (Russell, 1960)

- Oriental region: India (Sharma & Michael, 1980); Singapore (Karunakaran & Johnson, 1978); Singapore & India (Sudzuki, 1989); Lakelet Tan Daha, Kathmandu valley, Nepal (Daems & Dumont, 1974)

- Neotropical region: Orinoco river basin, Venezuela (Vasquez, 1984a); Antilles françaises (Pourriot, 1975); Antilles (Koste & José de Paggi, 1982)

Squatinnella rostrum (Schmarda, 1846)

Note: See also *Squatinnella lamellaris*

- Palaearctic region: Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); Ponds in Botanical Garden, Gent, Belgium (Segers *et al.*, 1991b); Romania (Rudescu, 1960); "Altes Land" near Hamburg, Germany (Caspers & Heckman, 1981 & 1982); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989c, 1989d); Nat. Res. Jursky Sur, CSR (Hudec, 1978); Lake Quackjeswater, Voorne, NL (Leentvaar, 1963); Broads & peat pits, NW Overijssel, NL (Schroevers, 1965); Darnsee near Epe, NW Germany (Koste, 1962); Engelbergs Moor, Druchhorn, Germany (Koste, 1965); Peat bogs in the Massif Central, France (Batut, 1965); All over Europe; Caspian area (Bērziņš, 1978); Lake Neusiedlersee, Austria

(Donner, 1979); Obretin embanked basin, Danube delta, Rom. (Godeanu *et al.*, 1973); Anatolia, Turkey (Segers *et al.*, 1992); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); Dübener Heide, N Germany (Wulfert, 1960a, 1960b & 1961); Meyendel dunes; Nat. Res. "De Wieden", NW Overijssel; Lake Venematen, *ibid.*; several dune waters; Lakes Zuidelijke Vechtplassen, NL (Dresscher, 1976); Etang de Léon, SW France (De Ridder, 1976b); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); In reed border of the Danube delta, Romania (Rudescu, 1968); Pond Heinrichsweiher, Bonn, Germany (Reck, 1981); 3 lakes of Sosnowickie, Poland (Radwan, 1966 & 1969); Peat bogs Poiana Stampei, Bukowina, Romania (Rudescu, 1966); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Garden ponds in Tokyo, Japan (Sudzuki, 1975); Serbian section of river Danube (Zivkovic, 1987); Spain: Léon (Velasco, 1990); Lipowey pond, Poland (Lewkowicz, 1972); Waters near river Bodrog, NE Hungary (Dévai *et al.*, 1972/1973)

- Nearctic region: Canada (Chengalath, 1977); Mesotrophic fen, Newfoundland, Canada (Bateman & Davis, 1980); Arctic N America (Chengalath & Koste, 1989); Kingston, Ontario, Canada (Nogrady, 1989)

- Australian region: Christchurch, New Zealand (Russell, 1960); Creek in Australia (Bērziņš, 1982); Qld, Aust. (Shiel & Koste, 1979); Qld & Vic, Aust. (Koste & Shiel, 1989)

Squatinella rostrum (Schmarda), f. *myersi* Voigt, 1957

- Palaeartic region: Pool, S of Trondheim, Norway (Thomasson, 1979); Southwest islands of Japan (Sudzuki *et al.*, 1992)

Squatinella similis Wulfert, 1960

- Palaeartic region: Dübener Heide, N Germany (Wulfert, 1960b & 1961); C Eur. mountains & plains (Bērziņš, 1978); Serbian section of river Danube (Zivkovic, 1987)

Squatinella spec.

- Palaeartic region: Water-courses in the Bucegi mts., Romania (Godeanu, 1963b); Marshy zones in the Bucegi mts., Romania (Godeanu, 1969a); Waters near river Bodrog, NE Hungary (Dévai *et al.*, 1972/1973); Periphytic biota in sewages & park waters, Japan (Sudzuki, 1981)

- Nearctic region: Lake Wabamun, Alberta, Canada (Gallup & Hickman, 1975)

- Oriental region: Sri Lanka (Fernando, 1980a)

- Neotropical region: Prov. San Luis & Chaco, Argentina (José de Paggi, 1990); Araucarian ponds & pools, Chile (Thomasson, 1963b); Suape area, Pernambuco, Brazil (Neumann-Leitao *et al.*, 1992)

Stephanoceros Ehrenberg, 1832

Stephanoceros fimbriatus (Goldfusz, 1820)

- Palaeartic region: District Lotharingen, Belgium (Gijssels *et al.*, 1976); Romania (Rudescu, 1960); Lake Derwart, near Tournai, Belgium (Bogaert, 1988; Bogaert & Dumont, 1989); Coast of S Finland (Eriksen, 1969); N Swedish Lapland (Pejler, 1962a); Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1986); Darnsee near Epe, NW Germany (Koste, 1962); Engelbergs Moor, Druchhorn, NW Germany (Koste, 1965); NW Germany (Koste, 1969c & 1970); Italy, Alps, C Eur. mts., Carpathes, Pontic prov., W, C & E Eur. plains, Baltic province, Ireland, UK, Boreal highland, NW Russian taiga. Cosmopolitan. (Bērziņš, 1978); Europe (Koste, 1972f); Reservoir Sedlice, near Zeliz, Bohemia, CSR (Sladeckova, 1960; Sladeckova & Sladeczek, 1963); R. Upper Sambre & pond at Landelies, Belgium (Daems & Dumont, 1983); All over Belgium (De Ridder, 1986); Pond in Chipstead, Surrey, UK (Sartory & Hollowday, 1983); Sambre river, Belgium (Dumont *et al.*, 1975); Frankenland, Germany (Tiefenbacher, 1972); Rivers Maas, Rijn, Waal & Yssel, NL (Dresscher, 1976); Waters near river Bodrog, NE Hungary (Dévai *et al.*, 1972/1973); In reed borders of the Danube delta, Romania (Rudescu, 1968); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Pond in the Paris suburb, France (Pourriot, 1965)

- Nearctic region: Canada (Chengalath, 1977); Cap Breton Island, Nova Scotia, Canada (Chengalath & Koste, 1988); Arctic N America (Chengalath & Koste, 1989); Mud pond, new Hampshire, USA (Wallace, 1977a); N America (Koste, 1972f); Mt. Tremblant Prov. park, Québec, Canada (Nogrady, 1980); Laurentian Great Lakes (Stemberger, 1979); Mirror Lake, New Hampshire, USA (Strayer, 1985)

- Oriental region: Sri Lanka (Fernando, 1980a); Sri Lanka: Madulla (Chengalath, Fernando & Koste, 1974); Asia (Koste, 1972f); Singapore & Malaysia (Karunakaran & Johnson, 1978); Singapore & Sri Lanka (Sudzuki, 1989)

- Australian region: NSW & Qld, Aust. (Shiel & Koste, 1979); Tasmania (Koste & Shiel, 1987)

- Neotropical region: Amazonia, Brazil. S America (Koste, 1972f); Varzea near Santarem, Brazil (Koste, 1974b); Brazil (Koste & José de Paggi, 1982); Ecuador: Costa (Koste & Böttger, 1992)

Stephanoceros fimbriatus (Goldfusz), f. *millsii* (Kellicott, 1885)

- Palaeartic region: C Eur. plain (Bērziņš, 1978); Aneboda, Sweden (Bērziņš, 1979)

- Nearctic region: N America (Bērziņš, 1978; Koste, 1972f); Canada (Chengalath, 1977); Mud pond, New

- Hampshire, USA (Wallace, 1977a); Laurentian Great Lakes (Stemberger, 1979)
 - Australian region: Australia (Koste, 1972f; Bērziņš, 1978); NSW, Aust. (Shiel & Koste, 1979)
 - Neotropical region: Amazonia, Brazil. S America (Koste, 1972f); Varzea near Santarem, Brazil (Koste, 1974b); Panama (Bērziņš, 1979); Brazil & Panama (Koste & José de Paggi, 1982)

Stephanoceros spec.

- Nearctic region: Adirondack Lakes, NY State, USA (Siegfried *et al.*, 1984)
 - Neotropical region: S Brazil (Arcifa, 1984)

Streptognatha Harring & Myers, 1928

Streptognatha lepta Harring & Myers, 1928

- Nearctic region: NE Canada (Chengalath & Koste, 1983)

Synchaeta Ehrenberg, 1832

Synchaeta asymmetrica Koch-Althaus, 1963

- Palaeartic region: Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Kasprzak & Ronneberger, 1982; Ronneberger & Schönborn, 1985); C Eur. plain (Bērziņš, 1978)
 - Nearctic region: ? Lake Michigan, USA (Stemberger, 1974); Laurentian Great Lakes (Stemberger, 1979); Northern Michigan inland lakes (Stemberger, 1990); Kingston, Ontario, Canada (Nogrady, 1989)

Synchaeta atlantica Zelinka, 1970

- Palaeartic region: S & W Ireland & Atlantic Ocean, Farøe-Shetland area, Farøe-nd

Synchaeta bacillifera Smirnov, 1933

- Palaeartic region: Barents Sea (Bērziņš, 1960)

Synchaeta baltica Ehrenberg, 1834

- Palaeartic region: Vistula lagoon, Poland (Adamkiewicz-Chojnacka & Rozanska, 1990); Oostende, Belgium (De Ridder, 1986); River eastern Scheldt, NL (Dresscher, 1976); Black Sea (Rudescu, 1961); Waters of Czecezezin Lagoon, Poland (Wiktor, 1960); Southern Baltic (Arndt *et al.*, 1990); Romania (Rudescu, 1960); Sea and brackish water pools in S Finland (Björklund, 1972a); Coast of S Finland (Eriksen, 1969); N of Baltic Sea, Sweden (Johansson, 1987); C Sweden (Baltic Sea) (Pejler, 1972); In the Danube influence zone of the Black Sea (Zaytsev *et al.*, 1989); All over Europe (Bērziņš, 1978); Rügener, Hiddenseer & Darszer Boddengewässer, Germany (Schwarz, 1963); Gulf of Bothnia, Gulf of Finland, Gulf of Riga, Baltic Sea, Belt Sea, Kattegat, Skagerak, N & S North Sea, Bristol Channel, Irish Sea, S & W Ireland & Atlantic (?), Norwegian Sea, Barents Sea (Bērziņš, 1960); Southwest islands of Japan (Sudzuki *et al.*, 1992)

- Nearctic region: Mc Kay Bay, Florida, USA (Koste, 1981); Chesapeake Bay, Potomac river, USA (Heimbokel *et al.*, 1988); Rhode river estuary, Maryland, USA (Dolan & Gallagos, 1992)

- Australian region: NSW, Australia (Shiel & Koste, 1979); Lyttelton Harbour, New Zealand (Russell, 1960); Cook Strait, New Zealand (Cassie, 1960)

Synchaeta bicornis Smith, 1904

- Palaeartic region: S North Sea (Bērziņš, 1960); C Eur. plain, UK (Bērziņš, 1978); River Elbe estuary, Germany (Schulz, 1961; Rühmann, 1964; Giere, 1968); Lake Ysselmeer, NL (Dresscher, 1976); North Sea & Baltic (Koste, 1981)

- Nearctic region: Mc Kay Bay, Florida; Lake Pontchartrain, La, USA (Koste, 1981)

- Neotropical region: Lake Paulistinha & L. Imboacia (brackish), Brazil (Turner, 1990)

Synchaeta calva Ruttner-Kolisko, 1970

- Palaeartic region: English Lake District (Ruttner-Kolisko, 1970); UK (Bērziņš, 1978)

Synchaeta cecilia Rousselet, 1902

- Palaeartic region: Black Sea (Rudescu, 1961); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); Lake Palaeostomi, Georgia, R.F. (Haberman & Laugaste, 1982; Haberman, 1982); Sea & brackish waters in S Finland (Björklund, 1972a); Norway: coast & brackish waters (Eriksen, 1968); All over Europe (Bērziņš, 1978); Romania (Rudescu, 1960); Belt Sea, Kattegat, Skagerak, N & S North Sea, British Channel, Irish Sea, Norwegian Sea (Bērziņš, 1960); Delta of river Danube, Romania (Rudescu & Marinescu-Popescu, 1969); Roscoff, Atlantic coast of Brittany, France (d'Hondt, 1970); Southern Baltic (Arndt *et al.*, 1990)

- Nearctic region: Perch pond, Oberlin, Ohio, USA (Egloff, 1986); Perch pond, Falmouth, Mass., USA (Egloff, 1988); Mc Kay Bay, Florida, USA (Koste, 1981); Chesapeake Bay, Potomac river, USA (Heimbokel *et al.*, 1988); Rhode river estuary, Maryland, USA (Dolan & Gallegos, 1992)

- Australian region: ? Lyttelton harbour, New Zealand (Russell, 1960)

Synchaeta cecilia Rousselet, f. *fusipes* Buchholz, 1952

- Palaearctic region: Black Sea (Rudescu, 1961)

Synchaeta curvata Lie-Pettersen, 1905

- Palaearctic region: In the polyhalinic parts of the Veerse Meer, NL (Bakker & De Pauw, 1975); Lake Veerse Meer, NL (Dresscher, 1976); Lake Palaeostomi, Georgia, R.F. (Haberman & Laugaste, 1982); Brackish waters in Norway (Eriksen, 1968); N part of Baltic Sea, Sweden (Johansson, 1987); Romania (Rudescu, 1960); Black Sea (Rudescu, 1961); North Sea & Baltic (Koste, 1981); SW, N & NW Iceland (De Ridder, 1966a, 1969b & 1972); N & C Europe, Iceland (Bērziņš, 1978); Baltic Sea, Belt Sea, Kattegat, Skagerak, N & S North Sea, Norwegian Sea (Bērziņš, 1960); Rügener, Hiddenseer & Darszer Boddengewässer, Germany (Schwarz, 1963); Southern Baltic (Arndt *et al.*, 1990)

- Australian region: Cook Strait, New Zealand (Cassie, 1960)

Synchaeta cylindrica Althaus, 1957

- Palaearctic region: Shores of Black Sea (Bērziņš, 1978)

Synchaeta elsteri Hauer, 1963

- Palaearctic region: Spain: Tarragona (Velasco, 1990)

- Neotropical region: ? Amazonia, Brazil (Koste, 1972f); Brazil (Koste & José de Paggi, 1982)

Synchaeta fennica Rousselet, 1909

- Palaearctic region: Coast of S Finland (Eriksen, 1969); Lakes in C Sweden (Pejler, 1965); C Sweden (Baltic Sea) (Pejler, 1972); N part of Baltic Sea, Sweden (Johansson, 1987); North Sea & Baltic (Koste, 1981); Gulf of Bothnia, Gulf of Finland, Gulf of Riga, Baltic Sea & Belt Sea (Bērziņš, 1960); W Mediterranean, C Eur. plain & N Europe (Bērziņš, 1978); Lagoon Bogeviken, C Sweden (Pejler, 1964)

- Nearctic region: Rhode river estuary, Maryland, USA (Dolan & Gallegos, 1992)

- Australian region: ? Lyttelton Harbour, New Zealand (Russell, 1960)

Synchaeta glacialis Smirnov, 1932

- Palaearctic region: Barents Sea (Bērziņš, 1960)

Synchaeta grandis Zacharias, 1893

- Palaearctic region: Lakes, N of Bucarest, Romania (Godeanu, 1969b); River Elbe estuary, Germany (Schulz, 1961); River Danube (Enaceanu & Brezeanu, 1970); Romania (Rudescu, 1960); Delta of river Danube (Prunescu-Arion, 1989); Lakes in C Sweden (Pejler, 1965); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); Lake Bielersee, CH (Baugerter *et al.*, 1980; Berner-Fankhauser, 1983, 1986 & 1987); Lake Zürichsee, after Nipkow, 1962; L. Stechlinsee, after Koch-Althaus, 1963; L. Walchen, Oberbayern; L. Baggersee near Niederrhein; Swedish Lapland, after Pejler, 1957; European R.F., Caucasus, N Siberian lakes, e.g. L. Baikal, after Kutikova, 1970 (Koste, 1976c); Volga river, R.F. (V'yushkova & Lakhnova, 1974); Lakes in Soviet Karelia, R.F. (Filimonova, 1976); Lake Ladoga, R.F. (Nikolayev & Petrova, 1978); Neva Bay, Gulf of Finland, R.F. (Telesh, 1986); Baikal biological station, R.F. (Lozhuckova *et al.*, 1981); All over Europe (Bērziņš, 1978); Lake Myvatn, Iceland (Adalsteinsson, 1974); Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); Impoundment "Eisernes Tor", Danube, Rom. (Brezeanu & Petén, 1973); Grasmere Lake, Lake District, UK (Elliott, 1977); Lakes in Estonia (Haberman, 1978); Coast of S Finland (Eriksen, 1969); Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1986); Loch Leven, Scotland (May, 1986 & 1987); Lake Constance, Germany (Kiefer, 1968; Walz *et al.*, 1987); Knowsley Park, Liverpool, UK (Galliford, 1964); Obretin embanked basin, Danube delta, Rom. (Godeanu *et al.*, 1973); Lake Lauerzersee, CH (Odermatt, 1970); Rivers Rijn, Maas & Yssel, NL (Dresscher, 1976); Lake Zürichsee, CH (Nipkow, 1961); Karelian inland waters (Kutikova, 1965); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); Lakes in C Sweden (Pejler, 1964); Lac d'Annecy, France (Balvay & Druart, 1992); In reed border of Danube delta, Romania (Rudescu, 1968); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Serbian section of river Danube (Zivkovic, 1987); Spain: Burgos & Oviedo (Velasco, 1990); Rybnik Dam reservoir, Poland (Krzanowski, 1979); Lake Biwa, Japan (Hillbricht-Ilkowska, 1983a); Lake Kisajno, Mazurian lakeland, Poland (Klimowicz, 1964); Lake Mikolajskie, Mazurian lakeland, Poland (Klimowicz, 1972); Lake Baikal, R.F. (Kutikova, 1978); Small lakes SE of Gothenburg, W Sweden (Morling & Pejler, 1990); Lake Onega, R.F. (Nikolayev, 1972); Waldviertel area, lower Austria (Naidenow & Wawrik, 1992)

- Nearctic region: Laurentian Great Lakes (Koste, 1976c); NE Canada (Chengalath & Koste, 1983); NW Canada (Chengalath & Koste, 1987); Arctic N America (Chengalath & Koste, 1989); Milwaukee Harbor, USA (Stemberger, 1974); Laurentian Great Lakes (Stemberger, 1979); Wisconsin, USA (Bērziņš, 1984); Lakes in the Churchill Falls area of Labrador (Duthie & Ostrovsky, 1974)

Synchaeta grimpei Remane, 1929

- Palaearctic region: C Eur. plain, UK, Ireland (Bērziņš, 1978); North & Baltic Sea (Koste, 1981); Odessa Bay, Black Sea (Al'-Kamm, 1984); Lake Cullera, 35 km of Valencia, Spain (Miracle & Vicente, 1983);

Lagoon of Cullera, 35 km of Valencia, Spain (Miracle *et al.*, 1988); Rügener, Hiddensee & Darszer Boddengewässer, Germany (Schwarz, 1963); Belt Sea, British Channel & Irish Sea (Bērziņš, 1960); Southern Baltic (Arndt *et al.*, 1990); River Elbe estuary, Germany (Schulz, 1961; Rühmann, 1964; Giere, 1968); Lake Veerse Meer, NL (Dresscher, 1976); Spain: Valencia (Velasco, 1990)
- Nearctic region: Mc Kay Bay, Florida, USA (Koste, 1991)

Synchaeta gyrina Hood, 1887

- Palaearctic region: Pools with brackish waters in S Finland (Björklund, 1972a); Brackish waters in Norway (Eriksen, 1968); Coast of S Finland (Eriksen, 1969); Central Sweden (Baltic Sea) (Pejler, 1972); Romania (Rudescu, 1960); Bulgaria, shores of Black Sea, C Eur. plain, UK, Ireland, Iceland, Norway (Bērziņš, 1978); Rügener, Hiddensee & Darszer Boddengewässer, Germany (Schwarz, 1963); Gulf of Finland, Baltic Sea, Belt Sea, Kattegat, Skagerak, N & S North Sea, English Channel, Bristol Channel & Irish Sea, Farøe-Shetland area (?), Norwegian Sea (Bērziņš, 1960); Southern Baltic (Arndt *et al.*, 1990); Fresh & brackish waters in the Netherlands (Dresscher, 1976); Black Sea (Rudescu, 1961)

Synchaeta hyperborea Smirnov, 1932

- Palaearctic region: Gulf of Riga & Barents Sea (Bērziņš, 1960)

Synchaeta johanseni Harring, 1921

- Palaearctic region: ? Farøe-Iceland area (Bērziņš, 1960)

Synchaeta kitina kitina Rousselet, 1902

- Palaearctic region: River Danube (Enaceanu & Brezeanu, 1970); River Elbe estuary, Germany (Schulz, 1961); Lake Zürichsee, CH (Nipkow, 1961); Karelian inland waters (Kutikova, 1965); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); Lakes in C Sweden (Pejler, 1964); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Serbian section of river Danube (Zivkovic, 1987); Spain: Tarragona & Valencia (Velasco, 1990); Reservoir Vrané, 17 km S of Prague, CSR (Sladeczek, 1962); Balearic Archipelago, Spain (de Manuel *et al.*, 1992); Highly dystrophic lake Smolak, Poland (Brinska *et al.*, 1976); Romania (Rudescu, 1960); Lake Bielersee, CH (Bernier-Fankhauser, 1983, 1986 & 1987); Lake Balaton, Hungary (Zankai & Kertesz, 1967; Zankai & Ponyi, 1971a; Zankai, 1968 & 1989); Lake Mikolajskie, Poland (Karabin, 1978); Spanish reservoirs (Guiset, 1977); Lakes in Estonia (Haberman, 1978); Coast of S Finland (Eriksen, 1969); Loch Leven, Scotland (May, 1983, 1985, 1986 & 1987); Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1986); Man-made lake Zegrzynskie, Poland (Dusoge *et al.*, 1985); Lakes in C Sweden (Pejler, 1965); Lake Sempachersee, CH (Zimmermann, 1974); River Elbe near Hamburg, Germany (Caspers & Schulz, 1964); All over Europe (Bērziņš, 1978); Lake Blankvatn, near Oslo, Norway (Larsson, 1971); C Finland (Eloranta, 1982b); Lake Ross, NE Poland (Dawidowicz & Pijanovska, 1991); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); Albufera de Valencia, Spain (Oltra & Miracle, 1984); Lake Donk, Overmere, Belgium (Roche, 1989); Southern Baltic (Arndt *et al.*, 1990)

- Nearctic region: Lake Michigan, USA (Stemberger & Evans, 1984); Kentucky, USA (Bērziņš, 1984); Old Woman Creek estuary, Huron, Ohio, USA (Havens, 1991); River Ocqueoc, Michigan, USA (Beach, 1960); Laurentian Great Lakes (Stemberger, 1979); Northern Michigan inland lakes (Stemberger, 1990)

- Neotropical region: Tierra del Fuego, Argentina (Olivier, 1965); Argentina (Koste & José de Paggi, 1982)

Synchaeta kitina monodactyla Althaus, 1976

- Palaearctic region: Impoundment Saidenbach, Germany (Althaus, 1976)

Synchaeta lakowitziana lakowitziana Lucks, 1930

- Palaearctic region: Lake Erken, Sweden (Nauwerck, 1963); Svalbard (Amren, 1964b & 1964c); Lake Myvatn, Iceland (Adalsteinsson, 1974 & 1979); Lake Bielersee, CH (Baugerter *et al.*, 1980; Bernier-Fankhauser, 1983, 1986 & 1987); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); C Finland (Eloranta, 1982b); Lunzer Obersee, Austria (Mikschi, 1989); Lac Léman, Fr./CH (Balvay & Laurent, 1981, 1989, 1990a & 1990b); Alps, C Eur. plain, Fennoscandia (Bērziņš, 1978); Neva Bay, Gulf of Finland, R.F. (Telesh, 1986); W Spitsberg (Thomasson, 1961); Korea (Turner, 1986); Southwest islands of Japan (Sudzuki *et al.*, 1992); Southern Baltic (Arndt *et al.*, 1990); Lake Constance, Germany (Walz *et al.*, 1987); Lake Lauerzersee, CH (Odermatt, 1970); Lake Zürichsee, CH (Nipkow, 1961); ? L. Schwarzsee, Tyrolian alpine lake, Austria (Nauwerck, 1966); Lake Ösbysjön, near Stockholm, Sweden (Pejler, 1961); 2 lakes in Uppland, C Sweden (Pejler, 1962d); Lakes in C Sweden (Pejler, 1964 & 1965); Pond in the Paris suburb, France (Pourriot, 1965); Spain: Tarragona (Velasco, 1990)

- Nearctic region: Canada (Chengalath, 1977); Lake Michigan, USA (Stemberger & Evans, 1984); Lake Michigan & Milwaukee harbor, USA (Stemberger, 1974); Laurentian Great Lakes (Stemberger, 1979); Northern Michigan inland lakes (Stemberger, 1990); Lake Ontario, Canada (Nauwerck, 1978); Bay of Quinte, Lake Ontario, Canada (Nogrady, 1988)

- Australian region: Moorabool river, Aust. (Bērziņš, 1982); Moorabool r., Vic; r. Murray, S Aust. (Shiel & Koste, 1985); S Aust. & Vic, Aust.; S Tasmania (Koste, Shiel & Tan, 1988)

Synchaeta lakowitziana arctica De Smet, 1988

- Palaearctic region: Bjørnøya (Bear Island), Svalbard (De Smet, 1988)

Synchaeta lakowitziana Lucks, f. *proloba* Nogrady, 1989

- Nearctic region: Kingston, Ontario, Canada (Nogrady, 1989)

Synchaeta littoralis Rousselet, 1902

- Palaearctic region: River Elbe estuary, Germany (Schulz, 1961; Rühmann, 1964; Giere, 1968); In brackish waters on Svalbard (Amren, 1964b & 1964c); In meso- & polyhalinic parts of the Veerse Meer, NL (Bakker & De Pauw, 1975); Coast of North Sea (Veerse Gat, Zandkreek), NL (Bakker, 1964); Brackish waters in Norway (Eriksen, 1968); Coast of S Finland (Eriksen, 1969); Italia, shores of Black Sea, C Eur. plain, UK, Ireland, Iceland, Fennoscandia; Caucasus, Asia Minor (Bērziņš, 1978); Rügener, Hiddenseer & Darszer Boddengewässer, Germany (Schwarz, 1963); Gulf of Finland (?), Belt Sea, Kattegat, Skagerak, N & S North Sea, English Channel W, Bristol Channel & Irish Sea (Bērziņš, 1960); Delta of river Danube (Rudescu & Marinescu-Popescu, 1969); Southern Baltic (Arndt *et al.*, 1990); Akkeshi Bay, E district of Hokkaido, Japan (Hada, 1972); Buiten Y; Zuiderzee; Harlingen Harbour; Prov. Zeeland & Veerse Meer, NL (Dresscher, 1976); Black Sea (Rudescu, 1961); Spain: Tarragona (Velasco, 1990)

- Oriental region: India (Sharma & Michael, 1990; Sudzuki, 1989)

- Australian region: Billabong river Murray, SE Aust. (Shiel & Koste, 1983); Vic, Aust. (Koste & Shiel, 1980c); ? River Murray, Aust. (Koste, 1979b)

Synchaeta longipes Gosse, 1887

- Palaearctic region: River Grabia basin, Poland (Pawlowski, 1960, 1968 & 1970); Lake Balaton, Hungary (Zankai, 1968); W Iceland (De Ridder, 1972); Southwest islands of Japan (Sudzuki *et al.*, 1992); Lake Constance, Germany (Walz *et al.*, 1987); River Danube (Enaceanu & Brezeanu, 1970); Nat. Res. Oisterwijkse vennen, NL (De Graaf, 1960); Rivers Rijn, Maas, Waal & Yssel; Nat. Res. Oisterwijkse vennen; Almkerk surroundings, NL (Dresscher, 1976); Lake Zürichsee, CH (Nipkow, 1961); Karelian inland waters, R.F. (Kutikova, 1965); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); Parczew area peat bogs, Poland (Radwan, 1974); Middle course of river Loire, France (Lair & Sargos, 1981); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Serbian section of river Danube (Zivkovic, 1987); Spain: Tarragona (Velasco, 1990); Romania (Rudescu, 1960); Lunzer Obersee, Austria (Mikschi, 1989); Upland reservoir in N Poland (Zurek, 1980); Lake Alfsee, NW Germany (Koste & Poltz, 1987); Fishponds near Warsaw, Poland (Hillbricht-Ilkowska, 1964); Italy, Alps, shores of Black Sea, C Eur. plains, UK, Ireland, Iceland, Fennoscandia (Bērziņš, 1978); Impoundment "Eisernes Tor", Danube, Romania (Brezeanu & Petén, 1973); Coast of S Finland (Eriksen, 1969); Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1986); Delta of river Danube, Romania (Godeanu & Zinevici, 1983); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); Lake Kisajno, Mazurian lakeland, Poland (Klimowicz, 1964); Karstic Lake Percile, Latium, Italy (Margaritora *et al.*, 1981)

- Nearctic region: Rock Isle Lake, W North America (Thomasson, 1962); NE Canada (Chengalath & Koste, 1983); NW Canada (Chengalath & Koste, 1987); Cap Breton Island, Nova Scotia, Canada (Chengalath & Koste, 1988); Arctic N America (Chengalath & Koste, 1989); Kingston, Ontario, Canada (Nogrady, 1989); Great Dismal Swamp, Virginia-N Carolina border, USA (Anderson, Benfield & Buikema, 1987); River Ocqueoc, Michigan, USA (Beach, 1960); Kentucky, USA (Bērziņš, 1984); Mt. Tremblant Prov. park, Québec, Canada (Nogrady, 1980)

- Oriental region: Kalimantan (Borneo), Indonesia (Koste, 1988a); Indonesia (Sudzuki, 1989)

- Australian region: Vic, Aust. (Shiel & Koste, 1979); Lower river Murray, S Aust. (Shiel, Walker & Williams, 1982); NW Aust.: Magela Creek area (Koste, 1981b); ? Alligator rivers area, N Aust. (Koste & Shiel, 1983a); With certainty in Alligator rivers area, N Aust. (Tait, Shiel & Koste, 1984a); R. & reserv. of the Murray-Darling system, Aust. (Shiel, 1986); Dartmouth, SE Aust. (Shiel *et al.*, 1987); Tasmania (Koste & Shiel, 1987); River Darling, S Aust. (Shiel & Walker, *s.d.*)

- Neotropical region: Provinces in NW Argentina (José de Paggi, 1989); Amazonia, Brazil (Hauer, 1965b; Thomasson, 1971; Koste, 1972f); Venezuela, Brazil, Argentina & Honduras (Koste & José de Paggi, 1982); Rio Yatapu & r. Uatuma, Amazonia, Brazil (Koste & Hardy, 1984); Lago Camaleão, Amazonia, Brazil (Koste & Robertson, 1983; Koste, Robertson & Hardy, 1984); Rio Nhamunda, Amazonia, Brazil (Brandorff, Koste & Smirnov, 1982); Chilean lakes (Schmid-Araya, 1991); Prov. Santiago del Estero, Argentina (José de Paggi, 1990); Lake Raco, Chile (Campos *et al.*, 1992); Araucarian lakes, W of the Andes, Chile (Thomasson, 1963b); Ecuador: Oriente (Koste & Böttger, 1992)

Synchaeta monopus Plate, 1889

- Palaearctic region: Southern Baltic (Arndt *et al.*, 1990); Romania (Rudescu, 1960); Coast of S Finland (Eriksen, 1969); N Part of Baltic Sea, Sweden (Johansson, 1987); C Sweden (Baltic Sea) (Pejler, 1972); Lac Léman, Fr./CH (Balvay & Laurent, 1989, 1990a & 1990b); Italy, shores of Black Sea, C Eur. plain, Fennoscandia (Bērziņš, 1978); Rügener, Hiddenseer & Darszer Boddengewässer, Germany (Schwarz, 1963);

Gulf of Bothnia, Gulf of Finland, Gulf of Riga, Baltic Sea, Belt Sea, Kattegat (Bērziņš, 1960); Delta of river Danube, Romania (Rudescu & Marinescu-Popescu, 1969); Black Sea (Rudescu, 1961); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); Ponds in Oltina, SE Dobrogea, Romania (Popescu-Gorj & Costea, 1961)

- Australian region: Menzies Bay, New Zealand (Russell, 1960)

Synchaeta neapolitana Rousselet, 1902

- Palaearctic region: Romania (Rudescu, 1960); Coast of Norway (Eriksen, 1968); Shores of Black Sea & Norway (Bērziņš, 1978); Southwest islands of Japan (Sudzuki *et al.*, 1992); Black Sea (Rudescu, 1961); Adriatic sea (Riedl, 1970); Spain: Pontevedra (Velasco, 1990)

Synchaeta oblonga Ehrenberg, 1832

- Palaearctic region: All over Europe (Bērziņš, 1978); Romania (Rudescu, 1960); In small rivers, tributary to Kiev reservoir, R.F. (Polishchuk, 1987); Odessa Bay, Black Sea (Al'-Kamm, 1984); Mologa river, R.F. (Riv'yer *et al.*, 1981); Canal Isebek, Hamburg, Germany (Caspers, 1964); Lake Balaton, Hungary (Zankai, 1984 & 1989; Zankai & Ponyi, 1970, 1971a & 1972); Lake Biwa, Japan (Hillbricht-Ilkowska, 1983a; Yamamoto, 1967 & 1968); Darnsee near Epe, NW Germany (Koste, 1962); Engelbergs Moor, Druchhorn, NW Germany (Koste, 1965); Achmer Grasmoor, NW Germany (Koste, 1968b); River Hase, NW Germany (Koste, 1976b); Lake Dümmer, NW Germany (Koste & Poltz, 1983 & 1984); Lake Alfsee, NW Germany (Koste & Poltz, 1987); Delta of river Danube, Romania (Godeanu & Zinevici, 1983; Prunescu-Arion, 1989; Zinevici & Teodorescu, 1990 & 1991); In fishponds at Zabienice, near Warsaw, Poland (Hillbricht-Ilkowska, 1964 & 1965); Lac Léman, Fr./CH (Gawler, 1988; Balvay, 1989; Balvay & Laurent, 1981, 1989, 1990a & 1990b); River Elbe near Hamburg, Germany (Caspers & Schulz, 1964); Small water bodies in Soviet Karelia, R.F. (Filimonova, 1976); Lake Ladoga, R.F. (Nikolayev & Petrova, 1978); Aral Sea spawning grounds, R.F. (Yerekeyev & Kazakhbayev, 1972); Man-made lake Zegrzynskie, Poland (Dusoge *et al.*, 1985); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); L. Stechlinsee & Nehmitzsee, Brandenburg, G. (Kasprzak & Ronneberger, 1982); Lake Kisajno, Mazurian lakeland, Poland (Klimowicz, 1964); Impoundment Kninicki & river Svatka, CSR (Kubicek, 1964); Lake Mälaren, Sweden (Lanner & Pejler, 1973); C Sweden (Pejler, 1972); Lakes C Sweden (Pejler, 1965); Blelham Tarn, Cumbria, UK (Ferguson *et al.*, 1982); Lake Kinneret, Israel (Borman *et al.*, 1972; Landau *et al.*, 1988; Gophen, Serruya & Spatarn, 1990); Altenwörth station, Danube, Austria (Zoufal, 1989); Balearic Archipelago, Spain (de Manuel *et al.*, 1992); Waldviertel area, lower Austria (Naidenow & Wawrik, 1984); Lake Neusiedlersee, Austria (Donner, 1972d & 1979); Waulsort, Belgium (De Ridder, 1986); Lake Constance, Germany/CH (Kiefer, 1968; Walz *et al.*, 1987); River Elbe estuary, Germany (Schulz, 1961); River Danube (Enaceanu & Brezeanu, 1970); Ellesmere District, UK (Galliford, 1960a); Canal Leeds-Liverpool, UK (Galliford, 1960b); Knowsley Park, Liverpool, UK (Galliford, 1964); Lakes N of Bucarest, Romania (Godeanu, 1969b); Obretin embanked basin, Danube delta, Romania (Godeanu *et al.*, 1973); Nat. Res. Oisterwijkse vennen, NL (De Graaf, 1960); River Vistula, in the Warsaw area, Poland (Klimowicz, 1981); Small water bodies in the Mikolajkie area, Poland (Klimowicz, 1967); Side-arm of river Danube near Bratislava, CSR (Lichardova, 1964); Anatolia, Turkey (Segers *et al.*, 1992); Artificial ponds near Köln, Germany (Trahms, 1972); In periphyton of mosses & *Myriophyllum* in the Danube, and in some Alpine brooks, Austria (Donner, 1964); Shores of embanked and free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); ? River Salzach & its tributaries, Austria (Donner, 1970); Dübener Heide, N Germany (Wulfert, 1961); Lac de Nantua, Ain, France (Balvay, 1985); Lake Nobel, Ukraina (Polishchuk, 1991); Slotterplas, Amsterdam; r. Rijn, Waal & Yssel; Nat. Res. Oisterwijkse vennen; Nat. Res. Het Hol near Kortenhoeft; Loenerveense plas Wijdeblik; r. Maas; area between Linge & Rhine; area between Linge & Waal, NL (Dresscher, 1976); Lake Zürichsee, CH (Nipkow, 1961); Lake Erken, Sweden (Nauwerck, 1963); Karelian inland waters, R.F. (Kutikova, 1965); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); 2 lakes in Uppland, C Sweden (Pejler, 1962d); Lakes in C Sweden (Pejler, 1964); Lac d'Annecy, France (Balvay & Druart, 1992); Black Sea (Rudescu, 1961); Pond Heinrichsweiher, Bonn, Germany (Reck, 1981); Ponds in Oltina, SE Dobrogea, Romania (Popescu-Gorj & Costea, 1961); ? Lac Léman, Fr./CH (Rougier, 1969); ? River Loire in St. Laurent-les-Eaux, France (Pourriot *et al.*, 1982); 3 lakes of Sosnowickie, Poland (Radwan, 1969); Parczew area peat bogs, Poland (Radwan, 1974); Hamburg area, Germany (Rühmann, 1961); Middle course of river Loire, France (Lair & Sargos, 1981); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Ponds and canals in the Paris suburb, France (Pourriot, 1965); Lake Ohrid, Balkan peninsula (Stankovic, 1960); Serbian section of river Danube (Zivkovic, 1987); Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); Spain: Cuenca, Madrid & Tarragona (Velasco, 1990); Lake Biwa-ko, Japan (Yamamoto, 1960b); Lake Kinneret, Israel (Serruya & Pollinger, 1984); Lake Mikolajskie, Poland (Spodniewska *et al.*, 1973; Karabin, 1978); Waters near river Bodrog, NE Hungary (Dévai *et al.*, 1972/1973); Impoundment Twistetalsperre, Nordhessen, G. (Meinel *et al.*, 1983); Grasmere Lake, Lake

District, UK (Elliott, 1977); Lunzer Untersee, Austria (Rutner-Kolisko, 1977a & 1977d; Ruttner-Kolisko & Malicki, 1988); Spanish reservoirs (Guiset, 1977); Pools with brackish waters, S Finland (Björklund, 1972a); Coast of S Finland (Eriksen, 1969); Lake Bielersee, CH (Baugerter *et al.*, 1980; Berner-Fankhauser, 1983, 1986 & 1987); Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1986); Laguna de la Cruz & Lagunillo Negro, near Cuenca, Spain (Miracle & Vicente, 1983); Slovenia, ex-Yugoslavia (Markic, 1983); Asiatic Turkey (Dumont & De Ridder, 1987); C Finland (Eloranta, 1982b); Lake Myvatn, Iceland (Adalsteinsson, 1974); Impoundment Saidenbach, Germany (Althaus, 1976); Lakes in S Sweden (Arnemo *et al.*, 1968); Groszer Müggelsee, Berlin, Germany (Barthelmes, 1960); River Klyas'ma, R.F. (Bogoslowski, 1961); Heiluntian province, China (Bogoslowski, 1962); Lake Derwart, near Tournai, Belgium (Bogaert, 1988); Experimental fishponds near Warsaw, Poland (Spodniewska *et al.*, 1966); Korea (Turner, 1986); Japanese inland waters (Yamamoto, 1960a); Inundation area of Danube delta, Romania (Dorobantu, 1964); River Grabia basin, Poland (Pawlowski, 1960, 1968 & 1970); Lake Balaton, Hungary (Zankai & Kertesz, 1967; Zankai, 1968); Latorica, E Slovakia lowland, CSR (Terek, 1990a); Lake Donk, Overmere, Belgium (Dumont, 1968b; Martens, 1985); River Yzer, Diksmuide, Belgium (De Ridder, 1960b); N & W Iceland (De Ridder, 1972); Pond Vasikkalampi, C Finland (Eloranta, 1981); Southwest island of Japan (Sudzuki *et al.*, 1992); Southern Baltic (Arndt *et al.*, 1990)

- Nearctic region: Snowflake Lake, Banff Nat. Park, Alberta, Can. (Anderson, 1972); Waterton Lakes, Alberta, Canada (Anderson & Green, 1975 & 1976); River Ocqueoc, Michigan, USA (Beach, 1960); Canada (Chengalath, 1977); Ontario, Canada (Chengalath, Fernando & George, 1971; Chengalath & Fernando, 1973); Lakes on E side of Can. Rocky mts., Canada (Anderson, 1970a); Lake Michigan, USA (Stemberger & Evans, 1984); Whitacre pond, Northampton Co, Pennsylvania (Williamson, 1987); Lake Michigan & Milwaukee harbor, USA (Stemberger, 1974); Laurentian Great Lakes (Stemberger, 1979); Northern Michigan inland lakes (Stemberger, 1990); Wisconsin, USA (Bērziņš, 1984); Nat. Park in B. C. & Alberta, Canada (Anderson, 1977); NW Canada (Chengalath & Koste, 1987); Arctic N America (Chengalath & Koste, 1989); Lakes near Hanover, N Hampshire, USA (Gilbert, 1988 & 1989); Lac Echo, Québec, Canada (Nogrady, 1976); Lakes in Santee, California, USA (Nogrady, 1982); L. Hodges, San Diego County & San Francisco, California, USA (Nogrady, 1983); Bay of Quinte, Lake Ontario, Canada (Nogrady, 1988); Kingston, Ontario, Canada (Nogrady, 1989); Patricia L. & Celestine L., in Jasper Nat. Park, Alberta, Canada (Anderson, 1970b); Triangle Lake, Portage County, Ohio, USA (Havens, 1990 & 1991); Lake Ontario, Canada (Nauwerck, 1978); Whitacre pond, Black river, Pa (?), USA (Williamson & Butler, 1986); Lake 122 & L. 132, NW Ontario, Canada (Schindler & Novén, 1971); Lake Mitchell, Sharon, Vermont, USA (Stemberger & Gilbert, 1985)

- Oriental region: Fishpond at Barrackpore, W Bengal State, India (Michael, 1968); India (Sharma & Michael, 1980; Sudzuki, 1989)

- Australian region: Creek in Australia (Koste, Shiel & Brock, 1983); Reservoirs in SE Aust. (Shiel *et al.*, 1987); Tasmania (Koste & Shiel, 1987); NSW, Aust. (Shiel & Koste, 1979); Lakes in Tasmania (Shiel, Koste & Tan, 1989); Guydir river, Darling system, S Aust. (Shiel & Walker, *s.d.*); Lake Okaro, New Zealand (Forsyth & James, 1991); Mt. Cook & Christchurch, New Zealand (Russell, 1960)

- Neotropical region: Lake Llanquihuc, Chile (Campos *et al.*, 1988); Paraguay, Argentina, Surinam (Koste & José de Paggi, 1982); Chilean lakes (Schmid-Araya, 1991); Prov. Chubut & Rio Negro, Argentina (José de Paggi, 1990); Brokopondo Lake, Surinam (Leentvaar, 1979); Araucarian lakes, E of the Andes, Chile (Thomasson, 1963b)

Synchaeta pachypoda Jaschnov, 1922

- Palaearctic region: Lake Baikal, R.F. (Koshov, 1961 & 1963; Eggert, 1973; Kutikova, 1978; Afanas'jeva, 1975)

Synchaeta pachypoida Kutikova, 1978

- Palaearctic region: Lake Baikal, R.F. Endemic (Kutikova, 1978)

Synchaeta pectinata Ehrenberg, 1832

- Palaearctic region: Romania (Rudescu, 1960); Delta of river Danube, Romania (Godeanu & Zinevici, 1983; Zinevici & Teodorescu, 1990); Fishponds near Warsaw, Poland (Hillbricht-Ilkowska, 1964); Lac Léman, Fr./CH (Balvay & Laurent, 1990a & 1990b); Lac d'Aydat, Massif Central, France (Oulad Ali *et al.*, 1990); River Elbe near Hamburg, Germany (Caspers & Schulz, 1964); Volga river & Volgograd reservoir, R.F. (V'yushkova & Lakhnova, 1974); Lakes in Soviet Karelia, R.F. (Filimonova, 1976); In the Kolyrna Indigirka tundra lakes, R.F. (Kirillova & Sokolova, 1972); Vilnyus, Lithuania (Rachymas, 1971); All over Europe. Cosmopolitan (Bērziņš, 1978); Lake Prosece & L. Kozjak, Croatia, ex-Yugoslavia (Erben, 1991); "Grote Vijver", fort 8, Hoboken, Antwerp, Belg. (De Smet *et al.*, 1986); Kiev reservoir, R.F. (Polishchuk, 1987); Neva Bay, Gulf of Finland, R.F. (Telesh, 1986); Lake Tarasm, L. Onega, R.F. (Kruglova, 1981); Canal Isebek, Hamburg, Germany (Caspers, 1964); L. Stechlinsee & L. Nehmitzsee, Brandenburg, G. (Kasprzak & Ronneberger, 1982); Lake Kisajno, Mazurian lakeland, Poland (Klimowicz,

1964); Lake Mikolajskie & L. Taltowisko, *ibid.* (Klimowicz, 1972); Impoundment Kninicki & r. Svatka, CSR (Kubicek, 1964); Lake Mälaren, Sweden (Lanner & Pejler, 1973); L. Mikolajskie & L. Sniardny, Mazurian lake- (Kosicki, 1960); land, Poland; Karstic lake Percile, Latium, Italy (Margaritora *et al.*, 1981); Bicaz water power reservoir, Romania (Battes, 1971); C Sweden (Pejler, 1972); Lakes in C Sweden (Pejler, 1965); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); Lake Lunzer Obersee, Austria (Ruttner-Kolisko, 1975a; Pivoda, 1977; Mikschi, 1989); Lunzer Ober- & Untersee, Austria (Ruttner-Kolisko, 1977a); Lake Goggaussee, Karinthia, Austria (Herzig & Moog, 1976); Lake Bansee, near Seon, Bavaria (Preisler 1977a, 1977b & 1980); Lakes N of Bucarest, Romania (Godeanu, 1969b); Pond in Gif-s-Yvette, Essonne, France (Pourriot, 1972); Black Sea (Rudescu, 1961); Pond Heinrichsweiher, Bonn, Germany (Reck, 1981); Ponds in Oltina, SE Dobrogea, Romania (Popescu-Gorj & Costea, 1961); ? Lac Léman, Fr./CH (Rougier, 1969); Rés. biol. de Villars-la-Dombes, France (Rostan, 1976); Dusnatsynskie Lakes, Poland (Kowalczyk & Radwan, 1962); ? River Loire in St. Laurent-les-Eaux, France (Pourriot *et al.*, 1982); Parczew area peat bogs, Poland (Radwan, 1974); Hamburg area, Germany (Rühmann, 1961); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Moats of Château, ponds, canals & pools in the Paris suburb, France (Pourriot, 1965); Lake Doiran, Macedonia, ex-Yugoslavia (Popovska-Stankovic, 1990); Serbian section of river Danube (Zivkovic, 1987); All over Spain (Velasco, 1990); Experimental ponds at Golysz, Poland (Zürek, 1974); Lake Kinneret, Israel (Serruya & Pollinger, 1984; Gophen, Serruya & Spatarn, 1990; Berman *et al.*, 1972; Landau *et al.*, 1988); Lake Mikolajskie, Poland (Spodniewska *et al.*, 1973); Waters near river Bodrog, NE Hungary (Dévai *et al.*, 1972/1973); Impoundment Twistetalsperre, Nordhessen, G. (Meinel *et al.*, 1983); Grasmere Lake, Lake District, UK (Elliott, 1977); Lake Banyoles, NE Spain (Miracle, 1974, 1975 & 1977a; Miracle & Vicente, 1983); 2 lakes in N Sweden (Axelson, 1961); Lake Lunzer Untersee, Austria (Ruttner-Kolisko, 1977a; Ruttner-Kolisko & Malicky, 1988); Lakes in Estonia (Haberman, 1978); 3 reservoirs on river Guadiana, C Spain (Armengol, 1982; Armengol *et al.*, 1988); Peat pits in Finland (Selin & Koskinen, 1988); Impoundment Saidenbach, Erzgebirge, Germany (Beuschold, 1961; Rudolf, 1966); Coast of S Finland (Eriksen, 1969); Ponds near Darmstadt, Germany (Menzel & Roth, 1972); Lago di Giulianello, Latium, Italy (Ferrara & Margaritora, 1977); Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); Impoundments Saidenbach & Neunzehnhain, G. (Althaus, 1976); Lakes in S Sweden (Arnemo *et al.*, 1968); Groszer Müggelsee, Berlin, Germany (Barthelmes, 1960); Lake Bielersee, CH (Baugerter *et al.*, 1980; Berner-Fankhauser, 1983 & 1986); River Klys'ma, R.F. (Bogoslawski, 1961); Small lakes in Estonia (Haberman & Mäemets, 1987); Lago Scuro Parmense, N Italy (Antonietti *et al.*, 1988); Hoboken (Antwerp), Belgium (De Smet *et al.*, 1988); Lake Derwart, near Tournai, Belgium (Bogaert, 1988); Reservoirs in Spain (Miracle, 1982); Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1986); Slovenia, ex-Yugoslavia (Markic, 1983); Lake Glubokoje, near Moscow, R.F. (Matveeva, 1983, 1986 & 1991); Asiatic Turkey (Dumont & De Ridder, 1987); Lake Königssee, Bavaria (Laxhuber, 1987); Lake Siggefrorasjön, Sweden (Grundström, 1987); Gent, Belgium (Roche, 1987); District Ostrava, CSR (Dvorakova, 1960b); Southern Baltic (Arndt *et al.*, 1990); 6 lakes in the Puy-de-Dôme, France (Persoone *et al.*, 1968); C Finland (Eloranta, 1982b); Man-made lake Zegrzynskie, Poland (Dusoge *et al.*, 1985); Lago Maggiore, Italy (Tonolli, 1962; Goldman *et al.*, 1968); Bamberg-Hochstädt, Germany (Halbach, 1973); Nat. Res. Jursky Sur, CSR (Hudec, 1978); Lake Biwa, Japan (Hillbricht-Ilkowska, 1983a); Ponds in Surrey, UK (Pontin, 1989); Mt. Hoverla, Maramarosch Alps, Hungary (Varga, 1962); Lake Constance, Germany (Kiefer, 1968; Pauli, 1989); Lowland reservoir in S Poland (Zurek, 1980); Lake Sempachersee, CH (Zimmermann, 1974); Darnsee near Epe, NW Germany (Koste, 1962); Engelbergs Moor, Druchhorn, NW Germany (Koste, 1965); Achmer Grasmoor, NW Germany (Koste, 1968b); River Hase, NW Germany (Koste, 1976b); Lake Alfsee, NW Germany (Koste & Poltz, 1983 & 1984); Lake Dümmer, NW Germany (Koste & Poltz, 1987); Tingvall Loch, Mainland, Shetland (Bērziņš, 1982a); Lake Monterosi, Latium, Italy (Stella & Margaritora, 1966); Rügener, Hiddenseer & Darszer Boddengewässer, Germany (Schwarz, 1963); Etang du Brochet, Rambouillet, France (Pourriot *et al.*, 1969); Delta of river Danube, Romania (Zinevici & Teodorescu, 1991); Lake Donk, Overmere, Belgium (Dumont, 1968b; Martens, 1985; Roche, 1987 & 1989); Lower Silesia, Poland (Pawlowski, 1960); River Grabia basin, Poland (Pawlowski, 1968, 1970 & 1973); Lake Volvi, Macedonia, Greece (Zarfdjian *et al.*, 1990); Lake Balaton, Hungary (Zankai, 1968); Impoundment in E Bohemia, CSR (Sladeckova & Sladeczek, 1960); Boatracing canal, Gent, Belgium (Coussement, 1982); Meuse Liégeoise, Belgium (Baiverlin, 1984); Gulf of Bothnia, Gulf of Finland, Gulf of Riga, Belt Sea, Bristol Channel & Irish Sea (Bērziņš, 1960); NW Iceland (De Ridder, 1972); Small water bodies in the Mikolajskie area, Mazurian lakeland, Poland (Klimowicz, 1967); Side-arm of river Danube near Bratislava, CSR (Lichardova, 1964); Anatolia, Turkey (Segers *et al.*, 1992); Lake Baikal, R.F. (Koshov, 1963); Ponds at Mirwart, Belgium (Marlier & Wattiez, 1977); Hilversumse Wasmeer, NL (Leentvaar, 1967b); River Lausitzer Neisse & river Oder, Germany (Walter & Scharf, 1961); Near Bautzen, Oberlausitz, Germany (Walter, 1961); Shores of dammed & free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); L. Wallsee

- & r. Lobau, Austrian Danube basin (Donner, 1978); River Salzach & its tributaries, Austria (Donner, 1970); Lake Kummerower See, Mecklemburg, Germany (Kalbe *et al.*, 1965); Rhine water near Wiesbaden, Germany (Noll, 1972); Lac Léman, Fr./CH (Gawler *et al.*, 1988; Balvay, 1989; Balvay & Laurent, 1981 & 1989; Naef & Martin, 1985); River Warnow, near Rostock, Germany (Keil *et al.*, 1963); Lake Lauerzersee, CH (Odermatt, 1970); Lakes in NE Norway (Saeter, 1971); Dübener Heide, N Germany (Wulfert, 1960a, 1960b & 1961); Etang de Pommereau, Loir-et-Cher, France (Tassigny *et al.*, 1970); Lac de Nantua, Ain, France (Balvay, 1965); All over the Netherlands (Dresscher, 1976); River & valley in the Tatra mts., Poland (Madalinski, 1961); Lake Zürichsee, CH (Nipkow, 1961); Lake Erken, Sweden (Nauwerck, 1963); Karelian inland waters, R.F. (Kutikova, 1965); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); Lake Ösbysjön, near Stockholm, Sweden (Pejler, 1961); 2 lakes in Uppland, C Sweden (Pejler, 1962d); Lakes in C Sweden (Pejler, 1964); Lac d'Annecy, France (Balvay & Druart, 1992); Ponds in Gif-s-Yvette, Essonne, France (Pourriot & Leborgne, 1970); Lake Pluszsee, N Germany (Hofmann, 1975); Impoundment Lake Batlava, CSR (Jankovic, 1975); Lakes in E Poland (Radwan *et al.*, 1978); Lake Giulianello, Latium, Italy (Stella & Margaritora, 1972); Lake Nemi, Italy (Parise, 1962); Leczna-Wlodawa Lake District, E Poland (Kowalczyk & Radwan, 1982); Korea (Turner, 1986); Japanese inland waters (Yamamoto, 1960a); Canal Isebek, Hamburg, Germany (Caspers & Schulz, 1960); Lough Erne system, NW Ireland (Gibson *et al.*, 1980); Southwest islands of Japan (Sudzuki *et al.*, 1992); Balearic Archipelago, Spain (de Manuel *et al.*, 1992); Waldviertel area, lower Austria (Naidenow & Wawrik, 1984); Lake Neusiedlersee, Austria (Donner, 1979); 3 localities in Belgium (De Ridder, 1986); Lake Constance, Germany (Walz *et al.*, 1987); River Danube (Enaceanu & Brezeanu, 1970); River Elbe estuary, Germany (Schulz, 1961); Ellesmere District, UK (Galliford, 1960a); Canal Leeds-Liverpool, UK (Galliford, 1960b); Knowsley Park, Liverpool, UK (Galliford, 1964); L. Uiversnest & Meeuwenven, near Nijmegen, NL (Geelen, 1969); District Ardennen, Belgium (Gijssels *et al.*, 1976); Lac Luitel, Isère, France (Joly, 1960); Nat. Res. Oisterwijkse vennen, NL (De Graaf, 1960); Impoundment Weidatalsperre, E Thüringen, G. (Hoffmann, 1966); Lake Gjersjoen, SE Norway (Hessen & Nilssen, 1985); Sewage ponds near Czestochowa, Poland (Klimowicz, 1968); Near water works at Okocim, Poland (Klimowicz, 1975); Canal of river Odra, Poland (Klimowicz, 1979); River Vistula in the Warsaw area, Poland (Klimowicz, 1981); Pool in Fontainebleau forest, France (Pourriot, 1976); Lac Pavin, Massif Central, France (Restituto & Lair, 1976); 3 lakes of Sosnowickie, Poland (Radwan, 1969); Lake Jorzec, Mazurian lakeland, Poland (Radwan *et al.*, 1985); Pelagic zone of 3 lakes, Leczna-Wlodawa area, Poland (Radwan & Popiolek, 1977); Water sheets of the Hamburg area, Germany (Rühmann, 1964); Hamburg area, Germany (Rühmann, 1965a); River Alster, Hamburg, Germany (Rühmann, 1967); Ponds and canal in the Paris suburb, France (Pourriot, 1965); Aegean L., Macedonia, ex-Yugoslavia & Greece (Serafimova-Hadzisce, 1974); Pool, S of Trondheim, Norway (Thomasson, 1979); Forest pond in Lembeek, Belgium (Van Elslande, 1975); Rybnik dam reservoir, Poland (Krzanowski, 1979); Reservoir Vrané, 17 km S of Prague, CSR (Sladeczek, 1962)
- Nearctic region: In lakes and ponds near Hanover, New Hampshire, USA (Gilbert, 1990; Kirk & Gilbert, 1990); Post pond, Lyme, New Hampshire, USA (Stemberger & Gilbert, 1985a & 1987); Singletary Lake, N Carolina, USA (Thomasson, 1963a); NW Canada (Chengalath & Koste, 1987); Cap Breton Island, Nova Scotia, Canada (Chengalath & Koste, 1988); Arctic N America (Chengalath & Koste, 1989); Lac Echo, Québec, Canada (Nogrady, 1976); Lakes in Santee, California, USA (Nogrady, 1982); San Francisco, California, USA (Nogrady, 1983); Mt. Temblant Prov. park, Québec, Canada (Nogrady, 1986); Bay of Quinte, Lake Ontario, Canada (Nogrady, 1988); Kingston, Ontario, Canada (Nogrady, 1989); Star Lake, Norwich, Vermont, USA (Bogdan, Gilbert & Starkweather, 1980; Gilbert, 1989); Small pond in Vermont, USA (Gilbert, 1985); River Ocqueoc, Michigan, USA (Beach, 1960); Canada (Chengalath, 1977); Ontario, Canada (Chengalath, Fernando & George, 1971; Chengalath & Fernando, 1973); ? Lake Michigan, USA (Stemberger & Evans, 1984); Lake Michigan, USA (Stemberger, 1985 & 1986); Lake Michigan & Milwaukee harbor, USA (Stemberger, 1974); Laurentian Great Lakes (Stemberger, 1979); Northern Michigan inland lakes (Stemberger, 1990); Ontario, Canada; Wisconsin & Kentucky, Canada (Bērziņš, 1984); Pools & lakes near New Hampshire, USA (Gilbert, 1988); Colorado, USA (Turner, 1988); Lake Wabamun, Alberta, Canada (Gallup & Hickman, 1975); Clearwater Lake, near Sudbury, Ontario, Canada (Yan & Geiling, 1985); Paradise Lake, E Canada (George & Fernando, 1969); Newfoundland lakes, Canada (Chengalath *et al.*, 1984); Greens Lake, Beaver Island, Michigan, USA (Foran & King, 1982); In borrow-pit ponds, N Illinois, USA (Lipsej & Malcom, 1981); Bayou de Siard, Monroe, La, USA (Gallagher, 1965); Triangle Lake, NE Ohio, USA (Havens, 1989); Lake Ontario, Canada (Nauwerck, 1978); Lakes in the Churchill Falls of Labrador (Duthrie & Ostrovsky, 1974); Crater Lake, Walker L. & Stoneman L., Arizona, USA (Green, 1986)
- Oriental region: Sri Lanka (Mendis & Fernando, 1962; Fernando, 1969); Malaysia & India (Sudzuki, 1989); India (Sharma & Michael, 1980); W & E Malaysia & Singapore (Fernando & Zankai, 1981); Fishpond in Barrackpore, W Bengal State, India (Michael, 1968)

- Australian region: Qld & Vic, Aust. (Shiel & Koste, 1979); Lower river Murray, S Aust. (Shiel, Walker & Williams, 1982); Lakes in Tasmania (Shiel, Koste & Tan, 1989); River Murray, Aust. (Koste, 1979b); Alligator rivers area, NT, Aust. (Tait, Shiel & Koste, 1984); Billabongs river Murray, SE Aust. (Shiel & Koste, 1983); SW Aust. (Koste, Shiel & Brock, 1983); Reservoirs in SE Aust. (Shiel *et al.*, 1987); Tasmania (Koste & Shiel, 1987); In many localities in Aust. (Bērziņš, 1982); Lake Manapouri, S Island, New Zealand (Bērziņš, 1982a); Billabongs & reservoirs of the Murray-Darling system, Aust. (Shiel, 1986); Billabongs of the Murray r. floodplain, NSW, Aust. (Hillman & Shiel, 1991); Lake Grasmere, S Island, New Zealand (Stout, 1972 & 1991); Lakes in the mt. area of Canterbury, N. Zealand (Stout, 1969); Lake Pukaki, L. Tekapo, L. Ohau & L. Benmore, S Island, New Zealand (Stout, 1978); L. Ohau & L. Benmore, S Island, New Zealand (Stout, 1981); L. Pearson, S Island, New Zealand (Stout, 1984); Saddle Hill pond, New Zealand (Byars, 1960); North Otago, New Zealand (Russell, 1960); Murray river, Aust. (Serruya & Pollinger, 1984); ? Murray river at Mannum, S Aust. (Shiel, 1979); Bromfield Swamp: tropical Queensland & Lake Purrumbete, freshwater Australian crater lakes (Green, 1981)

- Neotropical region: Near Concepcion, Paraguay (Koste, 1986b); Chilean lakes (Schmid-Araya, 1991); Lake Hemmen, Rio Snia Missu, Mato Grosso, C Brazil (Green, 1972); Orinoco river basin, Venezuela (Vasquez, 1984a); Amazonia, Brazil (Hauer, 1965b; Thomasson, 1971; Koste, 1972f); Paraguay, Argentina, Chile, Brazil, Surinam, Honduras (Koste & José de Paggi, 1982); Lago Camaleão, Amazonia, Brazil (Koste & Robertson, 1983; Koste, Robertson & Hardy, 1984); Rio Nhamunda, Amazonia, Brazil (Brandorff, Koste & Smirnov, 1982); Lake Escondido, prov. Rio Negro, Argentina (Balseiro & Modenutti, 1990); Prov. Tierra del Fuego, Chubut & Rio Negro, Argentina (José de Paggi, 1990); Brokopondo Lake, Surinam (Leentvaar, 1979); Prov. Neuquen, Rio Negro & Tierra del Fuego, Argentina; Paraguay; Chile (Olivier, 1965); Lake Raco, Chile (Campos *et al.*, 1992); Araucarian lakes, W & E of the Andes, Chile (Thomasson, 1963b); Mato Grosso, C Brazil (Turner & Da Silva, 1992); Chile (Löffler, 1962); Pond in Esteli, Nicuragua (Moreno *et al.*, 1992); Ecuador: Oriente (Koste & Böttger, 1992)

Synchaeta pontica Rudescu, 1960

- Palaearctic region: Black Sea (Rudescu, 1960 & 1961); Black Sea area (Bērziņš, 1978)

Synchaeta razelmi Rudescu, 1960

- Palaearctic region: Lake Razelm, Romania (Rudescu, 1960); Black Sea area & C Eur. plain (Bērziņš, 1978)

Synchaeta rousseleti Zelinka, 1907

- Antarctic region: Antarctica & Subantarctica (José de Paggi & Koste, 1984)

Synchaeta rufina Kutikova, 1978

- Palaearctic region: Lake Baikal. Endemic (Kutikova, 1978)

Synchaeta stylata Wierzejski, 1893

- Palaearctic region: Romania (Rudescu, 1960); ? Lake Myvatn, Iceland (Adalsteinsson, 1979); Lakes in S Sweden (Arnemo *et al.*, 1968); Lake Groszer Müggelsee, Berlin, Germany (Barthelmes, 1960); Lake Bielersee, CH (Baugerter *et al.*, 1980; Berner-Fankhauser, 1983, 1986 & 1987); River Klyas'ma, R.F. (Bogoslowski, 1961); Heiluntian province, China (Bogoslowski, 1962); Lago Scuro Parmense, N Apennines, Italy (Antonietti *et al.*, 1988); Grasmere Lake, Lake District, UK (Elliott, 1977); Tingwall Loch, Mainland, Shetland (Bērziņš, 1982a); Coast of S Finland (Eriksen, 1969); Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1986); Delta of river Danube, Romania (Godeanu & Zinevici, 1983; Zinevici & Teodorescu, 1990); Asiatic Turkey (Dumont & De Ridder, 1987); C & S Sweden (Bērziņš & Pejler, 1987, 1989a, 1989b, 1989c & 1989d); ? District Ostrava, CSR (Dvorakova, 1960b); Lake Baikal, R.F. (Koshov, 1963); L. Wallsee & r. Lobau, Austrian Danube basin (Donner, 1978); Lake Lauerzersee, CH (Odermatt, 1970); Lakes in NE Norway (Saeter, 1971); Lakes Constance, Germany (Kiefer, 1968; Walz *et al.*, 1987); Dübener Heide, Germany (Wulfert, 1961); Brabantse Biesbosch & surroundings; r. Rijn, Waal & Yssel; Nat. Res. Oisterwijkse vennen; river Maas, NL (Dresscher, 1976); Lake Zürichsee, CH (Nipkow, 1961); Karelian inland waters, R.F. (Kutikova, 1965); Lake Chambedaze, Puy-de-Dôme, France (Persoone *et al.*, 1968); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); Lakes in C Sweden (Pejler, 1964 & 1965); Black Sea (Rudescu, 1961); Ponds in Oltina, SE Dobrogea, Romania (Popescu-Gorj & Costea, 1961); ? River Loire in St. Laurent-les-Eaux, France (Pourriot *et al.*, 1982); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Lake Doiran, Macedonia, ex-Yugoslavia (Popovska-Stankovic, 1990); Lake Ohrid, Balkan peninsula (Stankovic, 1960); Serbian section of river Danube (Zivkovic, 1987); Waters in the Szecezececín lagoon, Poland (Wiktor, 1960); Spain: Tarragona (Velasco, 1990); Lake Biwa-ko, Japan (Yamamoto, 1960b); C Finland (Eloranta, 1982b); Man-made lake Zegrzynskie, Poland (Dusoge *et al.*, 1985); Lake Kisajno, Mazurian lakeland, Poland (Klimowicz, 1964); Lake Taltowisko, Mazurian lakeland, Poland (Klimowicz, 1972); ? Impoundment Kninicki, CSR (Kubicek, 1964); Lake Biwa, Japan (Yamamoto, 1967 & 1968); River Hase, NW Germany (Koste, 1976b); River Volga, R.F. (V'yushkova & Lakhnova, 1974); Lakes in Soviet Karelia, R.F. (Filimonova, 1976); Lake Baikal, R.F. (Afan'es'jeva, 1975); Lake

Ladoga, R.F. (Nikolayev & Petrova, 1978); Lapland State Preserve, R.F. (Ghilarov, 1972); All over Europe. Cosmopolitan (Bērziņš, 1978); Neva Bay, Gulf of Finland, R.F. (Telesh, 1986); Baikal Biological Station, R.F. (Lozhuckova *et al.*, 1981); Inundation area of Danube delta, Romania (Dorobantu, 1964); River Grabia basin, Poland (Pawlowski, 1960 & 1970); Rügener, Hiddenseer & Darszer Bodengewässer, Germany (Schwarz, 1963); Gulf of Bothnia, Gulf of Finland (Bērziņš, 1960); N Iceland (De Ridder, 1970 & 1972); Japanese inland waters (Yamamoto, 1960a); Southwest islands of Japan (Sudzuki, 1990; Sudzuki *et al.*, 1992); Southern Baltic (Arndt *et al.*, 1990); River Danube (Enaceanu & Brezeanu, 1970); Knowsley Park, Liverpool, UK (Galliford, 1964); Lakes N of Bucarest, Romania (Godeanu, 1969b); Lakes of the Black Sea shore, Romania (Godeanu, 1970b); Obretin embanked basin, Danube delta, Romania (Godeanu *et al.*, 1973); Nat. Res. Oisterwijkse vennen, NL (De Graaf, 1960); River Vistula in the Warsaw area, Poland (Klimowicz, 1981); Side-arm of river Danube near Bratislava, CSR (Lichardova, 1964)

- Nearctic region: Canadian subarctic (Moore, 1978); Grace Lake, Long L., & Madeline L., N Canada (Moore, 1980); Lake Ontario, Canada (Nauwerck, 1978); Bay of Quinte, Lake Ontario, Canada (Nogrady, 1988); Placentia Bay, Newfoundland, Canada (Davis, 1986); Jenny Lake, W North America (Thomasson, 1962); Lake Waccama, N Carolina, USA (Thomasson, 1963a); Kingston, Ontario, Canada (Nogrady, 1989); Old Woman Creek, Ohio, USA (Havens, 1991a); Old Woman Creek estuary, Huron, Ohio, USA (Havens, 1991b); River Ocqueoc, Michigan, USA (Beach, 1960); Canada (Chengalath, 1977); Ontario, Canada (Chengalath, Fernando & George, 1971; Chengalath & Fernando, 1973); NE Canada (Chengalath & Koste, 1983); Lancaster Lake, Michigan, USA (Fairchild *et al.*, 1977); Lake Michigan, USA (Stemberger & Evans, 1984); Lake Michigan & Milwaukee harbor, USA (Stemberger, 1974); Laurentian Great Lakes (Stemberger, 1979); Northern Michigan inland lakes (Stemberger, 1990); Wisconsin, Illinois & Kentucky, USA (Bērziņš, 1984); Reservoir near Aiken, S Carolina, USA (Taylor & Mahoney, 1988); Lac Echo, Québec, Canada (Nogrady, 1976); Mt. Tremblant Prov. park, Québec, Canada (Nogrady, 1980); Lake Erie, Canada (Davis, 1969); Newfoundland lakes, Canada (Chengalath *et al.*, 1984); River Opinaca & Small Opinaca, James Bay area, N Québec, Canada (Armengol *et al.*, 1983)

- Oriental region: India (Sharma & Michael, 1980); Taiwan (Sudzuki, 1988); Taiwan & India (Sudzuki, 1989); Taiwan. Distribution: waters in temperate regions (Sudzuki, 1991)

- Australian region: Billabongs Magela Creek, S Aust. (Shiel, Walker & Williams, 1982); Creek & river in Aust. (Bērziņš, 1982); E Aust. (Koste & Shiel, 1980b); Rivers & billabongs of the Murray-Darling system, Aust. (Shiel, 1986); ? Cook Strait, New Zealand (Cassie, 1960)

- Neotropical region: Lake Llanquihuc, Chile (Campos *et al.*, 1988); Ecuador: Oriente (Koste & Böttger, 1989 & 1992); Lago do Macaco, Brazil (Koste, 1989a); Brazil (Koste & José de Paggi, 1982); Rio Nhamunda, Amazonia, Brazil (Brandorff, Koste & Smirnov, 1982); Chilean lakes (Schmid-Araya, 1991); Lake Todos los Santos, Chile (Campos *et al.*, 1990); Province Chubut, Argentina (José de Paggi, 1990); Brokopondo Lake, Surinam (Leentvaar, 1979)

Synchaeta tamara Smirnov, 1932

- Palaearctic region: Barents Sea (Bērziņš, 1960)

Synchaeta tavina Hood, 1893

- Palaearctic region: River Danube (Enaceanu & Brezeanu, 1970); Romania (Rudescu, 1960); Delta of river Danube (Rudescu & Marinescu-Popescu, 1969); Black Sea (Rudescu, 1961); Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Kasprzak & Ronneberger, 1982; Ronneberger & Schönborn, 1985); Polyhalinic part of lake Veerse Meer, NL (Bakker & De Pauw, 1975); Lake Veerse Meer, NL (Dresscher, 1976); Lac d'Aydat, Massif Central, France (Oulad Ali *et al.*, 1990); Rügener, Hiddenseer & Darszer Boddengewässer, Germany (Schwarz, 1963); Belt Sea, N & S North sea, S & W Iceland, Atlantic, Farøe-Shetland area (Bērziņš, 1960); Spain, Romania, shore of Black Sea, C Eur. plains, UK, Iceland, Caucasus, Asia Minor (Bērziņš, 1978); Southern Baltic (Arndt *et al.*, 1990); Roscoff, Atlantic coast of Brittany, France (D'Hondt, 1970)

- Nearctic region: Mc Kay Bay, Florida, USA (Koste, 1981)

- Australian region: Dartmouth, SE Aust. (Shiel *et al.*, 1987); Lower river Murray, S Aust. (Shiel, Walker & Williams, 1982); Vic, Aust. (Koste & Shiel, 1980c)

Synchaeta tremula (O.F. Müller, 1786)

- Palaearctic region: Romania (Rudescu, 1960); Lake Stechlinsee, Brandenburg, Germany (Althaus, 1963; Ronneberger & Schönborn, 1985); Impoundment Saidenbach, Germany (Althaus, 1976); Lake Bielersee, CH (Baugerter *et al.*, 1980; Berner-Fankhauser, 1983, 1986 & 1987); River Klyas'ma, R.F. (Bogoslawski, 1961); Grasmere Lake, Lake District, UK (Elliott, 1977); Lakes in Estonia (Haberman, 1978); Brackish and freshwater pools, S Finland (Björklund, 1972a); Coast of S Finland (Eriksen, 1969); River Warnow, near Rostock, Germany (Keil *et al.*, 1963); Lakes in NE Norway (Saeter, 1971); Lake Constance, Germany/CH (Kiefer, 1968; Walz *et al.*, 1987); Dübener Heide, N Germany (Wulfert, 1960a & 1960b); Amsterdam; Nat. Res. Meyendel; r. Lek; rivers Rijn, Waal & Yssel; Nat. Res. "Het Hol" near Kortenhoeft; Lake Zwanewater

in Callantsoog; Lake Abcoudermeer; River Maas; Surroundings of Dussen; Channel Zuidwillemsvaart, between 's Hertogenbosch & Veghel, NL (Dresscher, 1976); Lake Erken, Sweden (Nauwerck, 1963); Luga district of the Leningrad area, R.F. (Kutikova, 1962b); Karelian inland waters, R.F. (Kutikova, 1965); Lake Chambon, Puy-de-Dôme, France (Persoone *et al.*, 1968); Lake Ösbysjön, near Stockholm, Sweden (Pejler, 1961); Lakes in C Sweden (Pejler, 1964 & 1965); Pool in Fontainebleau forest, France (Pourriot, 1976); Pond Heinrichsweiher, Bonn, Germany (Reck, 1981); Ponds in Oltina, SE Dobrogea, Romania (Popescu-Gorj & Costea, 1961); Rés. biol. de Villars-la-Dombes, France (Rostan, 1976); 3 lakes of Sosnowickie, Poland (Radwan, 1969); Spain: Madrid (Velasco, 1990); Lake Biwa-ko, Japan (Yamamoto, 1960b); Reservoir Vrané, 17 km S of Prague, CSR (Sladeczek, 1962); Hamburg area, Germany (Rühmann, 1961); Middle course of river Loire, France (Lair & Sargos, 1981); River Volga, R.F. (Mordukhai-Boltovskoi, 1979); Moat of Château, ponds & pool in the Paris suburb, France (Pourriot, 1965); Lake Doiran, Macedonia, ex-Yugoslavia (Popovska-Stankovic, 1990); ? Garden ponds in Tokyo, Japan (Sudzuki, 1975); Serbian section of river Danube (Zivkovic, 1987); Lake Biwa, Japan (Yamamoto, 1967 & 1968); N & W Iceland (De Ridder, 1972); Pond Vasikkalampi, C Finland (Eloranta, 1981); Impoundment Goczalkowice, Poland (Starmach, 1961); Peat bogs Chambedaze & La Godivelle, Massif Central, France (Francez & Dévaux, 1985); Peat bogs in the Auvergne, France (Francez, 1981 & 1984c); Peat bog Chambedaze, Puy-de-Dôme, France (Francez, 1982); Peat bog La Godivelle, Massif Central, France (Francez, 1988); Canal Isebek, Hamburg, Germany (Caspers & Schulz, 1960); Lake Glubokoje, near Moscow, R.F. (Matveeva, 1986); Lake Nemi, Italy (Parise, 1962); Japanese inland waters (Yamamoto, 1960a); Southwest islands of Japan (Sudzuki *et al.*, 1992); Southern Baltic (Arndt *et al.*, 1990); Waldviertel area, lower Austria (Naidenow & Wawrik, 1984); Lake Neusiedlersee, Austria (Donner, 1972d & 1979); River Danube (Enaceanu & Brezeanu, 1970); Canal Leeds-Liverpool, UK (Galliford, 1960b); Knowsley park, Liverpool, UK (Galliford, 1964); Lakes, N of Bucarest, Romania (Godeanu, 1969b); Impoundment Weidatalsperre, E Thüringen, G. (Hoffmann, 1966); River Vistula in the Warsaw area, Poland (Klimowicz, 1981); Canal of river Odra, Poland (Klimowicz, 1979); Small water bodies in the Mikolajkie area, Poland (Klimowicz, 1967); In periphyton of mosses and *Myriophyllum* in the Danube, and in some Alpine brooks, Austria (Donner, 1964); Shores of embanked and free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); ? River Salzach and its tributaries, Austria (Donner, 1970); Lac Léman, Fr./CH (Martin, 1961; Balvay, 1989; Balvay & Laurent, 1981); Darnsee near Epe, NW Germany (Koste, 1962); Engelbergs Moor, Druchhorn, NW Germany (Koste, 1965); Achmer Grasmoor, NW Germany (Koste, 1968b); River Hase, NW Germany (Koste, 1976b); Lake Dümmer, NW Germany (Koste & Poltz, 1983 & 1984); Lake Alfsee, NW Germany (Koste & Poltz, 1987); Fish ponds near Warsaw, Poland (Hillbricht-Ilkowska, 1964); Volga river, R.F. (V'yushkova & Lakhnova, 1974); Lake Ladoga, R.F. (Nikolayev & Petrova, 1978); Mologa river, R.F. (Riv'yer *et al.*, 1981); All over Europe (Bērziņš, 1978); Lake Cullera, near Valencia, Spain (Miracle & Vicente, 1983); Delta of river Danube, Romania (Godeanu & Zinevici, 1983); Slovenia, ex-Yugoslavia (Markic, 1983); C & S Sweden (Bērziņš, 1987, 1989b, 1989c & 1989d); C Finland (Eloranta, 1982b); Lake Balaton, Hungary (Zankai, 1968 & 1989); Nat. Res. Jursky Sur, CSR (Hudec, 1978); Lake Stechlinsee & L. Nehmitzsee, Germany (Kasprzak & Ronneberger, 1982); Lake Kisajno, Mazurian lakeland, Poland (Klimowicz, 1964); Karstic lake Percile, Latium, Italy (Margaritora *et al.*, 1981); Mt. Hoverla, Maramarosch Alps, Hungary (Varga, 1962); Lake Lunzer Obersee, Austria (Miksch, 1989); Svalbard (Amren, 1964b & 1964c); Lakes in S Sweden (Arnemo *et al.*, 1968); 2 lakes in N Sweden (Axelson, 1961); N Swedish Lapland (Pejler, 1962a); River Grabia basin, Poland (Pawlowski, 1960 & 1973); Lake Donk, Overmere, Belgium (Dumont, 1968b; Martens, 1985); Gulf of Bothnia, Gulf of Finland, Gulf of Riga, Belt Sea & Norwegian Sea (Bērziņš, 1960)

- Nearctic region: Canada (Chengalath, 1977); Colorado, USA (Turner, 1988); Arctic N America (Chengalath & Koste, 1989); Milwaukee Harbor, USA (Stemberger, 1974); Laurentian Great Lakes (Stemberger, 1979); Northern Michigan inland lakes (Stemberger, 1990); Lac Echo, Québec, Canada (Nogrady, 1976); Mt. Tremblant Prov. park, Québec, Canada (Nogrady, 1980); Bay of Quinte, Lake Ontario, Canada (Nogrady, 1988); Kingston, Ontario, Canada (Nogrady, 1989)
- Oriental region: India (Sharma & Michael, 1980)
- Australian region: Barwon river, river Darling system, S Aust. (Shiel & Walker, *s.d.*); Barwon river, Murray-Darling system, S Aust. (Shiel, 1986); ? Tasmania (Koste & Shiel, 1987); NSW, Qld & Vic, Aust. (Shiel & Koste, 1979); Oamaru & Christchurch, New Zealand (Russell, 1960)
- Neotropical region: Chile (Koste & José de Paggi, 1982); Chilean lakes (Schmid-Araya, 1991); Provinces in NW Argentina (José de Paggi, 1989); Prov. San Juan, Cordoba & Santiago del Estero, Argentina (José de Paggi, 1990)

Synchaeta tremula (O.F. Müller), f. *digitata* Krau, 1972

- Neotropical region: Brazil (Koste & José de Paggi, 1982)

Synchaeta tremuloida Pourriot, 1965

- Palaeartic region: Peat bog in the Paris suburb, France (Pourriot, 1965); France (Bērziņš, 1978)

Synchaeta triophthalma Lauterborn, 1894

- Palaeartic region: River Elbe estuary, Germany (Schulz, 1961; Rühmann, 1964); North sea in front of Nieuwpoort, Belgium (De Ridder, 1986); In polyhalinic parts of Lake Veerse Meer, NL (Bakker & De Pauw, 1975); Romania (Rudescu, 1960); North Sea & Baltic (Koste, 1981); Spain, Italy, C Eur. plain, UK, Iceland, Norway (Bērziņš, 1978); Rügener, Hiddenseer & Darszer Boddengewässer, Germany (Schwarz, 1963); Baltic Sea, Belt Sea, Kattegat, Skagerak, N & S North Sea, English Channel E & W, Bristol Channel & Irish Sea, S & W Ireland & Atlantic, Norwegian Sea (Bērziņš, 1960); Southern Baltic (Arndt *et al.*, 1990); Akkeshi Bay, E District of Hokkaido, Japan (Hada, 1972); Roscoff, Atlantic coast of Brittany, France (D'Hondt, 1970); Zuiderzee, Noordzee, Zeeland, Lake Veerse Meer, NL (Dresscher, 1976); Black Sea (Rudescu, 1961); Spain: Pontevedra (Velasco, 1990)

- Nearctic region: Chesapeake Bay, Potomac river, USA (Haimbokel *et al.*, 1988); Mc Kay Bay, Florida, USA (Koste, 1981)

- Australian region: Oamaru harbour, New Zealand (Russell, 1960)

Synchaeta verrucosa Nipkow, 1961

- Palaeartic region: Lake Zürichsee, CH (Nipkow, 1961); Lake Bielersee, CH (Berner-Fankhauser, 1983 & 1986); Great Lakes in Estonia (Haberman, 1983); Lake Võrtsjärv, Estonia (Kutikova & Haberman, 1986); Lake Walchen, Oberbayern, Germany (Koste, 1976c); Alps (Bērziņš, 1978)

Synchaeta vorax Rousselet, 1902

- Palaeartic region: Akkeshi Bay, E District of Hokkaido, Japan (Hada, 1972); North Sea in front of Nieuwpoort, Belgium (De Ridder, 1986); Romania (Rudescu, 1960); In polyhalinic parts of Lake Veerse Meer, NL (Bakker & De Pauw, 1975); Sea & brackish water in S Finland (Björklund, 1972a); W & N Norway (Eriksen, 1968); Delta of river Danube, Romania (Godeanu & Zinevici, 1983; Zinevici & Teodorescu, 1991); Spain, Italy, Bulgaria, Romania, C Eur. plains, UK, Iceland & Norway (Bērziņš, 1978); Gulf of Finland (?), Skagerak, N & S North Sea, English Channel W & E, Bristol Channel & Irish Sea, S & W Ireland & Atlantic, Norwegian Sea (Bērziņš, 1960); Rügener, Hiddenseer & Darszer Boddengewässer, Germany (Schwarz, 1963); Japanese inland waters (Yamamoto, 1960a); Southwest islands of Japan (Sudzuki *et al.*, 1992); Southern Baltic (Arndt *et al.*, 1990); Roscoff, Atlantic coast of Brittany, France (D'Hondt, 1970); Lakes N of Bucarest, Romania (Godeanu, 1969b); Obretin embanked basin, Danube delta, Rom. (Godeanu *et al.*, 1973); Villefranche-sur-Mer harbour (Alps mar.), France (Clément, 1969); Lake Veerse Meer, NL (Dresscher, 1976); Karelian inland waters, R.F. (Kutikova, 1965); Black Sea (Rudescu, 1961); Spain: Pontevedra (Velasco, 1990)

- Nearctic region: Rhode river estuary, Maryland, USA (Dolan & Gallegos, 1992)

Synchaeta spec.

- Palaeartic region: Gulf of Riga, Baltic Sea (Kostrichkina *et al.*, 1992); Lake Bolsena & L. Bracchiano, C Italy (Ferrari, 1972); Man-made lake Zegrzynskie, Poland (Dusoge *et al.*, 1985); Lago Maggiore, Italy (Tonolli, 1962; Foldman *et al.*, 1968); Lake Oerd, Ameland, NL (Leentvaar, 1967); Lake Quackjeswater & L. Breedewater, Voorne; Lake Vogelmeer, Ymuiden, NL (Leentvaar, 1963b); Lake Laarder Wasmeer, NL (Leentvaar, 1963c); Broad & peat pits in NW Overijssel, NL (Leentvaar, 1965); Delta of river Danube, Romania (Godeanu & Zinevici, 1983; Prunescu-Arion, 1989; Zinevici & Teodorescu, 1990); Nat. Res. Neeruti lakes, Estonia (Mäemets A & A, *s.d.*); N Karelia, R.F. (Vardapetyan *et al.*, 1972); Lake Nemi, C Italy (Stella *et al.*, 1978); Po river, Italy (Ferrari *et al.*, 1984 & 1989); 2 spec. in Lake Numasuma, Japan (Sudzuki *et al.*, 1989); Barther Bodden, S Baltic Sea, Germany (Vietinghoff *et al.*, 1984); Koyoma-Ike, a coastal pond in Japan (Sudzuki & Fukuta, 1989); Carp ponds in S Poland (Zurek, 1980); Lake Sempachersee, CH (Zimmermann, 1974); Lake Mälaren, Sweden (Grönberg, 1975); River Danube, Romania (Popescu-Marinescu *et al.*, 1990); Norfolk Broad, UK (Irvine *et al.*, 1990); Lakes in Mazurian lakeland, Poland (Hillbricht-Ilkowska & Weglenska, 1970); In acid lakes of S Finland (Arvola *et al.*, 1990); Lake Erken & L. Mälaren, Sweden (Blomquist & Pejler, 1980); Impoundment Helme, near Kelbra, Kyffhäuser, Germany (Heynig, 1968 & 1974); Lake Derwart, near Tournai, Belgium (Bogaert & Dumont, 1989); Fish-fattening ponds in the Ukraina (Krazhan *et al.*, 1976); Rivers in W Kazakhstan, R.F. (Petrova, 1976); Lapland State Preserve, R.F. (Ghilarov, 1972); Lake Bodensee, Germany (Walz, 1986); Small lakes in Estonia (Haberman & Mäemets, 1987); Middle course of river Po, Italy (Ferrari *et al.*, 1986); Lake Goggausee, Karinthia, Austria (Herzig & Moog, 1976); Small lakes in SW Sweden (Stenson, 1982); River Cerna basin, Romania (Brezeanu & Marinescu-Popescu, 1964); 2 lakes in Karelia, R.F. (Vardapetyan, 1972); Lakes in Estonia (Haberman, 1978); Peat pits in Finland (Selin & Koskinen, 1988); Water putification plant near Köln, Germany (Bick & Scholtyseck, 1960); Jotunheimen, Norway high mountains (Blakar & Jacobsen, 1979); River Loire, France (Lair, 1980); Fjord Himmerfjärden, N Baltic Sea, Sweden (Johansson, 1983); Lake Glubokoje, near Moscow, R.F. (Matveeva, 1983 & 1991); Lakes in Estonia (Mäemets, 1983); Asiatic Turkey (Dumont & De Ridder, 1987); Priest Pot, Lake District, UK (Hewitt &

George, 1987); Lake Buchsee, Bodensee (Einsle, 1966); Lake Mindelsee, Bodensee (Einsle, 1967); Impoundment in E Bohemia, CSR (Sladeczkova & Sladeczek, 1960); Luka nad Olzon, near Ostrava, Silesia, CSR (Sladeczek, 1969); Latorica, E Slovakia lowland, CSR (Terek, 1990a); Canals in Hran area, CSR (Terek, 1990c); Obretin Lake, Danube delta, Romania (Neagu-Godeanu *et al.*, 1968); Boatracing canal, Gent, Belgium (De Maeseener, 1972); Canal de Séclin, Nord, France (Angeli, 1972); Karagöl, near Izmir, Turkey (Ustaoglu, 1986); Akgöl (Selçuk-Izmir), Turkey (Ustaoglu & Balik, 1987); Lake Marmara, Turkey (Ustaoglu, in press); In large and medium-sized rivers, tributary to Kiev reservoir (Polishchuk, 1987); Test field Wielenbach, Bavaria, Germany (Kucklantz, 1991); Kanem reservoir (Dnjeper), R.F. (Mogil'chenko, 1986); Volgograd reservoir, R.F. (V'yushkova, 1985); Lake Lukomul, Belorussia, R.F. (Mitrakovich *et al.*, 1983); Cherepet' power plant, S of Moscow, R.F. (Kuznetsova, 1982); Brackish water Lill-Pernåviken, near Porvoo, S Finland (Järnefelt, 1964); Terek reservoir, Astrakhan peninsula, R.F. (Chuykov & Deneskin, 1985); Lake Suwa, Japan (Hanazato *et al.*, 1989); Lake Randsfjord & surroundings, Norway (Elgmark, 1966); Lake Mikolajskie & L. Taltowisko, Poland (Gliwicz *et al.*, 1978); Near Lappeenrauta, Finland (Järnefelt, 1961); Sava Lake, ex-Yugoslavia (Kalafatic, 1978); Rheinisches Braunkohlenggebiet near Zülpich, G. (Küsters *et al.*, 1975); Lake Onega, R.F. (Nikolayev, 1972); Lake Mälaren, S Sweden (Willén, 1975); Sewage-purification plant, A'dam West, NL (Dresscher, 1960); Lago Santo Parmense, N Apennines, Italy (Ferrari, 1976); Lake Mossø, DK (Jørgensen *et al.*, 1983); River Svratka, CSR (Kubicek, 1968); Backwater Lubicko, Middle-Elbe, CSR (Straskraba, 1965); In acid ponds in lower Austria (Wawrik, 1972); Korea (Turner, 1986); Southwest islands of Japan (Sudzuki *et al.*, 1992); Loosdrecht Lakes, NL (Van Tongeren *et al.*, 1992); Waldviertel area, lower Austria (Naidenow & Wawrik, 1984); Clay pits in Stuivekenskerke, Belgium (Espeel, 1979); Brackish waters near Bruges, Belgium (De Ridder & Verheye, 1980); River Elbe estuary, Germany (Giere, 1968; Schulz, 1961); Lac de Pétichet, Isère, France (Gay, 1979); Obretin embanked basin, Danube delta, Rom. (Godeanu *et al.*, 1973); Lagoon Sacca del Canarin, Po river delta, Italy (Ferrari *et al.*, 1985); University Pond, Gent, Belgium (Dumont *et al.*, 1975); New impoundments in the CSR (Kubicek, 1968); Side-arm of river Danube near Bratislava, CSR (Lichardova, 1964); Lowland brook-pond system in Boom, Belgium (Maes, 1985); Brundall, Norfolk broads, E Anglia, UK (Leah *et al.*, 1980); Bay of Bothnia, Bothnian Sea (Sandström, 1979); Hilversumse wasmeer & l. in Leersumse veld, NL (Leentvaar, 1967b); River Oder, Germany (Walter & Scharf, 1961); Shores of embanked or free flowing stretches of the Danube, at the German-Austrian border (Donner, 1972); In the lower Danube in Romania (Enaceanu, 1964); In the lower Elbe, Germany (Grimm, 1968); Mouth areas of the Danube branches & predeltaic area of Danube in the Black Sea (Popescu-Marinescu, 1974); Delta of river Danube, Romania (Rudescu & Banu, 1973); Serbian section of river Danube (Zivkovic, 1968); Lake Lauerzersee, CH (Odermatt, 1970); Lakes in NE Norway (Saeter, 1971); River Danube and its tributaries (Bothar, 1982); Lac Léman, Fr./CH (Balvay, 1989); Lake Nimetön, S Finland (Arvola *et al.*, 1986); Umba-river, White Sea basin, R.F. (Kruglova, 1991); Vistula lagoon, Poland (Adamkiewicz-Chojnacka & Rozanska, 1960); All over the Netherlands (Dresscher, 1976); W Iceland (De Ridder, 1967a); Bulgarian bank of river Danube (Naidenow, 1963); Hamburg area, Germany (Rühmann, 1961); Middle course of river Loire, France (Lair & Sargos, 1981); Garden ponds in Tokyo, Japan (Sudzuki, 1975); Fukushima Prefecture, Japan (Sudzuki, 1982); Pool, S of Trondheim, Norway (Thomasson, 1979); Lago Trasimeno, Italy (Taticchi, 1968); Saltmarshes in Cadiz, Spain (Yufera *et al.*, 1984); Gravel pits along river Meuse, NL (Wibaut-Isebree Moens, 1964); Nanao Bay, Japan (Yamazi, 1960); Pond in Erlangen-Nürnberg, Germany (Korn, 1972); Pools Erpewaaien, near Nijmegen, NL (Leentvaar, 1970); Lake Laacher See, Eifel, Germany (Eckartz-Nolden & Nolden, 1992)

- Nearctic region: Silver Lake, Adirondack mts., NY State, USA (Siegfried, 1991); L. 382, experimental lake area, NW Ontario, Can. (Malley & Chang, 1991); Frobisher bay, NWT, Canada (Chengalath, 1985); 5 small mountain lakes in Alberta, Canada (Anderson, 1968); Lake Michigan & Milwaukee harbor, USA (Stemberger, 1974); Fentrus Lake, Little Swede n° 1 L. & Trapper's L., Colorado, USA (Pennak, 1966); Ontario, Canada; Wisconsin, Illinois & Kentucky, USA (Bērziņš, 1984); Acid lakes in Maine, USA (Brett, 1989); Buzzard roost L., near Folkston, Georgia, USA (Schoenberg, 1990); 18 arctic & subarctic lakes, Canada (Moore, 1978); Lake Michigan, USA (Sandgren & Lehman, 1990); Lake Brooker, Florida, USA (Scheda & Cowell, 1988); Lakes Adirondack, NY State, USA (Siegfried *et al.*, 1984 & 1989); Colorado, USA (Turner, 1988); Experimental ponds, C Florida, USA (Fry & Osborne, 1980); Atchafalya river basin, Louisiana, USA (Holland *et al.*, 1983); James Bay area, Canada (Pinel-Alloul *et al.*, 1979); Desaulniers reservoir, Québec, Canada (Pinel-Alloul *et al.*, 1982); Lake Whitney, Cumberland, Island Nat. Seashore, US; Stoneberger & Schmock, 1980); Clearwater Lake & Swan L., near Sudbury, Ontario, Canada (Yan & Geiling, 1985); Lake Mead, Nevada-Arizona, USA (Sollberger & Paulson, 1992); Clear Lake, California, USA (Li & Li, 1979); The Sacramento-San Joaquin delta estuary, USA (Siegfried & Kopache, 1980); Mirror Lake, New Hampshire, USA (Strayer, 1985); St. Andrew Bay system, Florida, USA (Hopkins, 1966); Chesapeake Bay, Potomac river, USA (Heimbokel *et al.*, 1988); Severson Lake, Minnesota, USA (Comita,

1972); Lake Ontario, Canada (Nauwerck, 1978); Lake Erie, Canada (Davis, 1969); Narragansett Bay, Rhode Island, USA (Martin, 1965); Carter Lake, N Colorado, USA (Thomasson, 1964b); Lake 122, NW Ontario, Canada (Schindler & Novén, 1971); Rhode river estuary, Maryland, USA (Dolan & Gallegos, 1991)

- Oriental region: Taiwan (Sudzuki, 1989); Ponds in Chinglepat, Madras, India (Sreenivasan, 1968); Dal Lake, Kashmir Himalayan Lake, India (Vass & Zutshi, 1983)

- Australian region: Lake Bullenmerri (slightly saline), Aust. (Timms, 1981); In many localities in Aust. (Bērziņš, 1982); Tasmania (Koste & Shiel, 1987); Tasmania & New Zealand (Sudzuki, 1985); Farm dams near Gloucester, NSW, New Zealand (Sudzuki & Timms, 1980); Nihotupu reservoir, near Auckland, New Zealand (Green, 1974); Lakes in SW New Zealand (Stout, 1975); Sidney reservoir, NSW, Aust. (Thomasson, 1973)

- Neotropical region: Prov. Chubut, Rio Negro, Neuquen & Corrientes, Argentina (José de Paggi, 1990); Reservoir Rapel, C Chile (Soto *et al.*, 1984); Chile (Löffler, 1962); S Brazil (Arcifa, 1984); Lower Orinoco and its delta, Venezuela (Vasquez & Rey, 1989); Arroyo Rodriguez, prov. Buenos Aires, Argent. (Modenutti, 1987); Provinces of Northern Argentina (José de Paggi, 1989); Rio Nhamunda, Amazonia, Brazil (Brandorff, Koste & Smirnov, 1982); Surinam (Leentvaar, 1975); River Parana, Argentina (Paggi & José de Paggi, 1974; José de Paggi, 1978 & 1985); Eutrophic waters Santa Fé, Argentina (José de Paggi, 1976a); River Santa Fé, Argentina (José de Paggi, 1976b); River Saladillo basin, Argentina (José de Paggi & Koste, 1988); Argentina (Modenutti & Claps, 1988); Argentine Patagonia (Kuczynski, 1987b); Amazonia, Brazil (Gillard, 1967; Thomasson, 1971); Araucarian lakes, W & E of the Andes, Chile (Thomasson, 1963b)