

First addition to the World Catalogue of Pipunculidae (Diptera)

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Abstract

The first update on the world catalogue of Pipunculidae is presented here. All new species described and taxonomic changes proposed in the literature since publication of the former are summarised. Replacement names for three *Tomosvaryella* ACZÉL species are proposed. The higher taxa *Cephalops* (*Demeyerias*) KUZNETZOV and *Adella* KUZNETZOV are proposed as junior synonyms of *Cephalops* (*Cephalops*) FALLÉN and *Tomosvaryella* ACZÉL respectively.

Key words: Catalogue, Diptera, Pipunculidae, new names, new synonyms

Introduction

The first author published a world catalogue of Pipunculidae (Diptera) in 1996 (DE MEYER, 1996a), comprising all names of taxa incorporated in this family with author, year of publication and reference to the original description. In addition, for (sub)specific taxa, the original generic combination, type locality, type depository, and distribution were added as well as any additional remarks when necessary. The catalogue comprises all names published before January 1st 1996 of which the author was aware. It was suggested that regular updates should be published.

Since then, several new species have been described and a number of taxonomic changes have been proposed in the literature. We hereby give a summary of these additions and changes published before June 1st 2000. For descriptions of new species, the information is given in the same format as in DE MEYER (1996a). For other taxonomic changes the information is briefly summarised. Abbreviations used are in the same format as in the original catalogue. Only new type depositories and references are listed at the end of the article, for others we refer to the lists published in DE MEYER (1996a). In addition, replacement names for three homonyms and two new synonyms for higher taxa are presented in this paper. Not included in this update are the distributional additions published in the literature since January 1996. It is envisaged that in the near future, the updated catalogue can be consulted through the internet. Distributional records will then also be updated.

Newly described species since publication of DE MEYER (1996a)

Genus *Nephrocerus* ZETTERSTEDT, 1838

Nephrocerus auritus XU & YANG, 1997: 32. – T.I.: People's Republic of China, Gansu Prov., Wen Co., Gaoluoshan. – T.d.: HFRI. DISTRIBUTION. Palearctic: PRC.

Genus *Pipunculus* LATREILLE, 1802

Pipunculus abnormis SKEVINGTON in SKEVINGTON & MARSHALL, 1998: 25. – T.I.: Mexico, Veracruz, Cordoba. – T.d.: UCD. DISTRIBUTION. Nearctic: USA (AZ). Neotropical: Costa Rica, México.

Pipunculus albidus SKEVINGTON in SKEVINGTON & MARSHALL, 1998: 27. – T.I.: USA, Arizona, Cochise Co., Chiricahua Mts. – T.d.: SEM. DISTRIBUTION. Nearctic: USA (AZ).

Pipunculus basilicus SKEVINGTON in SKEVINGTON & MARSHALL, 1998: 31. – T.I.: Canada, Ontario, Wellington Co., Guelph, Stone Road East. – T.d.: CNC. DISTRIBUTION. Nearctic: Canada (ON, QU); USA (FL, IL, IN, KS, MD, MO, NC, NJ, NY, OK, VA).

Pipunculus bulbistylus SKEVINGTON in SKEVINGTON & MARSHALL, 1998: 33. – T.I.: USA, Kansas, Lawrence, North Hollow. – T.d.: CMNH. DISTRIBUTION. Nearctic: USA (KS).

Pipunculus dentatus SKEVINGTON in SKEVINGTON & MARSHALL, 1998: 42. – T.I.: USA, Arizona, Cochise Co., Huachuca Mts, Miller Canyon. – T.d.: UCB. DISTRIBUTION. Nearctic: USA (AZ, NM).

Pipunculus hastatus SKEVINGTON in SKEVINGTON & MARSHALL, 1998: 52. – T.I.: USA, Arizona, Cochise Co., Chiricahua Mts, Herb Martyr Dam. – T.d.: CNC. DISTRIBUTION. Nearctic: USA (AZ).

Pipunculus kotaneni SKEVINGTON in SKEVINGTON & MARSHALL, 1998: 63. – T.I.: USA, Nevada, Clark Co., Charleston Peak, Kyle Canyon. – T.d.: CAS. DISTRIBUTION. Nearctic: USA (AZ, NV, WY). Neotropical: Mexico.

Pipunculus maritimus SKEVINGTON in SKEVINGTON & MARSHALL, 1998: 67. – T.I.: Canada, Prince Edward I, Green Gables, Cavendish Beach. – T.d.: CNC. DISTRIBUTION. Nearctic: Canada (NB, PE).

Pipunculus nanus SKEVINGTON in SKEVINGTON & MARSHALL, 1998: 69. – T.I.: USA, Washington, Okanagan Co, 9 mi NW Conconully, Salmon Meadows. – T.d.: WSU. DISTRIBUTION. Nearctic: Canada (BC); USA (AZ, CO, NM, WA).

Pipunculus nodus SKEVINGTON in SKEVINGTON & MARSHALL, 1998: 72. – T.I.: USA, Arizona, Huachuca Mts, 15 mi S Sierra Vista, Ramsey Canyon. – T.d.: CNC. DISTRIBUTION. Nearctic: USA (AZ).

Pipunculus papulus SKEVINGTON in SKEVINGTON & MARSHALL, 1998: 73. – T.I.: USA, California, San Bernardino Co., Mountain Home. – T.d.: UCD. DISTRIBUTION. Nearctic: USA (CA).

Pipunculus platystylus SKEVINGTON in SKEVINGTON & MARSHALL, 1998: 75. – T.I.: USA, New Mexico, Grant Co., 14 mi N Silver City, Cherry Creek Campground. – T.d.: CNC. DISTRIBUTION. Nearctic: USA (AZ, NM).

Pipunculus torus SKEVINGTON in SKEVINGTON & MARSHALL, 1998: 81. – T.I.: Canada, Ottawa, Carleton Co., 5 mi E Ottawa, Mer Bleu. – T.d.: CNC. DISTRIBUTION. Nearctic: Canada (AL, MA, NB, NE, NS, ON, QU); USA (CA, DC, GA, KS, ME, MD, MI, MO, MS, NH, NY, OH, OK, OR, PA, RI, UT, VA, WA, WI).

Genus *Cephalops* FALLÉN, 1810

Subgenus *Cephalops* s. str.

Cephalops (Cephalops) pedernalensis RAFAEL, 1996: 368. – T.I.: Dominican Republic, Pedernales, 23.5 km N Cabo Rojo. – T.d.: CMNH. DISTRIBUTION. Neotropical: Dominican Republic.

Genus *Cephalosphaera* ENDERLEIN, 1936

Subgenus *Cephalosphaera* s.str.

Cephalosphaera (Cephalosphaera) guanacastensis RAFAEL & MENEZES, 1999: 515. – T.I.: Costa Rica, Prov. Guanacaste, Parque Nacional Guanacaste, 9 km S Santa Cecilia, Estación Pitilla. – T.d.: INBC. DISTRIBUTION. Neotropical: Costa Rica.

Cephalosphaera (Cephalosphaera) insularis RAFAEL, 1996: 367. – T.I.: Dominican Republic, Pedernales, 26 km N Cabo Rojo. – T.d.: CMNH. DISTRIBUTION. Neotropical: Dominican Republic, Jamaica.

Cephalosphaera (Cephalosphaera) prionotaina SKEVINGTON, 1999: 254. – T.I.: Australia, Queensland, nr Teddington Weir, S of Maryborough. – T.d.: AMS. DISTRIBUTION. Australasian/Oceanian: Australia (QLD).

Cephalosphaera (Cephalosphaera) procera RAFAEL & MENEZES, 1999: 516. – T.I.: Costa Rica, Prov. Puntarenas, Peninsula Osa, Cerro La Torre, Finca La Purruja, Fila Matahambre. – T.d.: INBC. DISTRIBUTION. Neotropical: Costa Rica.

Cephalosphaera (Cephalosphaera) zumbadoi RAFAEL & MENEZES, 1999: 518. – T.I.: Costa Rica, Prov. Puntarenas, Peninsula Osa, Fila Casa Loma. – T.d.: INBC. DISTRIBUTION. Neotropical: Costa Rica.

Subgenus *Neocephalosphaera* DE MEYER

Cephalosphaera (Neocephalosphaera) eukrenaina SKEVINGTON, 1999: 248. – T.I.: Australia, Queensland, Scrub Rd, Brisbane Forest Park. – T.d.: QMBA. DISTRIBUTION. Australasian/Oceanian: Australia (QLD).

Cephalosphaera (Neocephalosphaera) parthenopipis SKEVINGTON, 1999: 251. – T.I.: Australia, Queensland, Carnarvon NP, Mt Moffatt Section, Mt Moffatt Summit. – T.d.: QMBA. DISTRIBUTION. Australasian/Oceanian: Australia (NSW, QLD).

Cephalosphaera (Neocephalosphaera) petila SKEVINGTON, 1999: 252. – T.I.: Australia, Queensland, Carnarvon NP, Mt Moffatt Section, Mt Moffatt Summit. – T.d.: QMBA. DISTRIBUTION. Australasian/Oceanian: Australia (QLD).

Genus *Collinias* ACZÉL, 1940

Collinias fulvicaudus DE MEYER, 1996b: 395. – T.I.: Congo (Democratic Republic), Parc National Garamba, “Makpe/8”. – T.d.: KBIN. DISTRIBUTION. Afrotropical: Congo (Democratic Republic), South Africa.

Genus *Microcephalops* DE MEYER, 1989

Microcephalops minisculus DE MEYER, 1996b: 390. – T.I.: Kenya, 25 km NW Kericho. – T.d.: NMK. DISTRIBUTION. Afrotropical: Kenya.

Microcephalops montanus DE MEYER, 1996b: 392. – T.I.: Kenya, Timboroa. – T.d.: NMK. DISTRIBUTION. Afrotropical: Kenya.

Genus *Elmohardyia* RAFAEL, 1987

Elmohardyia adunca RAFAEL & MENEZES, 1999: 525. – T.I.: Costa Rica, Prov. Puntarenas, Monteverde, San Luis. – T.d.: INBC. DISTRIBUTION. Neotropical: Costa Rica.

Elmohardyia aquinoi MENEZES & RAFAEL, 1997: 282. – T.I.: Brazil, Pará, Santarém, Vila Inanú. – T.d.: INPA. DISTRIBUTION. Neotropical: Brazil.

Elmohardyia bifida RAFAEL & MENEZES, 1999: 526. – T.I.: Costa Rica, Prov. Guanacaste, Parque Nacional Rincon de La Vieja, Estación Las Pailas. – T.d.: INBC. DISTRIBUTION. Neotropical: Costa Rica.

Elmohardyia concava MENEZES & RAFAEL, 1997: 283. – T.I.: Brazil, Pará, Belém, Floresta APEG. – T.d.: MPEG. DISTRIBUTION. Neotropical: Brazil.

Elmohardyia conchulata MENEZES & RAFAEL, 1996: 89. – T.I.: Brazil, Amazonas, 60 km N Manaus, Fazenda

Esteio ZF-3 km-23. – T.d.: INPA. DISTRIBUTION. Neotropical: Brazil.

Elmohardya costaricana RAFAEL & MENEZES, 1999: 528. – T.l.: Costa Rica, Prov. Guanacaste, Parque Nacional Guanacaste, 9 km S Santa Cecilia, Estación Pitilla. – T.d.: INBC. DISTRIBUTION. Neotropical: Costa Rica.

Elmohardya echinata MENEZES & RAFAEL, 1997: 284. – T.l.: Brazil, Rondonia, Ouro Preto do Oeste, Reserva INPA. – T.d.: INPA. DISTRIBUTION. Neotropical: Brazil.

Elmohardya galeata RAFAEL & MENEZES, 1999: 528. – T.l.: Costa Rica, Prov. Guanacaste, Parque Nacional Guanacaste, 9 km S Santa Cecilia, Estación Pitilla. – T.d.: INBC. DISTRIBUTION. Neotropical: Costa Rica.

Elmohardya hispida MENEZES & RAFAEL, 1997: 286. – T.l.: Brazil, Amazonas, Manaus, Reserva Ducke. – T.d.: INPA. DISTRIBUTION. Neotropical: Brazil.

Elmohardya immaculata MENEZES & RAFAEL, 1997: 287. – T.l.: Brazil, Amazonas, Manaus, Campus Universitário. – T.d.: INPA. DISTRIBUTION. Neotropical: Brazil.

Elmohardya maculata MENEZES & RAFAEL, 1997: 532. – T.l.: Costa Rica, Prov. Puntarenas, Monteverde, San Luis. – T.d.: INBC. DISTRIBUTION. Neotropical: Costa Rica.

Elmohardya manaos MENEZES & RAFAEL, 1996: 87. – T.l.: Brazil, Amazonas, 26 km NE Manaus, Reserva Ducke. – T.d.: INPA. DISTRIBUTION. Neotropical: Brazil.

Elmohardya oriximinaensis MENEZES & RAFAEL, 1997: 289. – T.l.: Brazil, Pará, Oriximiná, Rio Trombetas, Alcoa Mineração, Cruz Alta. – T.d.: INPA. DISTRIBUTION. Neotropical: Brazil.

Elmohardya parva MENEZES & RAFAEL, 1997: 292. – T.l.: Brazil, Amazonas, Parque Nacional do Jaú, Novo Airão. – T.d.: INPA. DISTRIBUTION. Neotropical: Brazil.

Elmohardya rosalyae MENEZES & RAFAEL, 1997: 293. – T.l.: Brazil, Pará, Alter do Chão. – T.d.: INPA. DISTRIBUTION. Neotropical: Brazil.

Elmohardya subtilis MENEZES & RAFAEL, 1997: 294. – T.l.: Brazil, Amazonas, Manaus, Reserva PDBFF. – T.d.: INPA. DISTRIBUTION. Neotropical: Brazil.

Elmohardya tricuspis MENEZES & RAFAEL, 1997: 296. – T.l.: Brazil, Amazonas, Manaus, Reserva PDBFF. – T.d.: INPA. DISTRIBUTION. Neotropical: Brazil.

Elmohardya valida MENEZES & RAFAEL, 1997: 300. – T.l.: Brazil, Amazonas, Manaus, Reserva PDBFF. – T.d.: INPA. DISTRIBUTION. Neotropical: Brazil.

Genus *Eudorylas* Aczél, 1940

Eudorylas abnormalis RAFAEL & MENEZES, 1999: 520. – T.l.: Costa Rica, Prov. Cartago, Amistad, Area Conservación, Finca Génesis II. – T.d.: INBC. DISTRIBUTION. Neotropical: Costa Rica.

Eudorylas blascoi DE MEYER, 1997: 424. – T.l.: Spain, Zaragoza Prov., Monegros, Pina de Ebro, Retuerta de Pina. – T.d.: KBIN. DISTRIBUTION. Palaeartic: E.

Eudorylas caledonicus ACKLAND, 1999: 35. – T.l.: Great Britain, Scotland, Aberdeenshire, Glen Tanar. – T.d.: UMO. DISTRIBUTION. Palaeartic: GB.

Eudorylas curvicaudatus RAFAEL, 1996: 377. – T.l.: Dominican Republic, Hato Mayor, Parque Los Haitises, 3 km W Cueva de Arena. – T.d.: CMNH. DISTRIBUTION. Neotropical: Dominican Republic.

Eudorylas dilatatus DE MEYER, 1997: 426. – T.l.: Spain, Alicante, Moraira. – T.d.: KBIN. DISTRIBUTION. Palaeartic: E.

Eudorylas dominicanensis RAFAEL, 1996: 377. – T.l.: Dominican Republic, Pedernales, 7 km NE Los Arroyos. – T.d.: CMNH. DISTRIBUTION. Neotropical: Dominican Republic.

Eudorylas echinatus RAFAEL & MENEZES, 1999: 520. – T.l.: Costa Rica, Prov. Guanacaste, Parque Nacional Barra Honda, 3 km NO de Nacaome. – T.d.: INBC. DISTRIBUTION. Neotropical: Costa Rica.

Eudorylas falcifer DE MEYER, 1997: 427. – T.l.: Spain, Zaragoza Prov., Monegros, Pina de Ebro, Retuerta de Pina. – T.d.: KBIN. DISTRIBUTION. Palaeartic: E.

Eudorylas falx RAFAEL & MENEZES, 1999: 522. – T.l.: Costa Rica, Prov. Guanacaste, Parque Nacional Rincón de La Vieja, Estación Las Pailas. – T.d.: INBC. DISTRIBUTION. Neotropical: Costa Rica.

Eudorylas goennersdorfensis DEMPEWOLF & DUNK, 1996: 93. – T.l.: Germany, Rheinland-Pfalz Daun, Gönnersdorf, Mäuerchenberg. – T.d.: ZMFK. DISTRIBUTION. Palaeartic: D.

Eudorylas johnenae DEMPEWOLF, 1996: 89. – T.l.: Germany, Rheinland-Pfalz, Eifel, Stadtkyll. – T.d.: ZMFK. DISTRIBUTION. Palaeartic: D.

Eudorylas macrocerus RAFAEL in RAFAEL & ALE-ROCHA, 1997: 33. – T.l.: Chile, Chiloé I, Ahoni Alto. – T.d.: CMNH. DISTRIBUTION. Neotropical: Chile.

Eudorylas mediterraneus DE MEYER & ACKLAND in DE MEYER, 1997: 431. – T.l.: Crete, Georgiopolis. – T.d.: BMNH. DISTRIBUTION. Palaeartic: E, GR.

Eudorylas monegrensis DE MEYER, 1997: 431. – T.l.: Spain, Zaragoza Prov., Monegros, Pina de Ebro, Retuerta de Pina. – T.d.: KBIN. DISTRIBUTION. Palaeartic: E.

Eudorylas moragai RAFAEL & MENEZES, 1999: 522. – T.l.: Costa Rica, Prov. Guanacaste, Parque Nacional Guanacaste, 9 km S Santa Cecilia, Estación Pitilla. – T.d.: INBC. DISTRIBUTION. Neotropical: Costa Rica.

Eudorylas serratus RAFAEL & MENEZES, 1999: 523. – T.l.: Costa Rica, Prov. Guanacaste, Parque Nacional Guanacaste, 9 km S Santa Cecilia, Estación Pitilla. – T.d.: INBC. DISTRIBUTION. Neotropical: Costa Rica.

Eudorylas tumidus DE MEYER, 1997: 434. – T.l.: Spain, Zaragoza Prov., Monegros, Pina de Ebro, Retuerta de Pina. – T.d.: KBIN. DISTRIBUTION. Palaeartic: E.

Eudorylas vineti DEMPEWOLF, 1996: 87. – T.l.: Germany, Rheinland-Pfalz, Pommern/Mosel. – T.d.: ZMFK. DISTRIBUTION. Palaeartic: D.

Eudorylas vunderdunki DEMPEWOLF, 1998: 535. – T.l.: Germany, Bavaria, Nuremberg forest nr Günthersbühl. – T.d.: ZMFK. DISTRIBUTION. Palaeartic: D.

Eudorylas wahisi DE MEYER, 1997: 435. – T.l.: Spain, Alicante, Moraira. – T.d.: KBIN. DISTRIBUTION. Palaeartic: E.

Genus *Metadorylas* RAFAEL, 1987

Metadorylas antillensis RAFAEL, 1996: 375. – T.l.: Dominican Republic, Pedernales, 23.5 km N Cabo Rojo. – T.d.: CMNH. DISTRIBUTION. Neotropical: Dominican Republic.

Metadorylas cornutus RAFAEL, 1996: 374. – T.l.: Dominican Republic, Pedernales, 3.3 km NE Los Arroyos. – T.d.: CMNH. DISTRIBUTION. Neotropical: Dominican Republic.

Metadorylas pilosus RAFAEL, 1996: 376. – T.l.: Dominican Republic, Pedernales, 23.5 km N Cabo Rojo. – T.d.: CMNH. DISTRIBUTION. Neotropical: Dominican Republic.

Metadorylas youngi RAFAEL, 1996: 372. – T.l.: Dominican Republic, Pedernales, 26 km N Cabo Rojo. – T.d.: CMNH. DISTRIBUTION. Neotropical: Dominican Republic.

Genus *Tomosvaryella* ACZÉL, 1939

Tomosvaryella aurata ALE-ROCHA, 1996: 166. – T.l.: Argentina, Ostende. – T.d.: INPA. DISTRIBUTION. Neotropical: Argentina.

Tomosvaryella bissulca ALE-ROCHA, 1996: 167. – T.l.: Chile, Santiago, La Rinconada Maipú. – T.d.: CAS. DISTRIBUTION. Neotropical: Chile.

Tomosvaryella chilensis ALE-ROCHA, 1996: 167. – T.l.: Chile, Mulchen, Caledonia. – T.d.: LEP. DISTRIBUTION. Neotropical: Chile.

Tomosvaryella crinita ALE-ROCHA, 1996: 169. – T.l.: Argentina, Santiago del Estero, Los Tigre. – T.d.: INPA. DISTRIBUTION. Neotropical: Argentina.

Tomosvaryella curta ALE-ROCHA, 1996: 170. – T.l.: Chile, Santiago, El Canelo. – T.d.: CAS. DISTRIBUTION. Neotropical: Chile.

Tomosvaryella diffusa ALE-ROCHA, 1996: 170. – T.l.: Brazil, Paraná, Umuarama. – T.d.: INPA. DISTRIBUTION. Neotropical: Argentina, Brazil, Guyana.

Tomosvaryella ekypphysis ALE-ROCHA, 1996: 172. – T.l.: Brazil, Mato Grosso, Chapada dos Guimarães. – T.d.: INPA. DISTRIBUTION. Neotropical: Argentina, Brazil.

Tomosvaryella hildeae DE MEYER, 1997: 440. – T.l.: Spain, Alicante, Moraira. – T.d.: KBIN. DISTRIBUTION. Palaeartic: E.

Tomosvaryella hispanica DE MEYER, 1997: 440. – T.l.: Spain, Zaragoza Prov., Monegros, Pina de Ebro, Retuerta de Pina. – T.d.: KBIN. DISTRIBUTION. Palaeartic: E.

Tomosvaryella hortobagyensis FÖLDVÁRI & DE MEYER, 2000: 323. – T.l.: Hungary, Hortobágy National Park, Újszentmargita, Margitai erdő. – T.d.: HNHM. DISTRIBUTION. Palaeartic: H.

Tomosvaryella incompta ALE-ROCHA, 1996: 172. – T.l.: Brazil, Paraná, Ponta Grossa, Vila Velha. – T.d.: INPA. DISTRIBUTION. Neotropical: Brazil.

Tomosvaryella longiseta ALE-ROCHA, 1996: 174. – T.l.: Argentina, La Plata. – T.d.: MLP. DISTRIBUTION. Neotropical: Argentina, Paraguay.

Tomosvaryella manauensis ALE-ROCHA, 1996: 174. –

T.l.: Brazil, Amazonas, Manaus, Reserva Ducke. – T.d.: INPA. DISTRIBUTION. Neotropical: Brazil.

Tomosvaryella magyarica FÖLDVÁRI & DE MEYER, 2000: 330. – T.l.: Hungary, Oszla, Cserépfalu. – T.d.: HNHM. DISTRIBUTION. Palaeartic: CH, H.

Tomosvaryella pectinalis ALE-ROCHA, 1996: 177. – T.l.: Chile, Santiago, La Rinconada. – T.d.: CAS. DISTRIBUTION. Neotropical: Argentina, Chile.

Tomosvaryella platensis ALE-ROCHA, 1996: 179. – T.l.: Argentina, Buenos Aires, La Plata. – T.d.: MLP. DISTRIBUTION. Neotropical: Argentina.

Tomosvaryella pruinosa ALE-ROCHA, 1996: 181. – T.l.: Chile, Santiago, Quebrada de La Plata. – T.d.: CAS. DISTRIBUTION. Neotropical: Chile.

Tomosvaryella resurgens DE MEYER, 1997: 442. – T.l.: Spain, Alicante, Moraira. – T.d.: KBIN. DISTRIBUTION. Palaeartic: E.

Tomosvaryella sepulta DE MEYER, 1997: 444. – T.l.: Spain, Alicante, Moraira. – T.d.: KBIN. DISTRIBUTION. Palaeartic: E.

Tomosvaryella spinosa ALE-ROCHA, 1996: 183. – T.l.: Argentina, Santiago del Estero, Los Tigres. – T.d.: INPA. DISTRIBUTION. Neotropical: Argentina.

Tomosvaryella virlai ALE-ROCHA, 1996: 185. – T.l.: Argentina, Buenos Aires, La Plata. – T.d.: MLP. DISTRIBUTION. Neotropical: Argentina.

Replacement names

Pipunculus rafaeli SKEVINGTON in SKEVINGTON & MARSHALL, 1998: 77 (n.n. for *Pipunculus hardyi* RAFAEL, 1991; preocc. YANG & XU, 1989: 160)

Tomosvaryella amazonensis **nom. nov.** [after the type locality, Amazon forest] (n.n. for *Tomosvaryella pulchra* ALE-ROCHA, 1993; preocc. KOZÁNEK, 1992: 10)

Tomosvaryella gobiensis **nom. nov.** [after the type locality, Gobi desert] (n.n. for *Tomosvaryella armata* KUZNETZOV, 1994; preocc. HARDY, 1940: 106)

Tomosvaryella santiagoensis **nom. nov.** [after the type locality, Santiago] (n.n. for *Tomosvaryella pruinosa* ALE-ROCHA, 1996; preocc. KOZÁNEK, 1992: 8)

Resurrections from synonymy

Pipunculus cingulatus LOEW, 1866 recognised as distinct species: SKEVINGTON & MARSHALL, 1998: 37.

Pipunculus curvitibiae HARDY, 1939 recognised as distinct species: SKEVINGTON & MARSHALL, 1998: 40.

Pipunculus hertzogi (RAPP, 1943) recognised as distinct species: SKEVINGTON & MARSHALL, 1998: 54.

Pipunculus horvathi KERTÉSZ, 1907 recognised as distinct species: SKEVINGTON & MARSHALL, 1998: 57.

Pipunculus luteicornis CRESSON, 1911 recognised as distinct species: SKEVINGTON & MARSHALL, 1998: 65.

Pipunculus townsendi MALLOCH, 1913 recognised as distinct species: SKEVINGTON & MARSHALL, 1998: 83.

Pipunculus viduus CRESSON, 1911 recognised as distinct species: SKEVINGTON & MARSHALL, 1998: 86.

Eudorylas clavatus (BECKER, 1898) recognised as distinct species: DEMPEWOLF, 1996: 90.

Tomosvaryella albiseta (CRESSON, 1911) recognised as distinct species: WOODLEY & HILBURN, 1994: 41.

Synonyms

Parapipunculus RAFAEL, 1986, junior synonym of *Pipunculus* LATREILLE, 1802. Syn.: SKEVINGTON & MARSHALL, 1998: 2.

Cephalops (*Demeyerias*) KUZNETZOV, 1995b: 323, **syn.nov.** of the nominate subgenus of *Cephalops* FALLÉN, 1810. The subgenus *Demeyerias* was erected for those *Cephalops* species with multiple rows of dorsocentral hairs on the thorax. KUZNETZOV (1995b) mentions *Cephalops conjunctivus* COLLIN, 1931 [= error, should be COLLIN, 1958] as type species but does not list any other species incorporated in this higher taxon. Study by the first author of *C. conjunctivus* and other related *Cephalops* spp. from the Afrotropical region (DE MEYER, 1989, 1992) has shown that characters regarding wing venation and male genitalia structure place these species in the nominate subgenus. They were grouped together in the *obtusus* subgroup by DE MEYER (1992) but there is no validation to recognize them as a separate sistergroup of the nominate subgenus or any of the other subgenera within *Cephalops*. It is therefore considered as being synonymous with the nominate subgenus.

Dorylomorpha (*Claraeomorpha*) KAPOOR, GREWAL & SHARMA, 1987, junior synonym of *Dorylomorpha* ACZÉL, 1939. Syn.: KUZNETZOV, 1995b: 324. *Claraeomorpha* is erroneously listed as a genus by KUZNETZOV (1995b) and no mention is made of its subgeneric position. From the structure of the male surstyli, which show the typical ventral projection of inner lobes, it falls under the subgenus *Dorylomyia* ALBRECHT, 1990. This position is confirmed by Albrecht (in litt.).

Adella KUZNETZOV, 1995b: 324, **syn.nov.** of *Tomosvaryella* ACZÉL, 1939. The genus *Adella* was apparently erected by KUZNETZOV (1995a). However this article does not seem to be publicly available. Although it is mentioned in the list of references in KUZNETZOV (1995b) as being published in the third issue of part 6 of the International Journal of Dipterological Research, none of the subscribers have received this particular issue. Neither this reference nor the proposed genus have appeared in the Zoological Record (including the most recent edition of 1999). The mention of the genus in KUZNETZOV (1995b) with indication of type species can however be considered as a valid publication. It is a monotypic genus, erected for *Pipunculus hirticollis* BECKER, 1910. Study of material of this species shows only minor external differences from other *Tomosvaryella* species such as dense pilosity on the thorax and scutellum. The male genitalia appear to be of a symmetrical shape not unlike that found in other *Tomosvaryella* species. These differences do not

seem to validate separate generic status and we therefore propose to synonymise *Adella* with *Tomosvaryella*.

Pipunculus alpinus CRESSON, 1911, junior synonym of *Pipunculus cingulatus* LOEW, 1866. Syn.: SKEVINGTON & MARSHALL, 1998: 37.

Pipunculus angus CRESSON, 1911, junior synonym of *Pipunculus horvathi* KERTÉSZ, 1907. Syn.: SKEVINGTON & MARSHALL, 1998: 57.

Pipunculus cingulatus var. *velutinus* CRESSON, 1911, junior synonym of *Pipunculus horvathi* KERTÉSZ, 1907. Syn.: SKEVINGTON & MARSHALL, 1998: 57.

Pipunculus constrictus BANKS in CRESSON, 1911, junior synonym of *Pipunculus elegantulus* WILLISTON, 1892. Syn.: SKEVINGTON & MARSHALL, 1998: 44.

Pipunculus nitidiventris LOEW, 1866, junior synonym of *Pipunculus fuscus* LOEW, 1866. Syn.: SKEVINGTON & MARSHALL, 1998: 49.

Pipunculus phaeton COE, 1966, junior synonym of *Pipunculus hertzogi* RAPP, 1943. Syn.: SKEVINGTON & MARSHALL, 1998: 54.

Pipunculus stricklandi CURRAN, 1927, junior synonym of *Pipunculus elegantulus* WILLISTON, 1892. Syn.: SKEVINGTON & MARSHALL, 1998: 44.

Tomosvaryella rondanii (COLLIN, 1945), junior synonym of *Tomosvaryella minima* (BECKER, 1898). Syn.: FÖLDVÁRI & DE MEYER, 2000: 320.

New combinations

Pipunculus elegantulus WILLISTON, 1892 formerly under *Parapipunculus*: see SKEVINGTON & MARSHALL, 1998: 44.

Pipunculus tibialis (HARDY, 1943) formerly under *Parapipunculus*: see SKEVINGTON & MARSHALL, 1998: 78.

Cephalops (*Semicephalops*) *stygius* (HARDY, 1948) considered as a subspecies of *Cephalops* (*Semicephalops*) *varius* (CRESSON, 1911): see RAFAEL, 1991a: 369.

Cephalosphaera (*Cephalosphaera*) *mocaensis* (HARDY, 1948) formerly under subgenus *Neocephalosphaera*: see RAFAEL, 1996: 367.

Microcephalops mutuus (Hardy, 1968) comb. nov., formerly under *Eudorylas*. The type was examined by the authors.

Names omitted in DE MEYER (1996a)

Pipunculus dubrensis STEPHENS, 1829: 266 (nomen nudum, mentioned as probably synonym of *Cephalops aeneus*. See also CHANDLER (1998) for discussion of this publication and names included therein).

Pipunculus meridionalis KERTÉSZ in ACZÉL, 1944 (nomen nudum, listed under *Tomosvaryella kuthyi* ACZÉL, 1944: 92 and unavailable).

Other taxonomic changes proposed in the literature

KUZNETZOV (1995b) proposed the erection of the several subtribal and tribal divisions. The justification for these

changes in the higher classification of Pipunculidae are based on a cluster analysis of 91 morphological characters (KUZNETZOV, 1995b: 322), the publication of which was not included in the paper but announced to be in press (KUZNETZOV, 1995b). Since this justification is not publicly available yet and the changes proposed are considerable, we prefer to await the publication of the aforementioned analysis before listing these. The position of Eudorylini and subtribes and genera herewithin will be discussed in a separate paper by the second author, as part of a phylogenetic revision of this group. Propositions or changes presented by KUZNETZOV (1995b) with regard to *Adella*, *Dorylomorpha* (*Claraeomorpha*) and *Cephalops* (*Demeyerias*) are discussed above under the heading synonyms. The status of the genus *Neodorylas* by this author, is subject to a ruling by the ICZN (DE MEYER & SKEVINGTON, 1999) and will not be discussed here.

New abbreviations:

CMNH: Carnegie Museum of Natural History, Pittsburgh, PA, USA

HFRI: Hunan Forestry Research Institute, Ghangsha, People's Republic of China

INBC: Instituto Nacional de Biodiversidad (INBio), Santa Domingo de Heredia, Costa Rica

MLP: Museu de Ciencias Naturales de La Plata, La Plata, Argentina

MPEG: Museu Paraense Emilio Goeldi, Belém, Brazil

NMK: National Museums of Kenya, Nairobi, Kenya

NSW: New South Wales, Australia

QLD: Queensland, Australia

QMBA: Queensland Museum, South Brisbane, Queensland, Australia

UCB: University of California, Berkely, California, USA

UCD: University of California, Davis, California, USA

WSA: Washington State University, James Entomological Collection, Pullman, Washington, USA

ZMFK: Koenig Museum, Bonn, Germany

Acknowledgements

The authors wish to thank Thierry Backeljau (KBIN, Brussels), Peter Chandler (Burnham, UK), Chris Thompson (USNM, Washington D.C.) and Ian White (BMNH, London), for checking certain aspects pertaining this update and/or providing copies of particular references.

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