longer postpedicel and acute axillary angle of wing.

Distribution. France (Corsica).

Microphorella curtipes (BECKER, 1910)

Material examined: France (Corsica), Vallée du Fango, 1 female, 23.V.1992 (sample II C2; leg. Marie-Cécile ANDREÏ-RUIZ (RBINS).

Remarks. Although BECKER (1910) described this species, as *Sciodromia curtipes*, from Corsica, other material has not been available ever since (CHVÁLA, 1988).

Distribution. Southern Europe (North Italy and Corsica).

Acknowledgements

We thank Dr. Marie Cécile ANDREÏ-RUIZ very heartily for allowing us to study her samples. We also thank Dr. Christophe DAUGERON for revising our manuscript. The second author acknowledges for a grant of the Belgian Federal Services for Scientific, Technical and Cultural Affairs.

References

- BECKER, Th., 1910. I. Orthorrhapha Brachycera. In BECKER et al. Dipterologische Sammelreise nach Korsika (Dipt.). Deutsche Entomologische Zeitschrift 1910: 635-665.
- CHVÁLA, M., 1970 (1969). Revision of Palaearctic species of the genus *Tachydromia Meig.* (=Tachista Loew) (Diptera, Empididae). Acta entomologica Musei nationalis Pragae 38: 415-524.
- CHVÁLA, M., 1988. Revision of Palaearctic Microphoridae (Diptera). 3. Parathalassiinae (Parathalassius MIK and Microphorella BECKER). Acta entomologica bohemoslovaka., 85: 352-372.
- CHVÁLA, M., 1988. A new species of Stilpon LOEW (Dipt., Hybotidae) related to S. nubilus Collin from England and western Europe. Entomologist's Monthly Magazine 124: 225-231.
- SMITH, K.V.G., 1969. The Empididae of Southern Africa (Diptera). Annals of the Natal Museum 19: 1-347.
- STARK, A. & M. CHVÁLA, 1997. A New Species of the Afrotropical Genus Lamachella (Diptera: Hybotidae), Found in Temperate Europe. Acta Universitatis Carolinae Biologica 41: 323-327.

Bulletin S.R.B.E./K.B.V.E., 139 (2003): 252-258

New Asilidae (Diptera) from Thailand: contribution 1

by G. Tomasovic¹ & P. Grootaert²

- ¹ Faculté des Sciences Agronomiques, Zoologie générale et appliquée, Passage des Déportés 2 B-5030 Gembloux, Belgium.
- ² Department of Entomology, Royal Belgian Institute of Natural Sciences, Vautierstreet, 29, B-1000 Brussels, Belgium.

Abstract

Five new Asilid species are described from the area around the Field Research Station at Na Haeo, Loei province, Northeast Thailand: *Anacinaces nahaeoensis* sp. nov., *Clephydroneura promboonae* sp. nov., *Michotamia siamensis* sp. nov., *Saropogon thailandensis* sp. nov. and *Laloides tigris* sp. nov. A lectotype is designated for *Laloides phalaris* (OSTEN SACKEN, 1882).

Résumé

Cinq espèces nouvelles d'Asilidae sont décrites des environs de la station de recherche de Na Haeo (province de Loei, Nord-Est de la Thaïlande): Anacinaces nahaeoensis sp. nov., Clephydroneura promboonae sp. nov., Michotamia siamensis sp. nov., Saropogon thailandensis sp. nov. and Laloides tigris sp. nov. Un lectotype est désigné pour Laloides phalaris (OSTEN SACKEN, 1882).

Introduction

This is the first paper in a series of notes devoted to the Asilidae that were collected in Northeast Thailand. Many specimens were collected by sweep netting in a dry mixed deciduous forest. Others were collected with a Malaise trap placed along the border of a bamboo-woodland, at the Field Research Station of Srinakharinwirot University (FIRS) at Na Haeo in the Loei province. A detailed description of the site can be found in GROOTAERT & VERAPONG (in press).

The Asilidae from Thailand are poorly known. Only 14 species from 10 genera are cited for this country but we have seen species belonging to 22 genera of which 15 are new for Thailand: Ammophilomima Enderlein, 1914, Anacinaces Enderlein, 1914, Anoplothyrea De Meliere, 1914, Choerades Walker, 1851, Damalis Fabricius, 1805, Dichaetothyrea De Meliere, 1914, Lagynogaster Hermann, 1917, Laphystia Loew, 1847, Microstylum Macquart, 1838, Ommatius Wiedemann, 1821, Pegesimallus Loew, 1857, Philonicus Loew, 1848, Psilonyx Aldrich, 1923, Saropogon Loew, 1847 and Trigonomima Enderlein, 1914.

In the present paper we describe 5 species new for science.

New species

Subfamily ASILINAE SCHINER, 1862

Tribe Asilini

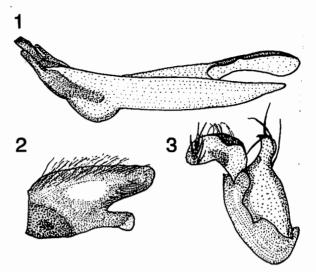
Genus Anacinaces EnderLein, 1914

The genus Anacinaces contains 3 species: A. gigas ENDERLEIN, 1914, holotype female from Sumatra, A. ochriventris (BECKER, 1925), holotype, male from Taiwan and A. rufiventris (MACQUART, 1838) described from a female from India.

Anacinaces nahaeoensis sp. nov. Figs 1-3

Material examined: Holotype male and 1 paratype female: Thailand, Loei prov., Na Haeo (FIRS), 5-12.V.2001, Light trap, leg. CONSTANT & GROOTAERT (RBINS); 2 females, Loei prov., Na Haeo (FIRS), 15-19.V.2003, Light trap, leg. CONSTANT, SMETS & GROOTAERT.

Male. Body length 23 mm. Grey with black markings.



Figs 1-3. Anacinaces nahaeoensis sp. nov. Holotype male: 1. aedeagus; 2. gonocoxite; 3. epandrium.

Head: Face beard with strong, black setae mixed with white hair and with hair between the tubercle and the antennae. Face tubercle strong occupying half of face. Occipital setae black, hairs white. Antennae lost. Palpi with strong black hairs, white hairs more slender.

Thorax: Mesonotum black with two fine median and one lateral grey stripes. Setae, 3 notopleural, 5 supraalar, 4 postalar, 6 dorsocentral, 8 scutellar all black. Scutellum with fine blak hairs on disc. Wings brownish. Legs black. Setae on legs black.

Abdomen: Greyish-brown with long white hairs on tergites 1-3, on following tergites, they are short and yellowish. White hairs on the sternites; last sternites with short and black hairs.

Male genitalia: (Figs 1-3). Hypopygium brownblackish, parts of epandrium with a deep concavity at the ventral apical process. Gonocoxites: short, with one broad strong pointed process, long black hairs at the apical process. Aedeagus with wide sheath with three strong apical process.

Derivatio nominis: The species is named after the type locality Na Haeo which means small rice field.

Differential diagnosis: The species of Anacinaces are very closely related but A. nahaeoensis can be distinguished from the other species by its colour that is greyish instead of other or yellowish. To recognize the species with certainty, the only character is the shape of the genitalia.

Genus Clephydroneura BECKER, 1925

This genus contains 47 species: 10 Palaearctic (China) and 37 Oriental. To identify the species of the Oriental region we have the studies of OLDROYD (1938), JOSEPH & PARUI (1979-1995) and PARUI & DAS (1995).

3 species are known from Indochina and 2 from Thailand: *C. sundaica* (JAENNICKE, 1867) and *C. xanthopa* (WIEDEMANN, 1819).

Clephydroneura promboonae sp. nov. Figs 4-7

Material examined: Holotype male: Thailand, Loei prov., Na Haeo (FIRS) 27.III-03.IV.2001. Malaise trap (leg. VERAPONG KIATSOONTHORN & P. GROOTAERT). Paratypes (4): 1 male, Na Haeo (FIRS) Malaise trap, 18-25.III.2001; 1 male, 27.III-03.IV.2001; 1 male. 3-10.IV.2001, leg. VERAPONG & P. GROOTAERT; 1 male, Na Haeo, Khring Nam Tok, 7.V.2001, leg. P. GROOTAERT (RBINS).

Male. Body length 8 mm. Coloration greyyellow and yellow.

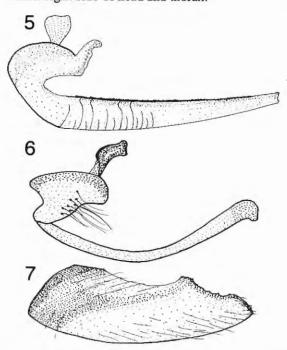
Head: Broader than thorax. Face with silvery tomentum; frons and occiput similar, all bristles white-yellowish, 2 fine very short black hairs on ocellar tubercle. Antennae pale brown, segment 3 and arista mostly black, segment 1 and 2 with black bristles; segment 1 twice as long as segment 2, segment 3 nearly equally long as segments 1+2, style as long as 1+2+3. Palpi and proboscis darkbrown with white hairs.

Thorax: Grey to yellowish tomentum. Pronotum with 4 yellowish bristles and fine white hairs. Mesonotum with 2 medial brown stripes on anterior 2/3. Setae black, 2 notopleural, 1 supraalar, 1 postalar, 6 long postsutural dorsocentral bristles; remaining bristles minute. Scutellum without setae, with small black hairs only on disc and at edge. Wings hyaline, not infuscated. Legs yellow. Femora: anteriorly with long, fine ventral yellowish bristles, middle and hind femora with fine, long yellowish bristles and black setae. Tibiae: fore and middle with long, fine yellow bristles and black setae, hind tibia with black setae only. Front tarsi yellow with black setae, last two segments rather darker.

Abdomen: Uniformly greyish. Tergite 1 with a tuft of white setae at sides, 2 posterior yellowish setae on each side of tergites 2-5, medially with



Fig. 4. *Clephydroneura promboonae* sp. nov. Holotype male: right side of head and thorax.



Figs 5-7. Clephydroneura promboonae sp. nov. Holotype male: 5. aedeagus; 6. gonocoxite and dististylus; 7. epandrium.

sparse, small black hairs. Sternites with sparse fine yellowish hairs; sternite 8 triangular with 2 brushes of long, yellow hairs.

Male genitalia: (Figs 5-7). Epandrium with fine, short black hairs, nearly rectangular with a concavity before the rounded apex. Gonocoxites shorts with few long bristles. Dististylus long, slender, parallel-sided, slightly bulged at apex. Aedeagus long, nearly parallel-sided without prongs. Apodeme small.

Derivatio nominis: The present species is dedicated to Prof. Dr. SUMONTA PROMBOON for her stimulation of the research on biodiversity in Thailand.

Differential diagnosis: This species can be distinguished from other species by the wings not being infuscated, the uniformly yellow legs, the shape of tergite 8 and the male genitalia.

Tribe Ommatini

Genus Michotamia MACQUART, 1838

MACQUART (1838, p. 72) erected the genus and described the species *M. analis* from a male originating from Java, a dding that this genus a lso occurs in India. Since than, 21 species have been described in that genus, the last being *M. assamensis* JOSEPH & PARUI, 1994, described, as 7 other species of that genus, from India; the others being known mainly from Indonesia (Java) and the Phillipines. 1 species: *M. aurata* (FABRICIUS, 1794), widespread in India, also occurs in Thailand; an illustration of the antennae, wing and head of this species is provided by HULL (1962).

Michotamia siamensis sp. nov. Figs 8-11

Material examined: Holotype male: Thailand, Loei prov., Na Haeo (FIRS), 3-10.IX.2001, Malaise trap, leg. VERAPONG & GROOTAERT (IRSNB).

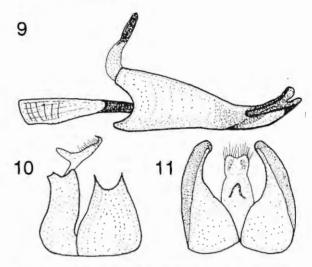
Male. Body length 9 mm. Coloration yellow and black.

Head: Face, frons and occiput with yellowish tomentum. Face narrow at the base of antennae markedly widening at the mouth margin. Ocellar tubercle black. Face beard and occiput with yellow setae. Antennae: segment 1 black with short black setae; segment 2 yellow with short and one long black setae; segment 3 black, very long more than 3 times as segment 1+2; arista with one row of spaced hairs. Palpi black with black hairs. Occipital setae and hairs yellowish.

Thorax: Pronotum, mesonotum and scutellum with yellowish tomentum. Pleura with a dense yellow tomentum. Setae, black and yellow: 2 notopleural, 1 postalar, dorsocentrals absent. Scutellum without setae, but some short yellow hairs on margin. Postnotal fan with a row of 4 yellow setae. Wings hyaline with microtrichia. Legs yellow with black setae. Hind femora with a small lateral and ventral brown spot.



Fig. 8. Michotamia siamensis sp. nov. Holotype male: left side of head.



Figs 9-11. Michotamia siamensis sp. nov. Holotype male: 9. aedeagus; 10. gonocoxite, dististylus and hypandrium.

Abdomen: Yellow with short black hairs, tergite 1 brownish with black and yellow setae, tergite 2 with 2 small brown spots. Sternites yellow.

Male genitalia: (Figs 9-11) yellow. Epandrium slender, conical with rounded apex and fine pale hairs. Proctiger large. Gonocoxites rectangular, dististylus situated at the apex. Dististylus with a pointed and a rounded process at the apex. Aedeagus long, conical, without prongs; a notch with two rounded process in the apical part.

Differential diagnosis: It differs from other species in the genus by its entirely yellow abdomen (except for two small black patches on the second tergite) and its genitalia.

Derivatio nominis: the name refers to the country of origin.

Tribe Saropogonini

Saropogon LOEW, 1847

The genus *Saropogon* is cosmopolitan, but only 8 species are known from the Oriental region: 2 from the Philippines, 2 from Indonesia (Java), 2 from India and 2 from Sri-Lanka (JOSEPH & PARUI, 1983).

Saropogon thailandensis sp. nov. Figs 12-15

Material examined: Holotype male: Thailand, Loei prov., Na Haeo FIRS (malaise trap), 24-30.IV.2000, leg. VERAPONG & GROOTAERT (RBINS).

Male. Body length 8 mm. Coloration blackish and with yellow legs.

Head: Face densely covered with silver tomentum. Face beard confined to a single row of 7 black setae on epistome. Frons shining black extending behind the ocellar tubercle which has two short black bristles. Occiput with silver tomentum and black setae. Antennae black, segment 1 markedly longer than segment 2, segment 3 twice longer than segment 1+2; with grey tomentum. Palpi brown with light yellow hairs.

Thorax: Black. Anterior part of the mesonotum with 1 greyish spot on each side and 1 indistinct darker stripe in middle, completely covered with light short hairs, setae black. Scutellum with 2 strong black marginal setae. Legs with yellow setae. Femora yellow. Fore and mid tibiae with a fine brown stripe; the apical spine on fore tibia small and slightly curved. Hind tibia brownish. Tarsi brownish with black and yellow setae.

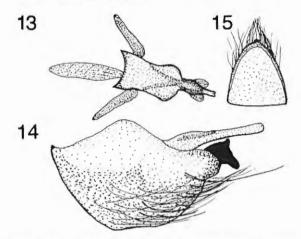
Abdomen shining black with narrow white stripes at the posterior margin of each tergite. One strong, black seta at side of first tergite.

Male genitalia (Figs 13-15). Epandrium triangular with long pale setae. Apical process of gonocoxites black, short and bulky. Dististylus long, slender with rounded apex. Aedeagus with a large ventral hump, apical part slightly curved. Two ventral processes boomerang-shaped. Apodeme large.

Differential diagnosis: This species is close to Saropogon rubricosus BEZZI, 1917 but it differs in the coloration (legs entirely yellow) and the genitalia.



Fig. 12. Saropogon thailandensis sp. nov. Holotype male: left side of head.



Figs 13-15. Saropogon thailandensis sp. nov. Holotype male: 13. aedeagus dorsally; 14. gonocoxite and dististylus; 15. epandrium.

Subfammily LAPHRIINAE MACQUART, 1838 Tribe Laphriini

Genus Laloides OLDROYD, 1972

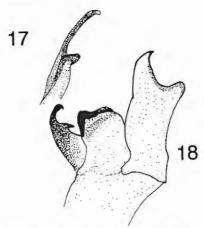
At the moment 4 species of Laloides are known in the Oriental region Oldroyd (1975): L. auripes Bromley, 1930 is reported from Malaysia, L. phalaris (Osten-Sacken, 1882) and L. pseudolus (Osten-Sacken, 1882) are known from the Philippine Islands Oldroyd (1972) and L. productus (Walker, 1857) is known from Borneo.

Laloides phalaris (OSTEN SACKEN, 1882) Figs 16-18

Material examined: In the collection of the Museum in Eberswalde (curator Dr. J. ZIEGLER), there are 5 syntypes of Laphria phalaris OSTEN



Fig. 16. Laloides phalaris (OSTEN SACKEN) dorsal view of head and thorax.



Figs 17-18. Laloides phalaris (OSTEN SACKEN). Male. 17. tip of median prong; 18. gonocoxite and dististylus.

SACKEN, 2 males, 2 females and one specimen spoilt without genitalia. We have studied the genitalia (Figs 17-18) of one male and in order to avoid ambiguity concerning the nominal taxon Laloides phalaris, a male is designated here as lectotype (3 manuscript labels: Philippines / Coll. O.S. / Laphria phalaris O.S.; 1 printed label: Syntypus). 3 other specimens are designated as paralectotypes: 1 male and 2 females (each with following labels: 1 manuscript: Laphria phalaris O.S. and 1 printed: Syntypus). The spoilt specimen is not designated as paralectotype (According to Article 74.3).

Laloides tigris sp. nov. Figs 19-20

Material examined: Holotype male: Thailand, Loei prov., Na Haeo, FIRS 25.V.2000, sample n° 20023, leg. P. GROOTAERT. Paratypes: 1 female, Na Haeo, 22.V.2003, Malaise trap 2; 1 male, Na Haeo, 22.V.2003, Malaise trap 1, leg. P. GROOTAERT.

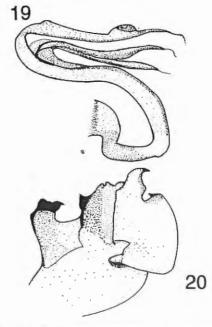
Male: Body length 20 mm. Coloration yellow with black markings. All chaetotaxy yellow or orange.

Head: frons and face covered with dense yellow tomentum. Mystax dense, yellow with stiff bristles below and hairs above that reach the base of antennae. Antennae completely orange, two basal segments with short bristles and hairs, first segment 3 time longer than the rather globular small second segment. Ocellar tubercle shiny. Second segment of palpi long, yellow with yellow hairs. Proboscis orange.

Thorax: Mesonotum yellow, on middle a large black stripe that does not reach scutellum, in this stripe one fine yellow stripe. 2 notopleural, 3 supraalar, 3 postalar, 6 scutellar bristles. Scutellum yellow with a small black spot at base.

Abdomen: Tergites, 1 with a longitudinal blackish stripe at the middle, 3 with two black spots, 4-5-6 entirely blackish.

Genitalia (figs 19-20) yellow. Aedeagus with three long, wide, cup-shaped tubes. The median tube differs from the lateral tubes in its apical part. This feature is somewhat similar to some species of the genus *Apoclea MACQUART*, 1838 of the subfamily Asilinae THEODOR (1976).



Figs 19-20. Laloides tigris sp. nov. Holotype male: 19. aedeagus; 20. gonocoxite and dististylus.

Apical process of gonocoxites large with black tips. Dististylus broad at base, apical part with curved, pointed apex and a pointed subapical tubercle.

Derivatio nominis: Lat. tigris = tiger, alludes to the colour of the body being black and yellow.

Differential diagnosis: differs from the three other species by the antennae completely orange and by the contrasted colour of the body that is black and yellow. It differs above all by the male genitalia.

Acknowledgements

We are very grateful for the help of the colleagues of Srinakharinwirot University, more particularly Prof. Dr. SUMONTA PROMBOON, rector of SWU, Prof. Dr. PUNSIN KETUDAT, Prof. Dr. DHASANEEYA SAKDEE, Prof. Dr. VERAPONG KIATSOONTORN and Dr. LA-AW AMPORNPAN. The authors thank Mr. J. CONSTANT for field assistance and preparation as well as Mr. P. LIMBOURG for his help in preparing the specimens.

References

GROOTAERT P. & VERAPONG KIATSOONTHORN (in press). - Insects of Na Haeo: a preliminary survey and seasonal dynamics of dolichopodid and empidid flies. (*La-aw Ampornpan and Shivcharn S. Dhillion. Eds*). The Environment of Na Haeo, Thailand: A SOURCEBOOK: 14 pp.

- HULL F.M., 1962. Robberflies of the World, United States National Museum, Bulletin 224. 1-907.
- JOSEPH A.N.T. & PARUI P., 1979. New and little-known Indian Asilidae (Diptera) III key to Indian Clephydroneura BECKER with descriptions of eight new species. Entomologica Scandinavica 10 (1), 33-41.
- JOSEPH A.N.T. & PARUI P., 1983. A review of the Asilidae (Diptera) from the Oriental region. *Oriental insects*, 17: 269-393.
- JOSEPH A.N.T. & PARUI P., 1994. On Asilidae (Diptera) from India and adjacent countries present in the California Academy of Sciences. The Wasmann Journal of Biology 50 (1-2), 1-38.
- MACQUART P.J.M. 1838. Diptères exotiques nouveaux ou peu connus. Mem. Soc. Sci. Agric. et Arts, Lille, 1, Asilidae pp. 14-156.
- OLDROYD H., 1938. Notes on the genus Clephydroneura Becker (Diptera: Asilidae). Annals and Magazine of Natural History 11 (i): 450-471.
- OLDROYD H., 1972. Robber flies (Diptera: Asilidae) of the Philippine Islands. *Pacific insects*, 14 (2): 201-337.
- PARUI P. & DAS, B.N., 1995. Three new species of Clephydroneura (Diptera: Asilidae) from South India. Record of the Zoological Survey of India, 95 (1-2), 23-29.
- THEODOR H., 1976. On the Structure of the Spermathecae and Aedeagus in the Asilidae and thier Importance in the Systematics of the Family, Jerusalem, 175 pp.

}