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DIPTERA OF THAILAND
A summary of the families and genera with references to the species representations*

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Results of the Diptera identifications in the materials collected by the workers of the Hungarian Natural History Museum (HNHM) in Thailand in 2003 and 2004 are reported (supplemented by a collection in 2000 of the MHNG). A summary of the dipterous families and genera represented in Thailand are given with references to the species representations. Twenty-four families are reported for the first time from Thailand, by which representatives of 99 Diptera families are known from Thailand. Several genera and species are recorded also from Vietnam. Three new genera, *Asiodixa* L. PAPP, gen. n. (Dixidae, type species *A. maculosa* sp. n.), *Bisubcosta* L. PAPP, gen. n. (Keroplatidae, type species *B. oligoneura* sp. n.) and *Stenocyamops* L. PAPP, gen. n (Stenomicridae, type species *S. thaii* sp. n.) and a subgenus *Paramyioides* (*Spinitrochanter*) L. PAPP, subg. n. (Milichiidae, type species *P.* (*S.*) *horrida* sp. n.), as well as 29 new species are described from Thailand: *Asiodixa maculosa* L. PAPP, sp. n., *Asiodixa pura* L. PAPP, sp. n., *Thaumalea nigronitida* L. PAPP, sp. n., *Mesochria thaii* L. PAPP, sp. n., *Bisubcosta oligoneura* L. PAPP, sp. n., *Heteropterna oroszi* L. PAPP, sp. n., *Heteropterna thaii* L. PAPP, sp. n., *Platyroptilon jarujini* L. PAPP, sp. n., *Setostylus alienus* L. PAPP, sp. n., *Xenokeroplatus continentalis* L. PAPP, sp. n., *Lycosepsis biseta* L. PAPP, sp. n., *Lycosepsis oedipus* L. PAPP, sp. n. *Formicosepsis paratinctipennis* L. PAPP, sp. n., *Strongylophthalmyia dorsocentralis* L. PAPP, sp. n., *Strongylophthalmyia macrocera* L. PAPP, sp. n., *S. palpalis* L. PAPP, sp. n., *S. thaii* L. PAPP, sp. n., *Noonamyia sasakawai* L. PAPP, sp. n., *Spaniocelypus paradentatus* L. PAPP, sp. n., *Odinia thaii* L. PAPP, sp. n., *Aldrichiomyza iwasai* L. PAPP, sp. n., *Paramyioides* (*Spinitrochanter*) *horrida* L. PAPP, sp. n., *P.* (*S.*) *spinosa* L. PAPP, sp. n., *Campichoeta* (*Thryptocheta*) *flavicauda* L. PAPP, sp. n., *Cyamops fumipennis* L. PAPP, sp. n., *Stenomicra flava* L. PAPP, sp. n., *Podocera claripennis* L. PAPP, sp. n., *P. variegata* L. PAPP, sp. n., *Stenocyamops thaii* L. PAPP, sp. n. With 139 figures.

Key words: Diptera, Thailand, Vietnam, *Asiodixa, Bisubcosta, Stenocyamops, Paramyioides* (*Spinitrochanter*), new species in Dixidae, Thaumaleidae, Mycetobiidae, Keroplatidae, Cypselosomatidae, Strongylophthalmyiidae, Lauxaniidae, Celyphidae, Odiniidae, Milichiidae, Campichoetidae, Stenomicridae, first records for Thailand of Diadocidiidae, Anisopodidae, Mythicomyiidae, Lonchopteridae, Pseudopomyzidae, Megamerinidae, Nothybidae, Gobryidae, Lonchaeidae, Chamaemyiidae, Asteiidae, Anthomyzidae, Cryptochetidae, Teratomyzidae, Neurochaetidae, Scathophagidae.

* With a contribution by Dr VALERY A. KORNEYEV (Schmalgausen Institute of Zoology, Kiev).

CONTENTS

INTRODUCTION

The Diptera fauna of Thailand is rather unevenly known. There are families, e.g. Culicidae, Tabanidae, Strongylophthalmyiidae and Muscidae, where one may think that a majority of the extant fauna has already been made known. On the other hand, there are species rich dipterous families, e.g. Mycetophilidae, Sciaridae, Hybotidae, Empididae, Dolichopodidae, Syrphidae, Chloropidae, Sphaeroceridae, etc., in which only a minor proportion has been surveyed yet. Thailand was not a colony, and it was not a target for collecting activities as Taiwan was for H. SAUTER. The old material was scattered, the "classical" works on the flies of the Oriental region, or more concretely, of SE Asia contain rather few occurrence data, and Thailand (formely "Siam") was the type locality of a rather low number of dipterous species.

The publication of the Catalog of the Diptera of the Oriental Region (CDO; DELFINADO & HARDY 1973, 1975, 1977) was an important action in the faunistic survey of the Oriental flies but that was not a turning point in the survey of Thailand Diptera. We estimate that more works and more first records of species were published in the last three decades than formerly. Unfortunately, as far as we are informed, neither a summary of Thailand Diptera, nor a history of the Diptera survey in Thailand has hitherto been published. However, in some families, particu-

larly so for those of medical and veterinary importance, professional collection activity, reliable identifications through international cooperation and publication of important, high quality papers were made. We think, that the most important momentum in all this development has been the activity of highly educated Thai colleagues, who are able to produce high quality papers, summaries, etc., mainly for the species of medical importance. Studies on physiology, genetics, toxicology, parasitology, etc., resulted in a number of papers published in the best international journals. Contrarily, there was no national collection of Diptera, which would serve as a solid base for a broad faunistic survey. Most recently, Prof. Dr. JARUJIN NABHITABHATA (National Science Museum, Klong Luang, Phatumthani) and other leading personalities of Thailand science decided to build such a collection. An establishment of collection facilities (which is difficult and expensive under a tropical climate) and creating positions for well-educated Diptera curators are needed as a starting point.

All those were the elements of the situation in the faunistics of Thai flies, when the workers of the Hungarian Natural History Museum made collection trips to Thailand in 2003 and 2004. Two of us (LP and MF) spent a month there in 2004. We captured an estimated number of 250 000 dipterous specimens, which we selected under stereomicroscopes on site. We selected somewhat more than eleven thousand individuals (see more below); a good part of them were minuten-pinned on site, the rest were put into vials with p-dichlorbenzol. Collection specimens were produced at the HNHM in Budapest in 2004–2005. The species richness, which we experienced while selecting those flies to families and groups, motivated us to write a more comprehensive paper on the Diptera of Thailand.

We aimed at a compilation of the family representations, possibly with a complete involvement of the genera hitherto reported. We had originally intended to publish all the dipterous species, which were described from Thailand, mentioned by name in our paper. We have mostly done so, but there are instances, where just the papers with original descriptions are quoted. We hope that our references contain all the papers with original descriptions. As for species, in some cases we have only referred to papers with lists of first records, particularly so for some species rich families. Since we are not specialists in a number of dipterous families, it was difficult to find information sources sometimes. Some papers are cited on their information content as stated in databases. In addition, there are papers, whose author(s) and bibliographical data were found but not seen, so we simply do not know, whether they contain new records or not (e.g. PAKARUSEREE 1979, 198), SANGVARANOND 1989).

Our paper is not to be used without the Catalog of the Diptera of the Oriental Region (CDO) only. In the references we only exceptionally quoted bibliographic

data from the individual chapters of the CDO. The "Selected Bibiliography" of the CDO has caused many problems for workers because it does not contain complete bibliographical data. We had intended to publish complete data but in cases we did not manage to find the original source, and consequently, the incomplete entries may be erroneous in our References as well.

The "References" part is a bibliography of 772 works, which is much more than expected. In addition, we are afraid that a good number of papers did not come to our attention, and so are not listed. For us that large number seems to be the result of a very large number of papers with scattered data for Thai flies. In comparison, the "Checklist of the Diptera of Hungary", which contains 5500 species, listed 869 works. We think those two numbers are comparable, since the number of works, on general morphology, annotated lists or summarising works without first records, etc., must not be much different.

We do not assume that the present paper will be more than just a source of faunistical records. However, we would like to stress the feasibility of our methods: Diptera specialists must go to the tropics to capture large numbers of flies, which are selected on site in order to have as many species representations as possible, collection specimens must be produced just after the collection trip and additional efforts must be made in their selection and partial identification in order to make them accessible for true scientific elaboration.

Below we publish a rather high proportion of unnamed species, estimated numbers of species under generic names, etc. We did so in order to inform colleagues about the quality and quantity of our material. For lack of expertise, we did not attempt selecting specimens into genera in several families. On the other hand, there are several thousand specimens in families such as the Dolichopodidae, Ephydridae, Drosophilidae and Muscidae, where our experience enabled us to select them into genera and species groups. We will do so in the near future but we have not been able to find time for such a selection before closing this MS. It is a matter of course that not less than first records of species, or, descriptions of new species are the factual results in a faunistic survey. However, we are not forced to send out materials for identification. There is no more any possibility for open, long-term loans from the HNHM. On the other hand, we hope that all this material may serve as parts of revisions on Oriental Diptera. European colleagues have an opportunity to visit our collection in the frame of the SYNTHESYS project. Any visitors are welcome with free use of our facilities and without a bench fee.

Abbreviations used in this paper – **HNHM**: Hungarian Natural History Museum, **MHNG**: Muséum d'histoire naturelle Genève; ♂: male(s); ♀: female(s); **CDO**: A Catalog of the Diptera of the Oriental Region, Vol. 1: 1973, Vol. 2: 1975,

Vol. 3: 1977 (for bibliographic data see References); **fig(s)**: figures other than in this work; **indiv.**: individual(s); **sp.**: species; **spp.**: more than one species; **N**: north, **S**: south, etc.; **FSz03**: collections of M. FÖLDVÁRI, A. SZAPPANOS *et. al*. in 2003; **PF04**: collections of L. PAPP and M. FÖLDVÁRI in 2004.

The abbreviations of characteristic setae in the descriptions of flies are the conventional abbreviations used in the Diptera literature. Wing veins are named as in KRZEMIŃSKI & EVENHUIS (2000) and in MATILE (1990).

*

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We would like to thank Dr. RUDOLF ROZKOŠNÝ (Brno University, Czech Republic), Dr. A. L. OZEROV and Dr. A. I. SHATALKIN (both Zoological Museum, Moscow University, Russia) for the identifications of the specimens in the MHNG of the families Stratiomyidae, Xylomyidae, Sciomyzidae; Sepsidae and Psilidae, respectively.

Mr. ANDRÁS OROSZ (Dept of Zoology, HNHM) was our partner in the collection trip in 2004; all his contribution to the successful collecting activity is much appreciated. LÁSZLÓ PEREGOVITS, ÁDÁM KŐRÖSI, Dr. ALBERT SZAPPANOS and Dr. BALÁZS MAKLÁRI-KIS were M. FÖLDVÁRI's collecting partners in 2003; their contribution is heartily thanked also here.

We would like to thank Mrs CSILLA RICSÓY for her assistance in typing and ordering bibliographical data. Our thanks are due to our assistants, Mrs JUDIT GALAMBOS, Mrs ZSUZSA PETROVICS and Mrs ESZTER ZAHORÁNSZKY-VIDA for the careful and precise work in mounting, labelling, etc. of the material from Thailand.

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MATERIALS AND METHODS

This paper is based on dipterous specimens collected during two collection trips by the staff members of the Hungarian Natural History Museum in 2003 and in 2004 (as well as that of B. MERZ's in 2000). Below we give data of the collection sites, which are shown also on a small map. When communicating locality data of the dipterous species below, only the code of the localities (given in **bold** in the lists below) are given for the sites in 2003 and 2004. However, collection label data of the type specimens are faithfully quoted.

Below locality data are quoted from itineraries, and as label data are found in the HNHM collection.

Sampling sites in Viet Nam and Thailand 2003, L. PEREGOVITS, M. FÖLDVÁRI, Á. KŐRÖSI, A. SZAPPANOS & B. MAKLÁRI-KIS Nov. 17 – Dec. 02, 2003, collection sites in Thailand (**FSz03/x**)

No. 7. Fang, Mae Fang National Park, headquarters, 19. XI., leg. L. PEREGOVITS, M. FÖLDVÁRI, Á. KŐRÖSI, A. SZAPPANOS & B. MAKLÁRI-KIS

No. 8. Fang, Mae Fang National Park, Doi Pha Hom Pok, 2000 m, 20. XI., UV light, leg. L. PEREGOVITS, M. FÖLDVÁRI, Á. KŐRÖSI, A. SZAPPANOS & B. MAKLÁRI-KIS

No. 9. Fang, Mae Fang National Park, Doi Pha Hom Pok, 1430 m, 21. XI., swept along creek and forest road, leg. M. FÖLDVÁRI

No. 10. Fang, Mae Fang National Park, Doi Pha Hom Pok, 1560 m, 21. XI., UV light, leg. L. PEREGOVITS, M. FÖLDVÁRI, Á. KŐRÖSI, A. SZAPPANOS & B. MAKLÁRI-KIS

No. 11. Fang, Mae Fang National Park, Doi Pha Hom Pok, 2000 m, 22–23. XI., swept along forest road and creeks, leg. M. FÖLDVÁRI

No. 12. Fang, Mae Fang National Park, Doi Pha Hom Pok, 2000 m, 22–23. XI., UV light, leg. L. PEREGOVITS, M. FÖLDVÁRI, Á. KŐRÖSI, A. SZAPPANOS & B. MAKLÁRI-KIS

No. 13. Fang, Mae Fang National Park, Doi Pha Hom Pok, 2000 m, 21–24. XI., yellow pan traps, leg. L. PEREGOVITS, M. FÖLDVÁRI, Á. KŐRÖSI, A. SZAPPANOS & B. MAKLÁRI-KIS

No. 14. Fang, Mae Fang National Park, Doi Pha Hom Pok, 2000 m, 24. XI., with methyl-eugenol, leg. M. FÖLDVÁRI

No. 15. Yanae, 28 km W from Mae Suai, 24. XI., UV light, leg. L. PEREGOVITS, M. FÖLDVÁRI, Á. KŐRÖSI, A. SZAPPANOS & B. MAKLÁRI-KIS

No. 16. Rong Rian Ban Mai Phang Kba, 800 m, N 19° 36' E 100° 45', 25. XI., UV light, leg. L. PEREGOVITS, M. FÖLDVÁRI, Á. KŐRÖSI, A. SZAPPANOS & B. MAKLÁRI-KIS

No. 17. Tham Sakoen National Park, 26. XI., N 19° 23' E 100° 38', swept over and along creek in forest, leg. M. FÖLDVÁRI & A. SZAPPANOS

No. 18. Doi Phuka National Park, headquarters, 26–27. XI., UV light, leg. L. PEREGOVITS, M. FÖLDVÁRI, Á. KŐRÖSI, A. SZAPPANOS & B. MAKLÁRI-KIS

No. 19. Doi Phuka National Park, headquarters, 27–28. XI., yellow pan traps, leg. L. PEREGOVITS, M. FÖLDVÁRI, Á. KŐRÖSI, A. SZAPPANOS & B. MAKLÁRI-KIS

No. 20. ca. 5 km NE from the intersection of roads No 1081 and No 1307 towards Ban Nam Lee Pattana, 28. XI., UV light, leg. L. PEREGOVITS, M. FÖLDVÁRI, Á. KŐRÖSI, A. SZAPPANOS & B. MAKLÁRI-KIS

No. 21. Tham Sakoen National Park headquarters, 29–30. XI., N 19° 23' E 100° 38', leg. L. PEREGOVITS, M. FÖLDVÁRI, Á. KŐRÖSI, A. SZAPPANOS & B. MAKLÁRI-KIS

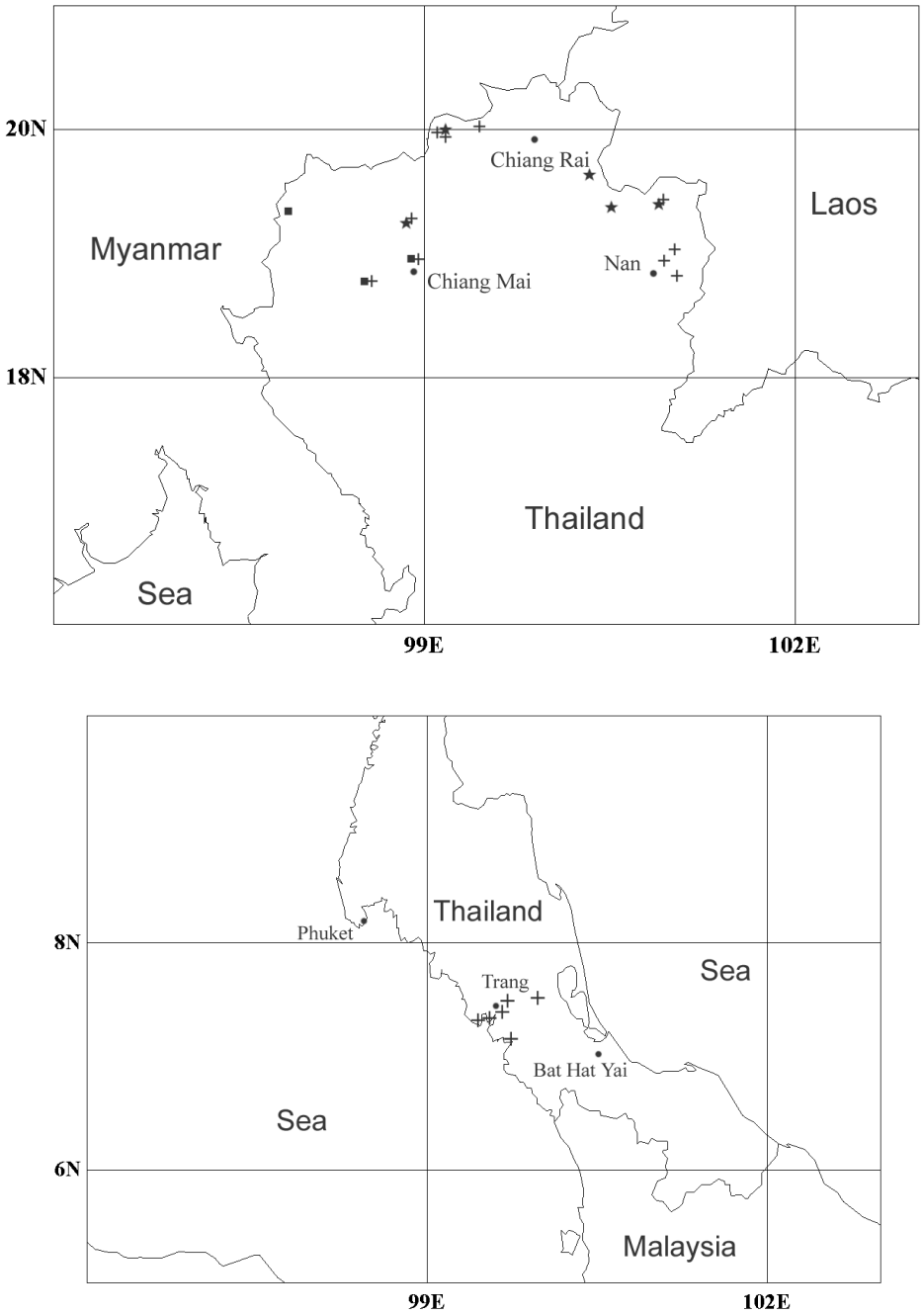
No. 22. Tham Sakoen National Park headquarters, 30. XI – 01. XII., N 19° 23' E 100° 38', on methyl-eugenol, leg. M. FÖLDVÁRI, L. PEREGOVITS & A. SZAPPANOS

No. 23. Tham Sakoen National Park headquarters, 30. XI – 01. XII., N 19° 23' E 100° 38', on cue-lure, leg. M. FÖLDVÁRI, L. PEREGOVITS & A. SZAPPANOS

No. 24. Tham Sakoen National Park headquarters, 30. XI – 01. XII., N 19° 23' E 100° 38', yellow pan traps, leg. L. PEREGOVITS, M. FÖLDVÁRI, Á. KŐRÖSI, A. SZAPPANOS & B. MAKLÁRI-KIS

No. 25. Mae Ta Man elephant park, 45 km N from Chiang Mai, swept on elephant dung, 01. XII., leg. M. FÖLDVÁRI, L. PEREGOVITS & A. SZAPPANOS

The 2003 collection material from Vietnam and Thailand are 3733 dipterous individuals, of which more than 2700 individuals are from Thailand.



Legend: ■ – 2000, B. MERZ; ★ – 2003, FÖLDVÁRI *et al.*; + – 2004, PAPP & FÖLDVÁRI

Sampling sites in Thailand, 2004
L. PAPP and M. FÖLDVÁRI (**PF04/x**)

No. 1. Chiang Mai, Doi Suthep N.P., 2 km down to Phuping Palace, groove in forest, Oct 28, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 2. ibid., from garbage containers, Oct 28/31, leg. L. PAPP
No. 3. ibid., besides and over small waterfalls, Oct 28, leg. L. PAPP & M. FÖLDVÁRI
No. 4. Pak Thang Salwang, ca. 30 km N Chiang Mai, pine plantation, on cow pats, Oct 29, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 5. Mae Taeng Elephant Camp, 50 km N of Chiang Mai, on elephant dung, Oct 29, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 6. Pak Thang Salwang, ca. 30 km N Chiang Mai, pine plantation, weeds & herbs, Oct 29, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 7. Doi Inthanon N. P., below Haui Sai Nueng Falls, along the brook, Oct 30, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 8. Doi Inthanon N. P., Pha Sum Ran Waterfall, forest & along the brook, Oct 30, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 9. Doi Inthanon N. P., over a small rocky brook, Oct 30, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 10. Doi Pui, over a forest trail, Oct 31, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 11. Doi Suthep N. P., along a forest brook, Oct 31, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 12. ibid., over and along a brook, above and below a small waterfall, Oct 31, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 13. ibid., dry slope & beside a brook, Oct 31, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 14. Mae Fang N. P., over and along a forest brook, Nov 1, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 15. ibid., on buffalo and cow pats, Nov 1, 2004, leg. L. PAPP
No. 16. Prov. Fang, 5 km N of Mae Ai, on cow pats, Nov 2, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 17. 8 km E of Doi Anh Kang, over a rocky brook, Nov 2, 2004, leg. L. PAPP & M. FÖLDVÁRI (beside Road no. 1249)
No. 18. Doi Phuka N. P., on light, Nov 3, 2004, leg. M. FÖLDVÁRI & L. PAPP
No. 19. Ban Na Lae, nr Pua, over a rocky forest brook, Nov 5, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 20. Ban Namphang, on fresh cow pats, Nov 5, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 21. Mae Charim, dry forest, Nov 5, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 21/a. ibid., netted over termite runs (covered) on the trunk of a large tree, Nov 5, 2004, leg. M. FÖLDVÁRI
No. 22. Nan Prov., along the rivulet above Mae Charim waterfall, Nov 6, 2004, leg. L. PAPP
No. 23. Nan Prov., nr Mae Charim waterfall, on a meadow, Nov 6, 2004, leg. M. FÖLDVÁRI
No. 23/a. ibid., on cow pats, leg. M. FÖLDVÁRI
No. 24. Prov. Nan, Nan – Mae Charim Road 20th km, mixed secondary bamboo forest, Nov 6, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 25. Nan Prov., over and along the rivulet above Mae Charim waterfall, Nov 7–8, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 26. same as No. 11, Nov 9, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 27. same as No. 12, Nov 9, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 28. Trang Prov., Thung Khai Botanic Garden, primary lowland rainforest, Nov 12, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 29. ibid., along the "Nature Trail", Nov 13, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 29/a. ibid., yellow pans, Nov 14–22, 2004, leg. M. FÖLDVÁRI

No. 29/b. ibid., on flowers, Nov 15, 2004, leg. L. PAPP
No. 30. Trang Prov., Khao Chong Botanic Garden, along the stream below waterfall, Nov 14, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 31. ibid., along a forest path, Nov 15, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 32. Trang Prov., Hat Samran, on seashore vegetation, Nov 16, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 33. Ban Yong Sata, on cow pats, Nov 16, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 33/a. ibid., on the edge of a swamp (abandoned rice fields), Nov 16, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 34. Ban Liphang, over a shadowed slow brook, Nov 16, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 35. Trang Prov., Palian District, Nam Tok Nam Pan Forest Park, over streams & vegetation around waterfalls, Nov 17, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 36. Trang Prov., Khao Chong Botanic Garden, rainforest, Nov 18, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 37. Trang Prov., Thung Khai Botanic Garden, on compost & rotten grass, Nov 19, 2004, leg. L. PAPP
No. 38. same as No. 28, Nov 19, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 39. Phattalung Wildlife Breeding Research Centre, along a forest brook, Nov 20, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 40. Khao Chong Botanic Garden, forest brook, yellow pans, Nov 18–22, leg. M. FÖLDVÁRI
No. 41. same as No. 31, Nov 20, leg. M. FÖLDVÁRI
No. 42. Khao Pu – Khao Ya N. P., along a forest brook below the (Pak Yam) waterfall, Nov 21, 2004, leg. L. PAPP & M. FÖLDVÁRI
No. 43. same as No. 36, Nov 22
No. 44. Thung Khai Botanic Gardens, captured on **a**: methyl-eugenol, **b**: cue-lure, Nov 14–22, leg. M. FÖLDVÁRI

The latter collection is of 11278 dipterous specimens in 81 families (pinned or mostly double-mounted, minuten-pinned), that have been identified or at least selected into families (genera) in the Diptera Collection of the HNHM. The above 2003 and 2004 materials are supplemented by dipterous specimens collected by Mr. ANDRÁS OROSZ in 2004 (102 additional specimens) and by A. OROSZ and Dr. GYÖRGY SZIRÁKI in 2003 (about 300 indiv.) As for the localities of the two latter materials (and those of the material in the MHNG), all the label data are given below.

All in all, presently nearly 15000 collection specimens from Thailand are preserved in the HNHM.

The other newly collected material, which served as a basis for the paper is the collection of Dr. BERNHARD MERZ made in Thailand (2000). It is a matter of course that we are not properly informed on other new collections made in Thailand.

At present all the types and other specimens are deposited in the Diptera Collection of the HNHM and in the MHNG. However, in the future, when standard insect collection circumstances (suitable for tropical climate) and at least one skilled Diptera collection curator will be in the National Science Museum or elsewhere in Thailand, we would like to send identified fly specimens to that collection. We mean, that we will not *return* voucher specimens to Thailand, since those specimens have not formerly been there anytime (they came to existence at Budapest or at Geneva). We would like to facilitate in due course also faunistical survey or identification activity through voucher specimens at hands of the future Thai colleagues.

DIPTEROUS FAMILIES IN THE FAUNA OF THAILAND

The first records of the following dipterous families are based on our materials: Thaumaleidae, Diadocidiidae (PAPP & ŠEVČÍK 2005), Lygistorrhinidae (PAPP 2005), Anisopodidae, Mycetobiidae, Rhagionidae, Acroceridae, Mythicomyiidae, Lonchopteridae, Cypselosomatidae, Pseudopomyzidae, Megamerinidae, Nothybidae, Gobryidae, Lonchaeidae, Chamaemyiidae, Asteiidae, Anthomyzidae, Odiniidae, Cryptochetidae, Teratomyzidae, Campichoetidae, Aulacigastridae (RUNG *et al.* 2005) and Scathophagidae.

Summarily, presently representatives of 99 Diptera families are known from Thailand.

Here we list also the families, which have not yet been recorded from Thailand, but which may probably occur there (based on OOSTERBROEK 1998): Tanyderidae, Corethrellidae, Ditomyiidae, Xylophagidae, Vermileonidae, Mydidae, Apioceridae, Pallopteridae, Coelopidae, Dryomyzidae, Fergusoninidae, Neminidae, Xenasteiidae, Nannodastiidae, Carnidae, Chyromyidae, Axiniidae, Rhinophoridae; (occurrence of Gasterophilidae is less probable).

TIPULIDAE

In the CDO (ALEXANDER & ALEXANDER 1973) 23 species of Tipulidae s. str. were listed from Thailand. *Pselliophora ladelli* EDWARDS, 1932 (p. 65), *Ps. pendleburyi* EDWARDS, 1928 (p. 128), *Ps. penicillata* EDWARDS, 1928 (p. 128), *Dolichopeza* (*Nesopeza*) *angustissima* ALEXANDER, 1960 (p. 137), *Holorusia regia* (ALEXANDER, 1935) (p. 218), *H. sordidithorax* (ALEXANDER, 1953*a*) (p. 740), *Nephrotoma metallescens* EDWARDS, 1928 (p. 133), *Indotipula blandita* (ALEXANDER, 1953*a*) (p. 902), *T.* (*Ramatipula*) *bilobula* ALEXANDER, 1938 (p. 441), *T.* (*Ramatipula*) *shawiana* ALEXANDER, 1953*a* (p. 750), *T.* (*Schummelia*) *dharma* ALEXANDER, 1956*a* (p. 36), *T.* (*Sch.*) *hinayana* ALEXANDER, 1956*a* (p. 37), *T.* (*Sch.*) *lama* ALEXANDER, 1954 (p. 593), *T.* (*Sch.*) *turea* ALEXANDER, 1956*a* (p. 38), *T.* (*Sch.*) *vocator* ALEXANDER, 1956*a* (p. 39), *T.* (*Sivatipula*) *alhena* ALEXANDER, 1953*a* (p. 748), *Tipulodina brevigladia* (ALEXANDER, 1968*a*) (p. 373), *Tipulodina mckeani* (COCKERELL, 1929) (p. 147) were described from Thailand. Later *Tipulodina thaiensis* (ALEXANDER, 1974) (p. 2) was described from Thailand.

Several other spp., *Pselliophora rubra* OSTEN SACKEN, 1886, *Megistocera filipes* spp. *fuscana* (WIEDEMANN, 1820), *Holorusia rector* (EDWARDS, 1926), *Nephrotoma bombayensis* (MACQUART, 1855), *Nephrotoma siamensis* EDWARDS, 1928, *Tipulodina contigua* (BRUNETTI, 1918) and *Tipulodina magnicornis* EN-

DERLEIN, 1912 (records in EDWARDS (1925) incl. Siam) were described from elsewhere but recorded also from Thailand.

Our material (5+2 indiv.) is insignificant.

CYLINDROTOMIDAE and PEDICIIDAE

In the CDO (1973) one species each of these two families were listed: *Stibadocerella pristina* BRUNETTI, 1918 and *Dicranota* (*Rhaphidolabis*) *furcistyla* ALEXANDER, 1954 (p. 597). The latter sp. was described from Thailand. We captured only one specimen of pediciids, and we think that focused collections must be done for the faunistic survey of those families.

LIMONIIDAE

The Limoniidae fauna of Thailand is comparatively well known. In the CDO (ALEXANDER & ALEXANDER 1973) 67 spp. of 27 genera were listed: *Atypophthalmus* 1 sp., *Elephantomyia* (*Elephantomyodes*) 1 sp., *Dicranomyia* (*Dicranomyia*) 3 spp., *Discobola* 1 sp., *Libnotes* (*Libnotes*) 4 spp., *Limonia* 4 spp., *Orimarga* (*O.*) 1 sp., *Rhipidia* (*Rhipidia*) 1 sp., *Epiphragma* (*E.*) 2 spp., *Eupilaria* 1 sp., *Hexatoma* (*H.*) 1 sp., *H.* (*Eriocera*) 8 spp., *Conosia* 1 sp., *Limnophila* (*Dicranophragma*) 1 sp., *Paradelphomyia* (*Oxyrhiza*) 3 spp., *Pseudolimnophila* 1 sp., *Taiwanomyia* 3 spp., *Erioptera* 2 spp., *Gnophomyia* 4 spp., *Ellipteroides* (*Ellipteroides*) 1 sp., *Idiocera* (*Idiocera*) 2 spp., *Ellipteroides* (*Protogonomyia*) 3 spp., *Gymnastes* (*G.*) 1 sp., *G.* (*Paragymnastes*) 1 sp., *Molophilus* (*Molophilus*) 3 spp., *Styringomyia* 5 spp., *Teucholabis* 5 spp., *Toxorhina* (*Ceratocheilus*) 1 sp., *Trentepohlia* (*Trentepohlia*) 2 spp.

An unusually high proportion, 51 spp. were described by EDWARDS and ALEXANDER from Thailand. They are in the sequence of the CDO: *Dicranomyia* (*Dicranomyia*) *lemmonae* (ALEXANDER, 1953*a*) (p. 903), *D.* (*D.*) *parvistylata* ALEXANDER, 1960 (p. 146), *D.* (*D.*) *perdocta* ALEXANDER, 1954 (p. 594), *Libnotes* (*Libnotes*) *crocea* (EDWARDS, 1916) (p. 353), *L.* (*Libnotes*) *neovittata punctiventris* EDWARDS, 1928 (p. 81), *L.* (*Libnotes*) *scutellata* EDWARDS, 1916 (p. 353), *L.* (*Libnotes*) *stantoni* EDWARDS, 1916 (p. 354), *Limonia micropyga* ALEXANDER, 1954 (p. 595), *L. murcida* ALEXANDER, 1967 (p. 228), *L. sannionis* ALEXANDER, 1967 (p. 230), *L. tagax* ALEXANDER, 1954 (p. 596), *Epiphragma* (*E.*) *caligatum* ALEXANDER, 1954 (p. 601), *Eupilaria leucopeza* ALEXANDER, 1972 (p. 3), *Eupilaria thurmani* ALEXANDER, 1953*a* (p. 906), *Hexatoma* (*H.*) *brevistigma* ALEX-

ANDER, 1953*a* (p. 908), *H*. (*Eriocera*) *aegle* ALEXANDER, 1953*a* (p. 909), *H*. (*E*.) *luxuriosa* ALEXANDER, 1936 (p. 419), *H*. (*E*.) *punctigera* (EDWARDS, 1928) (p. 121), *H*. (*E*.) *retrograda* ALEXANDER, 1953*a* (p. 909), *H*. (*E*.) *thaiensis* ALEXANDER, 1953*a* (p. 910), *H*. (*E*.) *thaiicola* ALEXANDER, 1957 (p. 113), *Limnophila* (*Dicranophragma*) *palassoptera* ALEXANDER, 1968 (*c*, p. 247), *Paradelphomyia* (*Oxyrhiza*) *manopi* ALEXANDER, 1956*a* (p. 43), *P*. (*O*.) *nubifera* ALEXANDER, 1954 (p. 600), *P*. (*O*.) *prayooni* ALEXANDER, 1954 (p. 598), *Pseudolimnophila (Pseudolimnophila) ernestina* ALEXANDER, 1953*a* (p. 754), *Taiwanomyia inobseta* ALEXANDER, 1970 (p. 79), *T. perpendicularis* (ALEXANDER, 1954) (p. 602), *T. perretracta* (ALEXANDER, 1954) (p. 603), *Erioptera* (*Teleneura*) *pennigera* ALEXANDER, 1954 (p. 606), *Erioptera tiro* ALEXANDER, 1954 (p. 607), *Gnophomyia anaphora* ALEXANDER, 1954 (p. 604), *G. multiermis* ALEXANDER, 1956*a* (p. 48), *G. nebulicincta* ALEXANDER, 1954 (p. 605), *G. nigrescens* EDWARDS, 1916 (p. 361), *Ellipteroides* (*Ellipteroides*) *tenebrosus* (EDWARDS, 1928) (p. 108), *E*. (*Protogonomyia*) *lateromacula* (ALEXANDER, 1968)b (p. 35), *E*. (*P*.) *namtokensis* ALEXANDER, 1953*a* (p. 911), *Idiocera* (*Idiocera*) *peninsularis* (EDWARDS, 1928) (p. 107), *I*. (*I*.) *thaiicola* (ALEXANDER, 1953*a*) (p. 912), *Gymnastes* (*G*.) *tridens* ALEXANDER, 1967 (p. 28), *G*. (*Paragymnastes*) *mckeani* ALEXANDER, 1935 (p. 217), *Molophilus* (*M*.) *algol* ALEXANDER, 1954 (p. 608), *M*. (*M*.) *lupus* ALEXANDER, 1954 (p. 609), *Styringomyia caudifera* ALEXANDER, 1953*a* (p. 913), *S. manicata* EDWARDS, 1928 (p. 97), *S. tenuispina* ALEXANDER, 1971, *Teucholabis siamensis* EDWARDS, 1928 (p. 95), *T. thurmani* ALEXANDER, 1954 (p. 603), *Toxorhina* (*Ceratocheilus*) *capnitis* ALEXANDER, 1956*a* (p. 52), *Trentepohlia* (*T*.) *suavis* ALEXANDER, 1955 (p. 899).

In 2004 we captured and pinned 70 indiv., in 2003 six indiv. This material is not significant if compared to the species richness in Thailand and due to lack of expertise we did not try to select them even to genera.

PSYCHODIDAE

In the CDO (LEWIS 1973) two spp. of *Phlebotomus* and four spp. of *Sergentomyia* were listed under Phlebotomidae. *Sergentomyia siamensis* CAUSEY, 1968 (p. 488) was described from Thailand, but that proved to be a junior synonym of *S. barraudi* (SINTON, 1929). No record of Psychodidae s. str. was given in the CDO from that country. In his revision of the Oriental phlebotomine sandflies, LEWIS (1978) described *Sergentomyia jamesi* (p. 300), *S. mahadevani* (p. 301) and recorded several spp. also from Thailand (see there). APIWATHNASORN *et al*. (1989) record eight spp. as new to Thailand, APIWATHNASORN *et al*. (1993) published additional data of the Phlebotominae spp.

In 2004 we captured 1 indiv. of Phlebotomi/nae/dae and 24 indiv. of Psychodidae s.str. and 13 indiv. in 2003. Due to lack of expertise, we did not try to identify them.

PTYCHOPTERIDAE

Bittacomorphella thaiensis ALEXANDER, 1953*b* (p. 98) and *Ptychoptera chalybeata* ALEXANDER, 1956*b* (p. 75) were described from Thailand. We managed to capture the former species, which is still considered to be endemic (7 indiv.). We have no specimens of *Ptychoptera* from Thailand.

Bittacomorphella thaiensis ALEXANDER, 1953 – 2 ♂: PF04/3 (Doi Suthep); 2 ♂: PF04/8 (Doi Inthanon); 1 ♂: PF04/11 (Doi Suthep); 2 ♂: PF04/12 (Doi Suthep). Its description was based on two females from Chiang Mai (Doi Chom Cheng and nr Wat at Doi Suthep), so all but two specimens were captured at its type locality. The peculiarities of this phantom crane fly inspired us to publish its habitus figure here (Fig. 1).

CHAOBORIDAE

In the CDO (COOK 1973) *Chaoborus* (*Sayomyia*) *flavidulus* EDWARDS, 1930 was listed from Thailand. We did not capture any chaoborid specimen.

CULICIDAE

The true mosquitoes are the best known dipterous family in the fauna of Thailand. In the CDO (STONE & DELFINADO 1973) 243 species of 17 genera are listed. Of them, 59 are described from Thailand (incl. two specific names, which proved later to be junior synonyms), as follows:

Anopheles (*A.*) *bulkleyi* CAUSEY, 1937 (p. 543), *A.* (*A.*) *interruptus* PURI, 1929 (p. 387), *A.* (*A.*) *pursati* LAVERAN, 1902 (p. 907), *A.* (*A.*) *tigertti* SCANLON & PEYTON, 1967 (p. 19),

Toxorhynchites (*T.*) *bickleyi* THURMAN, 1959 (p. 14), *T.* (*T.*) *manopi* THURMAN, 1959 (p. 16), *T.* (*T.*) *sunthorni* THURMAN, 1959 (p. 19),

Topomyia (*Suaymyia*) *cristata* THURMAN, 1959 (p. 46), *T.* (*S.*) *leucotarsis* THURMAN, 1959 (p. 47), *T.* (*S.*) *pseudoleucotarsis* THURMAN, 1959 (p. 48) – *T.* (*Topomyia*) *aenea* THURMAN, 1959 (p. 39), *T.* (*T.*) *inclinata* THURMAN, 1959 (p.

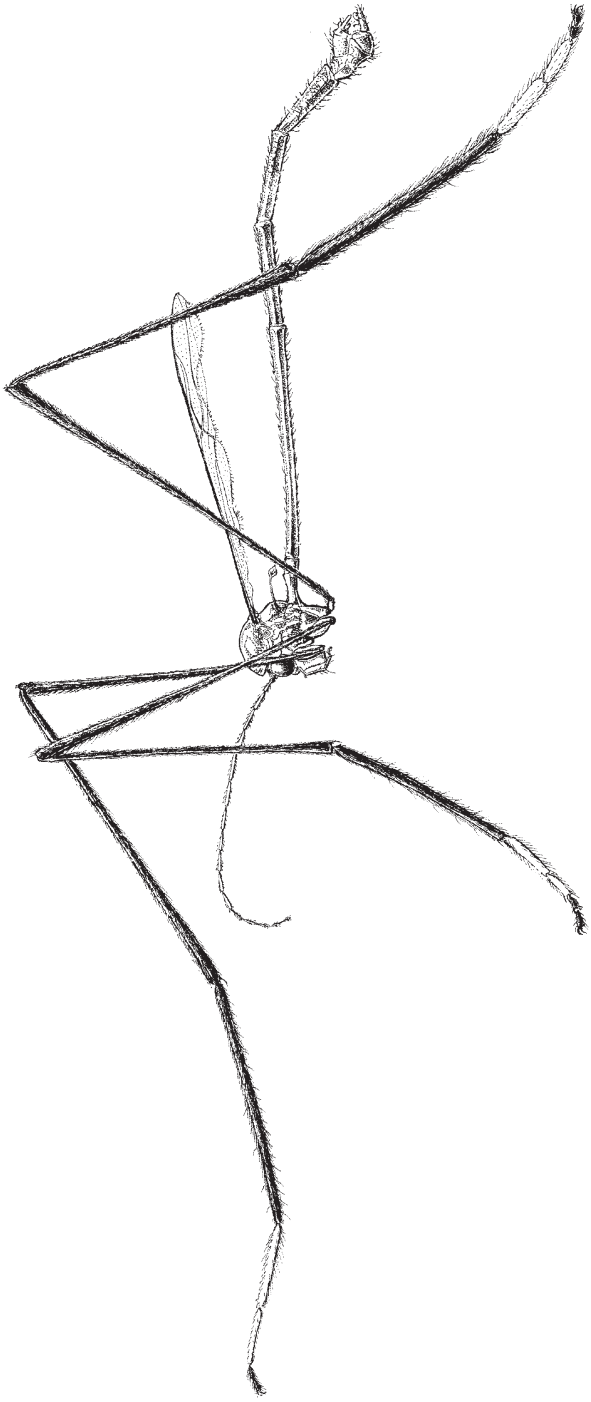


Fig. 1. *Bittacomorphella thaiensis* ALEXANDER, male (del. A. SZAPPANOS).

41), *T.* (*T.*) *lindsayi* THURMAN, 1959 (p. 42), *T.* (*T.*) *svastii* THURMAN, 1959 (p. 43), *T.* (*T.*) *unispinosa* THURMAN, 1959 (p. 44),

Aedes (*Diceromyia*) *scanloni* REINERT, 1970 (p. 17) – *Aedes* (*Finlaya*) *hegneri* CAUSEY, 1937 (p. 543) – *Aedes* (*Neomacleaya*) *cretatus* DELFINADO, 1967 (p. 14), *Ae.* (*N.*) *gibbosus* DELFINADO, 1967 (p. 20), *Ae.* (*N.*) *hispidus* DELFINADO, 1967 (p. 21), *Ae.* (*N.*) *latipennis* DELFINADO, 1967 (p. 26), *Ae.* (*N.*) *notabilis* DELFINADO, 1967 (p. 28), *Ae.* (*N.*) *protuberans* DELFINADO, 1967 (p. 29), *Ae.* (*N.*) *siamensis* DELFINADO, 1968 (p. 36), *Ae.* (*N.*) *torosus* DELFINADO, 1967 (p. 30) – *Aedes* (*Stegomyia*) *seato* HUANG, 1969 (p. 234),

Armigeres (*A.*) *bhayungi* THURMAN & THURMAN, 1958 (p. 186) – *A.* (*Leicesteria*) *vimoli* THURMAN & THURMAN, 1958 (p. 187),

Ayurakitia griffithi THURMAN, 1954 (p. 198),

Culex (*Culex*) *neolitoralis* BRAM, 1967 (p. 236), *C.* (*C.*) *siamensis* BARRAUD & CHRISTOPHERS, 1931 (p. 283, junior syn. of *C. tritaeniorhynchus* GILES, 1901) – *Culex* (*Culiciomyia*) *barrinus* BRAM, 1967 (p. 125), *C.* (*C.*) *scanloni* BRAM, 1967 (p. 147), *C.* (*C.*) *spiculothorax* BRAM, 1967 (p. 155), *C.* (*C.*) *termi* THURMAN, 1955 (p. 18), *C.* (*C.*) *thurmanorum* BRAM, 1967 (p. 159) – *Culex* (*Lophoceraomyia*) *aculeatus* COLLESS, 1965 (p. 286), *C.* (*L.*) *eukrines* BRAM & RATTANARITHIKUL, 1967 (p. 11), *C.* (*L.*) *fuscosiphonis* BRAM & RATTANARITHIKUL, 1967 (p. 11), *C.* (*L.*) *incomptus* BRAM & RATTANARITHIKUL, 1967 (p. 16), *C.* (*L.*) *peytoni* BRAM & RATTANARITHIKUL, 1967 (p. 7), *C.* (*L.*) *pholeter* BRAM & RATTANARITHIKUL, 1967 (p. 13), *C.* (*L.*) *spiculosus* BRAM & RATTANARITHIKUL, 1967 (p. 3) – *Culex* (*Thaiomyia*) *dispectus* BRAM, 1966 (p. 75),

Ficalbia (*Mimomyia*) *aurea* (LEICESTER, 1908) (p. 116),

Heizmannia (*H.*) *mattinglyi* THURMAN, 1959 (p. 70), *H.* (*Mattinglyia*) *thelmae* MATTINGLY, 1970 (p. 48),

Hodgesia lampangensis THURMAN, 1959 (p. 52),

Orthopodomyia lemmonae THURMAN, 1959 (p. 58, junior *syn.* of *O. anopheloides* (GILES, 1903)), *O. siamensis* ZAVORTINK, 1968 (p. 126),

Uranotaenia demeilloni PEYTON & RATTANARITHIKUL, 1970 (p. 404), *U. diraphati* PEYTON & KLEIN, 1970 (p. 245), *U. gouldi* PEYTON & KLEIN, 1970 (p. 248), *U. koli* PEYTON & KLEIN, 1970 (p. 246), *U. prajimi* PEYTON & RATTANARITHIKUL, 1970 (p. 406), *U. pseudomaculipleura* PEYTON & RATTANARITHIKUL, 1970 (p. 408), *Uranotaenia sombooni* PEYTON & KLEIN, 1970 (p. 249), *U. spiculosa* PEYTON & RATTANARITHIKUL, 1970 (p. 410), *U. sumethi* PEYTON & RATTANARITHIKUL, 1970 (p. 411).

An overview of the relevant literature on the Malesian Culicidae (after 1973) is involved in OOSTERBROEK's (1998) book. After 1973 a systematic survey and multidisciplinate research on the Thailand Culicidae was commenced. We men-

tion below only those papers, which involve new taxa and first records of spp. for Thailand.

REINERT (1972) revised the southeast Asian spp. of *Aedes* (subg. *Ayurakitia* THURMAN), describing *Ae*. (*A*.) *peytoni* (p. 7). HUANG (1973) described *Aedes* (*Stegomyia*) *malikuli* (p. 225, Chiang Mai, Huai Phrao) from Thailand. REINERT (1973b) described *Bothaella*, a new subgenus of *Aedes*, based on *Ae*. (*B*.) *helenae* (p. 9, Chiang Mai) and in the same year he (REINERT 1973*a*) described *Ae*. (*Diceromyia*) *pseudonummatus* (p. 29, Chiang Mai). SIRIVANAKARN (1973) described *Culex* (*Culicomyia*) *lampangensis* (p. 113, Ban Pha Daeng) and *C*. (*Culex*) *longicornis* SIRINAVAKARN, 1976 (p. 82, Chiang Mai, Doi Suthep). REINERT (1976) described *Aedes* (*Paraedes*) *thailandensis* (p. 319). HUANG (1977) recorded *Ae*. (*Stegomyia*) *craggi* and *Ae*. (*Stegomyia*) *w-albus* for the first time from Thailand. In his revision of the Oriental *Culex* (*Lophoceraomyia*) spp. SIRIVANAKARN (1977a) described *C*. (*L*.) *pairoji* (p. 63) and *C*. (L.) *hirtipalpis* (p. 152); in the same year he SIRIVANAKARN (1977b) described C. (*Culiciomyia*) *harrisoni* (p. 102) from Thailand. PEYTON (1977), when revising SE Asian spp. of *Uranotaenia* (*Pseudoficalbia*), described five new spp. from Thailand: *U. abdita* (p. 125), *U. albipes* (p. 64), *U. approximata* (p. 38), *U. enigmatica* (p. 133) and *U. nocticola* (p. 149). Knight (1978) described the new *Aedes* (*Finlaya*) *harinasutai* (p. 106) from Thailand. REINERT (1979) described *Isoades*, as a new subgenus of *Aedes* MEIGEN, and its type species, *Ae*. (*Isa*.) *cavaticus* (p. 148) was from Thailand. PEYTON & HARRISON's (1979) *Anopheles* (*Cellia*) *dirus*, a new species of the *leucosphyrus* group, was also from Thailand.

HARRISON (1980) in his revision of the *Anopheles* (*Cellia*) "*Myzomyia* series", HII (1980) in his studies on the *Anopheles balabacensis* complex gave also records from Thailand. SUCHARIT *et al*. (1980) published identification keys for the *Culex pipiens* complex in Thailand, based on the male terminalia. RATTANARITHIKUL (1982) published a guide to the genera of mosquitoes of Thailand with illustrated keys, biological notes and preservation and mounting techniques. MIYAGI *et al*. (1986) published new distribution records of mosquitoes from Thailand, summarising results from the years of 1983–84. KNIGHT & HARRISON (1987) described another new *Aedes* (*Finlaya*), *Ae. mikrokopion* (p. 215) of the *niveus* subgroup. RATTANARITHIKUL & GREEN (1987) described *Anopheles* (*Cellia*) *notanandai* (p. 259) and *A*. (*C*.) *sawadwongporni* (p. 256) from Thailand. HARBACH *et al*. (1987) recorded *Uranotaenia* (*Pseudoficalbia*) *hirsutifemora* PETERS from Thailand. As for a summary of the mosquito fauna of Thailand, TSUKAMOTO *et al*. (1987) published a complete annotated checklist. RATTANARITHIKUL & HARRISON (1988) described *Aedes* (*Finlaya*) *reinerti* (p. 78) from northern Thailand. PEYTON & RAMALINGAM (1988) described *Anopheles* (*Cellia*) *nemo-*

philus, a new species of the *leucosphyrus* group from Peninsular Malaysia and Thailand. HARRISON *et al*. (1988) concluded that *Anopheles barbiventris*, and not *A. campestris*, occurs in the Chiang Mai Valley of Thailand. HARBACH & RATTANARITHIKUL(1988) described *Culex* (*Eumelanomyia*) *richei* and recorded it from Thailand. MIYAGI & TOMA (1989) described *Topomyia* (*Suyamyia*) *sucheriti* sp. n. from Thailand.

REINERT (1990) described *Kenknightia*, as a new subgenus of the genus *Aedes* MEIGEN from the Oriental region and revised relegated spp., also those occurring in Thailand. HARRISON *et al*. (1990) summarised taxonomic changes, revised occurrence records and published other notes on the Culicidae of Thailand and neighbouring countries. BENJAPHONG & RATTANARITHIKUL (1991) reported *Zeugnomyia gracilis* LEICESTER from Thailand. APIWATHNASORN *et al*. (1991) gave a simplified key for larval identification of *Mansonia* mosquitoes in Thailand. RATTANARITHIKUL & PANTHUSIRI's (1994) paper with illustrated keys to the medically important mosquitos of Thailand is a useful tool in the identification. SALLUM *et al*. (2005) recorded species of the *Anopheles leucosphyrus* group, also from Thailand.

Our material is insignificant (63+4 indiv. from 2004 and 2003, respectively).

DIXIDAE

There is only one published record of this family from Thailand: *Dixella pollex* (NOWELL, 1980) was described from Thailand (p. 176, see below), otherwise there is no more data for dixids from the whole huge area of SE Asia. Taking this fact into consideration, our material of 44 individuals from 2004 and 15 indiv. from 2003 seem significant. They represent six species of three genera. One of the genera is new and described below as such.

Asiodixa L. PAPP, gen. n.
(Figs 2–12, 124–125)

Type species: *Asiodixa maculosa* L. PAPP, sp. n.; other included species: *A. pura* L. PAPP, sp. n.
Gender: feminine.

Very small dixids, wing length 2.0–2.5 mm.

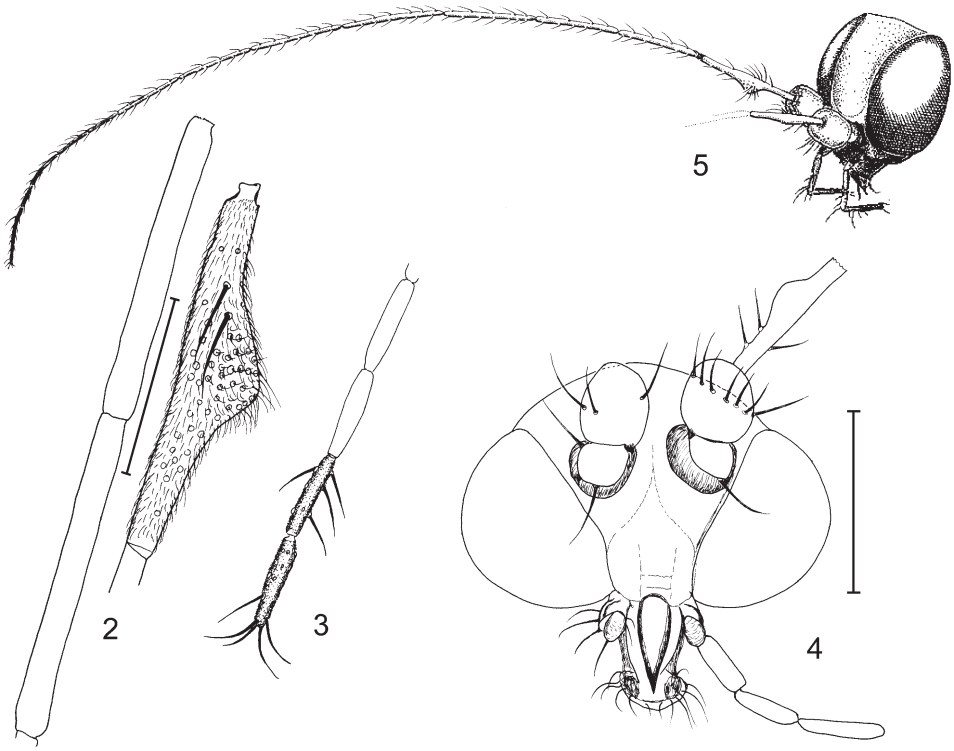
Frons convex without any setae. Scape very short ventrally (Fig. 4). Pedicel bulbous. Flagellum very long, male first flagellomere with a ventromedial dilatation at about middle (Figs 2, 4–5), other basal flagellomeres long cylindrical. Female first flagellomere long cylindrical. Apical

flagellomeres (Fig. 3) medium long, apex with medium long setae only. Palpus with 5 palpomeres, 3–5 rather long. Proboscis not particularly long.

Wing with long S-curved Rs section (Figs 124–125).

Male genitalia basically more similar to those of *Dixella*, than to those of *Dixa*: gonocoxite with an apical medially directed process. Dorsal wall of gonocoxites with a long pair of cranially directed processes (Figs 9–10). Phallus (Figs 6, 12) long or very long, thread-like.

The presence of a long pair of dorsal cranially directed processes of gonocoxites (dorsally to phallus) is in direct connection with the existence of long filiform phallus. The Thaii *Dixella* spp. have those and also some of the Palaearctic *Dixella* spp., e.g. *D. filiformis* (EDWARDS), too. No such long phallus and dorsal processes found in any *Dixa* spp. By this feature and some other characteristics I believe that the new genus is closer to *Dixella* than to *Dixa*.

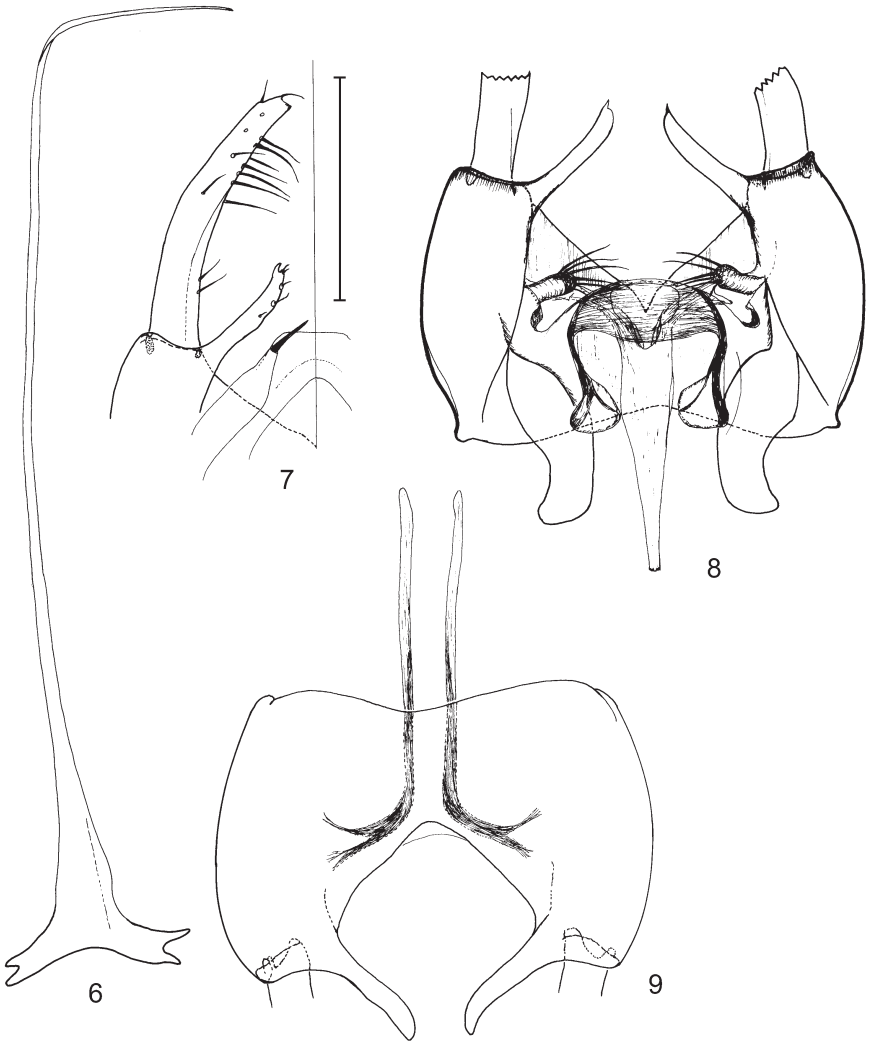


Figs 2–5. *Asiodixa maculosa* sp. n., paratype male, head and antenna: 2 = basal flagellomeres, 3 = apical flagellomeres, 4 = head with basal parts of antennae, anterior view (pedicel and first flagellomere turned upwards), 5 = head and right antenna, sublateral view (del. A. SZAPPANOS). Scales: 0.1 mm for Figs 2–3, 0.2 mm for Fig. 4

Asiodixa maculosa L. PAPP, sp. n.
(Figs 2–9, 124)

Holotype male (HNHM, left hind tarsi lost): THAILAND: Nan Prov., over and along the rivulet above Mae Charim waterfall, Nov 7–8, 2004, No. 25, L. PAPP & M. FÖLDVÁRI.

Paratypes: 18 males 5 females: same data as for the holotype; 1 male 2 females: Mae Fang N. P., over and along a forest brook, Nov 1, 2004, No. 14, leg. L. PAPP & M. FÖLDVÁRI.



Figs 6–9. *Asiodixa maculosa* sp. n., paratype male, genitalia. 6 = phallus, dorsal view, apex lateroclinate, 7 = gonostylus and apex of gonocoxite, dorsal view, 8 = genital complex, ventral view (apex of gonostyli omitted), 9 = gonocoxites, dorsal view. Scale: 0.1 mm for all

Measurements in mm: body length 1.58 (holotype), 1.50–1.81 (paratypes), wing length 2.06 (holotype), 2.05–2.30 (paratypes), wing breadth 0.67 (holotype), 0.65–0.76 (paratypes).

Dark grey, prothorax, coxae and femora yellowish (fore coxae brown in some specimens, incl. holotype), in some specimens also pleura yellowish grey. Frons strongly shiny. Thorax yellowish grey dusted.

Male first flagellomere much modified (Figs 2, 4–5), that of the females long cylindrical; flagellomeres 2–9 very long, flagellomeres 10–14 medium long (Fig. 3). Flagellomeres length (one male paratype): 1: 140, 2: 122, 3: 115, 10: 36, 11: 36, 12: 34, 13: 33, 14 (apical) 35 (divide those data by 667 to get them in mm, so 1st 0.21 mm). First flagellomere of a female 0.29 mm long, apical flagellomere 0.06mm.

All coxae dark brown. Knees dark brown. Hind tibia dilated apically. Tarsomeres of hind leg (paratype male) 0.837, 0.30, 0.163, 0.055, 0.07 mm.

Wing light brown, veins brown. A large brown spot present from basal 1/3 of Rs to M1–3 (Fig. 124). Fringe on hind margin 0.08 mm. Vein H oblique. M1 and M2 slightly upcurving. M2 broken, not joining M1. Length of wing vein sections (multiply with 0.0125 to have them in mm): Sc1 from H: 61, Rs (from R1 to R-M) 18, R2–5 5.5, R2–3 21.5, R5 59.5, R-M 11, M1–3 4, basal section of M 79.5, M1-M2 fork (ca., since base of M2 lost) 35.5, M1 (ca., see before) 24, M2 (visible part) 14, M-M 4.8, M3 37.5, M3-Cu 6.2, terminal section of Cu1 22.5, costal sections: 2: 10, 3: 8, 4: 10, 5: 9.5, 6: 14.5, 7: 14, 8: 20.5, 9: 16.5. Wing length/Rs vein ratio 10. Halteres dark grey.

Genitalia much larger than in *A. pura*. Gonocoxites (Figs 7–9) fused rather V-shaped. Dorsal (fused) wall with a long (0.17 mm) pair of cranially directed processes, supporting phallus. Ventrobasal process rather broad and blunt, medial process with 5 long setae. Apical medially directed process (similar to that of *Dixella* spp.) digitiform with sharp apex (Figs 7–9). Proctiger with a pair of large caudal apical setae. Phallus (Fig. 6) very long, 0.52 mm, apex lateroclinate. Gonostylus (Fig. 7) long, slightly inclinate, apex sharp, medially with medium long setae.

The name of this new species refers to the brown central spot on its wing. That is the obvious and easily detectable difference from *A. pura*. However, details of the male genitalia are also markedly different. Therefore I do not think that the two species are closely related.

Asiodixa pura L. PAPP, sp. n.
(Figs 10–12, 125)

Holotype male (HNHM): THAILAND: Ban Na Lae, nr Pua, over a rocky forest brook, Nov 5, 2004, No. 19, L. PAPP & M. FÖLDVÁRI.

Paratypes: 3 males (one male's abdomen with genitalia in a plastic microvial with glycerol) 5 females: same data as for holotype.

Measurements in mm: body length 1.85 (holotype), 1.82–2.30 (paratypes), wing length 2.15, 2.12–2.55, wing breadth 0.74, 0.74–0.98.

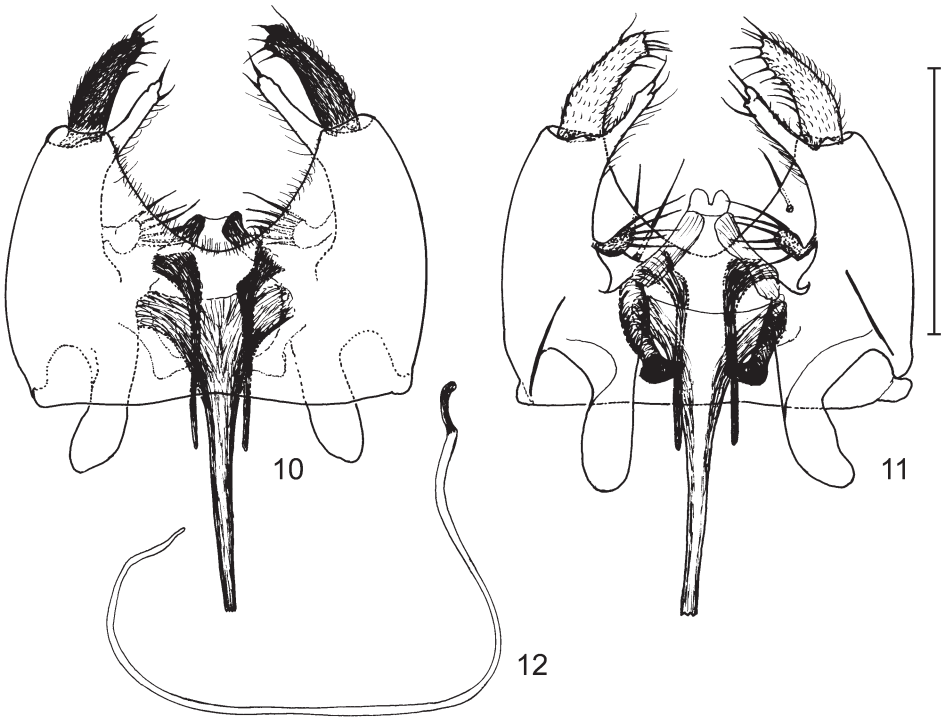
Head all dark, thorax yellowish grey, mesonotum with a broad brown sagittal band, posthumeral area and middle of nesonotum with a pair of unshapy, diffusely bordered yellow spots.

Length of hind tarsomeres (paratype male): 0.763, 0.275, 0.16, 0.055, 0.07 mm.

Wing (Fig. 125) clear light brown, slightly wider than in *A. maculosa*. Veins dark brown, in general thicker than is *A. maculosa*, particularly so for R1 and Rs. Vein H oblique. Length of wing vein sections (multiply with 0.0125 to have them in mm): Sc1 from H: 68.5, Rs (from R1 to R-M) 31.5, R2–5 6.5, R2–3 24, R5 66.5, R-M 10, M1–3 3.5, basal section of M 91, M1-M2 fork 42, M1 23.5, M2 (complete) 15, M-M 6.5, M3 40, M3-Cu 9.5, terminal section of Cu1 22, costal sections: 2: 14.5, 3: 9, 4: 11, 5: 11.5, 6: 16, 7: 17, 8: 33, 9: 18.5. Wing length/Rs ratio 6.3, Rs much longer than in *A. maculosa*. Second costal section slightly longer, costal section between M3 and Cu1 much longer than in *A. maculosa*. Cu2 reaching wing margin but 0.135 mm.

As for body characteristics, othrwise similar to *A. maculosa*.

Genitalia (Figs 10–12) much smaller than those of *A. maculosa*. Gonocoxites (Figs 10–11) fused U-shaped. Dorsal (fused) wall with a short (0.075 mm) thin pair of cranially directed processes, supporting phallus. Ventrobasal processes blunt, not particularly short. Apical medially directed process thin, apex narrowed. Gonostylus (Figs 10–11) rather short, not longer than apical processes of gonocoxites, apex blunt. Phallus (Fig. 12) ca. 0.34 mm, i.e. shorter than in *A. maculosa*.



Figs 10–12. *Asiodixa pura* sp. n., paratype male. 10 = genitalia, dorsal view, 11 = genitalia, ventral view, 12 = phallus, lateral view. Scale: 0.1 mm for all

The name of the new species refers to its unspotted wing (the Latin word 'pura' means clear, clean, unicolorous).

Dixa pollex (NOWELL, 1980) – 1 ♂: PF04/30. Based on my study on its male genitalia, I can state in good faith that this male is conspecific with NOWELL's species, which however, is not a *Dixella* but a *Dixa* species.

Dixa sp. 1 ♀: PF04/7. Unfortunately the male specimen from S Thailand (above) and the female from N Thailand are not conspecific. In NOWELL's (1980) key it keys out to *D. bifasciata* BRUNETTI, 1911 from India, but it is surely not conspecific.

Dixella sp. n. 1. 7 ♂: PF04/9. This is a new species (with shorter and blunt apical lobe on gonocoxite and with longer gonostylus), which will be described elsewhere. Actually the two *Dixella* spp. here are closely related ones; they key out to *D. barraudi* FREEMAN, 1948 from India in NOWELL's (1980) key (wing clear, no clouds or spots).

Dixella sp. n. 2. 5 ♂ 3 ♀: FSz03/11; 4 ♂ 3 ♀: FSz03/18. Another new species with longer and thinner lobe of gonocoxite and apically cut gonostylus.

CERATOPOGONIDAE

In the CDO (WIRTH 1973) the subfamily Leptoconopinae were listed with two Thai spp., both were described from Thailand: *Leptoconops* (*Holoconops*) *xuthosceles* CHANTHAWANICH & DELFINADO, 1967 (p. 299) and *L.* (*Leptoconops*) *siamensis* CARTER, 1921 (p. 20). Ninety-five spp. of 10 genera of other ceratopogonids were listed: *Culicoides* (*Avaritia*) 7 spp., *C.* (*Beltranmyia*) 1 sp., *C.* (*Culicoides*) 6 spp., *C.* (*Haemophoructus*) 2 spp., *C.* (*Meijerehelea*) 4 spp., *C.* (*Monoculicoides*) 1 sp., *C.* (*Oecacta*) 2 spp., *C.* (*Pontoculicoide*s) 1 sp., *C.* (*Trithecoides*) 12 spp., *Culicoides* 12 (unplaced) spp., *Alluaudomyia* 18 spp., *Monohelea* 1 sp., *Stilobezzia* (*Eukraiohelea*) 5 spp., *S.* (*Neostilobezzia*) 3 spp., *S.* (*Stilobezzia*) 12 spp., *Tetrabezzia* 1 sp., *Calyptopogon* 3 spp., *Neosphaeromias* 1 sp., *Sphaeromias* 2 spp., and *Xenohelea* 1 sp.

Only 28 spp. were described from Thailand; in addition, there are other three names, which proved to be junior synonyms, *Culicoides* (*Monoculicoides*) *homotomus* KIEFFER, 1921 (syn. *C. denmeadi* CAUSEY, 1938*a*: 403), *Culicoides* (*Oecacta*) *schultzei* (ENDERLEIN, 1908) (syn. *C. housei* CAUSEY, 1938*a*: 407) and *Stilobezzia* (*Stilobezzia*) *chasteli* CLASTRIER, 1967 (syn. *S. punctiventosa* DAS GUPTA & WIRTH, 1968: 106).

The still valid species are: *Culicoides* (*Trithecoides*) *gewertzi* CAUSEY, 1938*a* (p. 409), *C.* (*Trithecoides*) *macfiei* CAUSEY, 1938*a* (p. 411), *C.* (*Meijerehelea*) *hegneri* CAUSEY, 1938*a* (p. 402), *C.* (*Trithecoides*) *gewertzi* CAUSEY, 1938*a* (p. 409), *C.* (*T.*) *macfiei* CAUSEY, 1938*a* (p. 411), *Culicoides corti* CAUSEY, 1938*a* (p. 411), *C. hewitti* CAUSEY, 1938*a* (p. 413), *C. huffi* CAUSEY, 1938*a* (p. 406), *C. shermani* CAUSEY, 1938*a* (p. 404), *Alluaudomyia annulipes* WIRTH & DELFI-

NADO, 1964 (p. 637), *A. fuscipennis* WIRTH & DELFINADO, 1964 (p. 612), *A. griffithi* WIRTH & DELFINADO, 1964 (p. 635), *A. inaequalis* WIRTH & DELFINADO, 1964 (p. 613), *A. magna* WIRTH & DELFINADO, 1964 (p. 632), *A. sternalis* WIRTH & DELFINADO, 1964 (p. 617), *A. thurmanorum* WIRTH & DELFINADO, 1964 (p. 629), *Stilobezzia* (*Eukraiohelea*) *fuscipes* DAS GUPTA & WIRTH, 1968 (p. 20), *S*. (*E*.) *fusciterga* DAS GUPTA & WIRTH, 1968 (p. 22), *S*. (*E*.) *minuta* DAS GUPTA & WIRTH, 1968 (p. 23), *S*. (*Neostilobezzia*) *artistyla* DAS GUPTA & WIRTH, 1968 (p. 41), *S*. (*Neostilobezzia*) *subnebulosa* DAS GUPTA & WIRTH, 1968 (p. 38), *S*. (*N*.) *venefica* DAS GUPTA & WIRTH, 1968 (p. 39), *S*. (*Stilobezzia*) *distinctifasciata* DAS GUPTA & WIRTH, 1968 (p. 135*), S*. (*S*.) *isthmosteca* DAS GUPTA & WIRTH, 1968 (p. 116*), S*. (*S*.) *pseudofestiva* DAS GUPTA & WIRTH, 1968 (p. 89*), S*. (*S*.) *subfestiva* DAS GUPTA & WIRTH, 1968 (p. 94*), Calyptopogon brevitarsis* MACFIE, 1939 (p. 8), *Neosphaeromias gibbus* DAS GUPTA & WIRTH, 1970 (p. 879).

In their revision of the Oriental *Dibezzia* KIEFFER spp. WIRTH & RATANAWORABHAN (1981) described *D. debenhamae* (p. 202) from Malaysia with Thai paratypes. WIRTH & RATANAWORABHAN (1981) described five new species (*Bezzia lewvanichae*, p. 322, *B. yasumatsui*, p. 424, *Mackerrasomyia wongsirii*, p. 404, *Nilobezzia yasumatsui*, p. 409 and *Phaenobezzia mellipes*, p. 427) and recorded several other spp. from rice paddies in Thailand. GROGAN & WIRTH (1981*a*) described *Niphanohelea* as new genus of Sphaeromiini with *N. bannae* (p. 202) from Thailand. GROGAN & WIRTH (1981*b*) described *Jenkinshelea niphanae* (p. 45) and *J. tokunagai* (p. 49) from Thailand. WIRTH & RATANAWORABHAN's (1992) paper on the Oriental species of *Atrichopogon* (*A. jacobsoni* group) is with holotypes from Malaysia. WIRTH & HUBERT's (1989) bulky monograph of *Culicoides* of southeast Asia included also records from Thailand. YU & WIRTH (1997) published the monograph of *Lasiohelea* of southeast Asia, incl. spp. in the Thailand fauna.

In 2004 we selected and pinned 247 indiv., in 2003 44 indiv. This material is rather rich in species but still awaiting identification.

CHIRONOMIDAE

Surprisingly, in the CDO (SUBLETTE & SUBLETTE 1973) there are no species recorded from Thailand.

After 1973 HASHIMOTO (1985) recorded the phytophagous chironomid, *Polypedilum anticum* (JOHANNSEN) also from Thailand. MOUBAYED (1989) described *P*. (*Polypedilum*) *siamensis* (p. 276), *Rheotanytarsus orientalis* (p. 278) and *Tanytarsus gianii* (p. 280) from Thailand, one year later he (MOUBAYED 1990)

described *Rheotanytarsus thailandensis* and *Tanytarsus thaicus*. REISS (1997) described *Microtendipes schuecki* from Thailand. ANDERSEN & WANG's (1997) paper on darkwinged *Heleniella* and ADAM & SAETHER's (1999) revision of the genus *Nilothauma* are with new spp. and records from Thailand. A review of the Oriental *Rheotanytarsus* was given in two papers of KYEREMATEN *et al*. (2000a, b) with records also from Thailand. MENDES & ANDERSEN (2002) described *Qiniella thai* from N Thailand. EKREM (2002) reviewed a high number of south and east Asian *Tanytarsus* v.D. WULP, his paper is also with Thai records. MENDES *et al*. (2004) reviewed *Antillocladius* SAETHER, *Compterosmittia* SAETHER and *Litocladius* new genus (Orthocladiinae), with records from Thailand.

We did not make special collecting, so our chironomid material is insignificant (8 indiv.).

SIMULIIDAE

In the CDO (CROSSKEY 1973) only three species, *S*. (*Simulium*) *griseifrons* BRUNETTI, 1911, *S*. (*Simulium*) *hackeri* EDWARDS, 1928 and *Simulium indicum* BECHER, 1885 were listed from Thailand.

Since Thailand is rich in fast running waters and other habitats proper for the development of simuliids, the fauna is rather rich. And indeed, after 1973 a number of high quality papers were published with descriptions of new spp. and new records. As a consequence, by now the family Simuliidae is one of the better known dipterous families in the fauna of Thailand.

In their summary on the blackflies of Thailand, beside a number of new records, TAKAOKA & SUZUKI (1984) described two spp. of *S*. (*Gomphostilbia*): *S*. (*G*.) *inthanonense*, p. 18, *S*. (*G*.) *siamense* and five spp. of *S*. (*Simulium*): *S. barnesi*, p. 31, *S. chamlongi*, p. 27, S. *chiangmaiense*, p. 38, *S. naknonense*, p. 33, *S. thailandicum*, p. 37. TAKAOKA & ADLER (1997) described a new subgenus, *Simulium* (*Daviesellum*), and a new species, *S*. (*D*.) *courtneyi*, from Thailand and the Peninsular Malaysia. KUVANGKADILOK *et al*. (1999) published new records in their paper on the distribution of the larvae of blackflies at Doi Inthanon National Park. TAKAOKA & KUVANGKADILOK (1999) described four new spp. from Thailand. KUVANGKADILOK & TAKAOKA (2000) recorded several spp. and described a new species. TAKAOKA (2001) described *S*. (*Simulium*) *weji* from Thailand. TAKAOKA & CHOOCHOTE (2002) described two new spp. of the *S. griseifrons* species group from Thailand. TAKAOKA & CHOOCHOTE (2004*b*) in their list and keys to black flies in Thailand 45 species of *Simulium* LATREILLE s. l. are listed, and keys to subgenera and species within each subgenus are provided for adults, pupae and

mature larvae. That included their former description (TAKAOKA & CHOOCHOTE 2004*a*) of two new species of S. (*Simulium*) from Thailand (*S. suchariti* and *S. setsukoae*, Doi Inthanon National Park, Chiang Mai Province).

We selected and pinned 34 indiv. in 2004, 43 indiv. in 2003, but for lack of expertise, we did not try to identify them.

BLEPHARICERIDAE

Blepharicera thurmanae ALEXANDER, 1953*b* (p. 102) was described from Thailand. We captured 44 individuals in 2004, which belong to two species of *Blepharicera*.

Blepharicera sp. 1 (? *thurmanae* ALEXANDER). 1 ♂: PF04/3, 2 ♀: PF04/8, 4 ♂ 7 ♀: PF04/12, 1 ♀: PF04/19, 26 ♂ 2 ♀: PF04/25, 1 ♂: PF04/27. They were captured over running waters in three different parts of North Thailand.

Blepharicera sp. 2. 1 ♀: PF04/42. A small-bodied species, unfortunately the specimen is without abdomen.

THAUMALEIDAE

This is the first record for this family from SE Asia. They were mentioned and keyed as a family in the comprehensive book on the Malay Archipelago (OOSTERBROEK 1998), since their occurrence was anticipated there. A second new species has already been found in our material from Vietnam.

Thaumalea nigronitida L. PAPP, sp. n.
(Figs 13–16)

Holotype female (HNHM): THAILAND: Doi Inthanon N. P., over a small rocky brook, Oct 30, 2004, No. 9, L. PAPP & M. FÖLDVÁRI (abdomen with genitalia in a microvial with glycerol, left hind leg lost).

Measurements in mm: body length 1.98 to 2.00 mm (measured along the downcurved abdomen), wing length 2.47, wing breadth 1.18.

Body black, scutum shiny black, coxae black, legs blackish brown.

Apical flagellomere with teo 0.03–0.035 mm long apical setae. Five visible flagellomeres, first flagellomere thickened. Second and third palpomeres bulbously thickened.

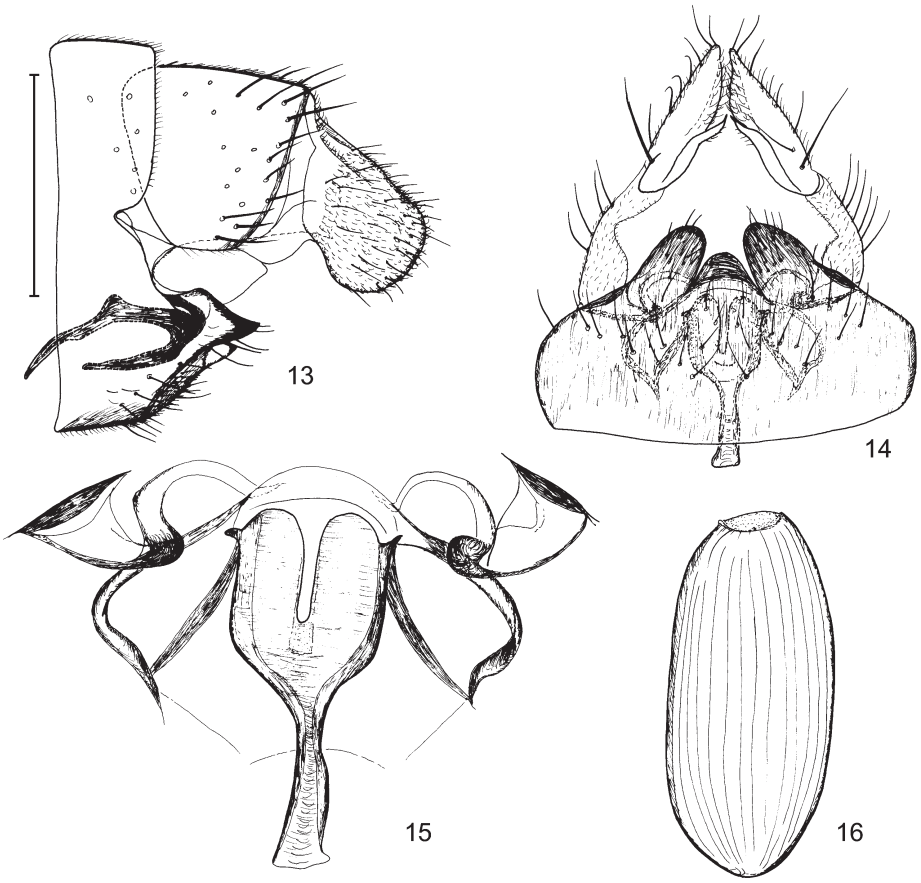
Wing fumose, c, sc, r1 and r2+3 cells black. Subcostal vein short (less than 0.4 mm from H). Costal sections (from H): 33: 69: 108, i.e. 0.36: 0.75: 1.17 mm. Veins R1 and R4+5 setose dorsally, crossvein M-M concave, M-Cu 0.075 mm long. Anterior medial vein almost straight, posterior me-

dial vein (M3 or M3+4, "CuA1", see remark below) downcurved, Cu1 S-formed, distal third almost straight. Cu2 runs close to Cu1, archely curved, faint and thin apically, but overruns crossvein Cu-M remarkably. Vein A1 present only as a straight basal vein. A2 continued to wing margin as a colourless vein.

Haltere broad lamelliform, sides curled, 0.58 mm long, black on dorsal side.

Abdomen rather thick, dark brown. Several hundreds of 0.16–0.17 mm long ripen eggs (Fig. 16) were in holotype's abdomen, some of them are preserved in the microvial with glycerol. Egg bullet-shaped, with longitudinal ridges and a small round micropyle.

Tergite 8 and sternite 8 completely fused laterally with an emargination at place of fusion (Fig. 13). Tergite 9 simple, without any projection on ventral caudal edge (that is definitely rounded). Cerci subquadratic in profile with broadly rounded apex. Sternite 8 and 9 partly fused, lateral lobes rather long rounded apically (Fig. 14). Inner genital sclerites (Fig. 15) of an intricate form with an an-



Figs 13–16. *Thaumalea nigronitida* sp. n., holotype female. 13 = apex of abdomen, lateral view, 14 = same, ventral view, 15 = genital sclerites, ventral view, 16 = egg. Scales: 0.2 mm for Figs 13–14, 0.1 mm for Figs 15–16

terior cylindrical apodeme and a shovel-shaped medial part. Genital sclerites join to the latero-caudal edge of the sternal complex through a pigmented sclerotized thickening.

The other Oriental *Thaumalea* spp. were described from Pakistan (SCHMID 1958) and from N India (SCHMID 1970). All were described based on male genitalia. One may regard a description of a species based on a female as questionable. However, I think this black-bodied and black-winged small sp. is characteristic enough to represent the first record of the family from SE Asia. The new species is related to *Th. karakoramica* SCHMID by its body colour. I have to note that in the HNHM there is a *Thaumalea* female also from Vietnam (but that is a "regular" species with its large reddish body).

Remark. I question the hitherto prevailing nomenclature of the wing veins in thaumaleid taxonomy. I am convinced that not one but two medial veins present also in thaumaleids. In *Mesothaumalea fossilis* KOVALEV (Upper Jurassic, see KRZEMIŃSKI & EVENHUIS 2000) there are clearly two medial veins. The presence of the characteristic Cu2 (its basal part running close to Cu1) corroborates this opinion.

BIBIONIDAE

There are rather numerous Oriental Bibionidae species described (cf. CDO, HARDY 1973), but we do not know published records from Thailand. In our small material (all from 2003 and from mountains of N Thailand) we found representatives of six species. For lack of time and expertise, they were not identified to species.

Bibio spp. sp. 1: 1 ♀: FSz03/21 (Tham Sakoen); sp. 2: 1 ♂: FSz03/18 (Doi Phuka); sp. 3. 2 ♂: FSz03/18/21; sp. 4: 1 ♂: FSz03/9 (Doi Pha Hom Pok); sp. 5: 1 ♂: FSz03/21.

Dilophus sp. 1 ♂: FSz03/21.

PLECIIDAE

Two pleciid species were described from Thailand. EDWARDS (1928) described *Plecia minor* from Mabek, but that being a junior primary homonym of *Plecia minor* JAENNICKE, 1867, HARDY gave it a new name, *Plecia malayaensis* HARDY, 1948. *Plecia siamensis* HARDY, 1953 (p. 100) was described from "Koh Chong Island".

We captured ten specimens of three *Plecia* species.

Plecia sp. 1. 3 ♂: PF04/35. A species close to *P. siamensis*, but not conspecific.

Plecia sp. 2. 5 ♂: PF04/7/11/12/17. A species obviously in the *P. impostor* group.
Plecia sp. 3. 1 ♂ 1 ♀: PF04/12/15. A large-bodied species.

SCATOPSIDAE

Scatopse flavipalpis EDWARDS, 1928 (p. 47) was described from Thailand (Khao Luang).

In 2004 we selected and pinned 26 indiv., but we did not find any scatopsids in the material from 2003. This is however, a very diverse material with up to 16 species representations.

ANISOPODIDAE

Five specimens represent this family, which has not been recorded from Thailand formerly. The Oriental *Sylvicola* spp. need a revision. We refrain from providing additional descriptions in order to avoid further chaos about that species rich genus. However, we can foresee a splitting of *Sylvicola* into several (i.e. more than 2) genera, which seems reasonable and to be easily justified.

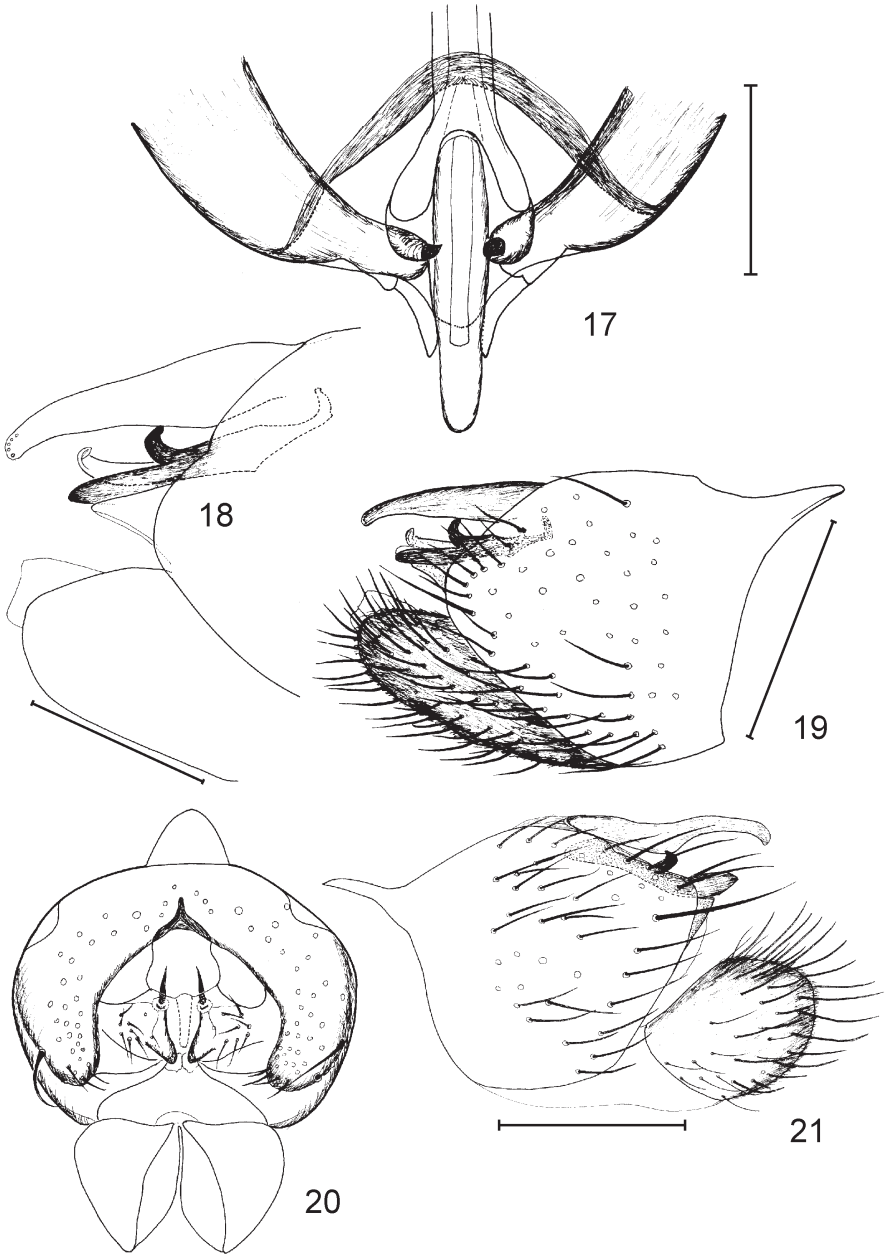
Sylvicola sp. 1 (variegate, i.e. black & yellow flagellomeres): 1 ♂: PF04/35; 2 ♀: PF04/14; 1 ♂: FSz03/7.
Sylvicola sp. 2 (all black flagellomeres): 1 ♀: FSz03/11 (Doi Pha Hom Pok).

Seven indiv. of a third species were captured during the 2003 expedition in Vietnam.

MYCETOBIIDAE

The family has not formerly been recorded from Thailand. We captured seven individuals of three species. Two of them are new to science. One species is described below, the other one elsewhere.

Mesochria cinctipes DE MEIJERE, 1913 – 1 ♂: PF04/30; 1 ♀: PF04/29; 1 ♀: PF04/36; 1 ♀: PF04/38; 1 ♀: PF04/43.
Mesochria simplicipes L. PAPP, 2006 – Paratype ♂: PF04/17. The holotype was collected on Taiwan. The species was described in another paper (PAPP 2006). Its male genitalia (Figs 20–21) differ from those of *M. thaii* remarkably: lateral projection of gonocoxites shorter and blunt, medial lobe of gonostylus somewhat more basal, lateral lobe broader in profile, cerci broader but shorter and broadly rounded, phallus membranous.



Figs 17–21. *Mesochria* spp., male genitalia. 17–19 = *M. thaii* sp. n., holotype male: 17 = apical part of genitalia, ventral view, cerci removed, 18 = same, lateral view, 19 = whole genitalia, lateral view. 20–21 = *M. simplicipes* L. PAPP: 20 = caudal view, 21 = lateral view. Scales: 0.2 mm for Figs 19–21, 0.1 mm for Figs 17–18

Mesochria thaii L. PAPP, sp. n.
(Figs 17–19)

Holotype male (HNHM, right mid leg lost, abdomen with genitalia in a plastic microvial with glycerol): THAILAND: Khao Pu – Khao Ya N. P., along a forest brook below the (Pak Yam) waterfall, Nov 21, 2004, No. 42, L. PAPP & M. FÖLDVÁRI.

Measurements in mm: body length 1.96, wing length 2.27, wing breadth 1.30.

Scutum unicolorous ochre, pleura, coxae and legs yellow.

Ocellar triangle much protruding, 0.065 mm high, all ocelli directed forward and laterally, respectively. Ocelli large, lateral ones 0.07 mm, apical 0.075 mm. Antennae black, also palpi and proboscis black. Flagellum of probably 14 flagellomeres, but apical 4 ones lost on holotype. Ventral facettes of eyes smaller than dorsal ones.

Legs unicolorous without any pattern, only apical part of hind tibia darker. Hind coxa with 4 medium-long setae on postero-lateral edge (partly broken on holotype). Length ratios of tibiae and basitarsi: fore: 77: 67 (in paratype of *M. simplicipes* 79: 67), mid 104: 85, hind 138: 83 (x 0.0109 mm). Hind tibia medially on posteromedial surface with a row of 9 black thick setae. Claws rather long (0.06 mm), thin, curved.

Veins yellow, upper veins, costa and basal setion of Cu1 ochre. Subcostal vein rather long. Sc, R1, R2+3 and R4+5 setose both dorsally and ventrally. M1 and M2 very faint, only apical parts well visible (yellow). M3 almost straight, downcurved apically. The most easily detectable characteristic of this new sp. is that Cu1 vein tenderly curved and *not* angulately "broken" at middle. Cu2 faint but distinct, detectable even well distally to M-Cu. A1 vein slightly curved in apical half and reaches wing margin but very faint and even disappearing in basal 1/3. A2 present on 2/3 distance of its base to wing margin.

Abdomen rather thick, dark brown. Sternites broad, even the 2nd one. Tergites 8 and sternite 8 not fused, sternite 8 very short, 0.15 mm only. Tergite 8 0.07 mm, form half of a ring. Cerci (Fig. 18) much different from those of *M. simplicipes*: longer but less high in profile (cf. Figs 20–21). Lateral lobe of gonocoxites broadly rounded, i.e not narrowed apically in profile as in M. *simplicipes* (Figs 18–19 cf. Fig. 21). Gonostylus bilobed, dorsal lobe black, strongly dorsally curved (Figs 18–19), apical lobe less sharp than in M. simplicipes. Phallus thin, straight, upcurving apically.

The new species is related to *M. simplicipes*; the differentiating characters are given in the key below.

A KEY TO THE ORIENTAL SPECIES OF *MESOCHRIA* ENDERLEIN

1. Mid and hind leg with distinct brown bands on femur and tibia (although they may be diffuse on mid leg). Mesoscutum caudally with 4 large dark brown patches. Posterodorsal row of spiniform setae on hind tibia of ca. 12 setae
M. cinctipes DE MEIJERE, 1913

– Mid and hind leg without brown bands on femur and tibia, only knees and end of tibiae darkened. Mesoscutum without dark patches caudally. 2

2. Hind femur with 9 setae in the posterodorsal row. Distance of apex of R5 and M1 equals that of M1 and M2 on wing margin. Male genitalia as in Figs 17–19. **M. thaii** sp. n.

– Hind femur with ca. 16 setae in the posterodorsal row. Distance of apex of R5 and M1 shorter than that of M1 and M2 on wing margin. Male genitalia as in Figs 20–21. Taiwan and Thailand. **M. simplicipes** L. PAPP, 2006

(The female type of *M. intermedia* EDWARDS (N Borneo) was not examined within the scope of this project but it does not seem to be closely related to any of the above species.)

DIADOCIDIIDAE

This small family of Sciaroidea was not included in the CDO, since no representative of them has been known from SE Asia or even from the Oriental region until most recently (cf. OOSTERBROEK 1998). Last year the first paper on the Oriental Diadocidiidae was published (PAPP & ŠEVČÍK 2005), which includes also the paratype male of *Diadocidia* (*Taidocidia*) *globosa* PAPP & ŠEVČÍK, 2005, that was captured during our Thailand collectings (PF04/42).

KEROPLATIDAE

Only *Orfelia* (*Ralytupa*) *pendleburyi* (EDWARDS, 1928) was described from Thailand and no more species were mentioned in the CDO. We captured 71 indiv. in 2004 and nine indiv. in 2003. In the tribe Keroplatini seven species of in six genera, in Orfeliini 26 species in 12 genera were found. All the 18 genera are new to the fauna of Thailand. Below only the new species of Keroplatini are described.

KEROPLATINI

Bisubcosta L. PAPP, gen. n.
(Figs 126–128)

Type species: *Bisubcosta oligoradiata* L. PAPP, sp. n.
Gender: feminine.

Head globular, proboscis and palpi minute. Flagellomeres 14, flattened lateromedially, basal one much longer than broad, flagellomeres 10–13 quadrate, apical flagellomere with a cylindrical apical process (Fig. 128). Two lateral ocelli, no anterior ocellus.

Scutum not much arched. Laterotergite bare. Scutellum short quadrate. No membranous area below scutellum. Metanotum *strongly* conical. Prosternum quadrate (divided sagittally) and bare.

Coxae thickened and comparatively long. Tibial spurs very long (see below): 0 : 1 : 1.

Two longitudinal subcostal veins: Sc1 terminates in costa (Fig. 126), Sc2 ends free but close to costa. No R4 vein (Fig. 127). R1 and R5 setose dorsally. R5 very long, much downcurving, like in Macroceridae. M1–2 stalk long. Cu2 short. A1 vein short, slightly longer than half of the distance of its base to wing margin, no A2 vein but only a short shadow (fold) of a vein. Alula minute, long triangular, calypter long but low, with long hairs.

Abdomen very narrow basally (see below). Male tergite 9 much broader than long, subtriangular. Gonocoxite long and not high, consequently ventral genital opening large: much longer than broad. Gonostylus broad and thick, no basal lobe.

Second subcostal vein (Sc2) is only a Sc1-R1 cross-vein in majority of cases in Mycetophilidae. However, in Keroplatidae Sc2 is clearly a longitudinal vein, ending in R1 radial vein, e.g. in species of *Xenoplatyura*. Although it may completely missing (*Xenokeroplatus*) or reduced and ends close to H vein (*Keroplatus*). Though *Nauarchia* MATILE and some spp. of *Euceroplatus* have similar R5, this form is not common in the Keroplatidae.

Bisubcosta gen. n. does not key out to couplet 9/13 in MATILE's (1990) key, since there is no R4 vein. If we leave this character out of consideration, and since tibial microchaetae are well ordered in rows in whole their length, we may go to couplet 16: *Nauarchia* MATILE, 1990, whose antenna is similar but otherwise that is not related.

Etymology. The generic name refers to the possession of two true subcostal veins, which is exceptional.

Bisubcosta oligoradiata L. PAPP, sp. n.
(Figs 126–128)

Holotype male (HNHM, apex of right fore tibia with tarsi and left hind tarsomeres 2–5 lost): THAILAND: Ban Na Lae, nr Pua, over a rocky forest brook, Nov 5, 2004, No. 19, leg. L. PAPP & M. FÖLDVÁRI.

Measurements in mm: body length: head plus thorax 1.70, abdomen (downcurved) ca. 5.02, all body 6.63, wing length 3.37, wing breadth 1.53.

Frontal tubercle sharp, triangular, strongly protruding from the depressed preocellar frons. Distance of eyes at proboscis only 0.085 mm, i.e. much less than one half of prosternum (2×0.11 mm).

Scutum brown with thin darker brown oblique bands, approaching and united at the level of wing base, and with long prealar and supraalar setae. Scutal setae otherwise evenly distributed. Metanotum whitish. Scutellum 0.39 mm broad, 0.16 mm long. Antepronotum laterally, proepisternum and postpronotum (prestigmal ridge, i.e. not directly before anterior stigma) with long black setae. Anepisternum anterodorsally with ca. 10 short setae.

Coxal length 1.065, 1.23 and 1.17 mm. Femora yellow with dark bases and apices, fore tibia brown, mid and hind tibiae black, tarsi brown. No apical spur on fore tibia, but a row of sharp apical setae on ventral half (not a tibial comb), i.e. no regulr comb on t1. Both tibial apical combs strong on hind tibia, lateral comb of t2 normal, but a less distinct comb present medially on t2. Mid tibial apical spur 0.63 mm, hind tibial spur 0.80 mm, both thickly hairy. Legs (in mm): f1 1.195, t1 1.90, mt1 2.62, f2 1.64, t2 2.13, mt2 2.23. Claws minute, thin, straight and perpendicular, no pulvilli.

Common section of Rs and M1–2 continued backwards in a long and rather thin brown spot, almost to radial trunk (Fig. 127). M1–2 stalk 0.78 mm, M1 1.98 mm. Veins R1 and Cu1 thick, black, Cu2 short but comparatively very thick. R5 thick and even thicker from basal Ľ to almost its apex.

Abdomen dark brown, S2 and S3 with a pair of long yellow bands, S4 to S6 with central yellow areas. Tergite 0.49 mm long, very narrow, tergite 2 0.92 mm, tergite and sternite 8 short, narrow and mostly hidden in the 7th sclerites.

Etymology. The specific epithet (noun) refers to the missing R4 vein.

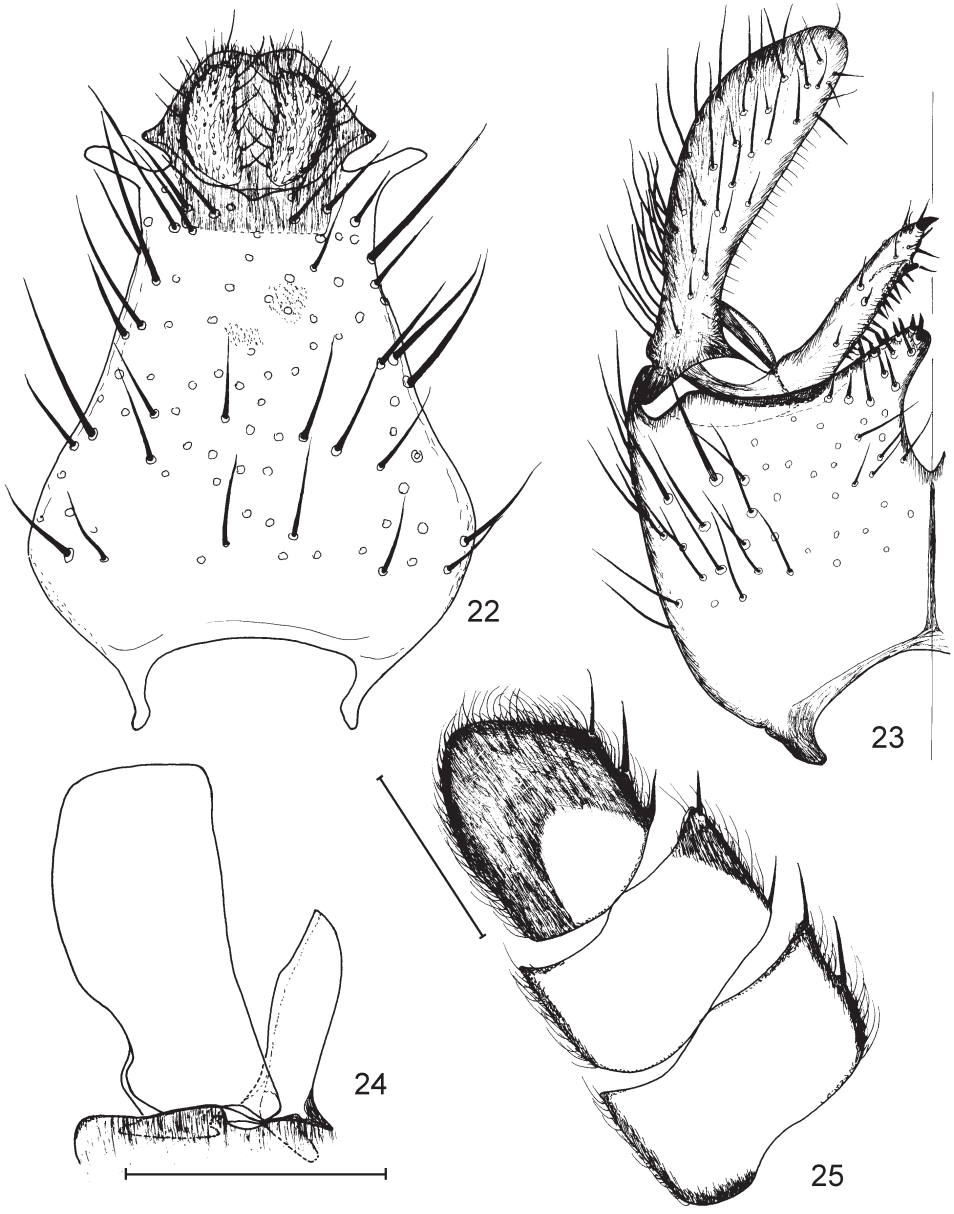
Heteropterna oroszi L. PAPP, sp. n.
(Figs 22–25)

Holotype male (HNHM, left hind leg lost, abdomen with genitalia in a plastic microvial with glycerol): THAILAND: Trang Prov., Khao Chong Botanic Garden, along the stream below waterfall, Nov 14, 2004, No. 30, leg. L. PAPP & M. FÖLDVÁRI.

Measurements in mm: body length 4.46, wing length 3.37, wing breadth 1.38.

Head dark, covered with grey microtomentum, only ocelli are shiny. Palpi minute and black like proboscis. Two large lateral ocelli and a minute anterior one. Face linear at middle. Eyes covered by short whitish, very dense cilia. Basal 11 flagellomeres dark brown, only anterior lateral part of flagellomeres 2–6 with diffuse yellowish stripe. Flagellomeres 12–13 yellow, apical flagellomere bicolorous (Fig. 25) and slightly bifid apically (best seen subdorsally): medial part yellow, rest dark brown. Flagellomeres much flattened, medial ones 4 times broader than long.

Scutum dark brown but anterior half yellow with a thin sagittal brown line and a pair of rectangular brown stripe, which embrace (with the dark lateral and caudal colour) a pair of quadrate yellow spots. Supraalar area with long dense black setae. Postpronotum, antepronotum and proepisternum dark brown, bulging, latter two sclerites with long black setae. Prosternum with some lateral setae. Anepisternum dark brown, katepisternum (preepisternum), anepimeron and laterotergite less dark brown, metepisternum, metepimeron and metanotum dark brown again. Scutellum with medium long apical setae, no discal setae. Subscutellar membraneous area forms a regular triangle.



Figs 22–25. *Heteropterna oroszi* sp. n., holotype male. 22 = tergite 9 with cerci and proctiger, 23 = gonocoxite and gonostylus, ventral view, 24 = gonostylus, lateral view, 25 = apex of antenna, inner (lateral) view. Scales: 0.2 mm for Figs 22–24, 0.109 mm for Fig. 25

Coxae all blackish brown, bases of femora dark. Legs mainly light brown. Coxae, particularly cx1 and cx2 with dense long black setae. Tibial spurs: 1 (brown): 2 (white) : 2 (white). Hind tibia thickened in its apical half (almost bat-shaped) and darkened. Hind basitarsus very long (1.13 mm), thick, flattened laterally, width 0.12 mm at middle. Claws short thick with ventral dentation.

Wing's basic colour light brown and covered with dense microtrichia. Veins thick, dark brown, particularly so for radial veins. A large dark brown spot in costal, subcosta and r1 cells to the apex of Sc, down to M1–2 fork base; another quadrate dark spot from 2/5 of Sc-R1 costal section to the apex of R4 into r5 cell, where it is confluent with the apical (somewhat less dark) spot. R1 setose in its whole length and R5 setose from base of M1–2 to apex, Sc and other veins bare. Costa continued on 2/5 of R5-M1 costal section (0.215 mm). M2 does not reach wing margin. Cu1 strongly downcurving, Cu2 distinct distally to Cu1 curvature.

First abdominal sclerites dark brown, tergites 2- yellow with brown caudal margin. Sternites 2- with a pair of lateral and 2 medial brown spots, which are confluent on S3 and S4, S5 to S7 with broad brown caudal margin, T8 and S8 dark brown. Tergite 9 (Fig. 22) rather long, with a pair of digitiform lateral caudal processes, proctiger with almost sharp lateral projections, cerci normal with medium-long thin setae. Gonocoxites (Fig. 23) with a medium-deep but broad caudal incision and with a pair of medial processes, which bear short thick black setae. Gonostylus (Fig. 24) long, apex quadrate in lateral view, basal process rather large, with a black apical and another black subapical teeth. No long setae on basal process, otherwise gonostlus covered by almost evenly thick setae.

This species runs to *H. fenestralis* MATILE, 1990 in MATILE's key, but wings are much different: subcostal "windows" are much longer.

I name this new species to the honour of Mr. ANDRÁS OROSZ (Dept. of Zoology, HNHM), who was our partner during the collection trip, and who collected so many valuable dipterous specimens for the Diptera Collection formerly.

Heteropterna thaii L. PAPP, sp. n.
(Figs 26–28)

Holotype male (HNHM, right fore leg lost, abdomen with genitalia in a plastic microvial with glycerol): THAILAND: 8 km E of Doi Anh Kang, over a rocky brook, Nov 2, 2004, No. 17, leg. L. PAPP & M. FÖLDVÁRI. Its body length was measured before making genitalia preparation and b. l. is described on pin card under the specimen.

Measurements in mm: body length 6.60, wing length 3.64, wing breadth 1.63.

Head black but occiput so strongly microtomentose that looks grey. Antenna black, dorsal 1/5 of flagellomeres 7 and 8 whitish yellow, four apical (10th–14th) flagellomeres whitish yellow but lateral and medial sides of flagellomere 10 with diffuse brown spot subventrally. Tip of apical flagellomere also diffuse brown. Medial flagellomeres 5 times broader than long. Face linear at middle. Proboscis and palpi black, latters minute, hardly longer than 0.05 mm.

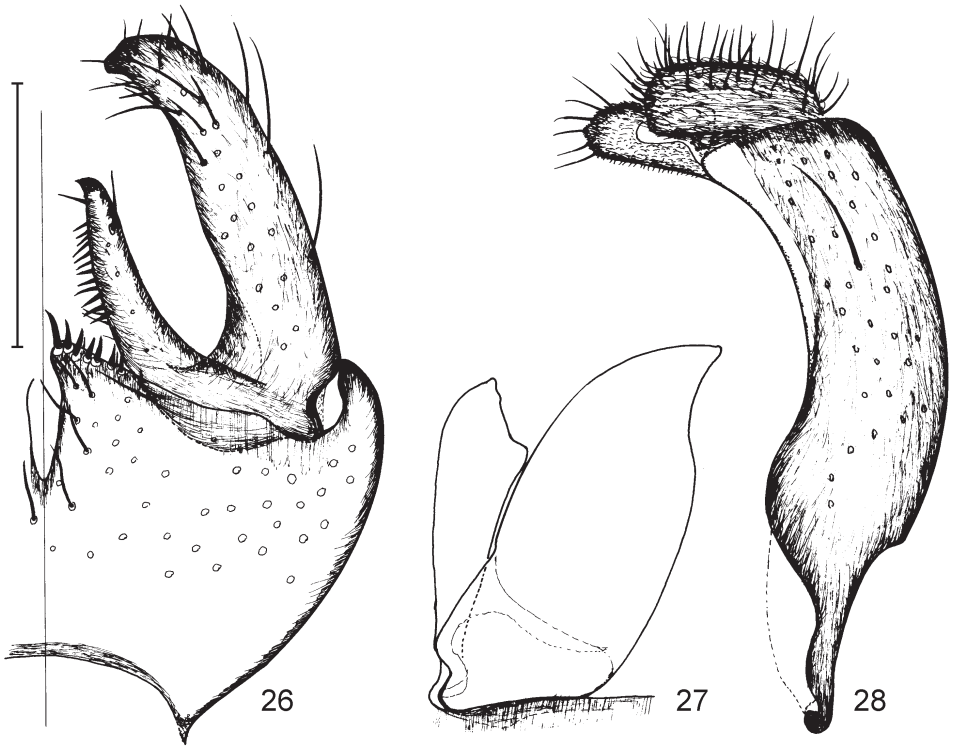
Scutum brown with a pair of transverse postalar yellow spots and 2 pairs of diffusely bordered ochre longitudinal bands: lateral ones from anterior parapsidal suture to scutellum, medial ones from antepronotum slightly posteriorly to the level of wing base, separated from each other by a sagittal brown line and from the lateral ones by a pair of thin brown oblique bands. Prosternum yellow, dorsal part dark brown, with some short black setae. Pleura dark brown but katepisternum dorsally with a

broad light band. Laterotergite bare. Scutellum blackish brown. Subscutellar membranous area large in form of a triangle, which is slightly higher than its basal side.

Basic colour of wing light brown, all apex infuscated. Upper (costal) marginal parts to the level of Rs (i.e. also 2/3 of cell r5) dark brown with 2 quadratic "windows": 1) from apex of Sc down to R4–5, 0.25–0.27 mm long, 2) distally to R4, down to middle of cell r5, 0.20–0.25 mm long. Costa continued to the 1/3 of R5-M1 costal section (0.195 mm), ends abruptly. Costal ratios: 0.87 mm: 0.12 mm : 0.77 mm, R4 0.205 mm. M1–2 stalk 0.43 mm, M1 1.87 mm. Knob of haltere black, stalk white.

Coxae black, for and mid femora dark brown, hind femur yellow with brown base and apical part. Fore tibia and all fore and mid tarsi yellow, mid tibia ochre, hind tibia and metatarsus dark brown, less thickened than in *H. oroszi*. Tibia spurs: 1 (light brown): 2 : 2(white). Claws short thick with ventral comb-like dentation.

Basal abdominal sclerites dark brown, tergites 2–6 yellow with brown lateral and caudal margins, which are gradually larger on more caudal segments. Sternite 2 with broad brown lateral rim, cranial part with a 6-gonal brown spot to its 2/5; sternite 3 with brown lateral rim in its caudal ⅓ and with a diffuse brown spot centrally; both S4 and S5 yellow in their cranial 1/3, brown posteriorly with a pair of quadrate yellow spots. Tergite without a pair of laterocaudal processes (as in *H. oroszi*). Cerci perpendicular to the tergite 9 (Fig. 28) and so not reliably depicted in a single view. Caudal lateral process of tergite 9 rather long (Fig. 28). Medial incision of gonocoxite (Fig. 26) medium long



Figs 26–28. *Heteropterna thaii* sp. n., holotype male. 26 = gonocoxite and gonostylus, ventral view, 27 = gonostylus, lateral view, 28 = tergite 9 with cerci and proctiger, lateral view. Scale: 0.1 mm for all

and narrow, medial caudal pair of gonocoxal processes broad apically and with a row of short sharp black thornlike setae. Basal lobe of gonostylus (Fig. 27) large, broad, gonostylus much narrowing in lateral view. No long setae on basal process but medial surface with numerous short black setae; lateral lobe covered with medium-long setae only.

This species keys to *H. septentrionalis* OKADA (Japan) in MATILE's (1990) key. Also its wing pattern resembles to that of *H. septentrionalis*. However, male genitalia are strongly different: shape and armature of gonocoxite and particularly gonostylus are very different (Figs 26–27, cf. figs 587–8 of MATILE 1990).

Keroplatus sp. 1 ♀: PF04/11. This is also a new species. However, since it is a female, it is advisable to wait until male material is available.

Platyroptilon jarujini L. PAPP, sp. n.
(Figs 29–31)

Holotype male (HNHM, right wing, left two apical flagellomeres, right apical flagellomere lost, abdomen with genitalia in a plastic microvial with glycerol): THAILAND: Trang Prov., Khao Chong Botanic Garden, rainforest, Nov 22, 2004, No. 43, leg. L. PAPP & M. FÖLDVÁRI. Its body length was measured before genitalia preparation and b. l. is described on pin card under the specimen.

Measurements in mm: body length 3.67, wing length 2.18, wing breadth 0.88.

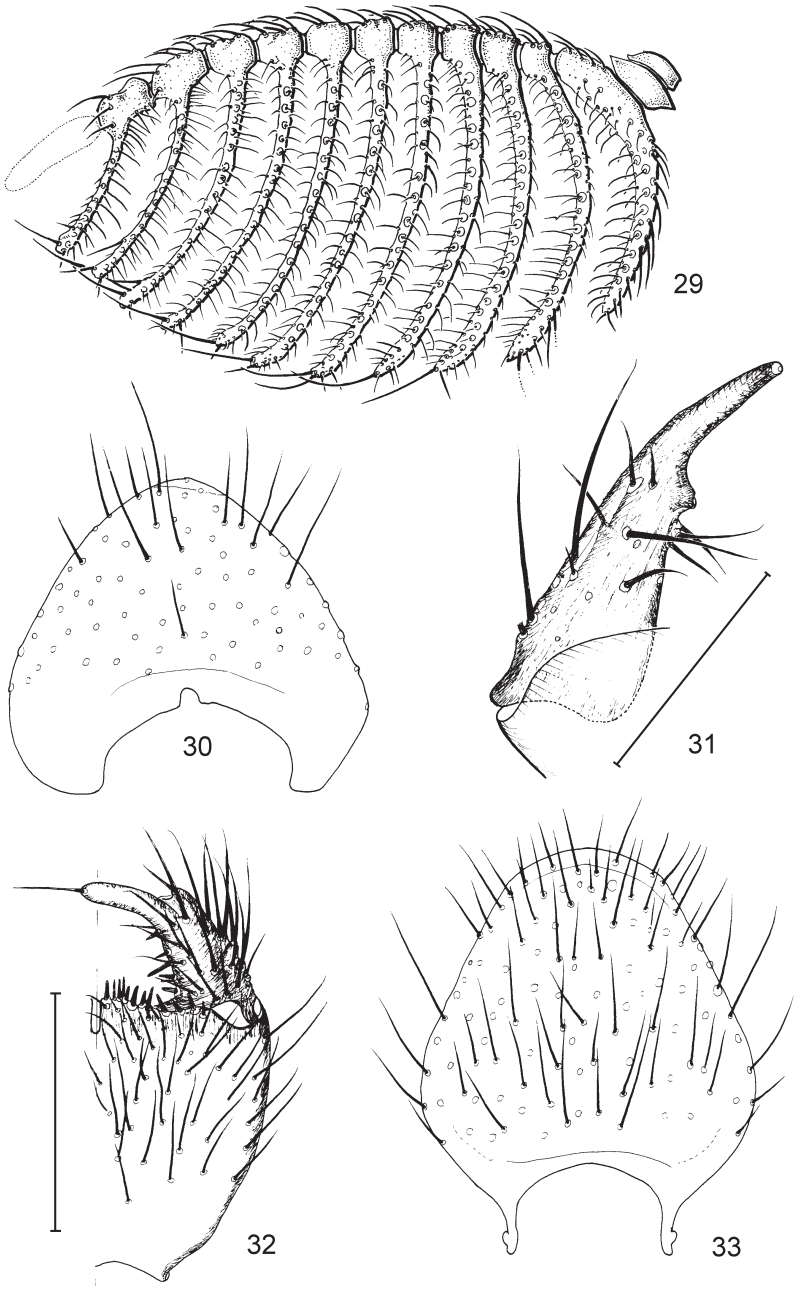
Face and other parts of head brown. Three ocelli, laterals much larger than anterior one, lateral *oc* separated from eye margin by a distance of 10/7 of their diameter. Antennae (Fig. 29) all dark brown but medial surface of basal prolonged flagellomere more yellowish. Palpi minute, black, shorter than 0.05 mm.

Scutum and scutellum dark brown, except for humeral callus, anepisternum centrally brown, like kapepisternum and dorsal part of laterotergite, other parts of pleura yellowish, metepimeron and metanotum dark again. Lateral part of antepronotum, proepisternum and proepimeron dark brown. Anepisternum as well as laterotergite bare.

Legs mostly dirty yellow, apices of cx2 and cx3, bases and apices of mid and hind femora as well as that of mid and hind tibiae blackened. Tibial spurs 1:1:1, lateral and medial combs well developed on all tibiae, except medial one of t1.

Wing light brownish, subcostal and radial veins thickened and darker brown, other veins lighter brown. Costa continued to 3/5 of R4+5-M1 section, ends abruptly. No sign of Sc2 vein. Costal sections: 0.62 : 0.087 : 0.45 mm. R4 0.19 mm, i.e. almost twice longer than R1-R4 costal section. M1–2 stalk 0.24 mm, M1 1.05 mm. Cu2 continued to wing margin but 0.15 mm. Knob of haltere black, stalk white.

Abdominal tergites dark with light anterior margin on T3 to T6. Sternites yellow but caudal margins dark brown. Tergite 9 (Fig. 30) shield-shaped with rather long setae. Gonocoxite caudally with short thick setae. Cerci and proctiger seem much larger than those of *P. papua* Matile. Gonostylus (Fig. 31) not large at base (as in *papua*), not broad but rather narrow at base, with long setae; there is a double tooth at 1/3 of medial margin and there with long thick setae.



Figs 29–33. 27–29 = *Platyroptilon jarujini* sp. n., holotype male: 29 = antenna (del. A. SZAPPANOS), 30 = tergite 9, 31 = gonostylus, subventral view. 32–33 = *Setostylus alienus* sp. n., paratype male: 32 = gonocoxite and gonostylus, ventral view, 33 = tergite 9. Scales: 0.2 mm for Figs 30, 32–33, 0.1 mm for Fig. 31

The new species surely belongs to the *P. collessi* MATILE (Australia), *kirkspriggsi* MATILE (Sulawesi), *papua* MATILE, *scurror* MATILE (Sulawesi) group with its 11 prolonged flagellomeres (12 flagellomeres in all). Unfortunately the apical flagellomere is lost on holotype, but its antenna (longest prolongation definitely longer than half antennal length) resembles more to that of *P. zernyi* EDWARDS (fig. 894 of MATILE 1990), than to that of *P. collessi*, to which it is related (Fig. 889 of MATILE). There was an undescribed "espèce malaise" in MATILE's (1990) monograph. Otherwise the genus was not recorded from the continental Asia (1 sp. each from P.N.G. and Queensland, and 2 spp. from Sulawesi). Its closest relative is probably *P. papua*, but rather smaller (wing length 2.18 mm vs 2.8 mm). Its tergite 9 is much different and also details of gonostylus are different.

Etymology. I name this new species to the honour of Prof. Dr. JARUJIN NABHITABHATA (Klong Luang, Phatumthani, Thailand).

Setostylus alienus L. PAPP, sp. n.
(Figs 32–33)

Holotype male (HNHM): THAILAND: Trang Prov., Thung Khai Botanic Garden, primary lowland rainforest, Nov 12, 2004, No. 28, leg. L. PAPP & M. FÖLDVÁRI.

Paratypes: Nov. 2004, leg. L. PAPP & M. FÖLDVÁRI: 4 ♂ (one male's abdomen with genitalia in a plastic microvial with glycerol): same data as for holotype; 5 ♂: ibid., Nov. 19, No. 38; 1 ♂: Trang Prov., Thung Khai Botanic Garden, along the "Nature Trail", Nov 13, 2004, No. 29; 1 ♂: Khao Pu – Khao Ya N. P., along a forest brook below the (Pak Yam) waterfall, Nov 21, No. 42; 2 ♂: Trang Prov., Khao Chong Botanic Garden, rainforest, Nov. 22, No. 43.

Measurements in mm: body length 3.67 (holotype), wing length 2.54 (holotype), 2.44–2.60 (paratypes), wing breadth 1.11 (holotype), 1.05–1.16 (paratypes).

Head and antennae all blackish brown, anterior ocellus minute. Preocellar frons strongly depressed, frontal tubercle less protruding. Flagellomeres with 8–10 macrochaetae on dorsal edge, no such setae on ventral edge of flagellomeres. Apical flagellomere cordiform (i.e. with asymmetrical blunt apex). Medial flagellomeres 4 times broader than long at middle.

Scutum yellow, no brownish pattern on it. Anepisternum and laterotergite brown, other pleura yellow (ochre in some individuals), antepronotum, proepisternum and proepimeron darker brown. Scutellum with brown apical 1/3, some medium long marginal and several shorter discal setae.

Fore coxa wholly yellow, apical 1/3 of mid coxa and hind coxa dark brown, as well as metanotum, otherwise yellow. Bases and apices of mid and hind femora brownish, legs otherwise yellow. Claws short and thick. Hind tibial spurs subequal, anterior spur of mid tibia 0.095 mm, ventral spur 0.26 mm long.

Wing light brown, veins brown. Cu2 rather long, apex well distal to base of M fork. A1 continued almost to wing margin, vein A2 almost to half distance to wing margin. Costal ratios (holotype): 0.71 : 0.15 : 0.45 mm, R4 0.21 mm. M1–2 stalk 0.21 mm, M1 1.17 mm.

Abdomen brown, tergite 1 black, anterior half of tergites 2 to 4 yellow with brown medial and caudal stripes; anterior ¾ of sternites 1 to 4 yellow. Tergite 9, gonocoxites and gonostyli yellowish.

Male tergite 9 (Fig. 33) similar to that of *S. innotatus* (EDWARDS) from Sumatra (cf. fig. 933 of Matile 1990). Also its gonostylus (Fig. 32) is similar but medial spines shorter and thicker, apical process longer and thinner and apical seta slightly longer.

Etymology. Its specific epithet ("foreign") refers to its peculiar combination of characters, but otherwise it is a true *Setostylus* sp.

S. alienus sp. n. does not key to any of couplet 3/4 in MATILE's (1990) for the Asian spp. of *Setostylus*: there are no ventral apical macrochaetae on flagellomeres but there are discal setae on scutellum. Contrarily to *S. innotatus*, its wings are unicolorous light brown, scutum of the new sp. unicolorous yellow. Details of male genitalia, particularly so for the shape and armature of gonostylus and apical part of gonocoxites give a safe basis for its identification.

Xenokeroplatus continentalis L. PAPP, sp. n.
(Figs 34–37)

Holotype male (HNHM, flagellomeres 8-lost, right wing preserved between two pieces of cover glass glued under the specimen, abdomen with genitalia in a plastic microvial with glycerol): THAILAND: Doi Suthep N. P., along a forest brook, Oct 31, 2004, No. 11, leg. L. PAPP & M. FÖLDVÁRI.

Paratype female: same data as for the holotype.

Measurements in mm: body length: 4.62 (holotype), 1.27 (head+thorax) 3.64 (abdomen), total body 4.86 (paratype), wing length 3.12 (holotype), 3.88 (paratype), wing breadth 0.96 (holotype), 1.16 (paratype).

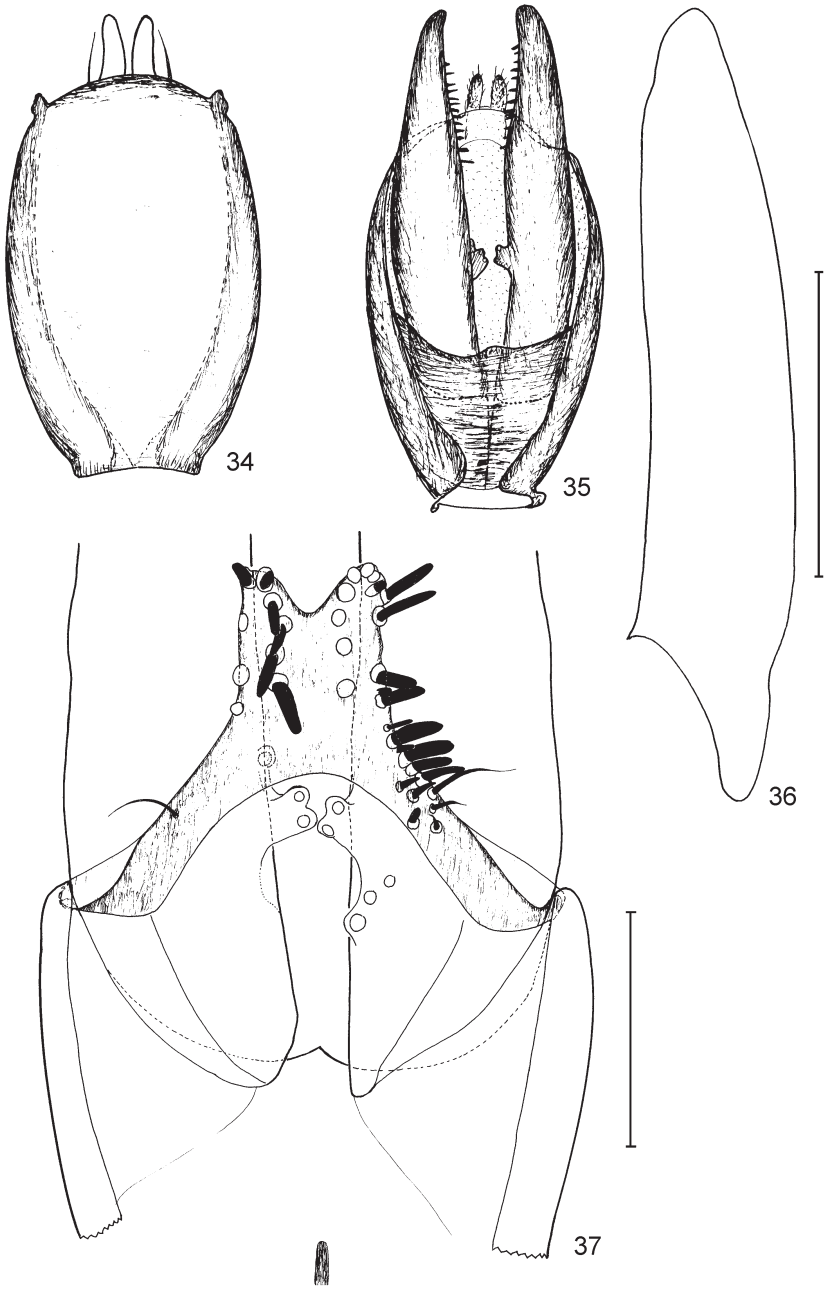
Head, scutum, scutellum, metanotum and abdomen blackish brown.

Occiput much bulging, ocellar triangle positioned anterior to middle of head. Two lateral large ocelli only. Antenna black. First flagellomere much longer than broad, flagellomeres 2 quadratic in profile (female) or broader than long (male), flagellomeres 3 to 13 broader than long, apical flagellomere rounded apically, length/width 7/5, i.e. 0.075/0.053 mm. Eyes covered by dense cilia. Proboscis minute, palpi 2-segmented, apical segment oval. Frontal tubercle very small triangular, not protruding from plane of frons. Sides of frons ("orbitalia") and vertical eye margin with rather long proclinate setae.

Scutellum triangular (0.29 mm broad, 0.185 mm long, holotype), without *any* setae. Metanotum strongly conical. Pleura, coxae and legs mainly dirty yellow. Prosternum short but very broad, bare. Anepisternum and laterotergite bare, latter may be brown fumose.

Fore and mid coxae with numerous short black setae, hind coxa with a row of 5–6 setae on posterior lateral edge. Tibiae and metatarsi (basitarsi) extremely long, microchaetae on tibiae ordered in rows in their whole length. Length of tibiae and basitarsi: t1 0.815, mt1 2.85 mm, ratio 3.49; t2 1.36, mt2 2.67 mm, ratio 1.97. Tibial spurs 1 : 0 : 1 (!), medial spur on hind tibia minute but discernible. Tibial apical combs on t1 (short, medial), t2 (short medial), t3 (lateral, rather short). No macrochaetae on legs. Claws almost straight, ventral dentation very fine, no pulvilli.

Wing light brown with diffuse darker brown apex and ventral part back to cubital veins. Veins darker brown. Costa continued to 3/5 of R5-M1 costal section.Vein R1 setose dorsally, R5 setose only in apical 1/3, proximally to R4. Vein Sc1 short thin, apex just overrun R-M crossvein. No sign of



Figs 34–37. *Xenokeroplatus continentalis* sp. n., holotype male. 34 = outer genitalia, dorsal view, 35 = same, ventral view, 36 = contour of gonostylus, lateral view, 37 = apical part of gonocoxites with medial process and basal half of gonostyli, dorsal view, tergite 9 removed. Scales: 0.4 mm for Figs 34–35, 0.2 mm for Fig. 36, 0.1 mm for Fig. 37

Sc2. R4 minute, shorter than 0.05 mm. Veins M1 and M2 convergent. Cu1 slightly curved, strong, continued to wing margin. Cu2 does not reach visible part of M2. A1 straight, runs close to Cu2 and not reaching Cu-M. Costal ratios (holotype): 90:51:31, i.e. 0.98 : 0.55 : 0.34 mm. M1–2 stalk and basal part of M1 and M2 missing, visible parts 1.20 mm and 1.62 mm. Calypter anterobasally with a small pit with minute black setulae. Halteres all dark.

Abdomen very narrow, only 0. 34 mm at thickerst, slightly higher than broad. Sternites yellowish broad, laterally meet tergites.

Male tergite 9 (Figs 34–35) extremely large, ventral cranial edges almost meet sagittally, connection of genitalia to abdomen rather narrow, only 0.12 mm of that large fly. Tergite 9 with slightly convex caudal end. Hypoproct with some thick black setae. Sternite 9 was not detected. Cerci rather small. Gonocoxites short, i.e. rather small, without ventral incision but with a sagittal plate, which is 2/3 as long as ventral length. Gonocoxites with a basally inserted process (Fig. 37), or, a pair of processes, which fused sagittally to each other, and bears similarly thick black thorns like gonostylus. Gonostylus (Figs 36–37) very long, apex narrowly rounded in lateral view. All medial surface of gonostylus with thick, more or less blunt black thorns, as in its congeners. In addition, gonostyli on medial edge with medially directed processes, which bears 2 pairs of black thorns (Fig. 37).

Female cerci broad at base, almost sharply pointed at apex, with medium long and not thick setae only.

X. continentalis sp. n. keys out to *X. riparius* MATILE (Solomon Is.) but gonostylus is even longer and gonocoxal medial process must be different (cf. fig. 988 of MATILE 1990). This is the first known species of *Xenokeroplatus* from the Asian continent.

ORFELIINI

Laurypta spp. Seven specimens of three species represent that genus from Thailand. One of them may well be *L. leptura* (EDWARDS, 1928), which was described from Malaysia. Unfortunately, there are two spp. in our material with extremely long cerci.

Lapyruta EDWARDS, 1923. 1 ♀: PF04/17, of a medium-sized, yellow bodied and yellow winged species. It readily keys out to this New World genus. The only known species was described from the West Indies.

Neoplatyura spp. Five individuals of three spp. were captured. Hitherto only one sp., *N. tjibodensis* (EDWARDS, 1927) has been reported from the Oriental region (unfortunately I have not seen its type).

Proceroplatus spp. Three males of two spp. were collected. Hitherto 4 spp. have been reported from the Oriental region (CDO, under Mycetophilidae, COLLESS & LIEPA 1973): two of them from Sri Lanka, one sp. each from Borneo and Bangla Desh. It is worth mentioning that some of the earlier records of *Proceroplatus* are questionable. It is advisable to restrict the genus only those species with evenly setose mesoscutum, setose laterotergite, setulae on anepisternum dorsally, short Sc vein, no Sc2 vein, rather short Cu2 and long R5 vein and with flattened flagellomeres.

Pyratula sp. A single ♂ (PF04/19) plus one damaged indiv. without abdomen were captured. Only one species is known from the Oriental region (BECHEV 2000).

Ralytupa pendleburyi EDWARDS, 1928. The only Oriental species of this predominantly Afrotopical genus (34 known species, BECHEV 2000) was described from Thailand (Nakhon Si

Thammarat), but not found in our material. The genus is known to me based on Afrotropical species. I am afraid, it is impossible to decide on the relegation of *R. pendleburyi* without a study of its type.

Rutylapa spp. We captured and pinned 20 specimens of eight species. Most of the Oriental species have a flagellum with spiculiform apical flagellomere. Only four spp. were formerly described from the Oriental region, but it seems probable, that *Rutylapa* is a species rich genus (or even, the most diverse one) in the Oriental region.

Truplaya sp. 1 ♀: PF04/24.

Xenoplatyura spp. Eleven individuals of three species are in our material. None of those spp. seem conspecific with the three spp. in the CDO.

In addition, representatives of at least four undescribed genera are in our material (represented by 9 specimens). A longer, separate paper is planned on the Oriental species of Orfeliini, where all the new taxa will be described.

MACROCERIDAE

One species, *Macrocera femina* COHER, 1963 (p. 31) was described from Thailand, no other species was reported from that country. We have 31 macrocerid specimens from 2004 and 29 specimens from 2003. They represent two genera and eight species. Since macrocerid flies are much better fliers than most of the Sciaroidea groups, at present I am thinking of species more widely distributed (i.e. with large areal). If I am wrong, species, which were/are reported from far distant countries (e.g. Nepal *vs* Java) must be separated later.

Chiasmoneura anthracina DE MEIJERE, 1913 – 1 ♂ 2 ♀: OSz03/31; 1 ♀: FSz03/18; 2 ♂ 1 ♀: PF04/25; 1 ♂ 1 ♀ and 2 indiv without abdomen: PF04/39; 4 ♂: PF04/43. It was described from Java and hitherto known from India, Malaysia, Java and Sumatra. Published records seem to need revision, since e.g. genitalia of our males do not respond to MATILE's figures (1990, figs 269–70). New to Thailand.

Macrocera brunnea BRUNETTI, 1912 – 1 ♂: PF04/10 (Doi Pui). Described from India (Simla Distr.), but COHER (1963) reported it also from Nepal. Our almost intact male fits well to both those descriptions, and even to COHER's figure (plate I, lower row) of gonostylus, if we manage to find the special view, in which he depicted male genitalia.

Macrocera femina COHER, 1963 – 1 ♀: PF04/7; 1 ♀: PF04/10; 2 ♀: FSz03/15. Described from Thailand, Trang Prov., "Chong", based on a single female. Although our specimens have paler wing patterns, they fit well to the description, incl. the small size (wing length of our specimens less than 4.0 mm, about 3.5 mm). *M. femina* is distinctly smaller than any of the other species from Thailand (even sp. aff. *nepalensis*).

Macrocera trispina COHER, 1963 – 1 ♀: PF04/28; 3 ♀: PF04/38. Described from Nepal, a far distant area, but anepisternum of our specimens is also without setae, and wing patterns are the same as given in its original description.

Macrocera sp. n. aff. *brunnea* BRUNETTI – 1 ♂ 2 ♀: PF04/11. Mesoscutum brown centrally, as well as scutellum and metanotum, while postpronotum, notopleura and most of pleura yellowish. Wing with a pattern more similar to that of *M. nepalensis* but apical part of wing with macrotrichia.

Macrocera sp. n. aff. *nepalensis* COHER – 1 ♂: FSz03/7; 2 ♂: PF04/26. Wing pattern resembles to that of *M. nepalensis* but this is obviously a new species with its longer gonocoxite and comparatively rather long gonostylus.

Macrocera sp. n. aff. *simbhanjangana* COHER – 1 ♂: FSz03/10; 2 ♂: PF04/10; 1 ♀: Fang, Mae Fang N.P., Doi Pha Hom Pok, 22. 11. 2003, 2000m, along road and creek, leg. A. SZAPPANOS. I cannot find a closer relative than that. The species with its simple wing pattern but with dense macrotrichia on wing falls into the same species group as *M. simbhanjangana* COHER, 1963 (Nepal). However, basal 2/3 of female wing is not darkened as in *simbhanjangana*, and I was unable to position male gonostylus to have a similar shape as COHER (1963) gave on his plate 1.

Macrocera sp. (? n.) aff. *M. nepalensis* COHER, 1963 and *M. breviceps* SASAKAWA, 1966 – 2 ♂: FSz03/8; 1 ♂: FSz03/12; 3 ♂: FSz03/10; 8 ♂ 1 ♀: FSz03/15; 1 ♂ 1 ♀: FSz03/18; 1 ♀: FSz03/12; 2 ♀: FSz03/20; 1 ♂: Fang, Mae Fang N.P., Doi Pha Hom Pok, 22. 11. 2003, 2000m, along road and creek, leg. A. SZAPPANOS; 6 ♂: PF04/24. 27 indiv. Our specimens have a feature, which seems unique among the Oriental spp.: the species has a very small, black shiny, projecting ocellar triangle, where ocelli are close to each other. The distance between ocelli is not more than their own diameter. It agrees with both *nepalensis* and *breviceps*, since it has very short Sc vein and similar wing pattern (and no macrotrichia on wing).

MYCETOPHILIDAE – MANOTINAE

We wholly accept those strong evidences, by which manotines are relegated to the family Mycetophilidae, as a subfamily. It is only for practical reasons, that I treat them in a separate paragraph. In 2004 we captured 49 manotine individuals. Much to our satisfaction, that includes those two species of *Eumanota* TUOMIKOSKI, 1966, which SÖLI (2002) described from Thailand. All the other species belong to the genus *Manota*.

Eumanota racola SÖLI, 2002 – 2 ♂: PF04/35. It was described from Koh Ra. Our locality (Trang Prov., Palian District, Nam Tok Nam Pan Forest Park) is rather far from the type locality but we do not think manotine species distributions too restricted.

Eumanota suthepensis SÖLI, 2002 – 1 ♂: PF04/3 (Doi Suthep); 1 ♂: PF04/7 (Doi Inthanon); one of them is its type locality, the other one is a similar mountainous area.

Manota spp. In contrast to *Eumanota*, and contrarily to the exceptional species diversity in the Oriental region, no comprehensive work on *Manota* has ever been published (H. HIPPA's paper on 27 new spp. from Malaysia is under publication). We captured and pinned 39 males and six females (two of them relegable to conspecific males), which represent 19 species (probably ten of them are new to science). H. HIPPA and the senior author plans to publish another paper on the SE Asian *Manota*. In advance, it seems that the following characters (other than those of the male genitalia) are useful to base practical groups of species: +/- long black postocular setae, ratio of visible sections of veins M1 and M2, length of 4th palpomere (and its ratio to the length of three basal palpomeres combined), extension of black colour on hind femur.

MYCETOPHILIDAE s.str.

In the CDO (COLLESS & LIEPA 1973: 451–463) there is only one species, *Allactoneura argenteosquamosa* (ENDERLEIN, 1910) listed from Thailand. Later KJAERANDSEN (1994) described *Pseudexechia inthanonensis* (p. 329) from Thailand. In his revision of the Oriental *Sciophila*, SØLI (1995) described three species: *Sciophila bilobata* (p. 283), *S. fistulata* (p. 285) and *S. suthepensis* (p. 286).

It is not an exaggeration, if we say that our material is extremely rich. In 2004 we captured and pinned 1120 indiv. of Mycetophilidae s.str., the 2003 expedition resulted in 479 indiv., partly from Vietnam but mainly from Thailand. All the material must contain well over 100 species, a good majority of them new to science.

We list the genera represented in the material following BECHEV's (2000) table (with the number of indiv. from 2004 + 2003 in brackets).

Mycomyinae: *Mycomya* RONDANI, 1856 (68+29), *Neoempheria* OSTEN SACKEN, 1878 (246+4), *Parempheriella* MATILE, 1973 (15 indiv., 6 new species)

Sciophilinae: *Acnemia* WINNERTZ, 1863 (1+1), *Azana* WALKER, 1856 (1), *Monoclona* MIK, 1886 (*M. laosilvatica* ŠEVČÍK, 2000: 1 ♂: PF04/28), *Neuratelia* RONDANI, 1856 (8), *Phthinia* WINNERTZ, 1863, or a gen. n. (2), *Sciophila* MEIGEN, 1818 (1)

Gnoristinae: *Boletina* STAEGER, 1840 (1), genus aff. *Dziedzickia* JOHANNSEN, 1909 (7), *Tetragoneura* WINNERTZ, 1846 (2)

Allactoneurinae: *Allactoneura* DE MEIJERE, 1907 (4)

Metanepsiinae: *Metanepsia* EDWARDS, 1927, (2)

Leiinae: *Clastobasis* SKUSE, 1890 (40+3), "Docosineura" gen. n. (5), *Leia* MEIGEN, 1818 (4+2), *Megophthalmidia* DZIEDZICKI, 1889 (1+3), *Neoclastobasis* OSTROVERCHOVA, 1970 + *Greenomyia* BRUNETTI, 1912 (12), *Rondaniella* JOHANNSEN, 1909 (15), *Sticholeia* SÖLI, 1996 (1 ♀, sp. n., the 4th species of the genus, the first one from the Asian continent)

Mycetophilinae: Exechiini: *Allodia* WINNERTZ, 1863 (48+2), *Anatella* WINNERTZ, 1863 (5), *Brachypeza* WINNERTZ, 1863 (2), *Brevicornu* MARSHALL, 1896 (1+3), *Cordyla* MEIGEN, 1803 (4), *Exechia* WINNERTZ, 1863 (33+2), ?*Tarnania* TUOMIKOSKI, 1966 (1)

Mycetophilini: *Aspidionia* COLLESS, 1966 (7+1), *Epicypta* WINNERTZ, 1863 (493+68), *Mycetophila* MEIGEN, 1803 (21+11), *Phronia* WINNERTZ, 1863 (8), *Platurocypta* ENDERLEIN, 1910 (21+1), *Sceptonia* WINNERTZ, 1863 (0+2), *Zygomyia* WINNERTZ, 1863 (2)

In addition, representatives of two new genera of the Exechiini are in that material.

The most interesting specimens are probably one ♂ and one ♀ of *Leptomorphus*, or a new genus aff. *Leptomorphus* (PF04/29). Its body is a metallic blue and yellow, and its wing venation fit well to that of *Leptomorphus*. However, it has no scutellum! The thinner sclerotized (nearly membranous) yellow lamella at the place of scutellar base can be slightly protruding (♂) or totally flat (♀).

We have to mention here that also the material from Vietnam (FSz03/1–6) is very interesting. I found the representatives of the following genera: *Mycomya*, *Neoempheria*, *Acnemia*, *Polylepta* WINNERTZ, 1863, *Sciophila*, *Apolephthisa* GRZEGORZEK, 1885, *Boletina*, *Coelosia* WINNERTZ, 1863, *Saigusaia* VOCKEROTH, 1980, *Tetragoneura*, *Leia*, *Allodia*, *Anatella*, *Brevicornu*, *Exechia*, *Rymosia* WINNERTZ, 1863, *Synplasta* SKUSE, 1890, *Aspidionia*, *Epicypta*, *Mycetophila*, *Phronia*, *Platurocypta*, *Trichonta* WINNERTZ, 1863, *Zygomyia*. In addition, a new genus of Gnoristini is involved.

LYGISTORRHINIDAE

The Oriental fauna is rich in species of this small family and the progress in revealing them seems remarkable (cf. HIPPA 2002). One species was described from Thailand most recently (PAPP 2005).

We captured nine specimens, which represent one species each of two genera.

Matileola thaii L. PAPP, 2005 – 7 ♂: PF04/1; 1 ♂: PF04/10. It is good to have more specimens, since the species was based on two males only.

Lygistorrhina sp. 1 ♀: PF04/42. A small clear-winged species.

SCIARIDAE

The CDO (STEFFAN 1973) listed nine species of six genera from Thailand. Of them, SASAKAWA (1962) described five species from the country, namely *Bradysia thailandina* SASAKAWA, 1962 (p. 129), *Bradysia umesaoi* SASAKAWA, 1962 (p. 132), *Chaetosciara ikomai* (SASAKAWA, 1962) (p. 126), *Chaetosciara minuta* (SASAKAWA, 1962) (p. 127) and *Lobosciara spinipennis* (SASAKAWA, 1962) (p. 130). The other species listed in the CDO are *Chaetosciara lygropis* (EDWARDS, 1928), *Schwenkfeldina carbonaria* (MEIGEN, 1830), *Sciara palliceps* EDWARDS, 1928 and *Trichosia rufithorax* (VAN DER WULP, 1881).

When revising *Prosciara* FREY, HIPPA & VILKAMAA (1991) summarized 36 spp., of which 25 were described (listed) from Burma and Thailand. KJAERANDSEN (1994) described *P. didactyla* (p. 147) and recorded *P. megachaeta* HIPPA &

VILKAMAA, 1991 from Thailand. In their revision of the Indomalayan spp. of *Prosciara*, VILKAMAA & HIPPA (1996) described 48 spp. incl. a number of spp. also from Thailand (see in the original paper).

Although our material is rather numerous (95 + 53 indiv), and seemingly rich in species, for lack of expertise, we did not try to sort them even to genera.

CECIDOMYIIDAE

In the CDO (GAGNÉ 1973) only *Orseolia oryzae* (WOOD-MASON, 1889) (p. 507) was listed and *Xylodiplosis niveonigra* BARNES, 1927 (p. 269) was described from Thailand. Our material, only 20 indiv., is insignificant and it is not proper to judge the species richness of the family.

TABANIDAE

In the CDO (STONE 1975) 4 spp. of *Chrysops*, 46 spp. of *Tabanus* and 14 spp. of *Haematopota* were listed from Thailand. Of them the following taxa were described from Thailand: *Chrysops indianus thailandensis* PHILIP, 1960 (p. 3), *Tabanus* (*T.*) *abbasalis* PHILIP, 1960 (p. 8), *T.* (*T.*) *acuminaris* PHILIP, 1960 (p. 9), *T.* (*T.*) *anabates* PHILIP, 1960 (p. 9), *T.* (*T.*) *ardalus* PHILIP, 1960 (p. 10), *T.* (*T.*) *aurilineatus gilvilineis* PHILIP, 1960 (p. 12), *T.* (*T.*) *barnesi* AUSTEN, 1922 (p. 435), *T.* (*T.*) *fulvilinearis* PHILIP, 1960 (p. 16), *T.* (*T.*) *gilvellus* PHILIP, 1960 (p. 16), *T.* (*T.*) *griseilineis* PHILIP, 1960 (p. 17), *T.* (*T.*) *konis* PHILIP, 1960 (p. 17), *T.* (*T.*) *nilakinus* PHILIP, 1960 (p. 19), *T.* (*T.*) *praematurus* AUSTEN, 1922 (p. 440), *T.* (*T.*) *rubicundulus* AUSTEN, 1922 (p. 442), *T.* (*T.*) *sphinx* PHILIP, 1960 (p. 21), *T.* (*T.*) *turmani* PHILIP, 1960 (p. 24), *T.* (*T.*) *virgulatus* AUSTEN, 1922 (p. 446), *T.* (*T.*) *zoster* PHILIP, 1960 (p. 28), *Haematopota abacis* (PHILIP, 1960) (p. 29), *H. corrigata* STONE, 1975 (p. 75), *H. lineota* (PHILIP, 1960) (p. 30), *H. personata* PHILIP, 1963 (p. 520).

After 1975 the most significant work is BURTON's (1978) monograph on the Thailand Tabanidae. There – beside new records of several additional spp. – he described 29 new species, as follow:

Atylotus crytotaxis (p. 125), *A. lobus* (p. 126), *Tabanus alumnus* (p. 54), *T. ballmeri* (p. 119), *T. borealorieus* (p. 118), *T. caduceus* (P. 27), *T. eurytopus* (p. 40), *T. firmus* (p. 122), *T. geographicus* (p. 46), *T. gyruchus* (p. 25), *T. helvinus* (p. 67), *T. idulis* (p. 26), *T. jeanae* (p. 117), *T. larvatus* (p. 112), *T. mesogaeus* (p. 41), *T. nyctops* (p. 117), *T. orbis* (p. 34), *T. oxybeles* (p. 103), *T. pristinus* (p. 84), *T.*

quadrifocus (p. 89), *T. rusticatus* (p. 88), *T. symmetrus* (p. 92), *T. systenus* (p. 94), *T. tamthaiorum* (p. 65), *T. thermarum* (p. 108), *T. unicus* (p. 116), *T. vernus* (p. 96), *T. xanthocorus* (p. 120), *T. zodiacus* (p. 31).

COHER (1986) published new records on the Thai Tabanidae, and particularly on Haematopotini spp. (COHER 1987), describing *Haematopota vimoli* (p. 13). TUMRASVIN (1989) summarised distribution data of the *Tabanus* spp. in Thailand.

We collected eight tabanid indiv. in 2004, so it is not a significant material.

RACHICERIDAE

In 1970 A. NAGATOMI described three species, *Rachicerus miyatakei* NAGATOMI, 1970 (p. 442), *Rachicerus solivagus* NAGATOMI, 1970 (p. 455) and *Rachicerus varius* NAGATOMI, 1970 (p. 461) from Thailand. They were listed also in the CDO. We do not know of any other paper on the Thailand Rachiceridae and we did not capture any specimens there.

XYLOMYIDAE – B. MERZ & L. PAPP

One species, *Solva* (*Solva*) *inconspicua* (BRUNETTI, 1923) (p. 171) was described from Thailand. Only that species was listed in the CDO (NAGATOMI 1975) and we do not know of any more records of the family from that country.

The following three species have not yet been recorded from Thailand (MHNG, all specimens were identified by R. ROZKOŠNÝ).

Solva completa (DE MEIJERE, 1914) – 1 ♀: N Thailand, Chiang Mai Province, Doi-Suthep National Park, What Phrathat, 950 m, 19.X.2000, attracted by freshly cut bamboo, leg. B. Merz & P. Schwendinger (MHNG).

Solva inamoena WALKER, 1860 – 1 ♀: N Thailand, Chiang Mai Province, Doi-Suthep National Park, What Phrathat, 950 m, 17.X.2000, leg. B. Merz & P. Schwendinger (MHNG).

Solva longicornis ENDERLEIN, 1913 – 1 ♀: N Thailand, Chiang Mai Province, Doi-Suthep National Park, nr. Phuphing Palace, 1250 m, 26.X.2000, leg. B. Merz & P. Schwendinger (MHNG).

In 2004 we selected and captured six indiv. of three species of *Solva*.

Solva spp. *sp.1*: 1 ♀: PF04/14 1 ♂: PF04/17, 1 ♂: PF04/34; *sp. 2*: 1 ♀: PF04/14; *sp. 3*: 1 ♂: PF04/17, 1 ♀: PF04/39. Some or all of them may be conspecific with the above spp.

STRATIOMYIDAE – B. MERZ & L. PAPP

The stratiomyid fauna of Thailand has still been not well known, if we take the diversity of stratiomyids in the Oriental region into consideration. In his World catalog WOODLEY (2001) summarised 321 Oriental species, many more spp. awaiting description. In the CDO (JAMES 1975) 11 spp. of eight genera were listed from Thailand (*Microchrysa* 2 spp., *Ptecticus* 1 sp., *Sargus* 1 sp., *Oplodontha* 1 sp., *Clitellaria* 1 sp., *Rhaphioceroides* 1 sp., *Parastratiosphecomyia* 2 spp., *Ptilocera* 2 spp.). *Parastratiosphecomyia stratiosphecomyioides* BRUNETTI, 1923 (p. 67, Bukit Besar, Patani) and *Rhaphioceroides pendleburyi* BRUNETTI, 1927 (p. 288, Khao Luang) were described from that country.

In the World catalog of Stratiomyidae WOODLEY (2001) listed eight additional species, three of them were described from Thailand: *Pachygaster piriventris* ROZKOŠNÝ & KOVAC, 1998b (larvae in the original description collected in Thailand), *Rosapha bicolor* BIGOT, 1877, *Campeprosopa longispina* (BRUNETTI, 1913), *Hermetia illucens* (LINNAEUS, 1758), *Ptecticus erectus* ROZKOŠNÝ & KOVAC 2000 (p. 104, Bang Khen), *Ptecticus siamensis* ROZKOŠNÝ & KOVAC, 1998*a* (p. 71, Pak Chong), *Ptecticus tricolor* WULP in DE MEIJERE, 1904 and *Sargus latipennis* (BRUNETTI, 1923). Most recently ROZKOŠNÝ & KOVAC (2005) described *Ptecticus thailandicus* (p. 3, Khao Yai NP, Khao Kheo) and published first Thai records of *P. aurifer* (WALKER, 1854), *P. cingulatus* LOEW, 1855, *P. kambangensis* DE MEIJERE, 1914, *P. minimus* ROZKOŠNÝ & KOVAC, 1997 and *P. vulpianus* (ENDERLEIN, 1914).

The MNHG specimens below all were all identified by R. ROZKOŠNÝ. Below "new for Thailand" means that the species was not reported in WOODLEY (2001) from Thailand.

BERIDINAE

Allognosta assamensis BRUNETTI, 1920 – 1 ♀: N Thailand, Chiang Mai Province, Doi Suthep-Pui National Park, above What Phrathat, 1100 m, 17.X.2000, leg. B. Merz & P. Schwendinger (MHNG). New for Thailand.

PACHYGASTRINAE

Argyrobrithes albopilosus (DE MEIJERE, 1907). – 1 ♂: Mae Hong Son Province, 22 km N Mae Hong Son, Tong Palace, 930 m, 21.X.2000, leg. B. Merz & P. Schwendinger (MHNG). New for Thailand.

Evaza spp. – *sp. 1*: 1 ♂: N Thailand, Lamphun Province, Doi Khuntan National Park, 45 km SE Chiang Mai, 650 m, 2.XI.2000, leg. B. Merz & P. Schwendinger (MHNG). *sp. 2*: 1 ♀: N Thailand, Chiang Mai Province, Doi Suthep-Pui National Park, What Phrathat, 900 m, 16.X.2000, leg. B. Merz & P. Schwendinger (MHNG). *sp. 3*: 1 ♂: N Thailand, Chiang Mai Province, Chiang Mai (University), 350 m, 31.X.2000, leg. B. Merz (MHNG). *sp. 4*: – 1 ♀: N Thailand, Chiang Mai Province, Doi Suthep-Pui National Park, What Phrathat, 950 m, 19.X.2000, leg. B. Merz & P. Schwendinger (MHNG).

Gabaza albiseta (DE MEIJERE, 1907) – 1 ♀: N Thailand, Chiang Mai Province, Chiang Mai (Zoological Garden), 24.X.2000, leg. B. Merz (MHNG). New for Thailand.

Monacanthomyia annandalei BRUNETTI, 1912 – 1 ♀: Mae Hong Son Province, 22 km N Mae Hong Son, Tong Palace, 930 m, 21.X.2000, leg. B. Merz & P. Schwendinger (MHNG). New for Thailand.

Tinda javana (MACQUART, 1838) – 1 ♂, 1 ♀: N Thailand, Chiang Mai Province, Chiang Mai (Zoological Garden), 24.X.2000, leg. B. Merz (MHNG). New for Thailand.

CLITELLARIINAE

Campeprosopa longispina (BRUNETTI, 1913) – 2 ♂, 1 ♀: Mae Hong Son Province, 22 km N Mae Hong Son, Tong Palace, 930 m, 21.X.2000, leg. B. Merz & P. Schwendinger (MHNG).

SARGINAE

Microchrysa calopa BRUNETTI, 1907 – 1 ♂, 1 ♀: Mae Hong Son Province, 22 km N Mae Hong Son, Tong Palace, 930 m, 21.X.2000, leg. B. Merz & P. Schwendinger (MHNG); 1 ♀: N Thailand, Chiang Mai Province, Doi Suthep-Pui National Park, What Phrathat, 950 m, 17.X.2000, leg. B. Merz & P. Schwendinger (MHNG). New for Thailand.

Microchrysa flaviventris (WIEDEMANN, 1824) – 5 ♂, 2 ♀: N Thailand, Chiang Mai Province, 4.5 km N Pai, 570 m, 23.X.2000, leg. B. Merz (MHNG); 1 ♀: N Thailand, Chiang Mai Province, Mae Hia, 5 km WSW of Chiang Mai, 400 m, 18.X.2000, leg. B. Merz (MHNG).

Ptecticus aurifer (WALKER, 1854) – 1 ♂: N Thailand, Chiang Mai Province, Chiang Mai, Suandok, 330 m, 19.X.2000, leg. B. Merz (MHNG). Recently recorded by ROZKOŠNÝ & KOVAC (2005) from Thailand.

STRATIOMYINAE

Oplodontha minuta (FABRICIUS, 1794) – 1 ♂: N Thailand, Chiang Mai Province, Mae Hia, 5 km WSW of Chiang Mai, 400 m, 18.X.2000, leg. B. Merz (MHNG); 10 ♂, 4 ♀: N Thailand, Chiang Mai Province, Chiang Mai (University), 350 m, 31.X.2000, leg. B. Merz (MHNG). New for Thailand.

Prosopochrysa vitripennis (DOLESCHALL, 1856) – 1 ♂, 1 ♀: N Thailand, Chiang Mai Province, Chiang Mai (University), 350 m, 31.X.2000, leg. B. Merz (MHNG). New for Thailand.

The HNHM material (2004: 49 indiv., 2003: 21 indiv.) is well preserved and rich in species, but for lack of expertise we did not try to select then even to genera.

RHAGIONIDAE

No published records for Thailand in the CDO (NAGATOMI 1975). We captured 55 indiv. in 2004 and 9 indiv. in 2003. This is the first record of the family from Thailand. Dr. JÓZSEF MAJER (Pécs University, Hungary) sorted the material to genera and he found eleven spp. of three genera: *Chrysopilus* 7 spp., *Symphoromyia* 1 sp. (probably new), *Rhagio* 3 spp. Dr. MAJER will publish the Thailand Rhagionidae in a separate paper.

ATHERICIDAE

No published records for Thailand in the CDO (NAGATOMI 1975), where the species of this family were listed under Rhagionidae. Later NAGATOMI (1979) described *Atrichops chakratongi* (p. 283, nr Songkhla) and *A. chotei* (p. 285, nr Songkhla) from S Thailand.

We captured 14 specimens in 2004 and an additional indiv. was found in the material from 2003. They represent three species.

Atrichops spp. *sp. 1*: 1 ♂ 1 ♀: PF04/7; *sp. 2*: 4 ♂ 1 ♀: PF04/19; 1 ♂: PF04/12; 1 ♂ 4 ♀: PF04/26; 1 ♀: PF04/14.

Suragina sp. 1 ♀: FSz03/21.

SCENOPINIDAE

In the CDO (KELSEY 1975) four spp. in three genera were listed from Thailand. All four spp. were described in a paper by KELSEY (1970): *Metatrichia thailandica* KELSEY, 1970 (p. 46), *Scenopinus maai* KELSEY, 1970 (p. 41), *S. thailandicus* KELSEY, 1970 (p. 41) and *Seguyia maai* KELSEY, 1970 (p. 46, described as *Seguyella*). We found two specimens of one of them in our material from 2004. We do not know of any other paper on Thailand scenopinids.

Seguyia maai KELSEY, 1970 – 2 ♂: PF04/32.

ACROCERIDAE – B. MERZ

Over 500 species of Acroceridae have been described from all over the world. They are very insufficiently known. Often, they are represented only by few specimens in collections, since they are difficult to spot in the field. They are parasites of spiders and are more easily collected by arachnologists. It is therefore not surprising that only scattered data is available for the Oriental Region. According to the CDO (SCHLINGER 1975) 40 species are known from that region, but mostly only from the type series. No species has ever been recorded from Thailand. Herewith we report the first finding of this family for Thailand. The specimen at hand remains at the present moment unidentified.

1 ♀: Thailand, Uttaradit province, Nam Pat district, Phu Soay Dao National Park, evergreen gallery forest above Phu Soay Dao Waterfall, 750 m, (17.42N, 100.57E), 23.XII.2005, leg. P. SCHWENDINGER. Pupariation: 2.III.2006, emergence 16.III.2006, ex *Macrothele* sp. (Hexathelidae, Araneae) (MHNG).

NEMESTRINIDAE

In the CDO (LYNEBORG 1975) *Hirmoneura cockerelli* BEQUAERT, 1935 (p. 125) was listed, which was described from Thailand. We did not collect any specimens of this family.

THEREVIDAE

There was no record of the Thai Therevidae in the CDO (LYNEBORG 1975). Since that time *Melanacrosathe* LYNEBORG, 1999 was described. In the revision of the Oriental *Phycus* spp. LYNEBORG (2003) described *Ph. angustifrons* LYNEBORG, 2003 and he recorded *Ph. brunneus obscuripes* KRÖBER, 1912 from Thailand.

In general, the Oriental therevids seem to be neglected if compared to those of the Nearctic, Afrotropical or Palaearctic faunas. Also the Malesian fauna has hitherto been less known (OOSTERBROEK 1998).

In 2003 two specimens were captured in N Thailand: one male (FSz03/8) and one female (Fang, Mae Fang N.P., Doi Pha Hom Pok, 22. 11. 2003, 2000m, along road and creek, leg. A. SZAPPANOS) of the same genus. They are related to some of the species of *Psilocephala* ZETTERSTEDT, which were listed in the CDO. However, the taxonomy of Therevidae has developed extensively in the last decades;

they do not belong to *Psilocephala* s.str., as recently understood. For lack of expertise, I was not able to identify them to genus with the keys for the Nearctic, Palaearctic or Afrotropical Therevidae.

ASILIDAE

In the CDO (OLDROYD 1975) 12 spp. of 9 genera are listed from Thailand (*Maira* 1 sp., *Pogonosoma* 1 sp., *Coplinopoda* 1, *Astochia* 2 spp., *Clephydroneura* 2 spp., *Machimus* 1sp., *Neomochtherus* 1 sp., *Philodicus* 2 spp. and *Promachus* 1 sp.). Of them, *Astochia inermis siamensis* RICARDO, 1919 (p. 68) and *Philodicus fuscipes* RICARDO, 1921 (p. 188) were described from that country.

A number of papers on Thai asilids were published since that time. In the *insula* species group, *Merodontina thaiensis* SCARBROUGH & HILL, 2000 was described. SCARBROUGH & MARASCIA's (2000) synopsis of the Oriental and Australian species of *Emphysomera* SCHINER is also with records from Thailand. TOMASOVIC & GROOTAERT (2003) described five new asilid species from the area from Na Haeo, Loei prov., NE Thailand (*Anacinaces nahaeoensis, Clephydroneura promboonae, Michotamia siamensis, Saropogon thailandensis* and *Laloides tigris*) and designated the lectotype for *Laloides phalaris* (OSTEN SACKEN, 1882). SCARBROUGH in SCARBROUGH & BIGLOW (2004) described three new species of *Astochia* BECKER from Thailand (*A. lancealata, A. nigranta and A. flava*). They reported *A. jayarami* JOSEPH & PARUI, an Indian species, from Thailand (increasing the number of spp. to five) and they keyed the known species from Thailand. SCARBROUGH & DUNCAN (2004) first recorded the genera *Heligmoneura* BIGOT and *Orophotus* BECKER from Thailand and described three new spp. (*H. calceolaria, O. gracilis* and *O. pilosus*) from the country. Recently SCARBROUGH in SCARBROUGH & SILVERMAN (2004) described *Cleptohydroneura finita* (p. 221), *C. furca* (p. 223), *C. involuta* (p. 223) and *C. valida* (p. 226) and they recorded *C. sundaica* (JAENNICKE, 1967) from Thailand. In their paper on a new *Merodontina* sp. from Vietnam, SCARBROUGH & CONSTANTINO (2005) gave a key to the regional species of the insula species group of *Merodontina*, with new locality records.

Our material is rich in species (42 indiv. from 2004 and 20 indiv. from 2003) but in for lack of expertise, they were left unnamed.

BOMBYLIIDAE

In the CDO (BOWDEN 1975) *Systropus polistoides* WESTWOOD, 1876, *Ligyra sphinx* (FABRICIUS, 1787) and *Ligyra tantalus* (FABRICIUS, 1794) were listed. Later NAGATOMI *et al*. (1991) gave the list of *Systropus* spp. in the country.

We collected only 2 indiv. in 2003 and 1 indiv. in 2004. One of them is a sp. of *Exoprosopa* (FSz03/21).

MYTHICOMYIIDAE

No former record of this family from Thailand. We captured three indiv. of a species.

Cephalodromia sp. – 2 ♂: PF04/21; 1 ♂: PF04/25.

HYBOTIDAE – M. FÖLDVÁRI

In the CDO SMITH (1975) does not list any species of Hybotidae from Thailand.

GROOTAERT & SHAMSHEV (2003) reported the genus *Nanodromia* GROOTAERT from Thailand (also first record for the Oriental Region). Four new species were described from different Thai localities: *N. narmjeud, N. phukhao, N. narmkroi* and *N. taksin*. SHAMSHEV & GROOTAERT (2004*b*) reviewed the genus *Stilpon* LOEW in the Oriental Region and described the following new species from Thailand: *S. monospinatus, S. spinicercus, S. crassinervis, S. isaanensis, S. laawae, S. nhamyaaw, S. seeluang, S. taksin, S. khorngkeun, S. lek, S. lekkwar, S. nhamdam, S. trilobatus, S. paradoxus* and *S. yai*. Most recently SHAMSHEV & GROOTAERT (2005*b*) described three new spp. of *Tachydromia* from Thailand: *T. thaica* (p.111, Loei Prov., Na Haeo), *T. terricoloides* (p. 113, Loei Prov.) and *T. luang* (p. 115, Singapore, paratypes from Loei Prov., Na Haeo).

We collected 789 specimens of Hybotidae in 2004 and 110 specimens in 2003. Due to the lack of time we did not sort the specimens from 2003 to genus level.

Specimens from 2004 belong to 11 genera as follow (number of indiv. in brackets): **Platypalpus** (62), **Elaphropeza** (212), **Syndyas** (19), **Drapetis** (118), **Parahybos** (25), **Crossopalpus** (152), **Syneches** (104), **Hybos** (67), **Leptopeza** (4), **Tachydromia** (18), **Chillcottomyia** (5), **Drapetini** (7).

EMPIDIDAE – M. FÖLDVÁRI

In the CDO SMITH (1975) did not list any species of Empididae from Thailand.

GROOTAERT & KIATSOONTHORN (2001) reported the genus *Hilara* for the first time from Thailand and described 5 new species of the subgenus *Hilara (Hilara)* from Thailand. HORVAT (2002) described two new species of the genus *Chelifera* from Thailand: *C. malicky* and *C. thaica*. DAUGERON & GROOTAERT (2003) reviewed a part of the *Empis* (*Coptophlebia*) *hyalea*-group and described 12 new species from Thailand: *Empis (Coptophlebia) atratata, E.* (*C.*) *kosametensis, E.* (*C.*) *lamruensis, E.* (*C.*) *miranda, E.* (*C.*) *nahaeoensis, E.* (*C.*) *nganga, E.* (*C.*) *pakensis, E.* (*C.*) *pseudospinotibialis, E.* (*C.*) *pulchra, E.* (*C.*) *ratburiensis, E.* (*C.*) *spinotibialis* and *E.* (*C.*) *thapensis*.

Staff members of the HNHM collected 76 empidids in 2003 and 200 indiv. in 2004. They belong to nine genera as follow: **Hilara** spp. (17+7 indiv.), **Empis** spp. (8+14 indiv.), **Rhamphomyia** spp. (8+0 indiv.), **Phyllodromia** spp. (19+2 indiv.), **Hemerodromia** spp. (6+149 indiv.), **Chelipoda** spp. (18+16 indiv.), **Clinocera** sp. (0+3 indiv.), **Dolichocephala** spp. (0+8 indiv.), **Trichopeza** sp. (0+1 indiv.).

DOLICHOPODIDAE – M. FÖLDVÁRI

In the CDO DYTE (1975) listed 10 species in eight genera and three of them have been described from Thailand: *Condylostylus perforatus* PARENT, 1934: 294, *Mesorhaga argentifacies* PARENT, 1941: 213 and *Paraclius siamensis* PARENT, 1941: 225.

In the last decade several good papers were published on the Thai dolichopodids. GROOTAERT & MEUFFELS (1997*a*) described new *Paramedetera* species from Thailand: *Paramedetera turschi* (p. 380), *Paramedetera ankarum* (p. 385), *Paramedetera horrorifera* (p. 383). GROOTAERT & MEUFFELS (1997*b*) described a new genus, *Griphomyia* from Thailand with *Griphomyia gravicaudata* (p. 111) as type species. GROOTAERT & MEUFFELS (1998*a*) described *Haplopharynx*, a new genus from Thailand with *Haplopharynx mutilus* (p. 254), as type species and *Haplopharynx phangngensis* (p. 258) as new species. GROOTAERT & MEUFFELS (1998*b*) described *Nanothinophilus*, a new genus from Thailand with *Nanothinophilus armatus* (p. 166), and *Nanothinophilus dolichurus* (p. 171) and *Nanothinophilus pauperculus* (p. 169) as new species. GROOTAERT & MEUFFELS (1998*c*) published new locality data on the species *Griphophanes gravicaudata* in Thailand. BICKEL (1999) described new species of the genus *Mastigomyia* BECKER

from Thailand: *Mastigomyia amami* and *M. trangensis*. GROOTAERT & MEUFFELS (1999*a*) reported *Terpsimyia semicincta* (BECKER, 1922) from Thailand. GROOTAERT & MEUFFELS (1999*b*) described a new species from Thailand, *Chaetogonopteron chaeturum*, which is considered to be very common throughout the country. GROOTAERT & MEUFFELS (2001*a*) described two new species from Thailand: *Hercostomus flavicans* (p. 213) and *Steleopyga dactylocera* (p. 208). GROOTAERT & MEUFFELS (2001*b*) described seven new species from Thailand: *Cymatopus thaicus, Thinolestris thaica, Thinophilus nitens, Th. parmatus, Th. setiventris, Nanothinophilus hoplites* and *Phacaspis mitis*. GROOTAERT & MEUFFELS (2002) described three new *Asyndetus* species: *A. ciliatus, A. aciliatus* and *A. thaicus*, and reported *A. latifrons* for the first time from Thailand. MEUFFELS & GROOTAERT (2004) described *Teuchophorus brachystigma, T. enormis, T. eurystigma, T. fimbritibia, T. fulvescens, T. ketudatae, T. krabiensis, T. obscurus, T. ornatuloides, T. ornatulus, T. parmatus, T. pauper, T. simplicissimus, T. stenostigma* and *T. vexillifer* as new species from Thailand. SHAMSHEV & GROOTAERT (2004*a*) described *Microphorella malaysiana* and *M. satunensis* from Thailand (Microphorinae are presently classified as Dolichopodidae s. lato). SHAMSHEV & GROOTAERT (2005*a*) described *Eothalassius* as a new genus to science from Papua New Guinea and *Eothalassius gracilis* (p. 114) as a new species from Thailand.

We collected 568 specimens of Dolichopodidae in 2004 and 215 indiv. in 2003; due to the lack of time we did not sort to genus level.

LONCHOPTERIDAE

We found no published records of Lonchopteridae from Thailand. The HNHM expedition collected 17 specimens of *Lonchoptera* spp. in 2003 and 2 indiv. in 2004. The material contains four species. While looking over them, ANDERSSON's (1971) paper on *Lonchoptera* spp. from NE Burma was used. However, we did not find conspecific specimens in our material. The HNHM has a rich material of Oriental Lonchopteridae. From Vietnam we have six additional species and also our material from Taiwan seems interesting. It seems advisable to study all those specimens in the frame of a project on the Oriental *Lonchoptera*.

PLATYPEZIDAE

In the CDO (KESSEL 1975) there is no record of platypezids from Thailand. Later *Lindneromyia brunettii* (KESSEL & CLOPTON) was reported (CHANDLER

1994). We found 17 platypezids in our material from 2004 and four additional specimens from 2003. They represent three species of *Lindneromyia*, two of them are new for the fauna of Thailand.

Lindneromyia argyrogyna (DE MEIJERE, 1907) – 2 ♂: PF04/8; 3 ♂ 1 ♀: PF04/28; 1 ♂: PF04/30; 1 ♂ 1 ♀: PF04/35; 2 ♂ 1 ♀: PF04/42; 2 ♀: PF04/43; 2 ♂: FSz03/18; 1 ♂: Trang Prov., W of Ban Navong, Ton Pan Waterfall, 26. 11. 2003, broad leafed forest, sweeping, No. 27, Orson & Shiroki. In the HNHM there are identified specimens also from N China and Taiwan. A widespread Oriental and Australasian species new to Thailand.

Lindneromyia brunettii (KESSEL & CLOPTON, 1969) – 1 ♂: PF04/10; 1 ♂: Doi Phuka NP, UV light, 26–27. 11. 2003, No. 18, leg. PEREGOVITS, FÖLDVÁRI, KŐRÖSI, SZAPPANOS & MAKLÁRI-KIS; 1 ♂ 1 ♀: PF04/10. A widespread Oriental species known also from Thailand (CHANDLER1994)

Lindneromyia curta CHANDLER, 1994 – 1 ♂: PF04/38. Also its male genitalia agree with the original description. Formerly known from India, Sri Lanka, Vietnam and Java, new to Thailand.

PHORIDAE

Before 1975 five species of four phorid genera were described from Thailand (in two papers): *Dohrniphora signata* BORGMEIER, 1967 (p. 139), *Megaselia* (*Aphiochaeta*) *nigribasis* BEYER, 1966 (p. 200), *M*. (*A*.) *siamensis* BEYER, 1966 (p. 188), *Phalacrotophora* (*Ph*.) *gressitti* BEYER, 1966 (p 173) and *Misotermes vicinus* Borgmeier, 1967 (p. 245). In the CDO (DELFINADO *et al*. 1975) an additional species, *Epicnemis flavidula* (BRUES, 1915) was listed only.

There are several papers after 1975 with records and new descriptions of Thaii Phoridae. The life history of *Megaselia scalaris* (LOEW) was studied in Thailand (TUMRASVIN *et al*. 1977). *Franssenia termyca* DISNEY in DISNEY & KISTNER, 1989 (p. 334) was described from Khao Yai N.P. A paratype of the thaumatoxenine *Palpiclavina kistneri* DISNEY in DISNEY & KISTNER, 1992 (p. 959) was from Ban Phu Toei (Kanchanaburi); in the same paper a neotype was selected and re-described for *Palpiclavina tonkinensis* SILVESTRI, 1947 (p. 967) from Khao Yai N.P. BROWN's paper (1992) on *Rhynchomicropteron nudiventer* L. PAPP is the first Thai record and contains also description of larva, male morphology and life history. *Clitelloxenia perdosetae* DISNEY, 1997 and *C. thailandae* DISNEY, 1997 (p. 54, 56, both Khao Yai N.P.) were described in the revision of the Oriental Termitoxeniinae (DISNEY & KISTNER 1997). In the same paper *Javanoxenia punctiventris* (SCHMITZ, 1915) was recorded from Thailand for the first time. MOSTOVSKI (1997) described *Chouomyia ramai* (p. 876, Surat Thani) from Thailand; later he described *Rhopica sukachevae* MOSTOVSKI, 2000 (p. 318) from Mae Hon Son. The holotype and numerous paratypes of *Psyllomyia browni* DISNEY in DISNEY & KISTNER, 1998 (p. 335) was from the Khao Yai N.P., other paratypes

from the Doi Inthanon N.P. BROWN's (1998) paper was with the first record of *Gymnophora* outside the Palaearctic region. The holotype of *Hypocera anularia* NAKAYAMA & SHIMA, 2001 was from Japan, but reported also from Thailand. The type specimens of *Megaselia holosericei* DISNEY & BROWN, 2003 (p. 404) are again from the Khao Yai N.P.

We managed to capture a very rich material of Thaii phorids: 272 indiv. from 2004, 26 indiv. from 2003. It includes apterous females of *Chonocephalus* and representatives of more than 50 spp. The following genera were recognized: *Beckerina* MALLOCH (2 indiv., 2 spp.), *Borophaga* ENDERLEIN (1 indiv.), *Chonocephalus* WANDOLLECK (10 ♂ 5 ♀, 3 spp.), *Conicera* MEIGEN (3 indiv., 3 spp.), *Diplonevra* LIOY (6 indiv., 4 spp., also subg. *Tristoechia* SCHMITZ), *Dohrniphora* DAHL (17 indiv., at least 7 spp.), *Megaselia* RONDANI (225 indiv., at least 30 spp.), *Metopina* MACQUART (3 indiv.), *Triphleba* RONDANI (1 indiv.), *Woodiphora* SCHMITZ (5 indiv., ?2 spp.). For lack of expertise we left 19 indiv., representatives of several genera, without identification.

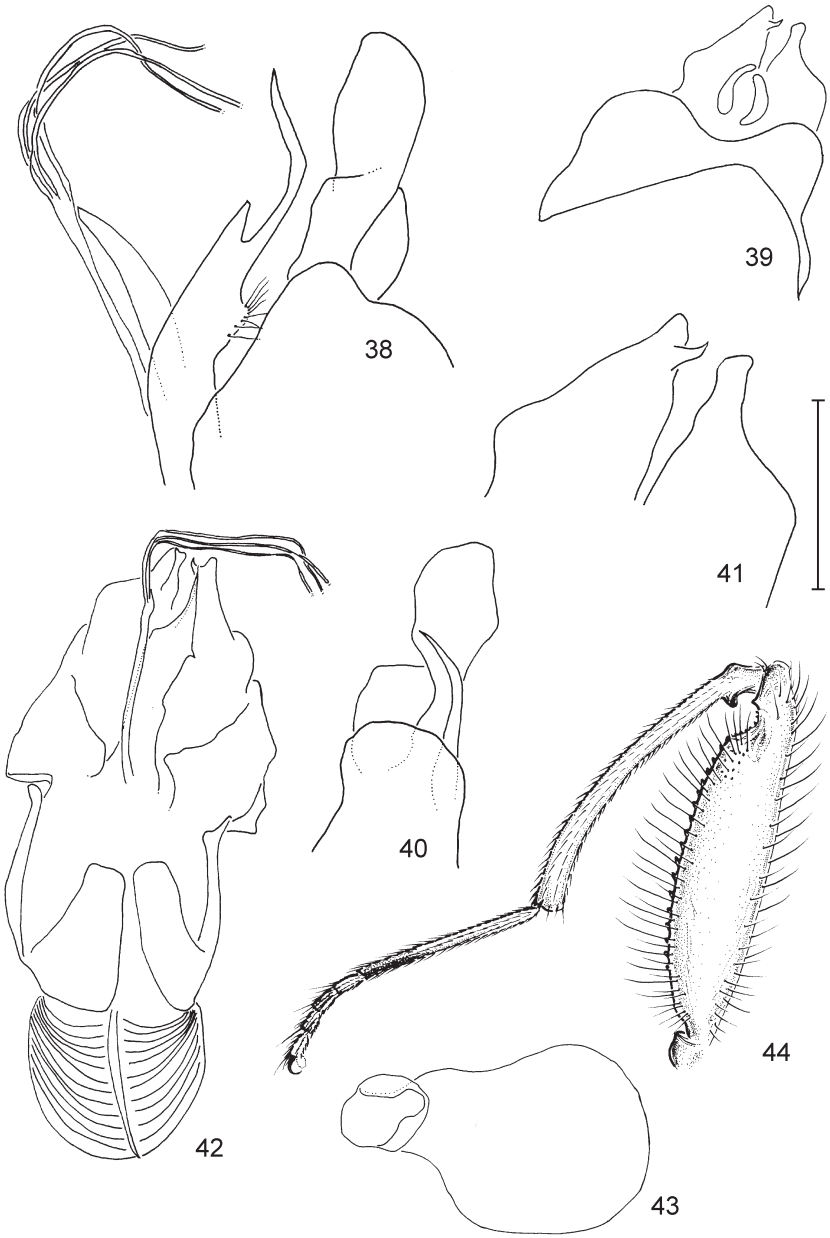
PIPUNCULIDAE – M. FÖLDVÁRI

In the CDO HARDY (1975) 16 species of two genera (today they are *Cephalosphaera* (1 sp.), *Cephalops* (3 spp.), *Beckerias* (1 sp.), *Microcephalops* (1 sp.), *Eudorylas* (8 spp.) and *Tomosvaryella* (2 spp.)) were listed. Formerly eight of them, *Cephalosphaera inusitata* (HARDY, 1972) (1972*b*: 34), *Cephalops nagatomii* (HARDY, 1972) (1972*b*: 22), *Eudorylas indivisus* (HARDY, 1972) (1972*b*: 48), *Eudorylas lentiger* (KERTÉSZ, 1915) (p. 386), *Eudorylas monothrix* (HARDY, 1968) (p. 455), *Eudorylas remotus* (HARDY, 1972) (1972*b*: 60), *Eudorylas scissus* (HARDY, 1972) (1972*b*: 61), *Tomosvaryella hactena* HARDY, 1972 (1972*b*: 71) were described from Thailand.

Cephalops pulvillatus (KERTÉSZ, 1915) was listed in the CDO (HARDY 1975, p. 299), but it is not reported as part of the Thai fauna in DE MEYER (1996).

HARDY (1972*a*) reported *Tomosvaryella oryzaetora* KOIZUMI, 1959, *Eudorylas javanensis* (DE MEIJERE, 1907), *Eudorylas orientalis* (KOIZUMI, 1959), *Eudorylas roralis* (KERTÉSZ, 1915), *Tomosvaryella subvirescens* (LOEW, 1872) and *Tomosvaryella sylvatica* (MEIGEN, 1824) from Thailand.

YANO (1979) listed *Eudorylas mutillatus* LOEW, 1857, *Eudorylas macropygus* (DE MEIJERE, 1914), *Clistoabdominalis confusoides* (LAMB, 1922) (as *Dorylomorpha lini* HARDY 1972, (1972*a*), a junior synonym of *Cli. confusoides*) and *Tomosvaryella nitens* (BRUNETTI, 1912) (the latter sp. not listed in DE MEYER (1996) as part of the Thai fauna).



Figs 38–44. 38–43 = *Eudorylas mongolorum* KUZNETZOV, male genitalia: 38 = outer surstylus and phallus, lateral view, 39 = surstyli and epandrium, dorsal view, 40 = inner surstylus, lateral view, 41 = surstyli, dorsal view, dorsal view, 42 = hypandrium and phallic guide, ventral view, 43 = sperm pump and ejaculatory apodeme. 44 = *Teleopsis* sp. n. 1., front leg. Scale bar: 0.2 mm for Figs 38–40, 0.4 mm for Figs 41–43

ALBRECHT (1990) described *Dorylomorpha* (*Dorylomima*) *similis* from Doi Suthep-Pui National Park. Recently KEHLMAIER (2005) reported *Claraeola colossus* (HARDY, 1972*c*) from Thailand.

We collected 34 specimens in 2004 and 11 specimens in 2003, among them the following taxa:

Eudorylas mongolorum KUZNETZOV, 1990 – 2 ♂: PF04/38 (Figs 38–43). The junior author's (M. F.) intention was to describe it as new species, as the closest relative of *Eudorylas phatnomus* HARDY, 1968. These specimens differ from HARDY's species in the colour of the first flagellomere, being yellow and having the pollinosity of the frons (separated) reduced to the lower half leaving the rest shining black.

It has to be noted that based on the figures and description given by KEHLMAIER (2005), *E. mongolorum* seems to be closely related to *E. sinuosus* of the Afrotropical Region, therefore detailed study of types of both species at the same time will be necessary to establish species identity.

Eudorylas mutillatus (LOEW, 1858) – 2 ♂: FSz03/18; 1 ♂: PF25; 1 ♂: Trang Prov., Tung Khai Bot. Garden, broad leaved forest, 28.11.2003, swept, OROSZ & SZIRÁKI.

Eudorylas sp. 1. – 6 ♂, **Eudorylas** – 17 spp., 18 indiv., **Tomosvaryella** – 5 spp., 7 indiv., **Dasydorylas** – 3 spp., 3 indiv., **Chalarus** – 4 indiv., **Microcephalops** sp. – 5 indiv., **Cephalops** – 6 spp., 7 indiv.

SYRPHIDAE – M. FÖLDVÁRI

The Syrphidae fauna of Thailand is very poorly known. In the CDO KNUTSON *et at*. (1975) only 31 species in nineteen genera are listed. Of them, 17 species were described from the country. We could not trace any subsequent publications on the Thai fauna (except mentioning syrphids as pollinators without species identification).

We collected 30 specimens in 2004 and 35 specimens in 2003. Altogether they represent 27 species of 18 genera.

Sphegina sp1., sp2., 5 indiv. The genus was not reported previously from Thailand.
Baccha sp., 2 indiv. The genus was not reported previously from Thailand.
Phytomia sp1.**,** 1 indiv., sp2.**,** 1 indiv.

CYPSELOSOMATIDAE

In the CDO there is no cypselosomatid record from Thailand. ANDERSSON (1976) revised the species of *Formicosepsis* (and those of the *Lycosepsis*, which he regarded as subgenus of *Formicosepsis*). No new species have been added since that time. We managed to capture 35 cypselosomatid specimens in 2004 and 58

specimens in 2003, which represent six species, three of them are described below as new.

Cypselosoma gephyrae HENDEL, 1913 – 1 ♂: PF04/17; 4 ♂: FSz03/9; 1 ♂: FSz03/17. Careful studies in the future may reveal that this extremely widespread Oriental species is a species complex and so it must be divided into several species.

Formicosepsis barbipes ANDERSSON, 1976 – 1 ♂: PF04/42. It was described from Java; new to Thailand.

Formicosepsis paratinctipennis L. PAPP, sp. n.
(Figs 45–47)

Holotype male (HNHM): THAILAND: Doi Inthanon N. P., over a small rocky brook, Oct 30, 2004, No. 9 leg. L. PAPP & M. FÖLDVÁRI.

Paratype: 1 male (abdomen with genitalia in a plastic microvial with glycerol): same as for holotype.

Measurements in mm: body length 3.85 (holotype), 3.66 (paratype), wing length 2.75 (holotype), 2.64 (paratype), wing breadth 0.82, 0.79.

Head mostly yellowish brown, only orbitalia, ocellar triangle, vertex and upper part of occiput shiny black. Meso-, metathorax and abdomen subshining black, abdominal tergites on almost their dorsal side covered by thick grey microtomentum, mesonotum sagittally with a microtomentose stripe, also prescutellar edge microtomentose.

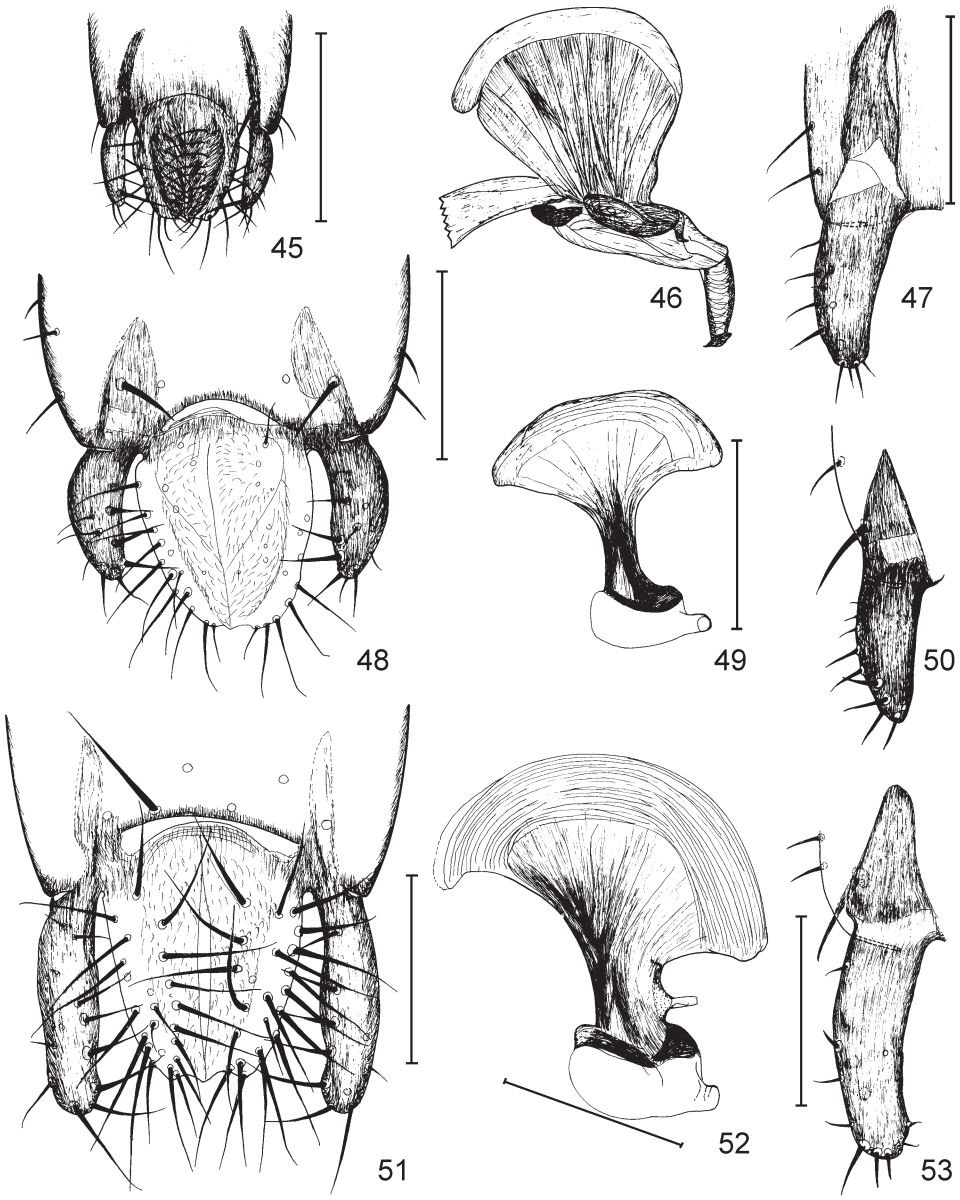
Two pairs of proclinate fronto-orbitals, 1 posterior re-and lateroclinate *frorb*. All head setae long, ocellars 0.155 m, postocellars 0.21 mm, interfrontal pair 0.094 mm, vibrissae 0.20 mm, posterior genal seta 0.138 mm. Scape and pedicel yellowish grey, first flagellomere even darker grey.

Not only postpronotum and lateral parts of prothorax but also an anterior patch of anepisternum yellowish. Thoracic setae are not black but yellowish. 2 + 2 pairs of dorsocentrals, *pprnt* rather strong, 2 *np* long, presutural *ia* and 2 *pa* pairs short. Apex of scutellum is conical but without a process. No sign of lateral (basal) scutellars, apical pair 0.38 mm long.

Fore coxa brown, mid and hind coxae yellow. Tibiae all black, femora variable in colour (dark brown and yellowish). All fore tarsi black, mid and hind tarsi yellow, apical 2 tarsomeres darkened. Fore femur medioventrally with 7(8) yellowish thick spine, shortening anteriorad. Mid femur anteriorly with 2 thorns at 25/57 and 45/57. Hind femur anteroventrally with a 0.10 mm long thick thorn at 66/85, other anteroventral setae shorter and thinner. Mid tibial armature: posterodorsals: medium-long and thick at 23/64, 38.5/64, 56/64, anterodorsals: strong long and thick at 18/64, 37/64, a medium strong anterior seta at 57/64 and 2 subapical ventral setae, a subventral at 41/64. Fore tibial hairs much shorter than diameter of tibia. Fore tarsal hairs (particularly so for tarsomeres 2–5) slightly longer than diameter of tarsus but shorter and less dense than in *F. barbipes* (cf. fig. 19 of ANDERSSON for *F. barbipes*).

Wing light brownish, veins light brown. Costal vein 0.022 mm and cell r1 0.04 mm thick. M vein ratios (holotype) 42: 37: 101.5. Haltere dark, knob tends to have a conical upper apex (which is light).

Male abdomen with S8 seta long, 0.20 mm, basal (yellow) pair of setae on epandrium 0.10 mm. Male sternite 1 minute, S2 very long, T-shaped, S3 long and narrow, S4 quadrate, S5 with sclerotized broad arms to lateral edge of T5. S6 trapezoid or rather shield-shaped and can be "tele-



Figs 45–53. *Formicosepsis* and *Lycosepsis* spp., apex of male genitalia, ventral view, ejaculatory apodeme in lateral view, surstylus and epandrial lamella in submedial view (broadest extension). 45–47 = *Formicosepsis paratinctipennis* sp. n.; 48–50 = *Lycosepsis biseta* sp. n.; 51–53 = *Lycosepsis oedipus* sp. n. Scales: 0.2 mm for Figs 45, 48, 51, 0.1 mm for Figs 46–47, 49–50, 52–53

scopised" under S5 lateral arms. Postabdomen almost completely symmetrical. Sternites of the 7th and 8th segments fused into an almost wholly symmetrical syntergosternite.

Basal pair of setae on epandrium short and rather thin. Male cerci (Fig. 45) very light brown, broad, apex rounded. Hypandrium joins epandrium most basally, lateral part broad (long), medially rather narrow (short). Cerci definitely longer than surstylus. Surstylus (Fig. 47) characteristic: outer wall partly fused to epandrium, medial wall lengthened into a long liguliform, basally directed process, which is parallel to epandrial wall (process seems to be longer than in *Lycosepsis* spp.). Ejaculatory apodeme (Fig. 46) with broad base, narrow stalk and fan-shaped distal part.

Formicosepsis paratinctipennis sp. n. is related to *F. tinctipennis* ANDERSSON, and keys out to that sp. in ANDERSSON's (1976) key. However, mid femoral thorns evenly long (distal thorn much longer than proximal one in *tinctipennis*), its mid tibial armature is more similar to that of *L. metatarsata* (ANDERSSON's fig. 17) than to that of *F. tinctipennis* (ANDERSSON's fig. 16). The setosity of fore tibia and tarsus is intermediate between that of *F. barbipes* and *F. tinctipennis*. The basal epandrial setae of *F. tinctipennis* are much longer than in this new sp. There are *Formicosepsis* specimens from Vietnam in the HNHM, which fit much better to *F. tinctipennis* DE MEIJERE, by the smaller surstyli, broader cerci and less long hairs on fore tarsi.

Lycosepsis biseta L. PAPP, sp. n.
(Figs 48–50)

Holotype male (HNHM): THAILAND: Fang, Mae Fang National Park, Doi Pha Hom Pok, 2000 m, 20. XI. 2003, No. 8, UV light, leg. L. PEREGOVITS, M. FÖLDVÁRI, Á. KŐRÖSI, A. SZAPPANOS & B. MAKLÁRI-KIS.

Paratypes: 2 males (one of them with abdomen and genitalia in a plastic microvial with glycerol): ibid., 1430 m, 21. XI. 2003, No. 9, swept along creek and forest road, leg. M. FÖLDVÁRI; 1 male: 8 km E of Doi Anh Kang, over a rocky brook, Nov 2, 2004, No. 17, leg. L. PAPP & M. FÖLDVÁRI.

Measurements in mm: body length 3.85 (holotype), 3.10–3.30 (paratypes), wing length 2.53 (holotype), 2.23–2.40 (paratypes), wing breadth 0.76, 0.65–0.70.

Head less flattened than in *L. oedipus*: length 0.625 mm, height 0.49 mm. Anterior margin of frons and cheeks light yellow, almost all frons, as well as vertex, occiput and posterior part of genae black shiny, particularly so for orbitalia. Interfrontalia dark granulose. Subocular rim of genae dirty yellow. Palpus short, ca. 0.15 mm, thin, bat-shaped, apical hair minute. Scape and pedicel light yellow, first flagellomere infuscated. Vibrissa (holotype) 0.175 mm long.

Mesothorax, metathorax, prosternum and abdomen dark, subshining blackish brown, prothorax, except for its dorsal part, and postpronotum lighter. Mesonotum without any sign of sagittal microtomentose line. 1+2 dorsocentral pairs, anterior one well cranial to anterior notopleural. Acrostichal macrochaetae (3–4) not aligned in a straight line nor paired. Mesothoracic setae otherwise as in *L. oedipus*. Apical process of scutellum shorter and thicker than in *L. oedipus*: scutellum in

sagittal line to the base of process 0.12 mm (holotype), process 0.062 mm long, lateral scutellar setae 0.065 mm, apical *sc* 0. 388 long, emerging from a globose process.

All coxae (incl. cx1) yellow, all tarsi except for the slightly darkened tarsomeres 2–5 or only 4–5 fore tarsomeres. Tibiae all dark but the apical 1/4 of mid tibia. Fore and hind femora strongly thickened, mid femur less so. Femora variegate in colour: fore femur lighter (ochre) in medial half, darker laterally, hind femur with a broad brown stripe medially and subapically each. Fore femur anteroventrally with 7(8) thick black spines in apical 2/5, shortening anteriorad. Mid femur with 2 spines anteriorly at 25/52 and 39/52. Hind femur with 2 longer (second one particularly long) and 3 shorter black spines on anteroventral 1/3. Mid tibial armature: posterodorsals: very long at 13/51, 27/51, shorter at 17/51, anterodorsals: shorter at 20/51, 31/51, long and thick at 46/51, medium long ventral at 35/51, a short ventral subapically.

Wing brownish, slightly darker at apical part of r1 cell. Costal sections R2+3 – R4+5 – M 14: 5 (holotype), 28 : 9 (paratype), medial vein sections from base 40:31:87, i.e. 0.50: 0.39: 1.09 mm. Halteres dark brown, apical half of knob white.

Abdominal tergites 1–6 medially with thick grey microtomentum. Tergite 1 caudally and tergite 2 cranially with a short inverted U-shaped yellowish sign. Sternites similar to those of *F. paratinctipennis* but sternite 5 broader, its lateral "arm" thin, less sclerotized. Sternite 6 shorter, its sagittal incision larger. Male sternite 8 with a pair of 0.15 mm long, strong setae. Epandrium shorter and broader. Surstylus (Fig. 48) digitiform, slightly ventrally (caudally) directed. Cercal and surstylar setae medium-long. Surstylar process under epandrium triangular (Fig. 50). Ejaculatory apodeme (Fig. 49) with modified stalk, intricately sclerotized basal part, distal part broad fan-shaped.

Lycosepsis biseta sp. n. keys to couplet 3 in ANDERSSON's (1976) key, but does not fit the description. It was named after the two strong spines on the anterior side of mid femur. Although its hind femur is thicker than that of *L. hamata*, it is easy to distinguish from *L. oedipus*, since its fore tarsomeres 2–4 are not black.

Lycosepsis oedipus L. PAPP, sp. n.
(Figs 51–53)

Holotype male (HNHM, left mid leg lost): THAILAND: 8 km E of Doi Anh Kang, over a rocky brook, Nov 2, 2004, No. 17, leg. L. PAPP & M. FÖLDVÁRI.

Paratypes: 1 male (abdomen with genitalia in a plastic microvial with glycerol): same as for holotype; 1 male: Doi Inthanon N. P., Pha Sum Ran Waterfall, forest & along the brook, Oct 30, 2004, No. 8, leg. L. PAPP & M. FÖLDVÁRI; 1 male: Mae Fang NP, Doi Pha Hom Pok, 21.11.2003, 1430m, spring, leg. A. SZAPPANOS.

Measurements in mm: body length 3.75 (holotype), 3.67–3.86 (paratypes) , wing length 2.54 (holotype), 2.50–2.70 (paratypes), wing breadth 0.75, 0.74–0.77.

Head black, 0.625 mm long, 0.49 mm high, interfrontal stripe covered by thin grey microtomentum. Shiny orbitalia involve base of anterior fronto-orbital seta, i.e. go to 4/5 of frons. Face wholly membranous, clypeus U-shaped, only 0.010–0.012 mm high. Anterior 2 fronto-orbital pairs proclinate and slightly lateroclinate, posterior fronto-orbital lateroclinate and slightly reclinate. Ocellars short, 0.175 mm, postocellars divergent, 0.275 mm. *Vti* convergent, *vte* lateroclinate. One

pair of short supralunular *ifr*. Vibrissae thin, 0.175 mm long. First flagellomere globose. Arista long curved, bare.

Thorax and abdomen shiny "leathery", black, mesonotum with a thin sagittal grey microtomentose stripe. Prothorax dark, postpronotum to *pprnt* seta diffuse greyish yellow. 2 +2 *dc* pairs, 3rd pair much closer to 4th than to 2nd, and mostly shorter than 2nd. 2 very long *np* pairs, 2 short *pa* pairs, anterior intra-alar (or, presutural) intermediate in length to *np* and *pa*. Scutellum with a long (0.075 mm) conical apical process. Scutellar length to base of process 0.105 mm. Basal sc satae shorter than process. Apical scutellars emerge from a wart, 0.40 mm long (holotype).

Fore coxa black, mid and hind coxae yellow. Tibiae dark shiny brown, except for apical part of mid tibia. Lateral surface of femora dark, except for bases, their medial half less dark, e.g. medial surface of t2 only with a broad subapical dark band. Fore basitarsus yellow, tarsomeres 2–5 black, mid and hind tarsi yellow, last tarsomere (or tarsomeres 4–5) may be infuscated. Length/thickness of hind leg:

f3	80 (holotype)	93 (paratype)	14 (holotype)	19 (paratype)
t3	80	93	11	14

Mid femur anteriorly with 1 black spine at middle. Mid tibial armature: 2 long dorsal setae at 14/58, 29/58, anterodorsals at 36/58, 51/58, a short anteroventral at 41/58, 51/58 each, plus a dorsal and a ventral sbuapical each. Anteroventral 1/5–1/4 of hind femur with 3 spines, the proximal one is the longest and it emerges from a conical process. Fore femur medioventrally with 5–6 long, slightly proclinate black thorn-like setae on apical 1/4.

Wing much longer than broad, racket-shaped, no anal lobe. Wing evenly brown, slightly darker in apical part of cell r1, veins brown. Cell r1 narrow, costa thickened, their width at middle 1.8: 2.5. R2+3 apical curvature variegate, consequently R2+3-R4+5-M costal sections vary from 21:11 to 27: 11. M vein sections: 45 : 30 : 89. Halteres dark brown, apex of knob (back to almost its half), as well as a part of stalk, light, whitish yellow.

Abdominal tergite 1 caudally and T2 cranially with an inverted broad V-shaped yellow spot. Setae on S8 0.19 mm long. Epandrium seems somewhat higher than in *L. biseta*. Cerci (Fig. 51) with rather numerous long setae. Surstylus (Figs 51, 53) rather long, setae long on caudal surface and short medially (Fig. 51). Subepandrial process of surstylus short. Ejaculatory apodeme (Fig. 52) robust, asymmetrically fan-shaped, stalk thick with a small cylindrical process, basal part semiglobular, intricately sclerotized.

Lycosepsis oedipus sp. n. keys to *L. hamata* in ANDERSSON's (1976) key, which seems a more abundant species in the Oriental region (see below). Its hind femur is much thickened, there is only one strong spine on the anterior side of mid femur, and fore tarsomeres 2–5 are black. This combination of characters, as well as details of male genitalia, separate *L. oedipus* from *L. biseta* and *L. hamata*.

Lycosepsis hamata ENDERLEIN, 1920 – 9 ♂: PF04/17; 3 ♂: PF04/25; 1 ♂: PF04/19; 1 ♂: PF04/9; 8 ♂10 ♀: FSz03/9; 1 ♂1 ♀: FSz03/11; 4 ♂6 ♀: FSz03/17; 1 ♂1 ♀: FSz03/18; 4 ♂4 ♀: FSz03/21; 2 ♂ 4 ♀: Rong Rian Ban Mai Phang Kba, 800 m, dry creek bed, N 19° 36' E 100° 45', 25. XI. 2003, leg. A. SZAPPANOS (60 indiv.). It was described from Taiwan and repeatedly reported from that island (otherwise known also from Sumatra).

Lycosepsis spp. 9 ♀: PF04/17; 1 ♀: PF04/19. 2 ♀: Tham Sakoen NP, 30. 11. 2003, 19° 23'N 100°38'E, along creek at forest border, leg. A. SZAPPANOS; 1 ♀: Mae Fang NP, Doi Pha Hom Pok, 21.11.2003, 1430 m, spring, leg. A. SZAPPANOS. I do not want to risk any misidentification, so I did not try to identify females of *Lycosepsis*.

NERIIDAE – M. FÖLDVÁRI

In the CDO (STEYSKAL 1977) four species of four genera (*Gymnonerius* HENDEL, *Chaetonerius* HENDEL, *Telostylinus* ENDERLEIN and *Telostylus* BIGOT) are listed, among which *Telostylus inversus* HENNIG, 1937 (p. 269) has been described from Thailand.

We collected 127 specimens of Neriidae in 2004 and 21 indiv. in 2003.

Chaetonerius spp. – 41 indiv. (2 spp.)

Gymnonerius fuscus (WIEDEMANN, 1824) – 1 ♂: PF04/14; 1 ♂: PF04/42; 1 ♂: PF04/36.

Stypocladius appendiculatus (HENDEL, 1913) – 1 ♀: Tham Sakoen NP, 30.11.2003, along creek at forest border, leg. A. SZAPPANOS. This is the first record of the genus in Thailand (Fig. 54).

Telostylus binotatus BIGOT, 1859 – PF04/43: 2; PF04/39: 4; PF04/30: 2; PF04/42: 4; PF04/41: 1; PF04/36: 1 indiv.

Telostylus trilineatus DE MEIJERE, 1910 – PF04/35: 1; PF04/36: 14; PF04/29: 41; PF04/43: 8; PF04/38: 20; PF04/25: 1; PF04/42: 1; PF04/29a: 3; PF04/22: 1, PF04/30: 1 indiv.

Telostylus spp. – 4 indiv. (2 spp.).

Telostylinus sp. – 6 indiv.

MICROPEZIDAE

In the CDO (STEYSKAL 1977) seven species in two genera (*Grammicomyia* (*Ectemnodera*) 2 spp., *Mimegralla* 5 spp.) were listed. Formerly *Grammicomyia* (*Ectemnodera*) *sondaica* HENNIG, 1935 (p. 80) and *Mimegralla cedens* (WALKER, 1856) ssp. *thaiensis* CRESSON, 1926 (p. 269) and a questionable infrasubspecific taxon*, M. cedens thaiensis niveimana* CRESSON, 1926 were described from Thailand. We selected and pinned 13 micropezid specimens during our 2004 collection trip. They represent four species of *Mimegralla*. Although we are aware of the literature for their determination (e.g. HENNIG 1935–36), for lack of expertise, we did not attempt further identification.

Mimegralla (**Mimegralla**) sp. – 1 ♂: PF04/43; 1 ♀: PF04/38.

Mimegralla (**Cyclosphen**) spp. – *sp. 1*: 1 ♂ 1 ♀: PF04/35; *sp. 2*: 1 ♂1 ♀: PF04/11, 1 ♂: PF04/21; *sp. 3*: 1 ♂ 1 ♀: PF04/42; 1 ♀: PF04/39.

PSEUDOPOMYZIDAE – B. MERZ

This small family is known from the Oriental Region according to the CDO (VOCKEROTH 1977) by one species from the Philippines, *Tenuia nigripes* MALLOCH, 1926. Recently, *Macalpinella brevifacies* L. PAPP, 2005 was described

from Taiwan. So far, the family has been unknown from Thailand. One female of an apparently undescribed species fitting the diagnosis of MCALPINE (1994) and MCALPINE & SHATALKIN (1998) of *Pseudopomyza* STROBL with a prominent facial tubercle was found at the following locality:

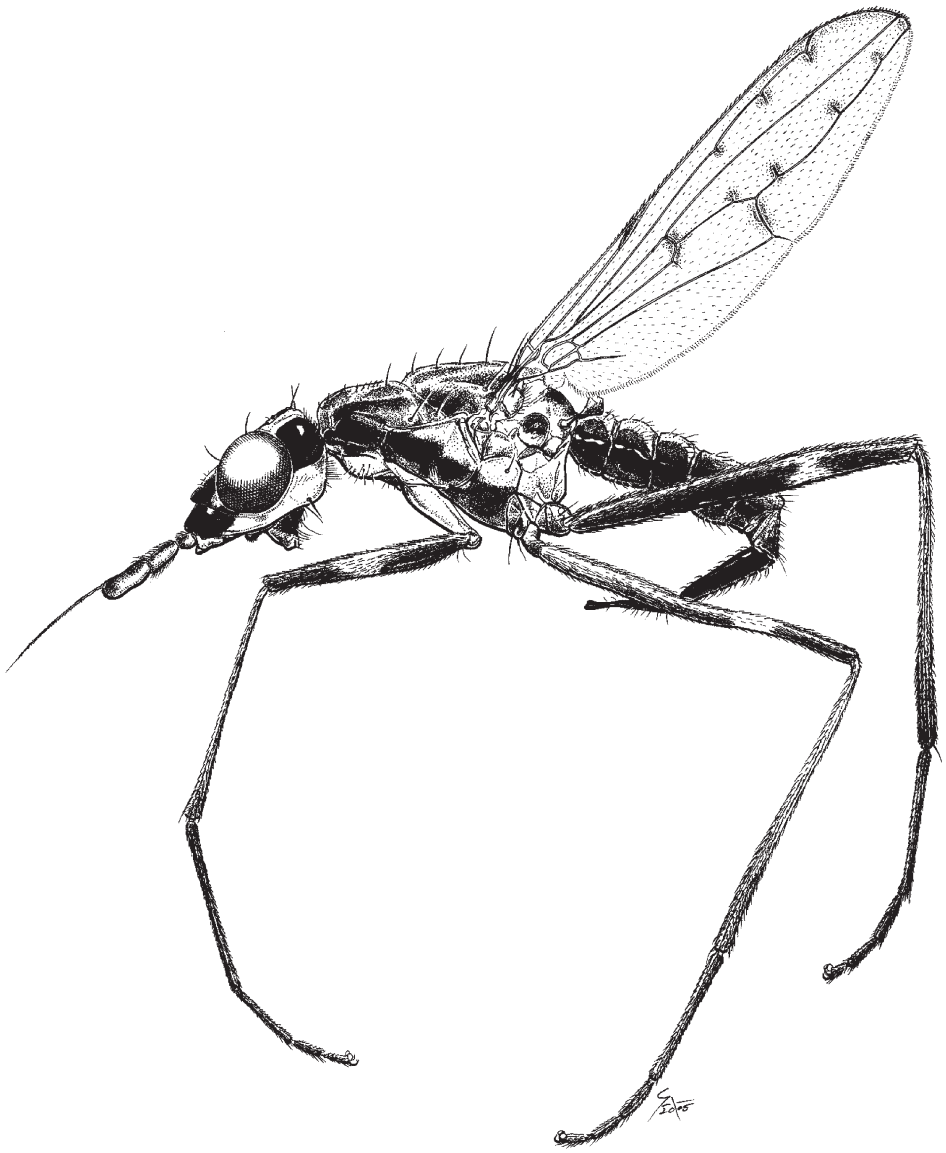


Fig. 54. *Stypocladius appendiculatus* (HENDEL) (del. A. SZAPPANOS)

N-Thailand, Chiang Mai Province, Chiang Mai (near Zoological Garden), 24.X.2000, leg. B. MERZ & P. SCHWENDINGER (MHNG). This female was swept from a broad leaf at the edge of a dry forest during a rainy day.

STRONGYLOPHTHALMYIIDAE

There are but a few acalyptrate dipterous families, for which we can say that they are rather well known in the Oriental region. One of those exceptions is the family Strongylophthalmyiidae. STEYSKAL (CDO, 1977) listed 22 Oriental species, although none of them was mentioned from Thailand. SHATALKIN (1996) described eight additional species, two of them from Thailand (both of them found also in our material). FREY's (1956) and STEYSKAL's (1971) keys, together with SHATALKIN's works (1993 etc.) are proper bases for the identification of the Oriental species (only two females in our material (PF04/25) was left unnamed).

We selected and pinned 71 *Strongylophthalmyia* specimens in 2004. One additional specimen was captured by our colleagues in 2003. The material is rich in species; four of them are new to science.

Strongylophthalmyia brunneipennis (DE MEIJERE, 1914) – 2 ♀: PF04/42; 1 ♂: PF04/43. It was described from Java and known also from the Philippines.

Strongylophthalmyia freidbergi SHATALKIN, 1996 – 1 ♂: PF04/11; 1 ♂: PF04/14. This is a peculiar species, which was described from NW Chiang Mai (Doi Suket) and from another Thai locality. It is much to our satisfaction, that we managed to capture it again.

Strongylophthalmyia gibbifera SHATALKIN, 1993 – 5 ♂: PF04/14. It was described from Vietnam.

Strongylophthalmyia lutea (DE MEIJERE, 1914) – 1 ♂: PF04/43. It was described from Java.

Strongylophthalmyia metatarsata DE MEIJERE, 1919 – 1 ♂: PF04/42. It was described from Sumatra.

Strongylophthalmyia nigricoxa (DE MEIJERE, 1914) – 1 ♂: PF04/14; 3 ♂: PF04/17; 4 ♂: PF04/19; 1 ♂: PF04/26; 3 ♂ 2 ♀: PF04/42; 1 ♂: Trang Prov., Khao Chong Reserve, rainforest, 22. 11. 2003, river Khao Chong, beating and netting, OROSZ & SZIRÁKI. It was described from Java. It does not seem rare in Thailand. It is a rather characteristic species with its large clypeus, anepisternum shiny black, not setose, male cerci extremely long, slender, longest cercal setae only 2/5 as long as cercus.

Strongylophthalmyia pectinigera SHATALKIN, 1996 – 1 ♂: PF04/14; 1 ♂: PF04/17. It was described from NW Chiang Mai (Doi Suket). Now it is reported from other two localities of N Thailand.

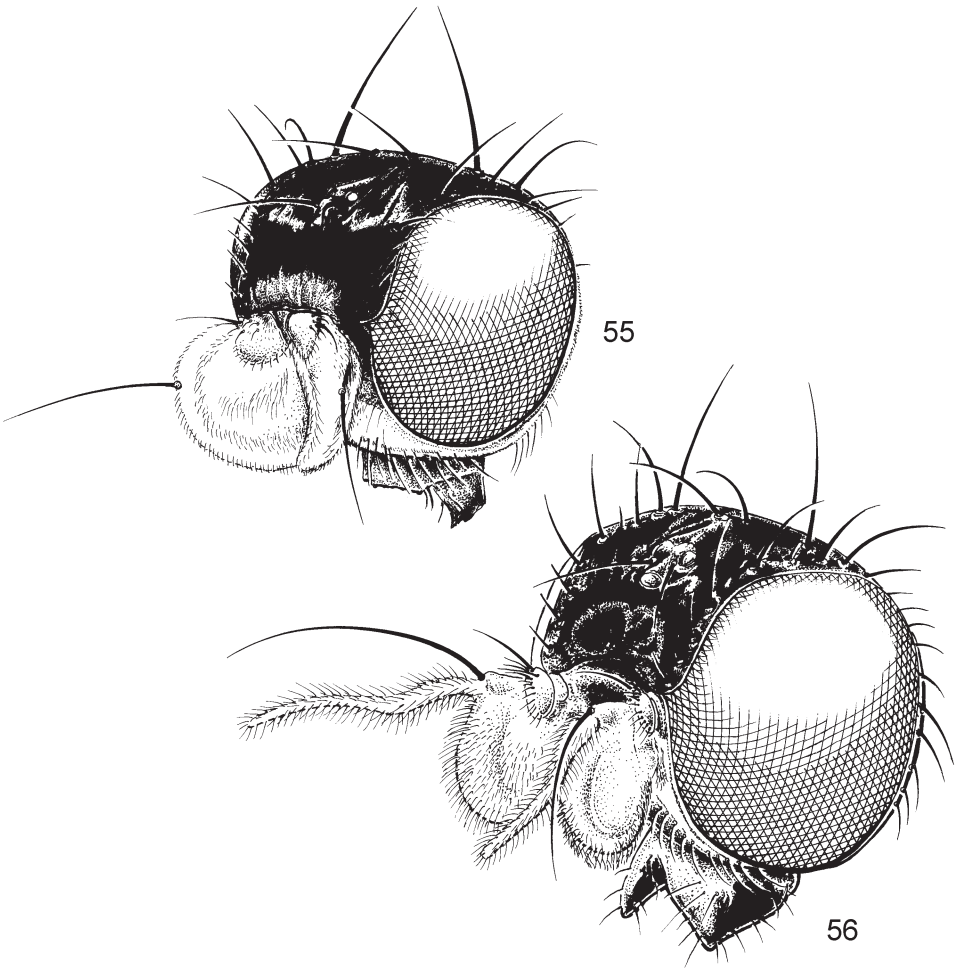
Strongylophthalmyia polita (DE MEIJERE, 1914) – 1 ♀: PF04/14. It was described from Java and known also from Sumatra.

Strongylophthalmyia punctata HENNIG, 1940 (Figs 60–62, 132) – 4 ♂: PF04/14; 1 ♂: PF04/17; 2 ♂: PF04/19. It was described from Taiwan. The large S-formed process of its 1st flagellomere is very characteristic (Fig. 132). Male palpus extremely broad. Cerci (Fig. 60) more

rounded apically than in *S. thaii* sp. n. Ejaculatory apodeme (Fig. 61) broad fan-shaped. Ventral apical (actually cranial) part of hypandrial complex (Fig. 62) digitiform.

Strongylophthalmyia spinosa FREY, 1956 – 1 ♂: PF04/14. It was described from Burma. Our specimen does not fit the original description completely. The presence of spiniform black setae on the dorsal side of fore femur is not specific character, since there are a number of species (*palpalis*, *punctata*, *thaii*), which possess them. Consequently, that character alone does not define a species.

Strongylophthalmyia crinita group spp. – 1 ♀: PF04/14; 1 ♀: PF04/42.



Figs 55–56 = *Strongylophthalmyia*, head of new species. 55 = *S. macrocera* sp. n., holotype male, 56 = *S. thaii* sp. n., paratype male (del. A. SZAPPANOS)

Strongylophthalmyia dorsocentralis L. PAPP, sp. n.
(Figs 129–130)

Holotype female (HNHM): THAILAND: Trang Prov., Khao Chong Botanic Garden, along the stream below waterfall, Nov 14, 2004, No. 30, leg. L. PAPP & M. FÖLDVÁRI.

Paratype female (a freshly emerged specimen, legs wrinkled, wing patterrn faint): data same as for holotype.

Measurements in mm: body length 4.67 (holotype), 3.70 (paratype), wing length 3.51, 3.13, wing breadth 1.28, 1.12.

A comparatively large yellow species, with a pair of faint ochre stripes just outside *dc* lines (Fig. 130).

Head yellow, only ocellar triangle dark. Only 2 pairs of long fronto-orbitals, anterior pair short, lateroclinate, posterior pair long, reclinate. No setae on cheeks and genae but only behind and below eyes. Clypeus extremely high, 0.25 mm, distance of lunule clypeus in sagittal line only 0.31 mm. Ocellar seta long, 0.35 mm. Seta on pedicel only 0.35 mm. Arista bare, 0.70 mm long. Palpus small, almost parallel sided.

Mesonotal setae all brown. 1 weak *pprnt*, 2 *np*, 1 presut *ia*, 1 *sa*, 1 *pa*, 1 +3 *dc*, 1 *anepst* (rather long), no row of white hairs on centre of anepisternum. Dorsocentrals between the characteristic (countable) ones) are unusually strong (Fig. 130). Only 2, more or less unarranged rows of scattered long acrostichals. No dorsal scutellars, apical scutellars long.

Legs and setae and hairs on legs yellow, dorsal side of fore femur convex, without spines. Fore tibia apically and medially with a comb of adpressed setulae.

Wing (Fig. 129) yellowish with a transverse central and an apical brown spot. Costa and vein R1 yellow, other veins brown (!). Costa only slightly thickened distally to R1. Base of R4+5 thickened and dark brown. Intra-crossvein sections and distal section of M (holotype): 24: 67: 98. Costal sections 78: 101. Calyptrae fumose, fringe rather long, longest 0.34 mm. Haltere ochre, stalk darker, brown.

Female abdomen brown, except for basal 2 tergites, lateral and marginal setae on tergites 0.35 to 0.38 mm long. Female cerci 0.35 mm long, brown, apical hairs only 0.02 mm long.

The specific ephithet refers to the unusually strong dorsocentral setae between the paired "characteristic" dorsocentrals and the presence of a pair of faint ochre stripes just outside *dc* lines.

Strongylophthalmyia dorsocentralis sp. n. is an easily recognisable species. It keys to *S. lutea* DE MEIJERE or to *S. immaculata* HENNIG both in STEYSKAL's (1971) and FREY's (1956) keys. Its abdomen is probably yellowish but darkened owing to gut content. Contrarily to *S. lutea*, it has two large brown spots on wing, its R2+3 is much longer than that of *S. lutea*.

Strongylophthalmyia macrocera L. PAPP, sp. n.
(Fig. 55)

Holotype male (HNHM, left wing lost)): THAILAND: Ban Na Lae, nr Pua, over a rocky forest brook, Nov 5, 2004, No. 19, leg. L. PAPP & M. FÖLDVÁRI.

Measurements in mm: body length 3.15, wing length 2.93, wing breadth 1.20.

Thorax and abdomen shiny black, postpronotum and lateral part of antepronotum yellowish.

Frons and occiput shiny black, cheeks, genae and eye margin up to the level of antennal base covered by light grey microtrichia. Clypeus only 0.07 mm high. One pair of anterior lateroclinate and 3 pairs of reclinate and lateroclinate fronto-orbitals. Ocellars emerge much anterior to middle of frons, postocellars longer than ocellars (0.28 mm and 0.24 mm). Peristomials downcurved or reclinate (posterior ones). Cheek with similar setae ventrally (above genal edge). Pedicel and first flagellomere yellow, slightly grey fumose, scape darker. Long seta on pedicel 0.17 mm. Fist flagellomere extremely large (Fig. 55): 0.26 mm long, 0.34 mm broad, cilia 0.04 m. Arista thin, bare, 0.43 mm long. Palpus short black, simple.

Anepisternum with a dorsal caudal (marginal) seta and several setulae on caudal part. No oblique row of whitish setae on anepisterenum.

Legs yellow, mid and hind femora brown fumose. Fore femur dorsally convex, without any modification, or thick thorns.; ventromedially at basal Ľ with a medially directed long, thorn-like seta. Mid tibia without a true ventroapical but with a yellow anteroventral (0.185 mm) and a posteroventral (0.15 mm) apical seta each.

Wing clear, yellowish grey, veins ochre. Second costal section 1.03 mm, third section 0.89 mm. M vein sections: 0.34, 0.62 and 1.01 mm. Veins R4+5 and M parallel. Base of R2–5 fork with a 0.06 mm, light button-like thickening. Calyptral fringe black. Halter's stalk grey, knob greyish (dirty) white.

Male cerci widely rounded apically, less than 0.2 mm long. Longest cercal seta 0.14 mm, lateral (i.e. not apical). Phallus 0.85 mm long (!), without strong thick thorns or lateral processes.

Female unknown.

Strongylophthalmyia macrocera sp. n. keys to *S. coarctata* HENDEL (Taiwan) in STEYSKAL's (1971) key, but they cannot be closely related. *S. coarctata* males have a long thick curved first flagellomeral process, their fore femur is without thick medioventral seta, and their R2+3 vein is much longer (compared to R4+5). The positions in FREY's and STEYSKAL's keys do not reflect relatedness. The light humeral area is not a synapomorphy, but the first flagellomeral process is most likely that. The new sp. does not belong to the *S. crinita* group either (palpus simple).

Strongylophthalmyia palpalis L. PAPP, sp. n.
(Figs 57–59, 131)

Holotype male (HNHM, right mid and hind legs lost): THAILAND: Mae Fang N. P., over and along a forest brook, Nov 1, 2004, No. 14, leg. L. PAPP & M. FÖLDVÁRI.

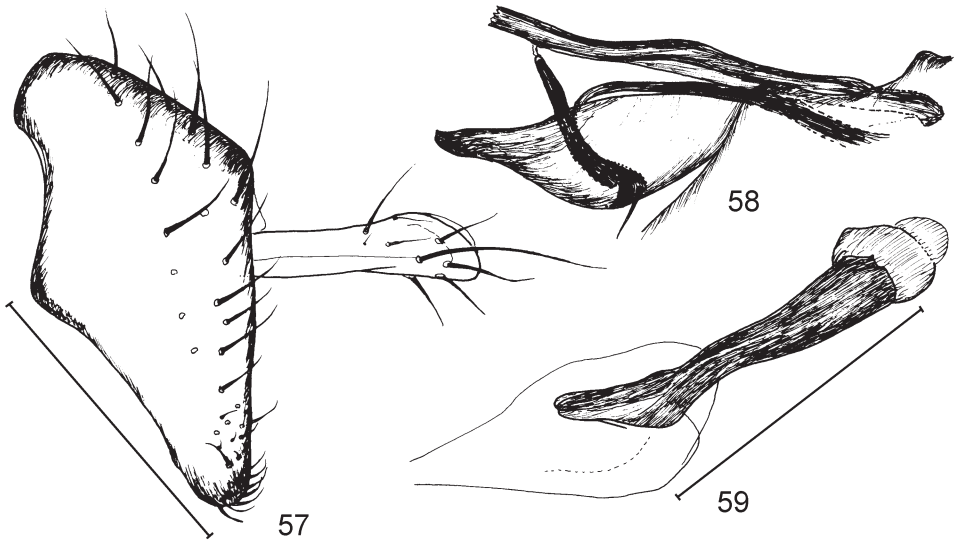
Paratypes: 1 male (abdomen with genitalia in a plastic microvial with glycerol) 1 female: THAILAND: Khao Pu – Khao Ya N. P., along a forest brook below the (Pak Yam) waterfall, Nov 21, 2004, No. 42, leg. L. PAPP & M. FÖLDVÁRI.

Measurements in mm: body length 2.93 (holotype, with abdomen downcurved), 2.28, 3.00 (paratypes), wing length 2.23, 1.85, 2.07(paratypes), wing breadth 0.90, 0.73, 0.82.

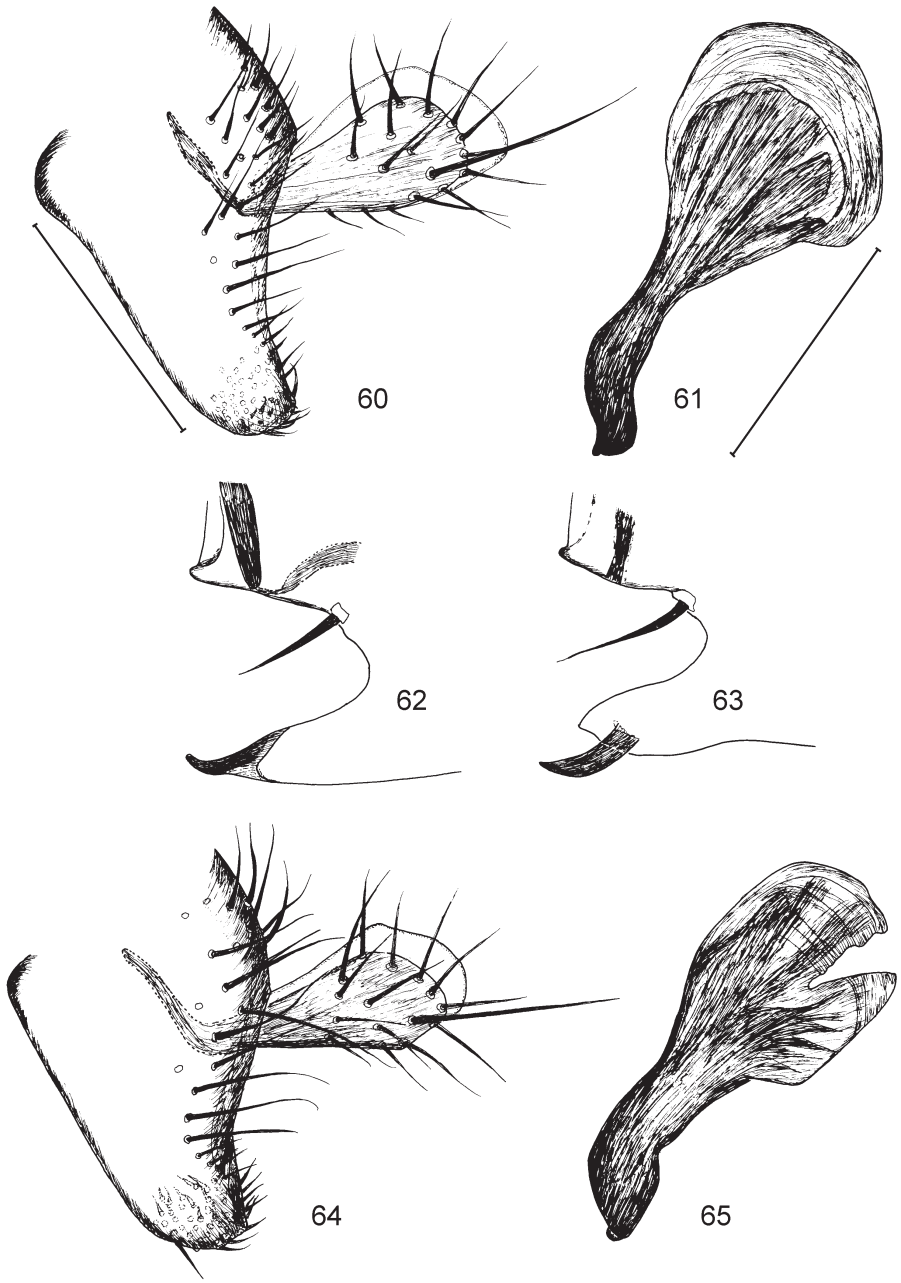
Head mostly yellow, posterior 2/3 of frons and upper half of occiput diffuse grey (♂) or frons and occiput all black, except for anterior 1/4 (♀). Antennae and face yellow, female first flagellomere fumose dorsally and apically. Middle fronto-orbital pair is the longest. *vte*, *vti* and *poc* setae normal, latter longer than ocellar setae. Antenna similar to that of *S. gibbifera* (though they are not closely related): with a dorsal conical process, first flagellomere with long dense white cilia (longest 0.07 mm). Arista bare, basal segment short and thick. i.e. bulbous. Ocellar triangle at middle of frons, ocellar setae 0.20–0.21 mm long only. Ventral part of cheeks and anterior half of gena with a row of downwards and backwards curved white hairs. Clypeus high, 0.10 mm. Male palpus (Fig. 131) consists of 2 black discs, apical one bears a long black seta at mid ventral edge. Female palpus very small bacilliform: 0.11 mm with a 0.10 mm long apical seta.

Thorax yellow, with a pair of diffuse, more or less broad stripe just laterally to *dc* lines. All but dc and sc yellow. Anepisternum with scattered long thin setae. Longest *anepst* seta *not* on posterior edge subdorsally (that is almost indiscernible), but on disc of anepisternum below middle. *pprnt*, 2 *np* and presutural *ia* not easily discernible, i.e. slightly longer (and same yellow), as other mesonotal non-characteristic setae. Acrostichal microchaetae in 2 rows (which are close to each other presuturally, more distant posteriorly). Apical scutellars very long, 0.41 mm, no dorsal scutellars.

Male fore femur 0.625 mm long (holotype), concave medio-dorsally in apical half, with 2 overlapping rows of black thorns: dorsal row of 5 setae from 1/10 to ½ (the most proximal seta is the longest one and it is medially directed), mediodorsal row of 6–7 setae from 2/5 to 7/10. Fore femur



Figs 57–59 = *S. palpalis* sp. n., paratype male: 57 = epandrium and cerci, full lateral view, 58 = apical half of hypandrial complex, 59 = ejaculatory apodeme. Scales: 0.1 mm



Figs 60–65. *Strongylophthalmyia* spp., male genitalia. 60–62 = *S. punctata* HENNIG: 60 = epandrium and cerci, lateral view, 61 = ejaculatory apodeme, broadest extension, 62 = gonopod, ventral part, broadest view; 63–65 = *S. thaii* sp. n. paratype: = gonopod, ventral part, broadest view, = epandrium and cerci, lateral view, = ejaculatory apodeme, broadest extension. Scale: 0.1 mm for all

ventrally at 1/5 with a button-like projection, which bears 2 almost perpendicular setae. Slightly anteriorly to that projection on mediodorsal side are 2 medially directed yellow thorn-like setae. Female fore femur with apical half and mid tibia in basal half blackish fumose. Male fore leg extremely characteristic: basitarsus 0.46 mm long (holotype) and thin (0.09 mm at thickest), fore tibia very short, only 0.40 mm and rather thick. Also female fore tibia shorter than normal: t1/mt1: 0.46 mm/0.35 mm. Fore tibial medial (apical) comb of rather long setae.

Wing clear light greyish, veins light brown. Costa thickened at and distally to R1. Costal sections: 44: 70. Intra-crossvein sections and distal section of M (holotype) 16.5: 40: 69. Calyptra fumose with long dark fringe (longest 0.20 mm). Haltere light grey.

Abdomen black, except basally, where tergites 1 and 2 diffuse greyish yellow.

Male cerci (Fig. 57) somewhat shorter than 0.2 mm, apically triangular, apical seta not particularly long. Cerci without any microchaetae. Surstylar lobe rather narrow, medially with short thick setae. Ejaculatory apodeme (Fig. 59) with very small apical part, stalk long, basal part elongate. Aedeagal apodeme shorter than phallus, with a definite S curve medially (Fig. 58). Basiphallus at apical 2/5 with a single, extremely thick lateral thorn, 90 μm long and 15 μm thick. Apical part of hypandrial complex narrow and not divided in lateral view (Fig. 58).

Female cerci 0.14 mm long, i.e. comparatively short, shiny brown, 0.025 mm broad (cerci together), longest hairs only 0.02 mm long.

Strongylophthalmyia palpalis sp. n. keys to *S. spinosa* in STEYSKAL's (1971) key, if we disregard the 1st paragraph. However, as stated above, the shape and armature of the fore femur in *spinosa* is not a specific character but rather a synapomorphy of a group of species. Since all its mesoscutum is yellow, we must follow couplet 44 and its abdomen is black (couplet 46/45). Mesoscutal faint stripes refer to *S. nigriventris* FREY, 1928 (Philippines), described as a var. of *lutea*. However, those stripes are not convergent and the head is almost completely black.

Strongylophthalmyia thaii L. PAPP, sp. n.
(Figs 56, 63–65)

Holotype male (HNHM): THAILAND: 8 km E of Doi Anh Kang, over a rocky brook, Nov 2, 2004, No. 17, leg. L. PAPP & M. FÖLDVÁRI.

Paratypes: 11 males (one of them with abdomen and genitalia in a plastic microvial with glycerol): data same as for the holotype; 13 ♂ (two of them with gen. prep.): Thailand, 2004, leg. L. PAPP & M. FÖLDVÁRI: 1 ♂: Doi Inthanon N. P., below Haui Sai Nueng Falls, along the brook, Oct 30, No. 7; 1 ♂: Doi Suthep N. P., along a forest brook, Oct 31, No. 11; 1 ♂: same as No. 11, Nov 9, No. 26; 1 ♂: ibid., over and along a brook, above and below a small waterfall, Oct 31, No. 12; 2 ♂: Mae Fang N. P., over and along a forest brook, Nov 1, No. 14; 7 ♂: Ban Na Lae, nr Pua, over a rocky forest brook, Nov 5, No. 19.

Measurements in mm: body length 3.37 (holotype), 3.04–3.80 (paratypes), wing length 2.70, 2.59–2.95 (paratypes), wing breadth 1.05, 1.03–1.22.

Head black. Ventral part of cheeks and genae with a row of downwards and backwards directed whitish hairs. Cheeks and genae with very dense white microtrichia, which continue in

microtomentose rim around eye. Face also tomentose. Ocellar triangle slightly anterior to the middle of frons. Three pairs of slightly reclinate fronto-orbitals, *vti* large, *vte* medium, plus an additional lateral vertical/occipical seta present. Ocellar setae only 0.20 mm long, postocellars longer. Pedicel with 0.20 mm long dorsal seta. First flagellomere (Fig. 56) with 0.055 mm, process with 0.075 mm long dense cilia. Arista bare, ca. 0.50–0.55 mm long. Antennal process as in Fig. 56. Palpus normal, broadening apicad, rounded apically, greyish yellow, apex black on a section of 0.1–0.12 mm, apex with dense black setae, which are not longer than 0.12 mm.

Lateral part of postpronotum, prosternum and sclerites between yellow, thorax otherwise shiny black. Thoracic chaetotaxy: 2 *dc* (!), 2 *np*, 1 presututal *ia*, 1 *sa*, 1 *pa*. Mesonotal microchaetae scaettered (not dense), whitish and comparatively long. One pair of short dorsal and 1 pair of long apical scutellars. Anepisternum with a thin posterior anepst seta and with some long whitish hairs on upper posterior edge. At the height of base of fore coxa a straight row of 12–14 downwards and backwards directed white, 0.12–0.13 mm long hairlike setae. This character seems to be a strong synapomorphy in several Oriental *Strongylophthalmyia* spp.

Legs yellow, mid tibia dorsally slightly fumose in some specimens (particularly so for proximal ½). Hind tibia (except its apical part) as well as apical part of hind femur brown or blackish. Fore femur concave in lateral view with 5–6(7) short black spines on medial half, beginning with basal 1/5 (i.e. between 2/10 and 7/10). First spine maybe more basal (1/6). Coxal setae white.

Wing clear, veins ochreous or light brown. Wing membrane cilia not dense but long. Costa much thickened distally to R1. Costal sections: 94: 61, 78: 58. Intra-crossvein sections and distal section of M: 38.5: 43: 81, 26.5: 41: 78. Base of vein R4+5 with medium-sized ochreous knob. Calyptrae blackish with long black fringe. Haltere whitish with grey to blackish stalk.

Abdomen black, but tergites 1 and 2 diffuse greyish yellow. Male genitalia structurally as in other *Strongylophthamyia* spp. Cercus not long, widest subapically, apex triangular (Fig. 64). Apical seta as long as cercus itself. Surstylar lobe almost parallel-sided, apex rounded (Fig. 64). Ejaculatory apodeme (Fig. 65) 0.16–0.18mm long, broadest (0.06–0.08 mm) apically, where sclerotization "broken". Distiphallus more or less globular with intricate sclerotization. Aedeagal apodeme 0.62 mm, strongly S-curved at middle. Ventroapical part of hypandrial complex (gonopod) with a proclinate, sharp, not digitiform process (Fig. 63, cf. Fig. 62).

Strongylophthalmyia thaii sp. n. keys to *S. spinosa* FREY, 1956 in STEYSKAL's (1971) key. However, it turned out, that the differentiating character, used by STEYSKAL (1971) and FREY (1956), i.e. short black spines on the slightly concave dorsal side of fore femur, is not a specific but a species group characteristic (6 known spp., see SHATALKIN 1996). The males of this group have a more or less developed process on dorsal side of first flagellomere subbasally. The concrete form of the antennal process, as well as details of the male genitalia make the individual species easily recognisable. *S. thaii* sp. n. seems close to *S. punctata* HENNIG. The male palpus of *S. punctata* is extremely broad, while that of the new sp. is normal. The shape of the antennal process in profile and details of the male genitalia are also characteristics for safe separation.

PSILIDAE – L. PAPP & B. MERZ

In the CDO there is no record of Psilidae from Thailand. There is no comprehensive work on for the Oriental Psilidae after FREY's (1955). His specimens were from NE Burma, i.e. any of them may occur also in Thailand. IWASA (1989, 1991, 1992) published good papers on the Japanese species of *Chyliza*, *Psila* s.lato and *Loxocera*, respectively, which are useful aids even when studying Oriental species. In two reviews on the Asian species of *Chyliza* and *Loxocera*, SHATALKIN (1998*a*, *b*) described *Chyliza kaplanae* (p. 104, Doi Suthep) and *L.* (*Asiopsila*) *freidbergi* (p. 94, Mae Sariang) from Thailand.

The psilid specimens in the MHNG were identified by A. I. SHATALKIN.

Asiopsila kambaitiensis (FREY, 1955) – 1 ♀: N Thailand, Chiang Mai Province, Doi-Suthep National Park, What Phrathat, 950 m, 17.X.2000, leg. B. Merz & P. Schwendinger (MHNG); 1 ♂: N Thailand, Chiang Mai Province, Doi-Suthep National Park, What Phrathat, 1100 m, 17.X.2000, leg. B. Merz & P. Schwendinger (MHNG). New for Thailand.

Chyliza munda (WALKER, 1860) – 2 ♀: N Thailand, Mae Hong Son Province, 22 km N Mae Hong Son, Tong Palace, 930 m, 21.X.2000, leg. B. Merz & P. Schwendinger (MHNG); 1 ♀: N Thailand, Chiang Mai Province, Huai Nam Dang National Park, 18 km E Pai, 1720 m, 22.X.2000, leg. B. Merz & P. Schwendinger (MHNG). New for Thailand.

In 2004 we selected and pinned ten specimens, an eleventh one was captured in 2003 and we also published a psilid fly from Vietnam below (the HNHM specimens were – partly – identified by L. PAPP).

Chyliza ? **elegans** HENDEL, 1913 – 1 ♂: PF04/25; 1 ♂: PF04/30; 1 ♀: PF04/43. As PAPP (2005) suggested recently, a revision of the Oriental species of *Chyliza* (a species rich genus in this region) is much needed. In the frame of that work, a review of our specimens will also be advisable.

Loxocera ? **maculipennis** HENDEL, 1913 – 1 ♂: PF04/7; 2 ♀: PF04/8; 2 ♀: PF04/1; 1 ♂: Fang, Mae Fang NP, Doi Pha Hom Pok, 2000 m, along road and creek, 20. 11. 2003, leg. A. SZAPPANOS.

Loxocera sp. (*decora* DE MEIJERE, or, *humeralis* DE MEIJERE, cf. DE MEIJERE 1914, 1916) – 1 ♂: PF04/11; 1 ♀: Vietnam, Da Lat, Cam Ly area, No. 691, 4. XII. 94, ZOMBORI. We are not sure of the identity of these specimens, but can state that they are not conspecific with any of the Japanese species (IWASA 1992).

Pseudopsila nigricollis FREY, 1955 – 1 ♀ (head in a plastic microvial with glycerol): PF04/10. This is an immature specimen, whose head was wrinkled. So the head was detached, boiled in NaOH, washed in water, in lactic acid and in water again and studied thereafter. We believe that this paper is not the proper place to discuss whether FREY's Burmese species really belong to this Nearctic genus (see also IWASA 1992); simply, we believe that this species is conspecific with FREY's.

DIOPSIDAE – M. FÖLDVÁRI

In the CDO (STEYSKAL 1977) only four species and one subspecies belonging to two genera were listed. Three species (*Cyrtodiopsis currani* SHILLITO, 1940, p. 159, *Teleopsis adjacens* BRUNETTI, 1928, p. 276, *Teleopsis sexguttata* BRUNETTI, 1928, p. 275) and a subspecies (*Cyrtodiopsis dalmani truncata* BRUNETTI, 1928, p. 277) were described from Thailand. The two genera are considered as one genus, *Teleopsis* (cf. MEIER & BAKER 2002).

We collected 138 specimens in 2004 and 114 specimens in 2003. Live specimens were collected during the 2004 expedition around Chiang Mai and kept alive in the laboratories of the Stalk-eyed Fly Research Group at the University College of London, U.K. They proved to be a *Teleopsis* species new to science, and they will be described in a separate paper together with molecular, morphological, behavioural and allometric data. Here we publish a habitus figure, a drawing of the first leg (Figs 44 and 66) and collecting data of dry specimens deposited in the HNHM.

Teleopsis sp. n. 1. (Figs 44 and 66) – males: PF/03, PF/07, PF/12, PF/19; females: PF/12, PF/25, PF/03, PF/41, PF/39, PF/07 (2ex.); 1 indiv.: FSz03/17.

List of other genera (indiv. 2004/2003): **Teleopsis** sp. 1. (22/47), **Teleopsis** sp. 2. (33/17), **Teleopsis** sp. 3. (19/20), **Teleopsis** sp. 4. (6/16), **Teleopsis** sp. 5. (2/0), **Eurydiopsis** sp. 1. (12/1), **Eurydiopsis** sp. 2. (0/10), **Eurydiopsis** sp. 3. (0/2), **Sphyracephala** sp. (33/0).

MEGAMERINIDAE

Neither the CDO nor any other later works contain any data for the occurrence of the family from Thailand. We captured one male, which we identified using KRIVOSHEINA & KRIVOSHEINA's (1996) paper.

Texara compressa WALKER, 1856 – 1 ♂: PF04/14. The details of male genitalia fit to those in KRIVOSHEINA & KRIVOSHEINA (1996).

NOTHYBIDAE

These are peculiar rare flies. There is no comprehensive work for their identification. We used original descriptions as well as ACZÉL's (1955) and FREY's (1958) paper while naming them. Ours are the first records of this family from Thailand. The workers of the HNHM managed to capture 13 specimens of two spe-

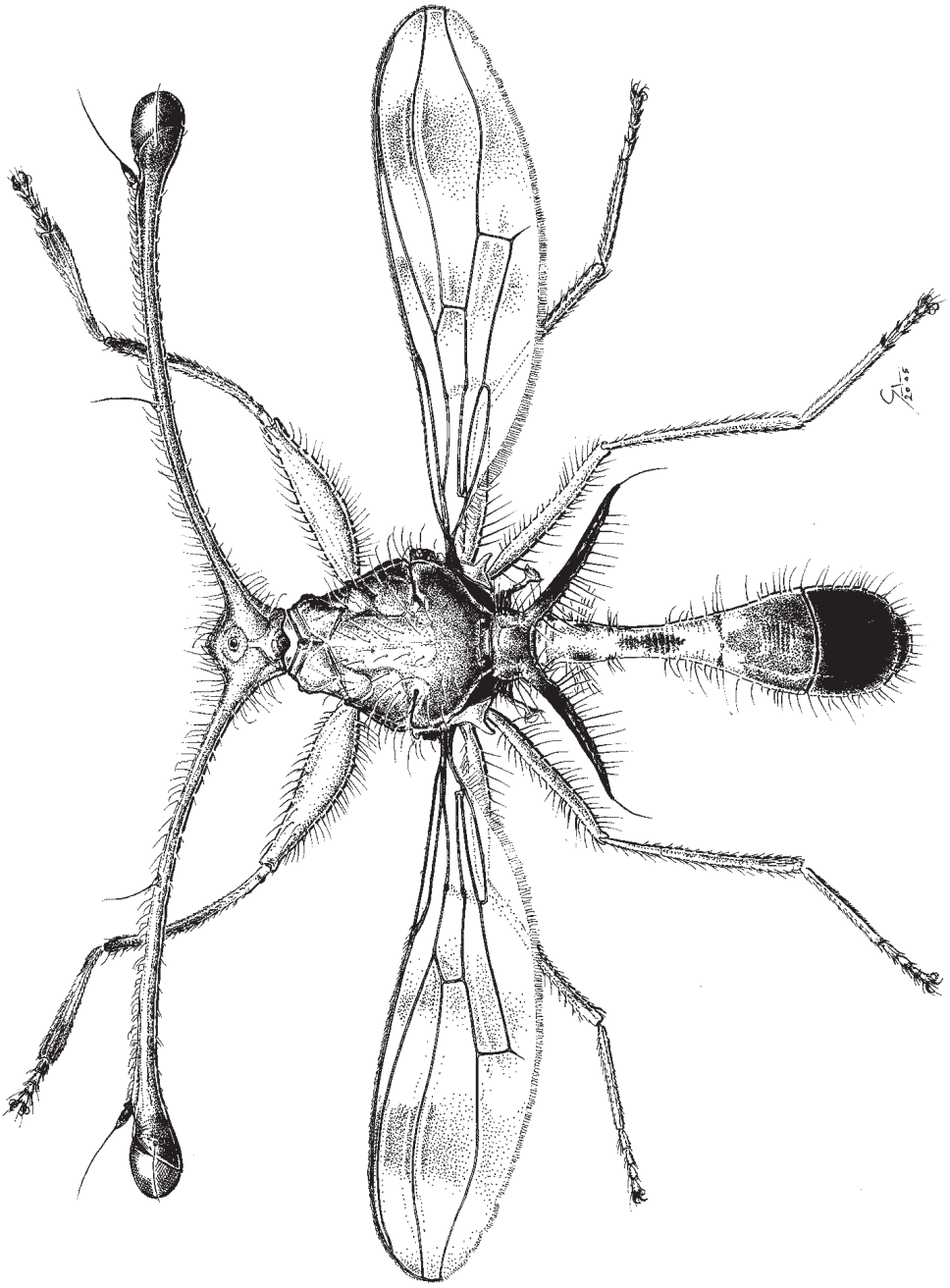


Fig. 66. *Teleopsis* sp. n. 1, male (del. A. SZAPPANOS)

cies. We publish here also two specimens from Vietnam, which are also the first records for that country.

Nothybus kempi (BRUNETTI, 1913) – 1 ♂: Tham Sakoen NP, 30. 11. 2003, 19º 23'N 100º 38'E, along creek at forest border, leg. A. SZAPPANOS; 1 ♀: FSz03/18; 1 ♂ 1 ♀: PF04/11; 1 ♂: PF04/21; 1 ♂: PF04/26; 5 ♂ 3 ♀: PF04/35; 1 ♂: PF04/42. VIETNAM: 1 ♂: Bac Can Prov., Ba Be NP, Na Muon, 300–600 m, 1999. IX. 16., leg. SZIRÁKI; 1 ♀: Da Lat, Cam Ly area, No. 740, 1994. XII. 8., leg. MAHUNKA, SZIRÁKI, ZOMBORI. This is a comparatively small-bodied species, which may not be very rare in the primary forests of SE Asia. Formerly known from Assam (India) and Laos.

Nothybus sumatranus ENDERLEIN, 1922 – 1 ♂: FSz03/18. Formerly known from Sumatra only.

GOBRYIDAE

In the CDO (STEYSKAL 1977) *Gobrya* was listed under the family Megamerinidae. We think their separation as a distinct family by MCALPINE (1997) as well based. The family is new for the fauna of Thailand.

Gobrya sp. aff. *simulans* DE MEIJERE – 2 ♂1 ♀: PF04/36/43/42. Although we cannot name them concretely, we can exclude *G. cyanea* ENDERLEIN, 1920 or *G. syrphoides* (HENDEL, 1913), both of which are represented in the HNHM collection (PAPP 2005). *G. simulans* DE MEIJERE, 1911 from Java seems to be the closest choice.

CONOPIDAE

In the CDO (SMITH 1975) there is no species listed from Thailand. Recently STUKE (2004) in his revision of the genus *Archiconops* KROEBER, 1939 described *A. smithi* (p. 48, Pattaya) from Thailand.

We have two specimens, one from 2003 and one from 2004, which represent two genera of Conopidae.

Physocephala sp. – 1 ♂: Trang Prov., Thung Khai Botanic G., pasture, 21. 11. 2003, A. OROSZ.

Zodion sp. – 1 ♂: Tham Sakoen NP, 30. 11. 2003, 19º 23'N 100º 38'E, along creek at forest border, leg. A. SZAPPANOS.

PLATYSTOMATIDAE

Only an unnamed sp. of *Rhegmatosaga* was listed in the CDO (STEYSKAL 1977). HARA (1994) described *Rivellia dasyixys* (p. 500), *R. fulvidorsalis* (p. 501), *R. kaochangensis* (p. 504) and *R. varia* (p. 494) from Thailand. In a revision of the

Oriental Plastotephritinae, WHITTINGTON (2000) described *Agadasys hexablepharis* (p. 338, Phangmga, Amphoe) from the country.

We selected and pinned 188 indiv. in 2004, three indiv. in 2003. They will be identified and published later by true specialist(s) in the family.

CTENOSTYLIDAE

Ramuliseta thaica KORNEYEV, 2001 was described recently from Thailand (and reported from Vietnam more recently (PAPP 2005)). The HNHM expedition in 2003 collected one ctenostylid specimen, which however belongs to another species.

Nepaliseta ashleyi (BARRACLOUGH, 1998) – 1 ♀: FSz03/15. Described from Sulawesi and reported from Taiwan (KORNEYEV 2001, PAPP 2005). New to Thailand.

PYRGOTIDAE – V. A. KORNEYEV

Trichempodia cockerelli MALLOCH, 1930 (p. 466) was described from Thailand ("top of Doi Satep"). Study of the holotype (in coll. BMNH) showed that the species is certainly congeneric with the other species of the genus *Geloemyia* HENDEL, 1908, widespread from Russian Far East to Madagascar but further nomenclatural changes should be made in a forthcoming revision (KORNEYEV, in prep.). Twelve pyrgotid species are known to occur in the Peninsula of Indochina and bordering territories of India (Sikkim) and China (Yunnan), but only two have been recorded hitherto from Thailand.

Workers of the HNHM collected seven specimens of pyrgotids in Thailand (Fang, Mae Fang NP, Doi Pha Hom Pok, on UV light) in 2003. They belong to two species now assigned to *Adapsilia* WAGA; one of them is new for the fauna of Thailand.

Adapsilia brevispina MALLOCH, 1934 – 1 ♀: FSz03/10. Described from Sichuan, China but not mentioned either in the Palaearctic or Oriental catalog.

Adapsilia verrucifer HENDEL, 1933 – 1 ♂: FSz03/8; 2 ♂: FSz03/10; 3 ♀: FSz03/12. Described from Sichuan, China. KORNEYEV (2004) recorded it also from Thailand (Chiang Mai Prov., Doi Suthep).

TEPHRITIDAE

The Thai fauna of Tephritidae is much better known, than that of the majority of acalyptrate families. In the CDO (HARDY 1977) 119 species of 48 genera were listed (plus an undescribed genus): *Callantra* 4 spp., *Dacus* (*Asiadacus*) 2 spp., *D.* (*Bactrocera*) 13 spp. (incl. an unnamed sp.), *D.* (*Hemigymnodacus*) 1 sp., *D.* (*Pacifodacus*) 2 spp., *D.* (*Zeugodacus*) 10 spp., (plus an unnamed subgenus nr *Daculus* (HARDY, 1973: 75), *Acanthonevra* 8 spp., *Diarrhegma* 1 sp., *Hexacinia* 1 sp., *Rioxa* 2 spp., *Themara* 1 sp., *Tritaeniopteron* 2 spp. (+ an unnamed sp.), *Xarnuta* 1 sp., *Adrama* 1 sp., *Andramoides* 1 sp., *Heterosphira* 1 sp., *Dimeringophrys* 1 sp., *Euphranta* (*E.*) 1 sp., *E.* (*Staurella*) 4 spp., *Felderimyia* 1 sp., *Ptilona* 1 sp., *Cycasia* 1 sp., *Acroceratitis* 8 spp., *Anoplomus* 1 sp., *Callistomyia* 1 sp., *Chaetellipsis* 2 spp., *Dietheria* 1 sp., *Galbifascia* 1 sp., *Gastrozona* 4 spp., *Paraxarnuta* 2 spp., *Phaeospilodes* 2 spp., *Proanoplomus* 3 spp., *Rhaibophleps* 1 sp., *Spaniothrix* 1 sp., *Taeniostola* 2 spp., an unnamed genus and sp. (HARDY, 1973: 213), *Xanthorrachis* 1 sp., *Acidoxantha* 1 sp., *Anomoia* 1 sp., *Carpomyia* 1 sp., *Hemilea* 1 sp., *Myoleja* 3 spp., *Paratrirhithrum* 1 sp., *Rhabdochaeta* 4 spp., *Dictyotrypeta* 1 sp., *Platensina* 6 spp., *Indaciura* 1 sp., *Isoconia* 1 sp., *Spathulina* 1 sp., *Acanthiophilus* 1 sp., *Paroxyna* 2 spp., *Trupanea* 2 spp., *Xyphosia* 1 sp.

Up to 1977 54 species were described from Thailand, mainly by D. E. HARDY (1973) in his monumental work "*The fruit flies (Tephritidae-Diptera) of Thailand and bordering countries*". They are namely *Callantra inferna* HARDY, 1973 (p. 13), *Dacus* (*Asiadacus*) *maculifacies* HARDY, 1973 (p. 15), *D.* (*A.*) *modicus* HARDY, 1973 (p. 17), *D.* (*Bactrocera*) *aculeus* HARDY, 1973 (p. 28), *D.* (*B.*) *aethriobasis* HARDY, 1973 (p. 30), *D.* (*B.*) *bullifer* HARDY, 1973 (p. 32), *D.* (*B.*) *citimus* HARDY, 1973 (p. 36), *D.* (*B.*) *latifrons* (HENDEL, 1915) (p. 425), *D.* (*Pacifodacus*) *vinnulus* HARDY, 1973 (p. 23), D. (*Zeugodacus*) *aptatus* HARDY, 1973 (p. 57), *D.* (*Z.*) *isolatus* HARDY, 1973 (p. 61), *D.* (*Z.*) *platamus* HARDY, 1973 (p. 65), *D.* (*Z.*) *rubellus* HARDY, 1973 (p. 66), *D.* (*Z.*) *ubiquitus* HARDY, 1973 (p. 71), *D.* (*Z.*) *vultus* HARDY, 1973 (p. 74), *Acanthonevra marginata* HARDY, 1973 (p. 89), *A. siamensis* HARDY, 1973 (p. 93), *A. soluta* (BEZZI, 1913*a*) (p. 114), *Rioxa sexmaculata* VAN DER WULP, 1880 (p. 185), *Tritaeniopteron elachispilotum* HARDY, 1973 (p. 115), *T. tetraspilotum* HARDY, 1973 (p. 115), *Andramoides pictus* HARDY, 1973 (p. 128), *Heterosphira decora* HARDY, 1973 (p. 131), *Dimeringophrys pallidipennis* HARDY, 1973 (p. 143), *Euphranta* (*E.*) *presignis* HARDY, 1973 (p. 147), *E.* (*Staurella*) *burtoni* HARDY, 1973 (p. 150), *E.* (*S.*) *maculifacies* HARDY, 1973 (p. 154), *Cycasia flava* HARDY, 1973 (p. 168), *Acroceratitis bimacula* HARDY, 1973 (p. 223), *A. cognata* HARDY, 1973 (p. 225), *A. incompleta* HARDY, 1973 (p. 227), *A. septemmaculata* HARDY, 1973 (p. 231), *A. siamensis*

(MUNRO, 1973) (p. 17), *A. similis* HARDY, 1973 (p. 233), *A. tomentosa* HARDY, 1973 (p. 235), *Anoplomus rufipes* HARDY, 1973 (p. 243), *Gastrozona balioptera* HARDY, 1973 (p. 188), *G. parviseta* HARDY, 1973 (p. 192), *Paraxarnuta anephelobasis* HARDY, 1973 (p. 196), *P. bambusae* HARDY, 1973 (p. 197), *Phaeospilodes fritillus* HARDY, 1973 (p. 199), *Proanoplomus minor* HARDY, 1973 (p. 270), *P. nitidus* HARDY, 1973 (p. 271), *P. vittatus* HARDY, 1973 (p. 276), *Rhaibophleps seclusa* HARDY, 1973 (p. 204), *Spaniothrix vittata* HARDY, 1973 (p. 206), *Myoleja ravida* HARDY, 1973 (p. 258), *M. setigera* HARDY, 1973 (p. 260), *Paratrirhithrum nitidum* HARDY, 1973 (p. 263), *Platensina intacta* HARDY, 1973 (p. 305), *P. quadrula* HARDY, 1973 (p. 307), *Paroxyna siamensis* (HARDY, 1973) (p. 329), *Trupanea brunneipennis* HARDY, 1973 (p. 333), *T. veroniae* HARDY, 1973 (p. 337).

After 1977 even more spp. were newly recorded from Thailand. MEKSONGSEE *et al*. (1991) overviewed all the fruit fly species recorded until that date in Thailand, TAKEISHI (1992) studied the fruit flies as quarantine subjects from Thailand to Japan. HANCOCK & DREW (1994*b*) gave the first records of *A. cassanova* and *Proanoplomus yunnanensis*. The papers of HANCOCK & DREW (1994*a*) on Asian Trypetinae, DREW & HANCOCK's (1994*a*) revision of *Ichneumonopsis* HARDY and *Monacrostichus* BEZZI, DREW & HANCOCK's (1994*b*) summary on the *Bactrocera dorsalis* complex in Asia, the revision of DREW *et al*. (1998) on *Dacus* spp., and HANCOCK & DREW's (1995a) paper on Trypetinae are also with first records also for Thailand. HANCOCK & DREW (1995b) recorded four *Acanthonevra* spp. (*A. desperata, A. gravelyi, A. hemileina, A. ultima*) for the first time from Thailand. HANCOCK & DREW (1999) made a monography on bamboo shoot fruit flies of Asia (Ceratitidinae) and described *Acroceratitis hardyi* (p. 647, paratype from Thailand). In a book-size paper ALLWOOD *et al*. (1999) summarised the host plant records for fruit flies in southeast Asia, with numerous records also from Thailand. HANCOCK & MCGUIRE (2002) published 13 new country records for Thailand of fruit flies in subfamilies Phytalmiinae, Ceratitidinae, Trypetinae and Tephritinae. *Ceratitella inthanona* was described from Thailand. In their revision of Adramini of the South Pacific and SE Asia HANCOCK & DREW (2005) newly recorded *Coelotrypes latilimbatus* (ENDERLEIN) from southern Thailand.

Our material is rather diverse (2004: 161 indiv., 2003: 104 indiv.). They will be identified and published later.

LONCHAEIDAE

There is no former reliable record of this family from Thailand (although OOSTERBROEK (1998) reported 19 spp. in three genera from SE Asia). We selected

and captured 78 specimens in 2004 and 12 indiv. were found from the 2003 expeditions material. The specimens represent two spp. of *Lonchaea* and at least six species of *Silba*.

Lonchaea sp. – 1 ♂: PF04/42. This is an extremely large species, body length 7.2 mm.

Lonchaea spp. – sp. 1: 1 ♂: FSz03/7; sp. 2: 2 ♂: FSz03/7.

Silba excisa (KERTÉSZ, 1901) – 2 ♂: PF04/14; 2 ♂: PF04/25, 1 ♂: PF04/29; 6 ♂ 3 ♀: PF04/35. It is a rather easily identifiable species. Our specimens were compared with KERTÉSZ's types.

Silba perplexa (WALKER, 1861) syn. *S. filifera* (BEZZI, 1913) – 2 ♂: PF04/5.

Silba sp. aff. *abstata* – 2 ♂: PF04/25.

Silba sp. (*atratula* group) – 1 ♂: PF04/35.

Silba sp. 1 ♀: PF04/35. It has a very broad ovipositor.

Silba sp**.** aff. *perplexa* – 2 ♂: PF04/22; 3 ♂: PF04/25; 1 ♂: PF04/19, 1 ♂: PF04/38; 1 ♂: PF04/41; 1 ♂: PF04/43. This is a dark-winged species.

Silba spp. females – 1 ♀: PF04/5; 2 ♀: PF04/22; 2 ♀: PF04/25; 13 ♀: PF04/29; 2 ♀: PF04/30; 2 ♀: PF04/34; 1 ♀: PF04/35; 4 ♀: PF04/36; 4 ♀: PF04/38; 8 ♀: PF04/42; 9 ♀: PF04/43; 7 ♀: FSz03/xx.

SCIOMYZIDAE – L. PAPP & B. MERZ

The CDO (STEYSKAL 1977) listed six sciomyzid species in three genera from Thailand (incl. *Sepedomerus macropus* (WALKER, 1849) as introduced to Thailand). Of them, *Sepedon spangleri* BEAVER, 1974 (p. 86) was described from this country. KNUTSON & GHORPADÉ (2004) listed also *Sepedon aenescens* WIEDEMANN, 1830 from Thailand.

In the MHNG there are six individuals of two *Sepedon* spp., in the HNHM only one male each of two *Sepedon* species, which were captured at the same locality (one sp. overlapping). All the three spp. were also formerly known from Thailand and they are widespread in the Oriental region (see KNUTSON & GHORPADÉ 2004).

The specimens in the MHNG were identified by R. ROZKOŠNÝ, those in the HNHM by L. PAPP.

Sepedon lobifera HENDEL, 1911 – 1 ♂: N Thailand, Chiang Mai Province, Chiang Mai (University), 350 m, 31.X.2000, leg. B. Merz (MHNG).

Sepedon plumbella WIEDEMANN, 1830 – 1 ♂: PF04/33/a. 3 ♂, 1 ♀: N Thailand, Chiang Mai Province, Chiang Mai (University), 350 m, 31.X.2000, leg. B. Merz (MHNG). 1 ♀: ibid., 4.5 km N Pai, 23.X. (MHNG).

Sepedon senex WIEDEMANN, 1830 – 1 ♂: PF04/33/a.

SEPSIDAE – L. PAPP & B. MERZ

In the CDO (ZUSKA 1977) two species, *Dicranosepsis bicolor* (WIEDEMANN, 1830) and *Meroplius fasciculatus* (BRUNETTI, 1910) were listed from Thailand. IWASA (1994) described *Meroplius elephantis* IWASA, 1994 (p.164, Chiang Dao) from Thailand. OZEROV (1997) when revising *Dicranosepsis*, described *D. iwasai* (p. 145, Khao Sok N. P.) and recorded *D. breviappendiculata* (DE MEIJERE, 1913), *D. crinita* (DUDA, 1926), *D. distincta* IWASA & TEWARI, 1990, *D. javanica* (DE MEIJERE, 1904), *D. quadrigemina* IWASA, 1989, *D. revocans* (WALKER, 1860) and *D. tibialis* IWASA & TEWARI, 1990 from Thailand for the first time. In OZEROV's (2005) World Catalogue also *Australosepsis frontalis* (WALKER, 1860), *Sepsis coprophila* DE MEIJERE, 1906, *S. dissimilis* BRUNETTI, 1910, *S. indica* WIEDEMANN, 1824, *S. nitens* WIEDEMANN, 1824, *S. testacea* WALKER, 1860, *Toxopoda bifurcata* IWASA, 1989, *T. contracta* WALKER, 1852, *T. mordax* IWASA, ZUSKA & OZEROV, 1991 and *T. simplex* IWASA, 1986 are listed from Thailand.

The Sepsidae specimens in the MHNG were identified by A. L. OZEROV. All species are already recorded in the World Catalogue of OZEROV (2005), those marked with an * based on the material collected in 2000: **Australosepsis frontalis* (WALKER, 1860), *Dicranosepsis bicolor* (WIEDEMANN, 1830), *D. breviappendiculata* (DE MEIJERE, 1913), *D. revocans* (WALKER, 1860), *D. tibialis* IWASA & TEWARI, 1990, **Sepsis dissimilis* BRUNETTI, 1910, **S. indica* WIEDEMANN, 1824, **S. testacea* WALKER, 1860, **Toxopoda mordax* IWASA, ZUSKA & OZEROV, 1991.

In the HNHM we selected and pinned 163 indiv. of Sepsidae in 2004 and 15 indiv. are from 2003. The material is rich in species, indeed. However, their identification must be made in the frame of another project.

PIOPHILIDAE

Only three species of Piophilidae were listed in the CDO (STEYSKAL 1977), but it that is probably true that the Oriental fauna is poor in piophilid species (cf. OZEROV 2004). Based on larvae collected in connection with a forensic case in Thailand, SUKONTASON *et al*. (2001) published SEM morphology of *Piophila casei* (LINNAEUS).

We captured a single male only, of a common species, which however, is recorded from Thailand for the first time.

Protopiophila contecta (WALKER, 1860) – 1 ♂: PF04/42. Formerly known from Sumatra, Celebes, Taiwan, the Philippines and New Guinea, new to Thailand.

LAUXANIIDAE

In the CDO (SHEWELL 1977) only two lauxaniid species, *Homoneura* (*Homoneura*) *laticosta* (THOMSON, 1869) and *H.* (*Homoneura*) *sublucida* MALLOCH, 1929 were listed from Thailand. OKADOME's paper (1985a) on *Lyperomyia* was with Thailand in its title but without any Thai data in its contents. In a paper on the lauxaniids of Thailand, SASAKAWA (1987) described *Noeetomima thaiensis* (p. 1) and *Phobeticomyia spinosa* (p. 7). SASAKAWA (1995) reported *Noonamyia euphlebia* SASAKAWA, 1990 from Thailand (see below). The holotype of *Trigonometopus* (*Tetroxyrhina*) *nigripalpis* SHATALKIN, 1997 (p. 166) and a paratype of *Trigonometopus* (*Tetroxyrhina*) *alboapicalis* SHATALKIN, 1997 (p. 164) were from Khao Sok. Recently SASAKAWA (2003) recorded *Homoneura quinquevittata* (DE MEIJERE, 1910) and *H. striatifrons* (DE MEIJERE, 1924) from Thailand. In the same paper, SASAKAWA (2003) mentioned Thailand as distribution area also for *H.* (*Neohomoneura*) *honesta* (KERTÉSZ), *H.* (*Homoneura*) *beckeri* (KERTÉSZ), *H.* (*Homoneura*) *picta* (DE MEIJERE), *H.* (*Homoneura*) *quinquevittata* (DE MEIJERE), *H.* (*Homoneura*) *signata* (VAN DER WULP), *H.* (*Homoneura*) *striatifrons* (DE MEIJERE) and *H.* (*Homoneura*) *trypetoptera* (HENDEL) but without concrete occurrence data.

Of course, the Thai Lauxaniidae fauna contains several hundred species. In 2004 we selected and pinned 1077 indiv. and the expeditions in 2003 resulted in 176 lauxaniid specimens. Of them 38 (26+12) specimens will be published in a separate paper in progress, on the revision of the tribe Trigonometopini (preliminarily: *Luzonomyza* 3 spp. (11 indiv.), *Maquilingia* 2 spp. (3 indiv.), *Tetroxyrhina* 4 spp. (14 indiv.), and a new genus with 3 spp. (10 indiv.)). The specimens in our material must represent well over 100 species, most of them are new to science. At least five new genera are included (incl. the smallest lauxaniid we have ever seen, with its wing length of 1.90 mm). The new taxa will be described in a series of papers in the future.

Cestrotus spp. – These are beautiful rare flies in the Afrotropical and in the Oriental regions. All the Oriental species belong to *Turriger* KERTÉSZ, whose distinctness has since long been debated. We think we can prove convincingly a reasonable separation from the Afrotropical (true) *Cestrotus*. However, it seems better to do so in comparison with the Afrotropical species in a separate paper. Our material is very rich: in 2004 we selected and pinned 49 specimens, in 2003 13 indiv. All that material includes eight or nine species, mostly new to science.

Homoneura VAN DER WULP, 1891 – In the present concept a giant – and in my opinion, a paraphyletic – group, where a separation into several genera is unavoidable. That action must be difficult and will result also in painful nomenclature changes. In any case, our project is not the proper place to do this. Below all those monophyletic groups, which have hitherto been treated as subgenera, are regarded as genera. The rest of *Homoneura* species is overviewed in species groups (about 40

spp.). Some of them are natural groups of more or less closely related species, some of them are not; the latters share only some easily detectable characters. (More than 150 indiv. were left ungrouped).

Chaetohomoneura spp. – Only nine indiv. from 2003 and 2004.

Drosomyia (or, *Homoneura picta* group) spp. – A natural group of several spp., 2004: 40 indiv., 2003: 19.

Euhomoneura spp. – 2004: 54 indiv. of 2 spp.; 2003: 3 indiv.

Neohomoneura spp. – 2004: 31 indiv. of 3 spp., 4 indiv. from 2003.

Homoneura beckeri group spp. – A group of closely related spp., 39 indiv. (2004), 6 indiv. (2003).

Homoneura discoglauca group – Four spp. (4+7+4+1 specimens from 2004), none of them is conspecific with *H. discoglauca*: KIM 1994.

Homoneura quinquevittata group spp. – A natural group of several related spp., 18 indiv. (2004), 7 indiv. (2003).

Homoneura picea group spp. – A natural group, centred by the type species of the genus, *H. picea* VAN DER WULP, 1891. 2004: 108 indiv. of 6/7 spp.

Homoneura spp. close to the *picea* group – Black-bodied spp. with short ocellars, less dense aristal rays and with different male genitalia. 2004: 31 indiv. of 2/3 spp.

Homoneura spp., other black-bodied species – Additional 2 or 3 spp., 22 indiv.; their relationship to the above group is to be cleared.

Homoneura spp. with rounded dark spots on wing: an artificial group of several spp.: 25 indiv (2004).

Homoneura spp. with black stripes on wing: an artifical group of two/three spp. in our material: 39 indiv.

Homoneura spp., large dark spots on wing: an artificial group of several spp., whose relationship to the (sub)genus *Euhomoneura* is to be revised: 73 indiv.

Homoneura spp. with a large dark central spot (occupying most of the wing membrane): 19 indiv of one or two spp.

Homoneura spp. with clear wings (or only dM-Cu cross-vein fumose): 126 indiv. of ca. ten spp.

Homoneura spp. with fumose wings: 24 indiv. of several spp.

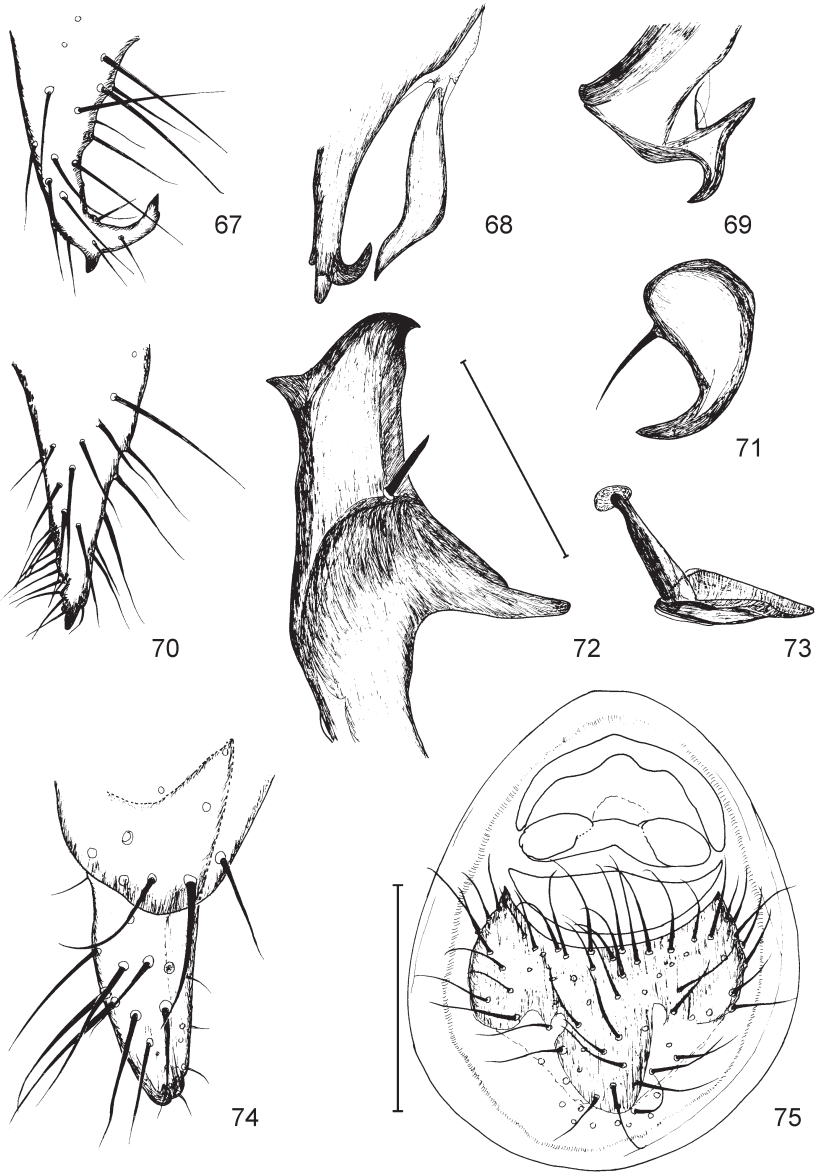
Homoneura sp.: an additional ungrouped sp. with completely black, short rounded wings: 2 indiv.

Melanopachycerina leucochaeta DE MEIJERE, 1914 – 1 ♂: Rong Rian Ban Mai, Phang Kba, 800 m, dry creek bed, N 19° 36' E 100° 45', 25. XI. 2003, leg. A. SZAPPANOS.

Melanopachycerina varipes MALLOCH, 1927 – 2 ♂ 1 ♀: FSz03/7.

Melanopachycerina sp. n. – 1 ♂: FSz03/18; 1 ♀: PF04/25. It is planned to revise all the species of this genus. In the frame of that work this sp. will be described and the identity of the above two spp. will be corroborated.

Noonamyia euphlebia SASAKAWA, 1990 (Figs 67–69) – 38 ♂15 ♀: PF04/28; 4 ♂: PF04/29; 1 ♀: PF04/30; 3 ♂2 ♀: PF04/35; 3 ♂: PF04/36/38/43; 1 ♂2 ♀: PF04/39; 1 ♂2 ♀: PF04/42; 1 ♂3 ♀: No. 10, OROSZ & SZIRÁKI; 1 ♂1 ♀: No. 34, OROSZ& SZIRÁKI. On its wing dark colour touches wing margin in the cells *r*2+3, *r*4+5 and *m*, or almost so. Males have long, curved surstyli. SASAKAWA's (1990) figure on wing fits better to this species, and, this form occurs in Thailand exclusively southern provinces, while the types are from Malaysia. All the other former records of *N. euphlebia* need revision. Male cerci smaller, height only 0.10–0.11 mm. There is a sclerotized epandrial process between cercus and surstylus (Fig. 68). Surstylus (Fig. 67) with a smaller apical and a large curved subapical process. Phallus and phallapodeme much longer than in *N. sasakawai* sp. n. Ventrocaudal process of gonopod bispinose (Fig. 69).



Figs 67–75. 67–71 = *Noonamyia* spp., male genitalia. 67–69 = *Noonamyia euphlebia* SASAKAWA: 67 = surstylus, in broadest, i.e. sublateral view, 68 = epandrial process, caudal view, 69 = ventral caudal process of gonopod; 70–71 = *Noonamyia sasakawai* sp. n.: 70 = surstylus in broadest, i.e. sublateral view, 71 = ventrocaudal process of gonopod; 72 –75 = *Spaniocelyphus paradentatus* sp. n, paratypes, genitalia: 72 = gonopod, lateral view, 73 = ejaculatory apodeme in a lateral view, when stalk is parallel to the plane of drawing, 74 = surstylus, in broadest extension, 75 = female "genital sternite", caudal view. Scales: 0.2 mm for Figs 67–68, 70, 75, 0.1 mm for Figs 69, 71–74

Noonamyia sasakawai L. PAPP, sp. n.
(Figs 70–71)

Holotype male (HNHM): THAILAND: Doi Pui, over a forest trail, Oct 31, 2004, No. 10, leg. L. PAPP & M. FÖLDVÁRI.

Paratypes: Thailand 2004, leg. L. PAPP & M. FÖLDVÁRI (HNHM): 1 male 1 female: same as for holotype; 1 ♂ (with abdomen and genitalia in a plastic microvial with glycerol): Chiang Mai, Doi Suthep N.P., 2 km down to Phuping Palace, groove in forest, Oct 28, No. 1; 2 ♂ 2 ♀ (one male with abdomen and genitalia in a plastic microvial with glycerol): Doi Suthep N. P., along a forest brook, Oct 31, No. 11; 4 ♂2 ♀: same as No. 11, Nov 9, No. 26; 1 ♀: ibid., dry slope & beside a brook, Oct 31, No. 13; 1 ♂1 ♀: ibid., over and along a brook, above and below a small waterfall, Nov 9, No. 27; 1 ♀: Doi Inthanon N. P., below Haui Sai Nueng Falls, along the brook, Oct 30, No.7. Thailand 2003: 1 ♂ 1 ♀: Tham Sakoen National Park, 26. XI., N 19° 23' E 100° 38', swept over and along creek in forest, No. 17, leg. M. FÖLDVÁRI & A. SZAPPANOS; 1 ♀: ibid., 30. 11., along creek at forest border, leg. A. SZAPPANOS; 4 ♂ 3 ♀: Doi Phuka National Park, headquarters, 26–27. XI., UV light, No. 18, leg. L. PEREGOVITS, M. FÖLDVÁRI, Á. KŐRÖSI, A. SZAPPANOS & B. MAKLÁRI-KIS.

Measurements in mm: body length 2.35 (holotype), 2.28–2.93 (paratypes), wing length 3.06 (holotype), 2.93–3.53 (paratypes), wing breadth 1.26, 1.20–1.52.

Noonamyia sasakawai sp. n. is very closely related to *N. euphlebia* but a more distinct, more or less broad, clear rim is in the cells *r*2+3, *r*4+5 and *m* of its wings. The distinctive characters are in male genitalia, as follow.

Cerci much higher than in *N. euphlebia*: 0.17–0.18 mm high. Surstylus (Fig. 70) with a single, apical process. Phallus and phallapodeme much shorter than in *N. euphlebia*. Ventrocaudal process of gonopod (Fig. 71) unispinose, with a large seta, seemingly not fused to gonopod.

The new species occurs in North Thailand.

I name this new species to the honour of Professor MITSUHIRO SASAKAWA (Hirakata City, Osaka Pref., Japan, formerly Kyoto Prefectural University) for his most remarkable achievements in Diptera taxonomy, particularly so for the Oriental Lauxaniidae.

Pachycerina sp. Four indiv. (FSz03).

Phobeticomyia lunifera DE MEIJERE, 1910 – 2004: 1 ♂2 ♀: PF04/3; 2 ♀: PF04/6; 1 ♂2 ♀: PF04/11; 4 ♂: PF04/9/14/21/24; 7 ♀: PF04/8/22/23/27/29/35/36; 2 ♂ 1 ♀: PF04/25; 3 ♂: PF04/30; 1 ♂ 1 ♀: PF04/42; 1 ♂ 3 ♀: PF04/43. Altogether 31 specimens from 18 sites, i.e. widespread in Thailand. 2003: 1 ♂ 1 ♀: FSz03/8; 1 ♂ 1 ♀: FSz03/17; 3 ♂: OSz03/10; 1 ♀: OSz03/3. When identifying our *Phobeticomyia* specimens from Thailand, I studied also the specimens, which had been in K. KERTÉSZ's hands, when he described the genus (*Lauxania lunifera* DE MEIJERE being its type species, which was described from "Batavia"). Although details of male genitalia of the Thaii and KERTÉSZ's Taiwan specimens differ, those differences fit to local populations of a widespread species (in the HNHM there are other specimens from Taiwan as well as from India).

Phobeticomyia preapicalis MALLOCH, 1929 – 7 ♂4 ♀: PF04/28; 1 ♀: PF04/38; 3 ♂ 3 ♀: PF04/29; 8 ♂2 ♀: PF04/35. 28 indiv. from under four locality numbers (actually only three sites) in S Thailand. 6 ♀: OSz03/34.

Phobeticomyia spp. 3 spp, 35+2+1 indiv. from 2004, 8 indiv. from 2003. One of them (we believe, the commoner one) is *Ph. spinosa* SASAKAWA, 1987, which was described from Thailand. The other two spp. are obviously new to science.

Steganopsis spp. – *sp. 1*: 1 ♂2 ♀: PF04/6; 1 ♂: PF04/17. *sp. 2*: 1 ♂: PF04/35.

Trypaneoides spp. It is better to separate Old World species in *Trypaneoides* as a genus, rather than a subgenus of *Trypetisoma* MALLOCH. Four species in our materials are represented by 18 indiv., at least one of them is new to science.

Calliclypeus spp. – Three specimens of two spp., one of them must be new.

Chaetolauxania sp. – 2 ♂: PF04/43.

Drepanephora sp. – 1 ♂: PF04/38.

Frendelia spp. Altogether 28 indiv. of 6 spp.

Minettia s.str. sp. – Five indiv. of a sp., superficially resembling to the *M. quadrivittata* group but with 8 rows of *acmi*.

Minettiella sp. 8 indiv. of *M. atratula* or a closely related sp.

Hendelimyza sp. In the HNHM 1 indiv. from Thailand and 2 indiv. from Vietnam.

Lauxaniella sp. – 1 ♂: PF04/25.

Sapromyza s.l. spp. – In the HNHM 1 indiv. from Thailand, another one from Vietnam.

CELYPHIDAE

Interestingly, the family is rather well known for the Thailand fauna. In the CDO (TENORIO 1977) listed one sp. of *Acelyphus*, four spp. of *Celyphus* (*Celyphus*), two spp. of *C.* (*Hemiglobus*), *C.* (*Paracelyphus*) *hyacinthus* BIGOT, 1859 and five spp. of *Spaniocelyphus* from Thailand. (*Spaniocelyphus palmi badius* TENORIO, 1972 is only a colour variety). The most important work on the Oriental species – other than the classical ones – is TENORIO's revision (1972). She described *Celyphus* (*Hemiglobus*) *quadrimaculatus* TENORIO, 1972 (p. 412), *Celyphus* (*Hemiglobus*) *rugosus* TENORIO, 1972 (p. 414) and *Spaniocelyphus pilosus* TENORIO, 1972 (p. 442) from Thailand.

In 2004 we captured 44 indiv., the expeditions in 2003 resulted in 47 indiv. of celyphids. Formerly ten spp. of three genera (we think one of them not reliable) were found in Thailand. Of these, we now found six spp.: an *Acelyphus* sp. is new to Thailand and a *Spaniocelyphus* sp. is described as new to science.

Acelyphus repletus MALLOCH, 1929 – 1 ♂: Malaysia, Pahang State, Pulau Tioman, 1995. III. 15., leg. Merkl O. (No. 28); 1 ♂: ibid., trail between Juara and Tekek, singled from oozing sap of an ant tree, No. 16, 11. III. Formerly known also from Thailand

Acelyphus retusus TENORIO, 1972 – 1 ♂: PF04/35; 1 ♂: Trang Prov., Khoa Chong Reserve, nr Ton Prew Waterfall, beating and netting, 21. 11. 2003, No. 10, OROSZ& SZIRÁKI; 1 ♂/ ♀ (abdomen lost): ibid., rain forest, 22. 11., river Khao Chong, No. 14. Formerly known from Sumatra only, new to Thailand.

Celyphus aurora KARSCH, 1884 – 2 ♂ 1 ♀: PF04/35.

Celyphus obtectus DALMAN, 1818 – 1 ♂: PF04/6. In the HNHM there are named specimens also from India, Sri Lanka, Laos and Sumatra (det. J.H.C. DE MEIJERE).

Celyphus signatus KARSCH, 1884 – 1 ♂: PF04/43; 1 ♀: PF04/13; 1 ♂/ ♀ (abdomen lost), 1 ♀: Trang Prov., Khao Chong Reserve, rainforest, 22. 11. 2003, river Khao Chong, beating and netting, No. 14,OROSZ& SZIRÁKI. We also have a female from Borneo, Kinabalu, identified by K. KERTÉSZ.

Spaniocelyphus palmi FREY, 1941 – 1 ♂ 2 ♀: Pathumthani Prov., Khong Luang, nr Hotel Manhattan, sweeping ruderal area, 18. 11. 2003, No. 1, OROSZ& SZIRÁKI; 1 ♀: Trang Prov., W of Ban Narong, Ton Pan Waterfall, 26. 11. 2003, broad leafed forest, sweeping, No. 27, OROSZ & SZIRÁKI; 2 ♀: ibid., Thung Khai Bot. Garden, 28. 11., swept; 2 ♂ 5 ♀: Trang Prov., Khao Chong Reserve, river Khao Chong, 02. 12. 2003, swept, No. 50, OROSZ & SZIRÁKI; 7 ♂ 8 ♀: Prachuap Khiri Khan Prov., 25 km S of Ban Noghin, secondary forest, 19. 11. 2003, No. 3, OROSZ & SZIRÁKI; 3 ♂ 1 ♀: Trang Prov., Khao Chong Bot. Garden, beating and netting, 20. 11. 2003, No. 6, OROSZ & SZIRÁKI; 5 ♂ 4 ♀: Phatthalung Prov., Wildbreeding Center Phatthalung, secondary arboreal vegetation, sweeping, 25. 11. 2003, No. 24, OROSZ & SZIRÁKI. 7 ♂ 1 ♀: PF04/6; 1 ♂: PF04/16; 1 ♂: PF04/22; 1 ♂: PF04/25; 2 ♂: Trang Prov., Thung Khai Botanic G., pasture, 13. 11. 2004, OROSZ A. This is probably the commonest celyphid species in the Oriental region.

Spaniocelyphus pilosus TENORIO, 1972 – 1 ♀: PF04/7; 2 ♂: PF04/8; 1 ♂ 1 ♀: PF04/17; 3 ♂: PF04/26. In the HNHM there is a male also from Taiwan.

Spaniocelyphus trigonalis DE MEIJERE, 1915 – 1 ♂ 1 ♀: PF04/25; 1 ♀: PF04/23; 1 ♀: Trang Prov., Khao Chong Bot. Garden, beting and netting, 20. 11. 2003, No. 6, OROSZ & SZIRÁKI; 1 ♂: Trang Prov., Khao Chong Reserve, river Khao Chong, 02. 12. 2003, swept, No. 50, OROSZ & SZIRÁKI; 1 ♂: Trang Prov., Khao Phu Khao Ya NP, Pak Yam Waterfall, rainforest, sweeping, 30. 11. 2003, No. 43, OROSZ & SZIRÁKI. LAOS: 1 ♀: Vientiane Prov., Vang Vieng, near Poukham Cave, 300 m, swept, No. 5, 21. III. 1998, leg. O. MERKL and G. CSORBA. Contrary to its original description, our specimens have no basal discoloration on the scutellum, although they must be conspecific (based on study of male genitalia).

Spaniocelyphus paradentatus L. PAPP, sp. n.
(Figs 72–75)

Holotype male (HNHM): THAILAND: 8 km E of Doi Anh Kang, over a rocky brook, Nov 2, 2004, No. 17, leg. L. PAPP & M. FÖLDVÁRI.

Paratypes: 6 males 5 females (1 ♂ 1 ♀ with abdomen and genitalia in a plastic microvial with glycerol): same as for holotype; 1 male (with abdomen and genitalia in a plastic microvial with glycerol): Nan Prov., nr Mae Charim waterfall, on a meadow, Nov 6, 2004, No. 23, leg. M. FÖLDVÁRI.

Measurements in mm: body length 2.72 (holotype), 2.55–3.09 (paratypes), length of scutellum 1.97 (holotype), 1.83–2.00 (paratypes), width of scutellum 1.51, 1.50–1.74.

Head dark brown, clypeus black, 0.14 mm high. First flagellomere much narrowed, almost pointed. Flat part of arista shorter than apical thin part (0.24mm *vs* 0.27 mm). Longest (ventral) aristal rays 0.10 mm (!).

Pronotum reddish brown, mesonotum shiny reddish brown, blackish. Mesonotum and scutellum without short pilosity. Scutellum strongly rugose on whole surface, with scattered 0.08–0.10 mm long setae.

Mid and hind tibia yellow with broad brown band at apical 2/5. Dorsal preapical seta of hind tibia 0.15–0.16 mm long.

Surstylus (Fig. 74) rather long, in lateral view with more or less rounded apex (not at all triangular), actually with a blunt, medially directed tip. Gonopods (postgonites) (Fig. 72) without finger-like projection on median dorsal margin and without large lateral teeth; apex not so widely rounded and dorsal projection is stronger than in *S. dentatus*, ventral process placed more apically than in *S. dentatus*. Narrower apical part much longer, middle dilated part of postgonite much shorter than in *S. dentatus*, with a thick thorn. Aedeagal apodeme large, broad, broadly rounded, plate-like. Ejaculatory apodeme (Fig. 73) with a broad, shovel-shaped base and short bacilliform stalk.

Female genital sternite (Fig. 75) characteristically different from that of *S. dentatus* (cf. fig. 32d of TENORIO 1972). Cranial (in caudal view, ventral) part not strongly narrowing, main part shorter, setae longer. Three globular spermathecae, longer diamater 0.11 mm.

Spaniocelyphus paradentatus sp. n. is closely related to *S. dentatus* but flat part of arista is shorter than apical thin part (in *S. dentatus* dilated part occupies 2/3 of arista). Both the male genitalia (apex of surstylus and details of postgonites) and female genital sclerite (cf. TENORIO 1972) are definitely different.

The types were compared to a male of *S. dentatus* TENORIO, 1972 from Taiwan, Taipei in the collection of the HNHM. Taiwan is the type locality. There was a specimen from Thailand (Fang) mentioned in the original description "… somewhat aberrant … the flat part of arista being equal to half the total length": I am convinced that the Fang specimen belongs to this new sp. However, its original mention does not cause any problem, since that was not included among the paratypes. The Hong Kong and other mainland China paratypes must be prepared in order to study genitalia, before their identify is established.

CHAMAEMYIIDAE

The Oriental fauna of Chamaemyiidae is really poorly known. In the CDO eleven species in of three genera were listed, none of them from Thailand (COGAN 1977). TANASIJTSHUK (1996) published a book-size paper on the silver-flies of Australia, which is the most useful work even when studying the Oriental species.

We captured only one chamaemyiid specimen in 2004 but the HNHM expeditions in 2003 produced ten specimens.

Acrometopia reicherti (EDWARDS, 1929) – 1 ♀: Fang, Mae Fang NP, Doi Pha Hom Pok, 2000 m, from herbs, 20. 11. 2003, leg. A. SZAPPANOS; 2 ♂ 2 ♀: ibid., 1800 m, spring, 21. 11.; 1 ♀: FSz04/21. It is widespread from the S Kurile Islands and Japan, in the Oriental and Australasian regions, but it is new to Thailand.

Anochthiphila sp. n. – 2 ♂ 1 ♀: Trang Prov., Rotehamangkon, swept, 01. 12. 2003, swamp forests, sand dunes, No. 26, OROSZ & SZIRÁKI. This is the first record of the genus from the Oriental region. It is a sp., near *A. norrisi* TANASIJTSHUK, 1996, but it is obviously a different one: dark dorsal spots are only on its T4 and T5 and none of them is confluent with the lateral ones. Male genitalia also show differences, though the structures are similar.

Leucopis (**Leucopis**) sp. – 1 ♂: FSz03/25; 1 ♀: PF04/32. A small species with palpi, antennae and legs black (knees and metatarsi paler), 2 pairs of *dc*, anterior pair weak, abdominal tergite 1+2 dark grey, T3 with a pair of small spots T4-T5 with sagittal darker line (♀) or without it (♂).

ASTEIIDAE

There is no record of Asteiidae from Thailand in the CDO (SABROSKY 1977). We captured five specimens, which represent three species. Since the one representing the third species is without abdomen, only two of them were identified.

Asteia megalophthalma DUDA, 1927 – 1 ♀: PF04/14. Formerly known from Taiwan.

Asteia vietnamensis L. PAPP, 1974 – 1 ♂: PF04/23; 1 ♂: PF04/43. 1 ♀: PF04/14. It was not a surprise to find this species also in Thailand.

CLUSIIDAE

There are rather few records of Clusiidae from Thailand. In the CDO only *Tranomeringia zosteriformis* SASAKAWA, 1966 (STEYSKAL 1977: 236) was listed. Later SASAKAWA (1986) described *Czernyola thaiensis* from Khao Yai, Nakhon Nayok. However, the literature i.e. knowledge on the Oriental Clusiidae has been on a higher level, than in most acalyptrate families. FREY's (1960) comprehensive paper on the "Indo-Australian" Clusiidae is the classical item, but MCALPINE's (1960) paper on the Australian species and some other shorter papers are also useful aids, when studying Oriental species. However, Prof. M. SASAKAWA, who published modern revisions on *Heteromeringia* CZERNY, described the related genus *Tranomeringia* (1966), on *Craspedochaeta* CZERNY (*Czernyola* BEZZI) (1971), on *Clusiodes* COQUILLETT (1987), and other smaller papers, is the most important author.

In 2004 we selected and pinned 85 individuals from our collectings and seven individuals were collected in 2003. We found representatives of 24 species, a number of them must be new to science. For lack of time and expertise, we identified only some of the species, but all of them, except *Tranomeringia zosteriformis*, are first records for Thailand.

CLUSIINAE

Heteromeringia melaena SASAKAWA, 1966 – 1 ♀: PF04/42. We are rather sure that this is the formerly unknown female of the species, which was described from Vietnam.

Heteromeringia rufithorax CZERNY, 1926 – 1 ♂: PF04/8. It seems more widespread than other species of the genus (FREY 1960).

Heteromeringia spp. Other four species as follow: *H. sp. 1*: 2 ♀: PF04/35/42; *H. sp. 2*: 3 ♂: PF04/28, 1 ♂ 1 ♀: PF04/29, 2 ♂: PF04/35, 1 ♂: PF04/38, 2 ♀: PF04/42, 1 ♂: PF04/43; *H. sp. 3*: 2 ♂: PF04/7, 1 ♂: PF04/8, 1 ♂: PF04/12, 1 ♀: PF04/17; *H. sp. 4*: 1 ♂: PF04/1.

Phylloclusia sp. n. nr *steleocera* HENDEL – 1 ♂: PF04/11. It was compared to a reliably identified female from Taiwan.

Tranomeringia zosteriformis SASAKAWA, 1966 – 1 ♂: PF04/7; 1 ♂: PF04/42. The holotype male of this peculiar species is from N Borneo, its paratype female from Chiangdao (Chiang Mai).

CLUSIODINAE

Allometopon (**Calometopon**) **nobile** FREY, 1960 – 2 ♂: PF04/17; 1 ♀: Fang (Prov.): Mae Fang NP, Doi Pha Hom Pok, 21.11.2003, 1430m, along creek and forest road, No. 9, leg. FÖLDVÁRI; 1 ♂ (HNHM): Vietnam, Cuc phuong, Pr. Ninh binh, 1966. V. 11., leg. Topál. It was described and formerly known only from Burma.

Allometopon (**Calometopon**) spp. n. aff. *atromaculatum* HENNIG. *sp. 1*: 1 ♂: PF04/38; *sp. 2*: 1 ♂: PF04/26; 1 ♀: Fang (Prov.): Mae Fang NP, Doi Pha Hom Pok, 21.11.2003, 1430m, spring, leg. A. SZAPPANOS.

Allometopon (**Calometopon**) sp. or representative of a new subgenus. 1 ♂: PF04/42. A small species, wing length 2.65 mm only. Body and legs all sulphurous yellow with a brown acrostrichal stripe. All the setae yellow. Abdomen dark brown, except its base. Only 2 pairs of fronto-orbitals, one inclinate lower and one reclinate upper pair. Arista densely dark setose. Calyptra and fringe blackish, wing veins yellow. Cross-vein R-M well distal to middle of discal cell, intracrossvein section of M 0.22 mm, terminal section of M 1.23 mm. This is a peculiar species, indeed. We made this short description only to call attention to this specimen.

Clusiodes (**Clusiodes**) sp. n. 1 ♂: PF04/12; 1 ♂: PF04/14; 5 ♂: PF04/19; 3 ♂: PF04/25; 1 ♂: FSz03/17.

C. (**Microclusiaria**) **obscuripennis** FREY, 1960 – 1 ♂ 2 ♀: PF04/25 (Nan Prov., nr Mae Charim waterfall). As far as I we can judge from its rather incomplete description, our specimens are conspecific.

C. (**Microclusiaria**) sp. aff. *obscuripennis* FREY, 1960 – 1 ♂: PF04/25. It is a closely related but different species.

C. (**Steleoclusiodes**) **nigrifrons** Frey, 1960 – 1 ♂: PF04/28; 1 ♂ 1 ♀: PF04/43; 1 ♀: FSz03/21. It was described from Kambaiti, Burma.

Craspedochaeta spp. Our material is rich in the representation of this genus. Representatives of six species were found (three ♀ were not relegated to any of them).

Craspedochaeta sp. aff. *biseta* HENDEL – 1 ♂: PF04/28; 4 ♂ 4 ♀: PF04/35; 1 ♂ 1 ♀: PF04/42; 1 ♂: PF04/43.

Craspedochaeta sp. 1 (? *borneoensis* SASAKAWA) – 1 ♂: PF04/28; 4 ♂: PF04/29; 3 ♂: PF04/38; 1 ♂: Orosz & SZIRÁKI No. 34; 1 ♂:OROSZ& SZIRÁKI No. 43. Palpi black with yellow apex, first flagellomere blackish, at least so apically, thorax, incl. pleura all black, fore and mid coxae, femora and tibiae black.

Craspedochaeta sp.2. 1 ♂: PF04/36; 1 ♂: PF04/42; 1 ♂: PF04/43. Similar to sp. 1, i.e. 1st flagellomere dark, palpi all dark, but meron, anepimeron, base of abdomen and mid as well as hind femora mostly yellow.

Craspedochaeta sp. 3. 1 ♂: PF04/12; 1 ♂: PF04/14; 1 ♂: PF04/25; 1 ♂: Tham Sakoen NP, 30. 11. 2003, 19º 23'N 100º 38'E, along creek at forest border, leg. A. SZAPPANOS. Similar to the former spp., but palpi black and yellowish, mesonotum yellowish, reddish laterally, similarly to meron and anepimeron.

Craspedochaeta sp. 4. 1 ♂: PF04/7. Fore and mid coxae black, but legs otherwise yellow, 1st flagellomere blackish, but proepisternum and notopleura yellowish.

Craspedochaeta sp. 5. 1 ♂: PF04/7; 1 ♂: PF04/42. Fore coxae as well as all legs yellow, 1st flagellomere yellow or even whitish, male with extremely long genal seta, pleura all dark. Taking smaller differences into consideration, the specimens from North Thailand and South Thailand may be distinct.

Hendelia (**Aristohendelia**) **extensicornis** FREY, 1960 – 2 ♂: PF04/7; 1 ♂: PF04/12. The subgenus and species were carefully described and depicted, based on specimens collected at Kambaiti, Burma.

Hendelia sp. (? a new subgenus) – 1 ♂: PF04/9. Head structure similar to that of *Aristohendelia*. First flagellomere as long as pedicel, arista flattened, as long as pedicel plus 1st flagellomere combined., the flattened part occupies its 5/6. One extra large re-and slightly inclinate fronto-orbital, plus 1 minute posterior *frorb* pair, aligned with ocellars (!). Ocellars large, postocellars very thin straight but as long as posterior *frorb*. Infraorbital pair very anterior (opposite bases of antennae), very thin and only 0.175 mm long; *vti* extremely long, *vte* very long. Mesonotum with a pair of dark brown vittae behind anterior notopleurals back not to the scutellum, just outside *dc* lines. Thoracic macrochaetae: 1+2 *dc* pairs, no propleural setae; apical scutellars very long, lateral scutellars short, plus 1 even more basal pairs of sc setulae present. Wing with dark brown colour on apical 1/3, intra-crossvein section of M 0.505 mm, terminal section 1.83 mm. Fore tarsi black and strongly flattened, legs, incl. coxae otherwise yellow. Abdomen black.

ANTHOMYZIDAE

In the CDO (VOCKEROTH 1977) two species of *Amygdalops* Lamb and one (unnamed) species of *Anthomyza* Fallén are listed. Since that time the knowledge on Anthomyzidae has been much enriched, particularly by J. ROHÁČEK's works. We captured 18 specimens of an *Amygdalops* species, representing the first record of this family for Thailand. They will be identified later.

Amygdalops sp. – 1 ♂: PF04/8; 2 ♂ 4 ♀: PF04/14; 1 ♂: PF04/17; 1 ♂: PF04/19; 1 ♀: PF04/22; 2 ♂ 4 ♀: PF04/25; 1 ♀: PF04/26; 1 ♂: PF04/43.

TETHINIDAE

There was no species listed in the CDO (STEYSKAL & SASAKAWA 1977). Although the knowledge on the Oriental (and other) Tethinidae is steadily developing, only one species has hitherto been recorded from Thailand.

Pseudorhicnoessa spinipes MALLOCH, 1914 – 1 ♀: PF04/32. It is not a surprise to find this species in again, after being first recorded from Thailand by MUNARI (2005). It is widespread in the Pacific Ocean region and known also from Malaysia, Vietnam, the Philippines and Taiwan.

ODINIIDAE

One species each of *Odinia* ROBINEAU-DESVOIDY and *Traginops* COQUILLETT were listed in the CDO (STEYSKAL 1977) from the whole Oriental region. *Odinia formosipennis* FREY, 1961 was described from Burma (based on a single female). We captured a male, which represents a new species and the first record of this family for Thailand.

Odinia thaii L. PAPP, sp. n.
(Figs 76, 133)

Holotype male (HNHM): THAILAND: Trang Prov., Thung Khai Botanic Garden, primary lowland rainforest, , along the "Nature Trail", Nov 13, 2004, No. 29, leg. L. PAPP & M. FÖLDVÁRI.

Measurements in mm: body length 2.15 mm, wing length 2.06, wing breadth 0.92.

Head (Fig. 76) broad. Frons and face unicolorous light grey owing to thick microtomentum. Interfrontalia darker grey, when seen in light from behind. Postgena slightly darker grey.

Scape and pedicel black, first flagellomere as high as long, apex rounded. Apical 1/2 of the medial surface of first flagellomere grey fumose; grey fumosity almost complete on the lateral side. Arista with minute cilia, basal two aristomeres thickened. Frons grey, bare but with the characteristic setae only (Fig. 76). Frontal setae strong (as usual in *Odinia*). Ocellar setae 0.22mm, postocellar setae longer than ocellars, 0.25mm. Anterior mediоclinate fronto-orbital seta as long as posterior reclinate fronto-orbital. Palpus broad, black, with 3 thick though not very long setae ventrally. One upcurving peristomial behind vibrissa, 1 downcurving genal seta medially, as thick as vibrissa, and several shorter genal setae posteriorly.

Mesonotum unicolorous darker grey, light (almost white) microtomentose, 1+3 (!) pairs of long *dc*, acrostichal microchaetae not well ordered in 4 rows. Intra-alar microchaetae comparatively long, an intra-alar macrochaeta also present. An extremely long supra-alar plus a short prealar present. Prescutellar pair medium-long. Scutellum concolorous with mesonotum. Pleura grey, only dorsal edge of katepisternum at setal bases darker, greyish brown. Anterior katepisternal 0.40 mm long, middle and posterior pairs only slighly longer than half as long. Anepisternum bare.

Legs thick. Femora dark grey, femoral apices, tibial bases yellow; all tibiae with a broad submedial and an apical brown bands each. Tarsi all darkened, basitarsi yellowish basally. Hind femur extremely thick with a long black anteroventral seta at apical 1/4. Mid tibia with two long ventroapicals.

Wing (Fig. 133) light greyish brown, veins yellow, but costa dark before conjointment with R_1 on a section of 0.12 mm and also R1 dark on apical 0.11 mm; also R-M cross-vein darker. Vein R_{4+5} straight and terminates at wing apex. Cross-vein dM-Cu complete on right wing, on the left wing only

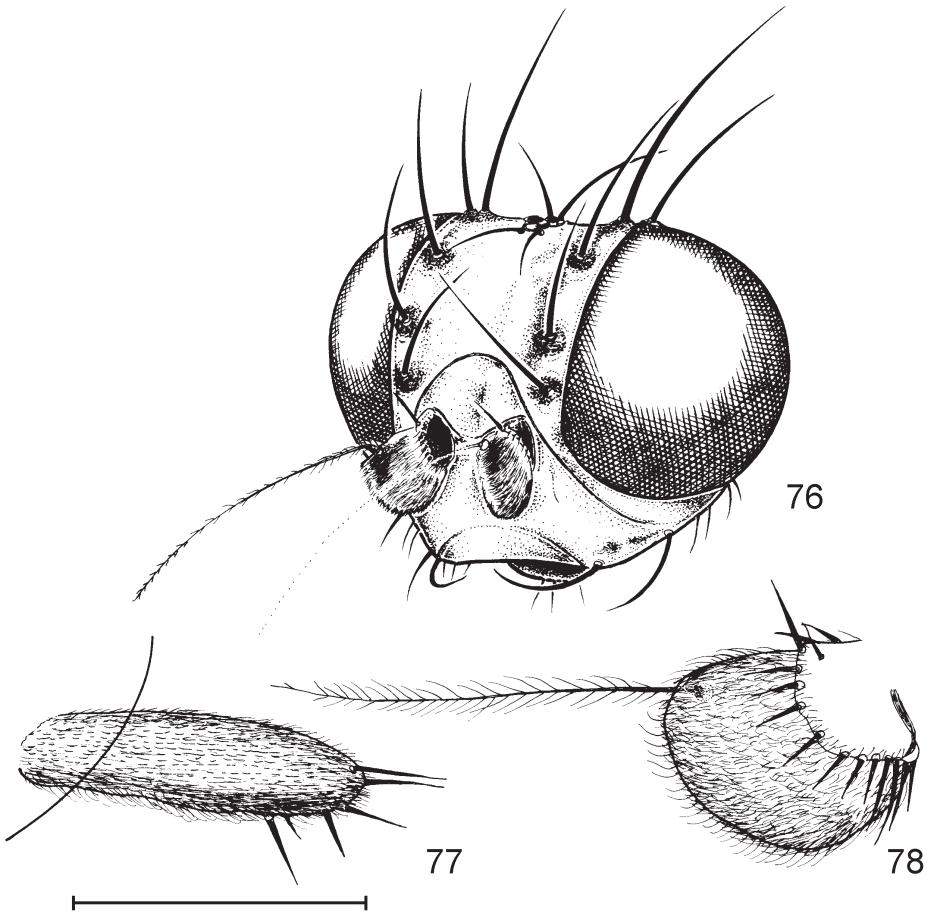
dorsal half present, this cross-vein not dark bordered. Terminal section per intra-crossvein section of M 0.804 mm and 0.228 mm, ratio 0.284. Halteres yellow.

Abdomen grey but caudal half of tergites 2 to 4 darker brown, which divided into a medial pair of spots and lateral stripes on tergite 4.

Male genitalia comparatively small, epandrium grey. I did not prepare the abdomen and genitalia of this unique specimen.

Female unknown.

Odinia thaii sp. n. keys to *O. boletina* (ZETTERSTEDT, 1848) in KRIVOSHEINA's (1979) key, which is still the most comprehensive key for the Palaearctic



Figs 76–78. 76 = *Odinia thaii* sp. n., holotype male, head (del. A. SZAPPANOS). 77–78 = *Paramyioides* (*Spinitrochanter*) *spinosa* sp. n., holotype male. 77 = palpus, 78 = antenna, lateral view. Scale: 0.2 mm for Figs 77–78

species of *Odinia* (although since that time some additional spp. were described; however, *O. photophila* PAPP, 1977 and *O. trifida* CARLES-TOLRÁ, 1996 are not related). *Odinia thaii* sp. n. is an easily recognisable species. Although I am convinced that it is a true *Odinia* sp., it has only 3 pairs of postsutural dorsocentrals, which is a unique character in *Odinia*. If we overlook this character, the new species is similar to *O. boletina*, but *O. boletina* has a double-striped pleura, blackened apex of first flagellomere, dotted (not striped) abdominal tergites, i.e. only its wing is most similar. The hitherto known single Oriental sp., *O. formosipennis* FREY, 1961 is not closely related.

AGROMYZIDAE

Seven spp. in five genera, *Japanagromyza incisa* SASAKAWA, 1963 (p. 28), *Japanagromyza trientis* SPENCER, 1962 (p. 667), *Melanagromyza gressitti* SASAKAWA, 1963 (p. 33), *Melanagromyza yodai* SASAKAWA, 1962 (p. 135), *Cerodontha* (*C.*) *kirae* SASAKAWA, 1962 (p. 137), *Phytobia maai* (SPENCER, 1962) (p. 664) and *Pseudonapomyza tibialis* (SASAKAWA, 1963) (p. 46) were described from Thailand in four original papers. Another five species, *Melanagromyza metallica* (THOMSON, 1869), *Ophiomyia atralis* (SPENCER, 1961), *Amauromyza aliena* (MALLOCH, 1914), *Chromatomyia horticola* (GOUREAU, 1851) and *Pseudonapomyza spicata* (MALLOCH, 1914) were described from elsewhere, but had been reported also from Thailand before the publication of the CDO (SPENCER 1977).

After 1977 SPENCER (1986) published a lengthy paper with "new species, revisionary notes and new records". Namely, beside publishing new records, he described *Melanagromyza eravanensis* (p. 490), *M. inthanonensis* (p. 491), *M. pasiae* (p. 492), *M. pasiensis* (p. 492), *Pseudonapomyza rampae* (p. 504) and *Tropicomyia pilosa* (p. 494), as new spp. In addition, he designated a lectotype for *Agromyza panici* MALLOCH, proposed a synonymy for *Pseudopomyza santokhi* GARG, 1971 to *P. atrata* MALLOCH, 1914 and removed *Cerodontha* (*Icteromyza*) *rishii* GARG, 1971 from synonymy. All this was made on the basis of his studies on Thai agromyzids.

In 2004 we selected and pinned 96 specimens of a very species rich material, the expeditions in 2003 resulted in capturing 37 indiv. Unfortunately we did not have enough time to identify this difficult group of Diptera but we selected them into genera only. Our material is very diverse, indeed. We found at least 37 spp. of 14 genera as follow.

Agromyza spp. – 10 indiv. of 5 spp.
Japanagromyza spp. – *sp. 1*: 1 ♂: FSz03/18; *sp. 2*: 2 ♂: PF04/14/25.

Melanagromyza spp. – 77 indiv. of at least 6 spp.: *sp. 1*: short face, large lunule, short postocellars, white squamal fringe; *sp. 2*: as sp. 1, but with dark squamal fringe; *sp. 3*: as sp. 1, but long aristal hairs and long postocellars; *sp. 4*: low lunule, short intracrossvein section of wing, black squamal fringe; *sp. 5*: very large body, black fringe; *sp. 6*: large body, small ocellar triangle, white squamal fringe.

Ophiomyia spp. – sp. 1: 1 ♀: Mae Fang NP, pasture, 1. 11. 2004, No. 15, leg. A. OROSZ; sp. 2: 1 ♂: PF04/32.

Aulagromyza spp. – sp. 1: 1 ♀: PF04/27; sp. 2: 1 ♂: PF04/8, 1 ♂: Fang, Mae Fang N.P., Doi Pha Hom Pok, 22. 11. 2003, 2000m, along road and creek, leg. A. SZAPPANOS.

Cerodontha sp. – 2 ♂ 1 ♀: FSz03/8.

Dizygomyza spp. – sp. 1: 1 ♂: FSz03/3 (Vietnam); sp. 2: 1 ♂: PF04/29.

Icteromyza spp. – 10 indiv. of 3 spp. (plus 3 indiv. from Vietnam).

Phytobia sp. – 1 ♀: PF04/26.

Phytoliriomyza spp. – 14 indiv. of 4 spp.

Poemyza spp. – sp. 1: 1 ♂: FSz03/6; sp. 2: 2 ♂: PF04/22/25.

Pseudonapomyza spp. – 5 indiv. of 2 spp.

Genus et sp. aff. *Liriomyza* – 1 ♂: PF04/14. Strongly asymmetrical aedeagal complex, no stridulating mechanism.

? genus – 1 ♂: PF04/22. Black, grey microtomentose body. Head large, ± globular, frons bulging, orbits raised above plane of frons, large ocellar triangle, very small ocellars, lunule very large, vibrissae thin. 0 + 2 dorsocentral pairs, no presuturals. Ejaculatory apodeme with a cylindrical basal appendix.

MILICHIIDAE

In the CDO (SABROSKY 1977) five milichiid species were listed from Thailand: *Desmometopa microps* Lamb, 1914, *Desmometopa singaporensis* KERTÉSZ, 1899, *Desmometopa varipalpis* MALLOCH, 1927, *Milichiella bakeri* ALDRICH, 1931; *Milichiella smithi* ALDRICH, 1931 (p. 399) was described from Bangkok.

In the HNHM there are 516 milichiid specimens from our collection in 2004 and 24 indiv. from 2003.

Milichiella lacteipennis (LOEW, 1866) – 5 ♂ 1 ♀: FSz03/25. It is widespread in the tropical regions, almost circumtropical. Contrarily, we do not know any record from Thailand. Our specimens were captured on elephant dung.

Milichiella smithi ALDRICH, 1931 – 1 ♂: FSz03/17; 1 ♀: PF04/5. It is fortunate to collect this beautiful species again. Ours is presumably the formerly unknown female of the species (we base this opinion on the yellow colour of its tarsi and its hyaline wings).

Desmometopa singaporensis KERTÉSZ, 1899 – 1 ♂: Phatthalung Prov., Wildbreeding Center Phatthalung, secondary arboreal vegetation, black light trap, 26. 11. 2003, No. 29, OROSZ & SZIRÁKI.

Desmometopa spp. We have collected another 2 ♂ 7 ♀ indiv. of another three species, incl. "D. sp. L." "Malaya" of SABROSKY (1983).

Neophyllomyza spp. Our material is significant (2004: 47 indiv., 2003: 3 indiv.). There are representatives of four new spp. in it, which will be described in the frame of a paper in progress on the Oriental species of *Neophyllomyza*.

Paramyia nitida L. PAPP, 2002 – 1 ♂: PF04/30. Described from Indonesia, Sumatra (Aceh) recently, new to Thailand.

Paramyia sp. aff. *flagellomera* L. PAPP, 2002 – 3 ♂: PF04/35/38/43.

Paramyia sp. aff. *formosana* L. PAPP, 2002 – 1 ♂: PF04/36; 3 ♀: PF04/38/42/43.

Paramyia sp. aff. *triangularis* L. PAPP, 2002 – 1 ♂ 1 ♀: PF04/35; 1 ♀: PF04/36.

Paramyia spp. 5 ♂ 7 ♀ indiv., some of them may represent even new species but a careful study incl. that on male genitalia under high magnification is needed to identify *Paramyia* spp. correctly (see PAPP 2002).

Phyllomyza spp. Our material of *Phyllomyza* is exceptionally rich (435+7 indiv.). It contains at least eight species new to science. They will be described in a revision of the Oriental species in a forthcoming paper.

Stomosis spp. – *sp. 1*: 1 ♀: FSz03/15; a large bodied, wholly yellow sp.; *sp.2*: 1 ♀ (much damaged, head lost): PF04/42.

Aldrichiomyza iwasai L. PAPP, sp. n.
(Figs 134–135)

Holotype female (HNHM): THAILAND: Nan Prov., over and along the rivulet above Mae Charim waterfall, Nov 7–8, 2004, No. 25, leg. L. PAPP & M. FÖLDVÁRI.

Measurements in mm: body length 3.04, wing length 2.74, wing breadth 1.00.

Frons, face and genae yellow, occiput dark, posterior rim of eye dark only on a section, which is not longer than fore tibial diameter. Gena about as broad as first flagellomere. Proboscis yellow, "knee" area black. Basal parts of proboscis 0.87 mm, labellum at least 0.67 mm (apical parts lateroclinate). Antenna (Fig. 134) largely yellow but grey fumose dorsally. Female arista with long, thickly set black setulae, similarly to the arista of all the females in this genus. Palpus yellow, thin, 0.43 mm long. Apex of palpi with 2 or 3 strong thick setae longer than first tibial diameter at base.

Mesonotum (Fig. 135) black presuturally, postsuturally yellow with a sagittal and 2 intra-alar narrow dark bands from the dark area to the level of posterior dorsocentrals. Scutellum and also metanotum yellow (cf. fig. 1 of IWASA 1997). Pleura largely yellow but anterior part of katepisternum and central part of meron dark. Thoracic chaetotaxy similar to its congeners, i.e. 1+3 pairs of dorsocentrals and 2 pairs of katepisternals present; anterior *kepst* extremely long, 0.63 mm. Acrostichal microchaetae of a straight sagittal row and 2 pairs of more or less well ordered lateral rows.

Femora yellow, all tibiae black. Fore tarsi black, mid and hind basitarsi, as well as 2nd tarsomeres yellowish, other tarsomeres dark.

Wing veins yellow. M vein sections 0.435, 0.337, 1.07 mm, M vein ratio 3.19. Strong costal fringe just overruns apex of R2+3. Halteres yellow (may be different in (unknown) males).

Abdominal tergite 1 yellow, tergite 2 yellow anteriorly and laterally, posterior half dark. Dorsal surface of tergites 3 to 6 dark with yellow lateral rim, laterally (down) curved parts of tergites also yellow. Female cerci black, at least 0.14 mm, very narrow with short setae only.

Male unknown.

Aldrichiomyza iwasai sp. n. is probably close to *A. flaviventris* IWASA, 1997 (Japan). It does not fit PAPP's (2002) key for the Oriental and Palaearctic species of *Aldrichiomyza*: scutellum and also postsutural area of mesonotum yellow but at

the same time dorsal parts of abdominal tergites dark. Contrary to *A. flaviventris*, its gena is narrower, sagittal dark stripe of mesonotum only linear, terminal section of vein M more than 3 times longer than intra-crossvein section, while in *A. flaviventris* this ratio is less than 2.5. Of course, male genitalia must be studied, but this awaits capture of a male specimen.

Paramyioides (Spinitrochanter) L. PAPP, subgen. n.
(Figs 77–89)

Type species: *P.* (*Spinitrochanter*) *horrida* sp. n.

Gender: masculine.

Head comparatively large. Two pairs of medioclinate *ori* setae. 4 pairs of medium long interfrontals. Two pairs of long lateroclinate *ors*, anterior pair also slightly proclinate; *oc* and *poc* pairs strong (the latter crossing); *vti* very long, *vte* broken off in our specimen but judging from their bases, they are probably medium-long. A pair of thin, short (0.085 mm or even shorter) medioclinate, additional fronto-orbital seta between posterior *ors* and *vti*. Vibrissa shorter than in the nominate subgenus. One or two medium-long cervical pairs present.

Frontal triangle bright yellow, reaches to 3/5 to 2/3 of frons, ocellar triangle small, gena broad. First flagellomere large, arista present (Fig. 78). Pedicel with a medium-long dorsal seta and a wreath of short black setulae apically; scape small with 4–5 pairs of medial, dorsomedial subapical setulae. Mouth opening broad but clypeus thin and half as broad. Palpi large but with small thin setae on apex only (Fig. 77).

Thorax brightly shiny, translucent, its chitinous sclerites are transparent, even thoracic muscles are visible. Basisternum long and thin or hardly discernible. Characteristic thoracic setae long as in *Paramyioides* s.str., i.e. not the slightest sign of a second dorsocentral pair of setae. Fore and mid coxae with strong setae ventrally. Armature of legs insignificant, except for ventral apical seta of mid tibia, and all of the hind leg. Hind trochanter strongly modified (Figs 79–80), also male hind tibia may be modified. (I must add here that the hind trochanter of *P. perlucida* is also modified: it bears a short ventral process.) Wing vein M very faint, no dM-Cu similarly to the nominate subgenus.

Abdomen semitransparent. Surstylus (Figs 85, 87) with numerous light thorn-like setae on medial surface. Distiphallus partly membranous, seems different in the two spp. described below. I cannot exclude that similarly to *Paramyia* species, the distiphallus can be inflated.

Some important characteristics of the new subgenus are similar to those of *Paramyiodes* s.str.. However, the presence of arista and the strongly modified hind trochanter, make it very distinct. It seems obvious that the translucent thorax and semitransparent abdomen of *Paramyiodes* are more than just extreme specific characteristics of *P. perlucida* L. PAPP, 2002. On the other hand, a loss (reduction) of arista is not a generic feature. So I feel corroborated that none other than the stem species of the *Paramyia* species is a closer relative of the *Paramyioides* spp. (cf. PAPP 2005).

Paramyioides (**Spinitrochanter**) **horrida** L. PAPP, sp. n.
(Figs 79, 82–86)

Holotype male (HNHM, abdomen with genitalia in a plastic microvial with glycerol, also left hind leg separated between two small pieces of cover glass): THAILAND: Trang Prov., Thung Khai Botanic Garden, primary lowland rainforest, Nov 12, 2004, No. 28, leg. L. PAPP & M. FÖLDVÁRI.

Paratype female: ibid., Nov 19, No. 38.

Measurements in mm: body length 2.34 mm (holotype), 2.50 (paratype), wing length 2.20, 2.17, wing breadth 0.87, 0.85.

Body and legs almost completely shiny yellow, though mesonotum darker yellow than pleura. Male (and female) anepisternum ventrally with a brown oblique spot, female mesonotum also with a pair of brown, shiny bands from postpronotum to postalar seta through base of supra-alar seta.

Frons yellow, only ocellar triangle dark. Four pairs of short *ifr*, supralunular pair 0.08 mm. Gena broad, 0.13 mm, genal setae short, anteriorly directed. Vibrissa only slightly longer than first peristomial. Peristomials continued into an oblique row of genal setae (most dorsal one almost on occiput, just below level of antennal bases). Antenna yellow, but dorsal 1/3 of first flagellomere dark brown. Arista 0.41 mm long (holotype), its cilia not dense, 0.03 mm long. Male palpus large, broader than in *P. spinosa*, with 1 apical, 1+1 subapical (dorsal and ventral) and 4 ventral setae.

Thoracic chaetotaxy as in *P. spinosa*. Apical scutellar 0.435 mm, katepisternal seta 0.24 mm long, prescutellar acrostichal pair only 0.08 mm long.

Fora tarsi darkened. Hind trochanter as in Fig. 79. Hind tibia as in Fig. 82. Hind metatarsus (Fig. 83) with 2 rows of long thick black setae.

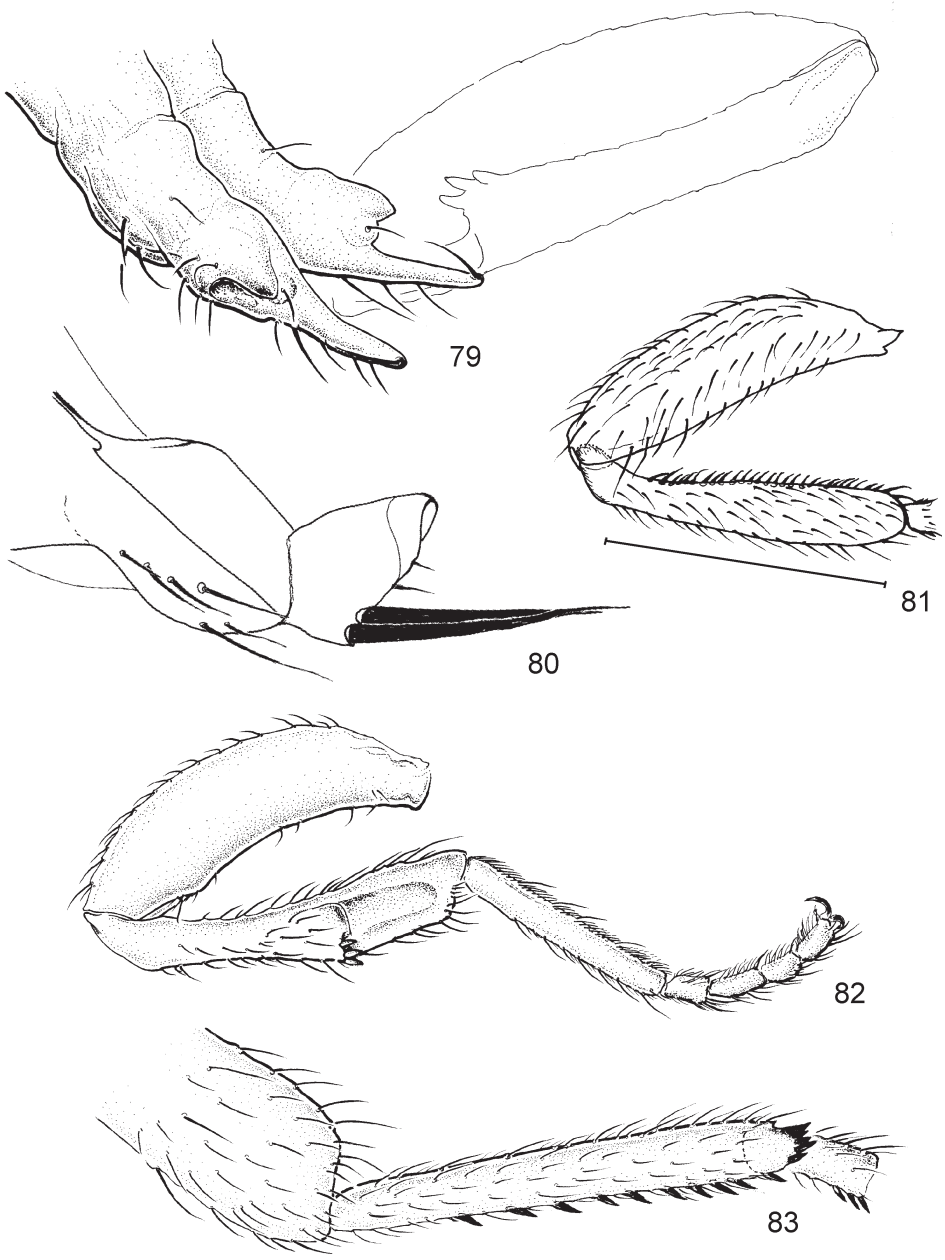
Wing clear yellowish, veins yellow. Third costal section shorter than 4th section (0.17 mm and 0.19 mm). Medial vein not visible, discernible only by the straight line of membrane microchaetae. Haltere light yellow (whitish).

All abdominal terga yellow, incl. tergite 5, with brown caudal margin. Epandrium brown. Cerci (Fig. 84) small with 3 pairs of long setae. Hypandrial complex inserted rather high on epandrium (Fig. 84). Surstylus (Fig. 85) almost triangular, only apex slightly proclinate, medial surface with less numerous but long thick setae (thorns). Paramere (Fig. 86) – in broadest extension – curved with broader base and narrow apex, apex itself blunt. Distiphallus (Fig. 84) looks like an intricately sclerotized globular structure below hypandrial complex (I cannot exclude that it can be inflated).

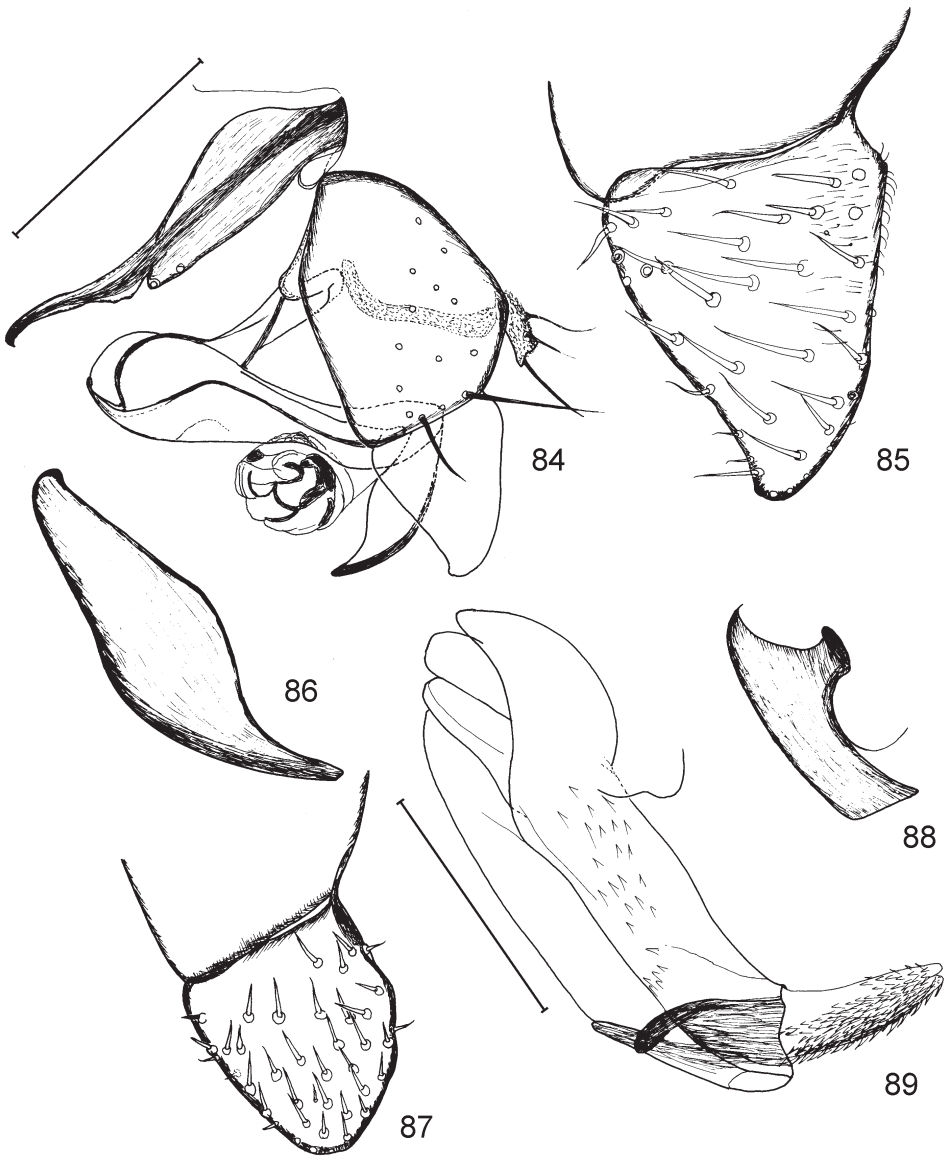
Female palpus thinner, 5 apical and subapical, plus only 2 ventral setae. This kind of sexual dimorphism characteristic also for the type species, *P. perlucida* female has longer setae on palpus, its palpus half as broad as that of the male. Female abdomen yellow but tergites 1 to 3 brown, tergite 3 very long, 0.43 mm, medially "broken", i.e. divided. Tergites 3 and 4 with long (0.20, up to 0.23 mm) setae. Tergite 4 caudal 2/5 dark brown, tergite 5 apical half dark brown. Female cerci ca. 0.14 mm long, hairs yellow, longest one 0.09 mm.

The specific epithet refers to the unusual form of the male trochanter and tibia.

The new species is a relative of *P.* (*S.*) *spinosa* sp. n., but the form of the hind trochanter and tibia, as well as shape and armature of the male surstylus make it easily recognisable.



Figs 79–83. *Paramyioides (Spinitrochanter)* spp., legs. 79 = *P.* (*S.*) *horrida* sp. n., hind coxae and trochanters (del. A. SZAPPANOS); 80–81 = *P.* (*S.*) *spinosa* sp. n.: 80 = hind coxa and trochanter, lateral view, 81 = hind femur and tibia; *P.* (*S.*) *horrida* sp. n.: 82 = hind femur and tibia, 83 = hind basitarsus (del. A. SZAPPANOS). Scale: 0.2 mm for Fig. 80, 0.4 mm for Fig. 81



Figs 84–89. *Paramyioides* (*Spinitrochanter*) spp., male genitalia. 84–86 = *P.* (*S.*) *horrida* sp. n.: 84 = genitalia with pregenital syntergosternite, lateral view, 85 = surstylus, broadest extension, 86 = paramere, broadest extension; 87–89 = *P.* (*S.*) *spinosa* sp. n.: 87 = surstylus, broadest extension, 88 = paramere, broadest extension, 89 = phallus, lateral view. Scales: 0.2 mm for Fig. 84, 0.1 mm for Figs 85–89

Paramyioides (**Spinitrochanter**) **spinosa** L. PAPP, sp. n.
(Figs 77–78, 80–81, 87–89)

Holotype male (HNHM): THAILAND: Trang Prov., Thung Khai Botanic Garden, primary lowland rainforest, Nov 12, 2004, No. 43, leg. L. PAPP & M. FÖLDVÁRI.

The wings of the holotype are prepared between two small pieces of cover glass and pinned on the collection pin (the larger piece of cover glass glued to a card), body incl. abdomen are in Canada balsam between cover glasses on a card with a large hole, genitalia are in a plastic microvial with glycerol.

Measurements in mm: body length 1.75 mm, wing length 1.58, wing breadth 0.68.

Body yellow, only frons darker, abdominal tergites 2 to 4 with broad brown caudal bands. Thorax clearly transparent (translucent), thoracic muscles were seen without preparation, also the body was put into Canada balsam through metyl-cellosolve without using sodium-hydroxide or lactic acid. Head and abdomen semitransparent.

All first flagellomere fumose, basic colour yellow. Arista 0.29 mm long (Fig. 78). Gena 0.09 mm broad below eye. Vibrissa 0.11 mm, 7 shorter peristomials present. Palpus broad (Fig. 77) with 4 apical and 1 ventral short setae.

Mesonotum shiny, bare laterally, only 3 microchaetae laterally to the dc-ia line. Thoracic chaetotaxy: 1 *pprnt*, 2 *np*, 1 shorter presutural, 1 *sa*, 1 *pa* (large) in supralar + 1 *pa* (shorter) in intra-alar position, prescutellar pair rather thin, 0.095 mm long. Two pairs of strong scutellars, apical scutellar setae 0.35 mm long. One katepisternal seta, anepimeron bare.

Hind trochanter enlarged antero-medially, with two extremely long thick black thorns on distal (caudal) medial edge (Fig. 80). Hind tibia (Fig. 81) thickened but not strongly modified as in *P. spinosa*, with a ventral row of short thick curved spiculate setae. Hind metatarsus long but normal.

Wing clear light yellowish grey, veins yellow. Costal vein runs to R4+5 only. Costal section between H and R1 veins short, 0.30 mm. Strong fringe on costa only to R2+3. R-M at the level of apex of R1, veins R2+3 and R4+5 slightly converging apically, R4+5 and M rather parallel (the latter discernible only by the straight line of membrane microchaetae). Distance of cross-veins (basal and R-M) 0.13 mm only.

Abdomen yellow, rather cylindrical. Tergites 2 to 4 with broad brown caudal bands. Tergite 5 as well as epandrium yellow. Cerci small. Surstylus (Fig. 87) broadly rounded with more numerous but shorter thick setae (thorns) on medial surface. Paramere (Fig. 88) shorter than in *P. horrida*, in broadest extension with a broad apical part, but without a sharp anterior tip. Distiphallus (Fig. 89) large, apical part rather narrow and covered by more or less blunt light retrograde pegs.

The specific epithet refers to the long spines on male hind trochanter. This is the most remarkable difference compared to *P.* (*S.*) *horrida* sp. n. *P.* (*S.*) *spinosa* sp. n. is smaller, its male hind tibia simple and details of male genitalia are different.

CHLOROPIDAE

In the CDO (SABROSKY 1977) 16 spp. of 12 genera were listed for Thailand: *Anatrichus* 1 sp., *Cadrema* 2 spp., *Elachiptera* (*Melanochaeta*) 1 sp., *Gampsocera* 1 sp., *Gaurax* 1 sp., *Meijerella* 1 sp., *Siphunculina* 3 spp., *Tropidoscinis* 1 sp.,

Anthracophaga 1 sp., *Mepachymerus* (*Steleocerellus*) 2 spp., *Neoloxotaenia* 1 sp., *Pachylophus* 1 sp.). None of them was described from Thailand.

After 1977 several papers on the Oriental Chloropidae (but none on Thaii Chloropidae) were published.

The HNHM material from Thailand is very rich in species (2004: 405 indiv, 2003: 179 indiv.). The species richness is to be estimated based on the data (J. DEEMING, pers. comm.), which are from the sorting and determination of the MHNG chloropid material from 2000 (ca. 500 indiv., numerous spp. in 35 genera). Dr. DEEMING plans to publish that material soon.

CRYPTOCHETIDAE

Four indiv. of a small *Cryptochetum* sp. from a single site (PF03/25) were captured. Since the identification of the cryptochetid flies is so difficult, we did not attempt it. This is the first record of the family from Thailand.

TERATOMYZIDAE

No named species of this small family was listed in the CDO. We have four indiv. of two spp. from the 2003 expeditions in Thailand. In addition, there is a rich material of Teratomyzidae in the HNHM from Taiwan, Vietnam and also some indiv. from Australia.

Teratomyza spp. sp. 1: 2 ♂ 1 ♀: FSz03/11. sp. 2: 1 ♀: Tham Sakoen NP, 30. 11. 2003, 19° 23'N 100° 38'E, along creek at forest border, leg. A. SZAPPANOS.

NEUROCHAETIDAE – B. MERZ

This peculiar family is also called "upside-down flies" because adults walk on leaves and stems always with the head directed downwards. Some 25 species in 4 genera are described, all from Old World Tropics (Afrotropical, Oriental and Australasian Regions). Only three named species of the genus *Neurochaeta* MCALPINE are known from the Oriental Region (MCALPINE 1988). An unnamed species from "Thailand" was published by MCALPINE (1993, fig. 9 and Table 1) which seems to be associated with banana leaves. During field work a male of a probably described species was also swept on banana leaves in a wet forest near a small stream.

Neurochaeta capilo MCALPINE, 1988 – 1 ♂: N Thailand, Chiang Mai Province, Doi Suthep-Pui National Park, above What Phrathat, 1100 m, 27.X.2000, leg. B. MERZ & P. SCHWENDINGER (MHNG).

EPHYDRIDAE

Fourteen spp. of 12 genera were listed in the CDO (COGAN & WIRTH 1977) for Thailand, incl. a junior synonym: *Chlorichaeta albipennis* (LOEW, 1848), *Allotrichoma alium* CRESSON, 1929, *Diclasiopa galactoptera* (BECKER, 1903), *Hecamedoides canolimbatus* (DE MEIJERE, 1916), *H. tarsalis* (DE MEIJERE, 1916), *Ceropsilopa cupreiventris* (VAN DER WULP, 1897), *Rhynchopsilopa magnicornis* HENDEL, 1913, *Typopsilopa chinensis* (WIEDEMANN, 1830) (syn. *Psilopa sorella* BECKER, 1924), *Dryxo* (*Cyphops*) *fasciata* JAENNICKE, 1867, *Notiphila* (*N.*) *dorsopunctata* WIEDEMANN, 1824, *Donaceus nigronotatus* CRESSON, 1943, *Zeros invenatus* (LAMB, 1912), *Brachydeutera hardyi* WIRTH, 1964 and *B. longipes* HENDEL, 1913.

MATHIS & ZATWARNICKI (1995) listed 18 spp. in their Catalog with occurrence in Thailand, incl. the following additional spp.: *Hydrellia philippina* FERINO, 1968, *Hecamede granifera* (THOMSON, 1868), *Lamproclasiopa mera* CRESSON, 1939, *Hecamedoides hepaticus* (DE MEIJERE, 1916), *Polytrichophora brunneifrons* (DE MEIJERE, 1916), *P. canora* CRESSON, 1929, *Psilephydra iridescens* ZATWARNICKI in MATHIS and ZATWARNICKI, 1988 (p. 112, S. Banna Nakhon) and *Setacera breviventris* (LOEW, 1860). However, they did not list four spp., which had been involved in the CDO as occurring in Thailand: *Chlorichaeta albipennis*, *Diclasiopa galactoptera*, *Donaceus nigronotatus* and *Brachydeutera hardyi*. MATHIS & ZATWARNICKI's (1988) paper on the tribe Dagini, ZATWARNICKI & MATHIS's (2001) paper on Discocerini and MATHIS & ZATWARNICKI's paper (2002) on Dryxini include data also on Thailand ephydrids. KRIVOSHEINA (2001) recorded *Notiphila* species from Thailand. ZATWARNICKI (2002) described *Orasiopa tajlandica* recently.

Our material is numerous and rich in species. In 2004 we selected and pinned 505 indiv., in 2003 68 indiv. Contrary to our original plans, for lack of time we did not select them even to genera.

CAMPICHOETIDAE

In the CDO (MCALPINE 1977) only two species of *Campichoeta* MACQUART, 1835 are mentioned: one from Nepal and one undescribed sp. from the

Philippines. As far as we know, eleven species have hitherto been described worldwide, the eleventh one very recently (PAPP 2005).

We were lucky enough to capture one male of *Campichoeta* in Thailand, representing the first record of this family for the country. As mentioned in the description of *C.* (*Campichoeta*) *spinicauda* from Taiwan, *Thryptocheta* RONDANI, 1856 is regarded as a subgenus of *Campichoeta*.

Campichoeta (Thryptocheta) flavicauda L. PAPP, sp. n.
(Figs 90–93)

Holotype male (HNHM, abdomen with genitalia in a plastic microvial with glycerol): THAILAND: Mae Fang N. P., over and along a forest brook, Nov 1, 2004, No. 14, leg. L. PAPP & M. FÖLDVÁRI.

Measurements in mm: body length 2.15, wing length 1.85, wing breadth not precisely measurable, ca. 0.76.

Head and thorax dark graphite grey with thick brownish microtomentum, scutum almost black. Abdomen dark brown, basal two segments yellowish brown. Epandrium yellow.

Frons dark, shiny, anterior margin (in 0.07 mm length) yellow, alike antennal bases as well as scape and pedicel (scape, however, grey dusted). First flagellomere very long, 0.30 mm, black with light cilia. Cephalic setae as in *C. griseola*: a more laterally placed proclinate pair of fronto-orbitals, a large reclinate *ors* just behind and medially to the proclinate one and a third short thin reclinate *ors* anteriorly and medial to the proclinate *ors*. Ocellars, inner and outer verticals very long, postocellars comparatively short (0.13 mm), cruciate. Frons with some minute setae behind lunule. Vibrissae comparatively short, apices almost meet. Gena 0.04 mm broad, only 3 thin peristomials present. Also subgenal seta thin. Longest (dorsal) aristal cilia comparatively long, 0.054 mm.

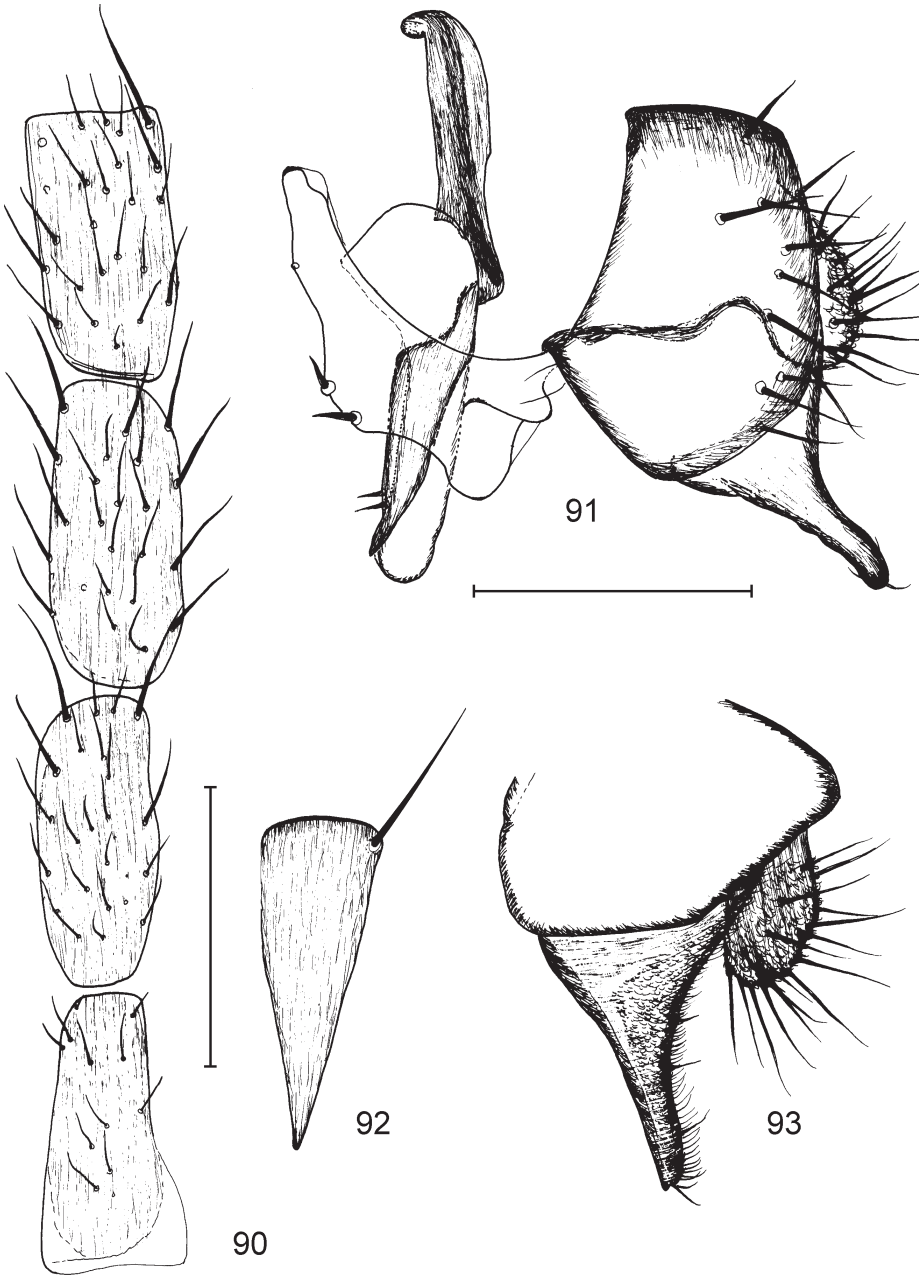
Mesonotum moderately humped. Thoracic setae: 1 *pprn*, 2 *np*, 1 large *prst*, 0+2 *dc*, 1 large prealar, 1 large *sa*, 1 small *pa*, 2 *sc*; 1 dorsal smaller and 1 larger ventral *kepst*. Prescutellars indistinct, only 0.09 mm.

Wing uniformly dark brown, veins even darker. Longest costal setae distally to H (mg1) 0.04 mm, 0.04 mm on mg2, the longer seta at break 0.07 mm. M vein sections 0.38, 0.72, ratio 1.89. Terminal section of Cu 0.30 mm. Anal cell very small. Anal (A1) and axial (A2) veins present as shadows of veins only. Squamal cilia black. Halteres whitish yellow.

Legs yellow; incl. coxae. Fore femur posteroventrally with 7 peg-like black thornlets, the 5th one much longer. Mid femur with a long anteroventral seta. Preapicals on tibiae comparatively weak, ventroapical of mid tibia 0.087 mm long.

Preabdominal sternites (Fig. 90) similar to those of *C. griseola*. Tergite 5 on caudal margin with 3 pairs of 0.10–0.13 mm long thick setae. Tergite 6 bare, tergite 7 (Fig. 92) 0.05 mm, 0.12 mm deep, finely sclerotized, forming little more than half-of-a-ring, with a pair of dorsomarginal setae.

Subepandrial sclerite 0.04 mm broad, less sclerotized, connecting base of cerci to hypandrium (Fig. 91), but not fused with hypandrium, broadening there to 0.08 mm. Cerci rather short rounded, with a number of longer setae. Male surstylus (Fig. 93) rather large, with broad base and narrow but not sharp apical part. Surstylus not fused to epandrium (Figs 91, 93), so this a species of the subgenus *Thryptocheta* RONDANI. The main distinctive features of the nominate subgenus is that their males have no true surstyli but only ventromedial ("surstylar") lobe on epandrium. Surstylus without long



Figs 90–93. *Campichoeta* (*Thryptocheta*) *flavicauda* sp. n., holotype male. 90 = pregenital sternites, 91 = genitalia, lateral view, 92 = tergite 7, 93 = surstylus, broadest extension, i.e. sublateral view. Scales: 0.2 mm for Fig. 90, 0.1 mm for Figs 91–93

setae but with a row of dense upcurving setulae on posterior margin. Aedeagal apodeme robust, rather short. Gonopod (Fig. 91) with two pairs of thick thorns ventrally. A pair of broad caudal hypandrial processes present. Parameres rather narrow, slightly curved.

Female unknown.

Remarks – This new species is related to the Palaearctic *C. griseola* (ZETTERSTEDT, 1855) but frons and scutum of *C. griseola* are much lighter, its fore femur with more numerous medioventral pegs, and its prescutellar setae are very long. The male genitalia show also distinctive features.

As far as I am informed, there is no described species of *Campichoeta* (*Thryptocheta*) in the Oriental region. MCALPINE (1977) mentioned an undescribed sp. from the Philippines and *C.* (*C.*) *obscuripennis* (MEIGEN, 1830) was listed (from Nepal). Recently PAPP (2005) described *C.* (*C.*) *spinicauda* from Taiwan. The new species, by its evenly fumose wings, and the similar anteroventral row of spines on fore femur, is related to *C. griseola*. However, *C. griseola* has a pair of dark brown stripes on its lighter grey dusted yellowish brown mesonotum and dorsal side of abdomen is also rather light. *C. griseola* is with tergite 7 much longer, strongly convex with a number of short setae, setae on marginal caudal edge of tergite 5 shorter and thinner, its surstylus is different and it bears several long setae, contrary to *C. flavicauda*. All in all, I do not think that these two spp. are closely related.

DROSOPHILIDAE

In the CDO (OKADA 1977) 35 spp. in five genera were listed from Thailand: *Amiota* (*Phortica*) 1 sp., *Drosophila* (*Dorsilopha*) 1 sp., *D.* (*Drosophila*) 7 spp., *D.* (*Sophophora*) 22 spp., *Liodrosophila* 1 sp., *Paramycodrosophila* 1 sp., *Sphaerogastrella* 2 spp.

Of them, *Drosophila* (*Sophophora*) *baimaii* BOCK & WHEELER, 1972 (p. 70), *D.* (*S.*) *barbarae* BOCK & WHEELER, 1972 (p. 62), *D.* (*S.*) *eugracilis* BOCK & WHEELER, 1972 (p. 31), *D.* (*S.*) *khaoyana* BOCK & WHEELER, 1972 (p. 68), *D.* (*S.*) *orosa* BOCK & WHEELER, 1972 (p. 64), *D.* (*S.*) *parabipectinata* BOCK, 1971 (p. 277), *D.* (*S.*) *paralutea* BOCK & WHEELER, 1972 (p. 15), *D.* (*S.*) *rhopaloa* BOCK & WHEELER, 1972 (p. 69) and *Sphaerogastrella rostralis* OKADA, 1974 (p. 31) were described from Thailand.

After closing the manuscript for the CDO, OKADA (1977) described *Amiota* (*Phortica*) *omega* (p. 21, Doi Suthep), BAIMAI (1979) described *Drosophila bocki* (p. 237, Khao Yai N.P.) of the *D. kikkawai* complex from Thailand. HIHARA & LIN (1984) described a new species, *D. siamana* (p. 207) of the *Drosophila hypocausta*

group, whose paratypes are from Thailand. OKADA's papers on the *Leucophenga proxima* group (1987), his revision of *Pararhinoleucophenga* and *Paraleucophenga* (1988) and his revision of the *Leucophenga ornata* group (1990) contained records of species also from Thailand and he described *Leucophenga kurahashii* OKADA, 1987 (p. 91) and *Paraleucophenga shimai* OKADA, 1988 (p. 621). TODA's (1991) paper on *Drosophila melanogaster* group included records from Thailand. In their revision of the SE Asian *Stegana* (*Oxyphortica*) *nigripennis* species group CHEN & WANG (2004) described a species (*S.* (*O.*) *prigenti*) also from this country. OKADA (1980) described *Hypselothyrea scutellata* OKADA, 1980 (p. 508, Khao Yai N.P) and *H. truncata* (p. 507, Doi Suthep), and there he published the first Thai record for *H. guttata* DUDA, 1926 and *H. pseudoguttata* TAKADA & MOMMA, 1975. In another *Hypselothyrea* paper PAPP (2003) described *H. deficiens* L. PAPP, 2003, *H. paralanigera* L. PAPP, 2003 (Thaii holotypes), *H. paratenuis* L. PAPP, 2003 (Thaii paratypes).

Our material is remarkable. It is not only numerous, but very rich in species, indeed. We captured 219 indiv. of *Hypselothyrea* spp. in 2004; *Hypselothyrea* is far more abundant in the Oriental region, than formerly expected. Our *Hypselothyrea* material includes nine or ten spp., incl. two new species of *H.* (*Deplanothyrea*) and a reduced-winged *Hypselothyrea* sp. n. In 2004 793 specimens, in 2003 344 specimens belonging to other genera were selected and pinned. Their identification must be the aim of another project.

Hypselothyrea (**Deplanothyrea**) **formosana** L. PAPP, 2003 – 4 ♂ 1 ♀: PF04/1; 1 ♀: PF04/3; 8 ♂ 8 ♀: PF04/8; 1 ♂: PF04/9; 1 ♂: PF04/10; 1 ♂: PF04/17; 1 ♂: PF04/19; 1 ♀: PF04/26. Described recently from Taiwan but its seems more widespread. The two new spp. of *Deplanothyrea* in our material are related to this species.

Hypselothyrea deficiens L. PAPP, 2003 – 1 ♀: PF04/1; 1 ♂ 5 ♀: PF04/3; 2 ♂: PF04/7; 7 ♂ 2 ♀: PF04/8; 3 ♂ 5 ♀: PF04/11; 1 ♀: PF04/12; 1 ♂ 1 ♀: PF04/19; 2 ♂ 4 ♀: PF04/26; 1 ♂: PF04/27. It was described from Taiwan, but we are sure it is a more widespread Oriental sp. It is a sp. of the *H. guttata* species group, where details of the male genitalia are the reliable characters for separating species. In the original description of this species, the peculiar undulately bent costa (and wing) on second costal section, seemingly a specific character, was not properly stressed.

Hypselothyrea guttata DUDA, 1926 – 4 ♂ 2 ♀: PF04/1; 1 ♂ 1 ♀: PF04/3; 4 ♂ 4 ♀: PF04/8; 4 ♂: PF04/10; 1 ♂ 1 ♀: PF04/11; 1 ♂: PF04/14; 1 ♀: PF04/17; 1 ♂: PF04/26. This is the commonest Oriental sp. of the genus (PAPP 2003).

Hypselothyrea paralanigera L. PAPP, 2003 – 1 ♂: Trang Prov., Thung Khai Botanic G., pasture, 13. 11. 2004, A. Orosz; 6 ♂ 2 ♀: PF04/3; 1 ♀: PF04/7; 2 ♂ 4 ♀: PF04/8; 1 ♀: PF04/10; 4 ♀: PF04/11; 1 ♂: PF04/12; 6 ♂2 ♀: PF04/14; 1 ♂: PF04/19; 3 ♂ 2 ♀: PF04/21; 13 ♂ 11 ♀: PF04/25; 6 ♂: PF04/26; 2 ♂: PF04/27; 5 ♂: PF04/28; 9 ♂ 2 ♀: PF04/29; 3 ♂ 1 ♀: PF04/29a; 2 ♂: PF04/30; 1 ♂: PF04/35; 2 ♂: PF04/36; 4 ♂: PF04/38; 2 ♂ 3 ♀: PF04/42 (102 indiv.). Although recently described, it is a rather common species in Thailand.

Hypselothyrea paratenuis L. PAPP, 2003 – 3 ♂: PF04/8; 2 ♀: PF04/11; 1 ♂: PF04/12. It was described from Vietnam and Thailand. Though it is not as common as the former sp., this beautiful

(and easily identifiable) sp. must not be rare, since soon after the former original record, it is reported again from Thailand.

Hypselothyrea pseudoguttata TAKADA & MOMMA, 1975 (*H. paraguttata*: PAPP 2003, *lapsus calami*) – 1 ♂: PF04/9; 1 ♂: PF04/42.

CANACEIDAE

In the CDO (DELFINADO & WIRTH 1977) three canacid spp. were listed for Thailand, *Procanace grisescens* HENDEL, 1913, *Trichocanace atra* WIRTH, 1964, *Trichocanace sinensis* WIRTH, 1951 were listed. We did not collect any canacids in Thailand.

CURTONOTIDAE

In the CDO (OKADA 1977: 340–1) three species of in two genera were listed for Thailand: *Axinota pictiventris* VAN DER WULP, 1886, *Axinota rufipes* OKADA, 1966 and *Curtonotum angustipenne* (DE MEIJERE, 1911). We captured 17 indiv., which is a good number, since none of the curtonotid species is abundant. The descriptions of Oriental *Axinota* species are not adequate for safe species identification and the absence of studies on types, we did not attempt their determination.

Axinota spp. *sp. 1*: 2 ♀: PF04/25; 1 ♀: PF04/22. *sp. 2*: 1 ♂: PF04/22; 1 ♂: PF04/38; 4 ♂ 1 ♀: PF04/25; 2 ♀: PF04/34; 1 ♀: PF04/39; 3 ♀: PF04/35; 1 ♂: Trang Prov., E of Ban Kok Sai, sweeping, Prai Sawan Waterfall, 27. 11. 2003, No. 31, OROSZ & SZIRÁKI.

Curtonotum angustipenne (DE MEIJERE, 1911) – 1 ♀: PF04/1. Formerly known from Java and Thailand only.

PERISCELIDIDAE – STENOMICRIDAE

In the CDO (1977) no species were listed under Periscelididae (or the genus *Stenomicra*) from Thailand. PAPP (1988) described *Periscelis kaszabi* from Vietnam. BAPTISTA & MATHIS (2000) described *Cyamops kaplanae* from Thailand and *C. laos* and *C. banvaneue* from Laos. We managed to capture a rich material in 2004: 47 indiv. of *Stenomicra* s. lato and 19 specimens of *Cyamops* were selected and pinned.

In the HNHM there are specimens of undescribed *Podocera* species from India, Vietnam and Taiwan. The species do not seem to be too restricted in their dis-

tribution. Some localities other than Thailand, based on the specimens identified in the collection of the HNHM, are also given below.

Cyamops kaplanae BAPTISTA & MATHIS, 2000 – 1 ♂: PF04/39. Hitherto known only from Thailand.

Cyamops fumipennis L. PAPP, sp. n.
(Figs 94–99, 136)

Holotype male (HNHM): THAILAND: Trang Prov., Khao Chong Botanic Garden, rainforest, Nov 22, 2004, No. 43, leg. L. PAPP & M. FÖLDVÁRI.

Paratypes: 6 males (one of them with abdomen and genitalia in a plastic microvial with glycerol) and 9 females: data same as for holotype; 1 male: ibid., forest brook, yellow pans, Nov 18–22, No. 40, leg. M. FÖLDVÁRI; 1 female: Doi Inthanon N. P., below Haui Sai Nueng Falls, along the brook, Oct 30, 2004, No. 7, leg. L. PAPP & M. FÖLDVÁRI.

Measurements in mm: body length 2.02 (holotype), 1.96–2.15 (paratype males), 2.46–2.65 (paratype females), wing length 2.11, 2.00–2.17, 2.38–2.66 (paratypes), wing breadth 0.73, 0.72–0.75, 0.85–0.88.

Ocellar triangle and vertex shiny black, depressed region deep velvety black, orbits from middle of frons down to below antennal bases, silvery. Occiput together with most posterior part of genae deep dark graphite. Facial ridge silvery basally and brown from ocular isthmus down to mouth edge. Face, cheeks and genae otherwise yellow. Clypeus thin, hairpin-like. 7 peristomials, pseudovibrissae 0.11 mm, dorsally directed and divergent. Facettes of eyes below antennae much larger than those beside orbitalia. Inner fronto-orbital seta reclinate (0.14 mm) and slightly divergent, anterior fronto-orbitals strongly proclinate (0.24 mm) and slightly convergent. Vertical seta 0.22 mm long. Antennae yellow. Arista bearing 9 dorsal rays, basal 5–6(7) rays forked, 2(3) ventral rays behindg apical fork.

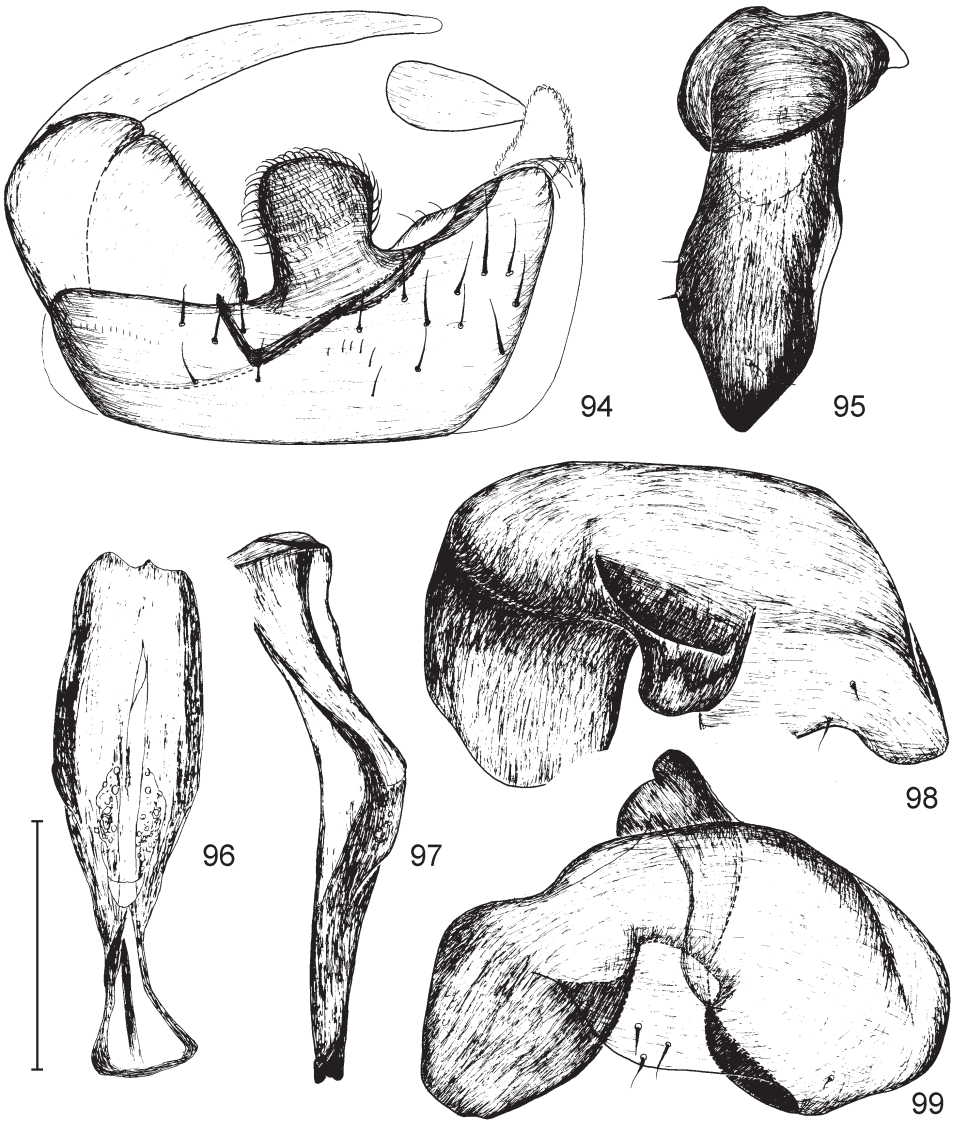
Thorax and abdomen dark greyish brown, shiny with thin grey microtomentum. Anepisternum silvery shiny. Katepisternum with thicker silvery microtomentum. 2 *np*, 1 prealar *sa*, 1 *pa*, as usual. Anterior *dc* seta 0.12 mm, posterior one 0.225–0.23 mm, i.e. less than double length of anterior one. Apical scutellars 0.24–0.26 mm long. Basal scutellars missing in most males, mostly present but weak in females: if present, they are hair-like and not longer than 1/6 (in females 1/4) length of the lateral scutellars. Two rows of short *acmi*, 1–1 pairs of rows of *dc* and *ia* microchaetae. Katepisternal seta medium-lomg, some additional thin katepisternals.

Basal 3/4 of femora dark (blackish brown), incl. knees; femoral bases, tibiae and most of tarsi yellow. Apical 2 tarsomeres of all legs black. Ventroapical seta of mid tibia very long. 0.225–0.23 mm, and thick.

Wing (Fig. 136) evenly fumose (blackish), wing base clearer. Costal ratios (paratype males): 68: 35.5: 10, 69: 33.5: 11.5, intra-crossvein sections and distal section of M: 28: 25.5: 61.5, 28: 22: 63.5. Halteres wax yellow, base of stalk grey.

Abdomen dark brown, basal two segments yellowish brown. Epandrium yellow, forms slightly more than 1/4 of a globe. Male tergite 6 almost twice longer than tergite 7 (bare), with some marginal and discal setae. Tergite 6 and 7 of about the same width. Also S5 strongly asymmetrical but not divided. The S6-S7 complex with a long broad, apically rounded medial process (Fig. 94). Left surstylus sickle-shaped in profile, dentiform in broadest view (Fig. 95). Right surstylus complex (Figs 98–99) with a dorsally directed basal (inner) process (perpendicular to the plane of figure), a

broad rounded medial process and broad "body". Aedeagal apodeme straight and rather broad, ejaculatory apodeme (Figs 96–97) long and not broad. Aedeagus similarly as long as aedeagal apodeme with concave conical apex.



Figs 94–99. *Cyamops fumipennis* sp. n., paratype male, genitalia. 94 = pregenital sclerites in ventral view, 95 = left surstylus, broadest extension (almost caudal view), 96 = ejaculatory apodeme, dorsal view, 97 = same, lateral view, 98 = right surstylus, broadest ventral view, 99 = same, broadest caudal view. Scale: 0.1 mm for all

In the key for Australasian/Oceanian species (BAPTISTA & MATHIS 2000) it runs to *C. delta* KHOO (but not closely related). In the Oriental region, its closest relative is probably *C. kaplanae*. However, its wings are evenly fumose (on immature specimens all the longitudinal veins bordered by broad dark fascia). The male genitalia (Figs 95–99) are obviously different.

Stenomicra angentata SABROSKY, 1965 – 2 ♂3 ♀: PF04/14; 1 ♂: PF04/29; 1 ♂: PF04/42. The species was described on the basis of a single female from Malaysia, but recorded also from India, Orissa (PAPP 1974). Our specimens are surely conspecific, based first of all on the silvery spot of on the thoracic pleura. A species new for the fauna of Thailand.

Stenomicra angustiforceps SABROSKY, 1965 – 1 ♂: PF04/14; 1 ♂: Trang Prov., Thung Khai Botanic G., pasture, 19. 11. 2004, A: Orosz; 4 ♀: FSz03/11. The species was described from Nepal and reported from India, Orissa (PAPP 1974). Also this species is new for the fauna of Thailand (in the HNHM specimens also from Taiwan).

Podocera fascipennis MALLOCH, 1927 (Figs 112–114) – 4 ♂5 ♀: FSz03/1; 2 ♂6 ♀: FSz03/11; 1 ♂7 ♀: PF04/28; 3 ♂3 ♀: PF04/29; 1 ♀: PF04/30; 2 ♀: PF04/35; 1 ♀: PF04/36; 1 ♂2 ♀: PF04/37; 3 ♂8 ♀: PF04/38; 3 ♀: PF04/39; 2 ♂: PF04/42; 2 ♀: PF04/43; 1 ♀: Trang Prov., Thung Khai Botanic G., pasture, 19. 11. 2004, A: Orosz; 2 ♀: OSz03/03; 2 ♀: OSz03/06; 1 ♀: OSz03/14; 1 ♀: OSz03/45. A species new for the fauna of Thailand. With its 16 ♂ 47 ♀ in our material this seems to be the commonest species of the family in Thailand. In the HNHM there are named specimens of this species also from Vietnam and Taiwan. We must stress that presently we have the concept of widely distributed species also in Stenomicridae.

Its surstylus bifid apically (Fig. 112) but different from that of *P. claripennis* sp. n. (below). Left long process of gonopod strongly upcurving, dorsally directed (short in dorsal view), in contrast to *P. claripennis*. Ejaculatory apodeme (Figs 113–114) similarly large as in *P. claripennis* but proximal part more rounded in dorsal view, distal (ductus) part much broadened in lateral view.

Stenomicra flava L. PAPP, sp. n.
(Figs 100–106, 137)

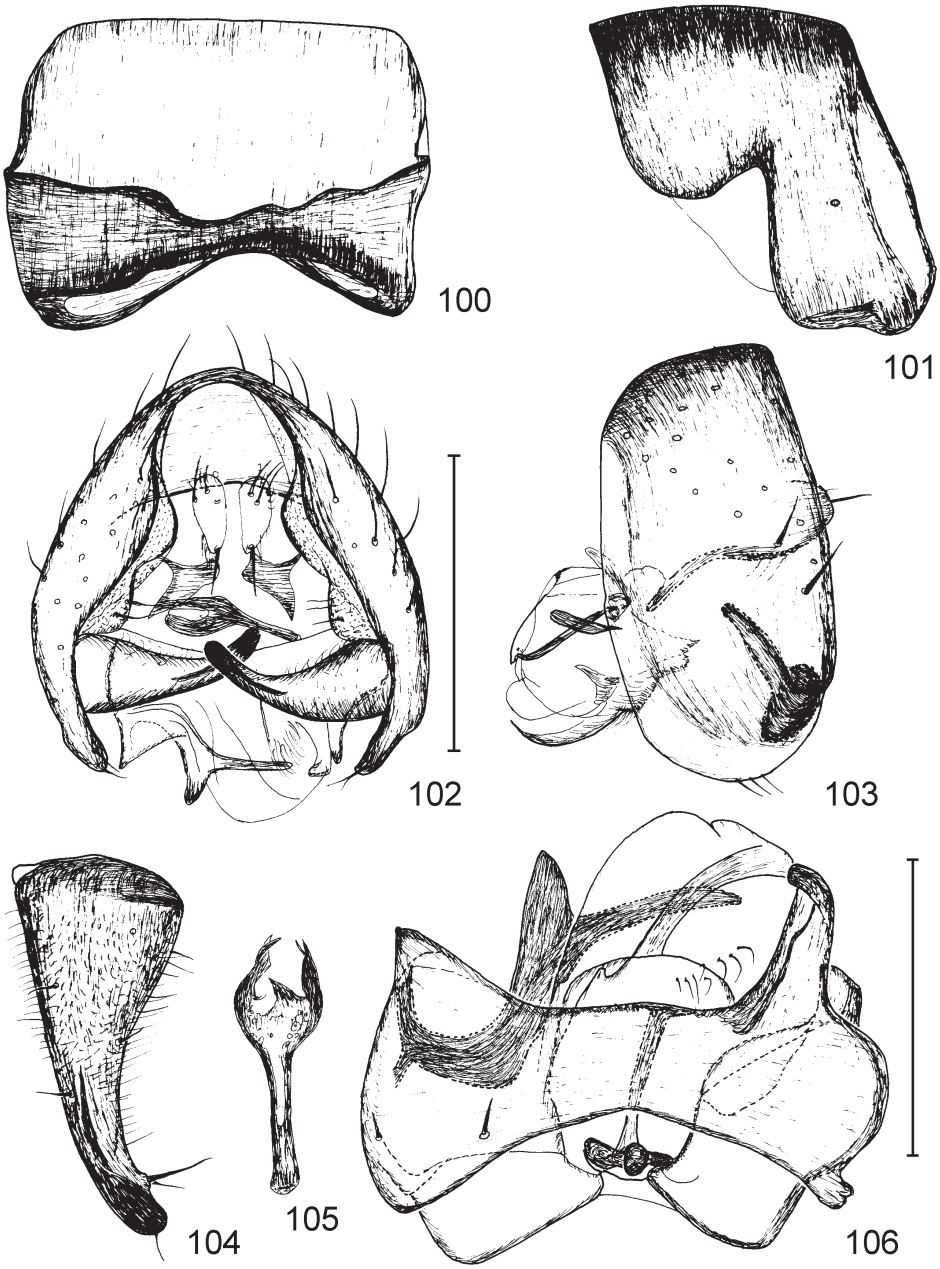
Holotype male (HNHM, abdomen with genitalia in a plastic microvial with glycerol): THAILAND: Fang, Mae Fang National Park, Doi Pha Hom Pok, 2000 m, 22–23. XI. 2003, swept along forest road and creeks, No. 11, leg. M. FÖLDVÁRI.

Paratype: 1 female: VIETNAM: Sín Chai, "Legendary Place", swept along forest patch & creek, 15.XI.2003, No. 6. leg. M. FÖLDVÁRI, L. PEREGOVITS & Á. KŐRÖSI.

Measurements in mm: body length 1.74 (holotype), 2.22 (paratype), wing length 2.17, 2.28 (paratype), wing breadth 0.65, 0.72.

Body and legs all yellow. All head and thoracic setae yellow.

Two pairs of reclinate *ors*, anterior pair very short (only 1/4 of posterior pair) and thin (Fig. 137). Facial genal setae shorter but more numerous: below "pseudovibrissae" 5 pairs of distinct setae (Fig. 137) and a pair of moderately long *subocular* genal seta, plus 4 pairs of short posterior genal setae present. Arista with 3 dorsal and 2 ventral long rays, basal ventral on particularly long, 0.15 mm. First flagellomere with long (0.06–0.07 mm) cilia on its whole dorsal edge.



Figs 100–106. *Stenomicra flava* sp. n., male genitalia. 100–101 = syntergosternite 7+8: 100 = ventral view, 101 = lateral view; 102 = genitalia in ventral view (cerci oblique to the body axis), 103 = same, lateral view, 104 = surstylus in broadest extension (subcaudal view), 105 = ejaculatory apodeme, dorsal view, 106 = hypandrial complex, dorsal view. Scales: 0.2 mm for Figs 100–103, 0.1 mm for Figs 104–106

Mesonotum bulging. No postpronotal seta, 2 np (posterior *np* far from suture) 1 presutural, 2 *dc* and 1 *kepst*. Five long *dcmi* cranially to anterior *dc*, *acmi* uniserial. Metanotumstrongly bulging.

Wing long and narrow, clear yellowish, veins yellow. R2+3 – R4+5 section of costa long, 0.48 mm, R2+3 – R4+5 section 0.10 mm. Intracrossvein section of M 0.18 mm, dM-Cu 0.08 mm. Haltere white.

Male abdomen yellow, tergites 2–4 with large blackish lateral spots, tergite 3 almost completely light brown on margin. Tergite 6 very short. Syntergosternite complex 7+8 circular (Figs 100–101) but sharply divided into a dorsal and a ventral part, dorsal part being much longer (Fig. 101). Cerci oblique to body axis. Surstyli (Figs 102, 104) symmetrical, moderately large, with broad base and narrow apical part, apex rounded with a subapical, medially directed seta. Surstylus hidden under epandrium when at rest (Fig. 103), i.e. inserted far above ventral edge of epandrium. Genital (hypandrial) complex comparatively small (Fig. 106), hypandrium long ("broad") medially, asymmetrical, dorsally with a small left and a large projecting right projection. Left gonite long, bifid. Ejaculatory apodeme (Fig. 105) rather small.

Female abdomen yellow, tergites 2 to 4 with brown spots on lateral edge of abdomen, anterior to caudal margin, which continue in submarginal light brown band each crossing all the tergites (i.e. meet sagittally). Tergites 5 and 6 all yellow, tergites 7 and 8 dark brown. Sternites 7 and 8 short, yellow, not produced into medial process. Female cerci short with minute yellow hairs only.

Stenomicra flava sp. n. does not key to species in SABROSKY's (1965) key: its wings are clear (not brown with white marks as in *S. argentata*), its mesonotum is clear yellow (opposing *S. angustiforceps* from East Nepal, see also above). The male surstylus is much different from that of *S. angustiforceps* (SABROSKY's fig. 5, vs Figs 102, 104).

Podocera claripennis L. PAPP, sp. n.
(Figs 107–111, 138)

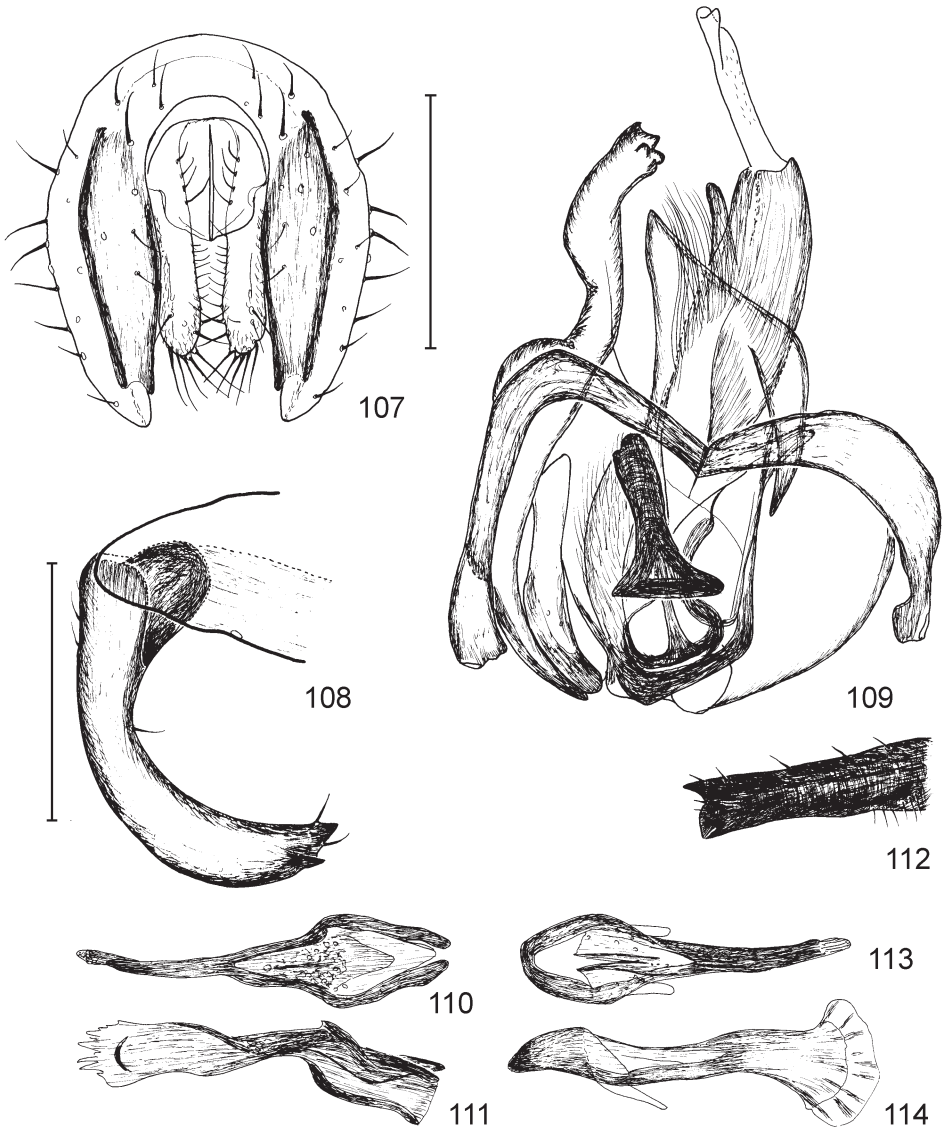
Holotype male (HNHM, abdomen with genitalia in a plastic microvial with glycerol): THAILAND: Fang, Mae Fang National Park, Doi Pha Hom Pok, 2000 m, 22–23. XI. 2003, swept along forest road and creeks, No. 11, leg. M. FÖLDVÁRI.

Paratypes: 1 male, 1 female: data same as for holotype; 2 males: VIETNAM: Sin Chai, "Legendary Place", 10.11.2003, No. 1, leg. M. FÖLDVÁRI, L. PEREGOVITS & Á. KŐRÖSI.

Measurements in mm: body length 1.63 (holotype), 1.41–1.85 (paratypes), wing length 2.07, 2.00–2.35 (paratypes), wing breadth 0.70, 0.65–0.80.

Frons grey, thickly whitish grey dusted. Face, lower pleura and legs yellow. Mesonotum and upper pleura yellowish grey.

Anterior pair of *ors* large (almost as long as posterior) and inclinate. Facial genal setae long and similar to those of *P. variegata* sp. n. (Fig. 138): ventrally to "pseudovibrissae" a half as long facial seta plus 2 pairs of long, slightly ventrally curved pairs, 2 pairs of additional downcurving genal setae. No subocular genal seta, but 2 longer posterior genal setae present. Arista with 4 dorsal and 2 ventral long rays behind the long apical fork. First flagellomere with long cilia on tip only. Vertical setae yellow, others black. Proclinate, short but distinct inner verticals present.



Figs 107–114. *Podocera* spp., male genitalia. 107–111 = P. *claripennis* sp. n.: 107 = epandrium, cerci and subepandrial sclerite, caudal view, 108 = surstylus in broadest extension (subcaudal view), 109 = genital (hypandrial) complex, dorsal view (ejaculatory apodeme omitted), 110 = ejaculatory apodeme, dorsal view, 111 = same, lateral view; 112–114 = *P. fascipennis* MALLOCH: 112 = apex of surstylus, broadest view, 113 = ejaculatory apodeme, dorsal view, 114 = same, lateral view. Scales: 0.2 mm for Fig. 107, 0.1 mm for Figs 108–114.

Middle part of mesonotum (between *dc* lines) thickly light grey microtomentose. Katepisternum and lower pleura yellow, anepimeron and anepisternum and other parts of upper pleura greyish yellow. Postpronotal and presutural setae short but distinct, only 1 *dc* pair. Metanotum bulging, less dusted, almost shiny.

Legs yellow, only apical 2/7 of hind tibia brown, apical tarsomeres browned.

Wings clear, about 3 times as long as broad. Vietnam males with a faint window around dM-Cu. Veins yellow, crossveins white. R2+3 – R4+5 costal section shorter than R4+5 –M section (0.065 mm, 0.08 mm). Intracrossvein section of M 0.325 mm, dM-Cu 0.14 mm. Haltere grey.

Male epandrium very high, hypandrium inserted at its dorsal ¼. Horizontal part of subepandrial sclerite not large. Cerci long (Fig. 107). Surstylus large, much (archely) curved (Fig. 108) with two apices. Surstylus inserted to medial apex of epandrium. Genital complex wholly asymmetrical (Fig. 109). Hypandrium narrow medially (actually short with large, long left hypandrial process. Right gonopod very large, left gonopod bipartite. A phallic theca present. Ejaculatory apodeme large (Figs 110–111) compared to that of *Stenomicra* spp., proximal (head) part more elongate, distal (ductus) part less broadened.

Its female sternite 7 produced into a sharp apex apico-caudally.

Its closest relative is an undescribed species from Taiwan and we can compare it only to *P. fascipennis* (MALLOCH) among the known species. Its specific epithet refers to its clear wings, as opposed to the darkened wings of *P. fascipennis*. Their male genitalia are the same in basic structure. Details depicted on Figs 107–111, vs Figs 112–114, show distinct differences.

Podocera variegata L. PAPP, sp. n.
(Fig. 139)

Holotype female (HNHM): THAILAND: Fang, Mae Fang National Park, Doi Pha Hom Pok, 2000 m, 22–23. XI. 2003, swept along forest road and creeks, No. 11, leg. M. FÖLDVÁRI.

Measurements in mm: body length 1.51, wing length 1.91 (!), wing breadth 0.60.

Frons greyish, mat, thickly grey microtomentose. Antenna greyish yellow.

Facial, genal and fronto-orbital setae dark, vertical and postocellar setae yellow. "Vti" in a true postocellar position, Anterior pair of *ors* large and inclinate. Facial genal setae long (as in Fig. 138): "pseudovibrissae" plus a half as long facial plus 2 pairs of long, slightly ventrally curved pairs. More caudally only 2 pairs of weak genal setae. Arista with 5 long dorsal rays and only 2, very long ventral rays behind the very small apical fork.

Thorax light brown, ventral part of pleura almost yellow, mesonotum matte with dense grey microtomentum. Scutellum and metanotum darker brown. One short *pprnt*, 2 *np*, 1 supralar dorsocentral (plus some short but distinct dorsocentrals anteriorly). Acrostichals uniseriate. Scutellar pair comparatively long, 0.22 mm. One long katepisternal.

Legs yellow, incl. coxae, basal 2/7 of hind tibia brown, apical tarsomeres darker brown.

Wing clear yellowish, even longer than in other *Podocera* spp., more than 3 times longer than its largest width. Discal cell very long. Veins whitish. Vein R2+3 ends near wing apex, 3rd costal section shorter than 4th section. Length of intracrossvein section of M and dM-Cu 8:3, i.e. 0.35 : 13 mm. Haltere greyish yellow.

Abdomen patterned (Fig. 139). Tergites 1 and 2 light brown, only caudal lateral edges of T2 yellowish, tergite 3 brown medially and laterally, sublateral parts light brownish yellow, tergites tregites 4 and 5 similar but sublateral yellow area large. Tergite 6 short, diffuse light brown medially, yellow on lateral 1/3. Tergites 7 and 8 brown and leave leaving a large trapezoidal dorsal membranous area open.

The specific name refers to its patterned abdomen.

P. variegata sp. n. does not key to species in SABROSKY's (1965) key for the Oriental *Stenomicra*: its wings are clear but it has no hyaline white basal part. There are numerous undescribed Oriental *Podocera* and *Stenomicra* species in the Diptera collections in the world (incl. that of the HNHM), but only *P. claripennis* sp. n. is comparable to *P. variegata*. The length/width ratio of wing is lower in *claripennis*, its anepisternum and anepimeron are definitely darker, its abdominal pattern is are different and its apical fork of arista longer. Until males are collected and studied, the best differentiating character is that the female sternite 7 is yellow and caudally rounded in *P. variegata*, while it is long, brown and with a sharp medial apex caudally in *P. claripennis*.

Stenocyamops L. PAPP, gen. n.
(Figs 115–123)

Type species: *Stenocyamops thaii* L. PAPP, sp. n. (no other species included presently).
Gender: masculine.

Face in profile angulate. Head comparatively large, face slightly narrowed below antennae. Outer verticals large, inner vertical present (almost perpendicular), as well as a pair of thin proclinate occipitals lateral to *vte*. Both anterior fronto-orbitals are broken in the holotype but anterior fronto-orbitals must be strong judging from their bases. Anterior pair much anterior to the posterior fronto-orbitals. "Pseudovibrissae" long and thick (Fig. 115), facial and genal setae short and fine. Gena narrow. Facettes of eyes seem to be uniform.

Anepisternum without setae. Metanotum not bulging, but a more or less narrow subscutellum present. One short postpronotal, 1 presutural, 2 *np*, 1 supraalar pairs of setae present. One *dc* (against wing base) and 1 *sc* pairs. Katepisternal seta rather long though thin.

Anal lobe of wing distinct, a narrow alula present. Subcostal vein ends free at 4/7 of costal cell. No basal cross-vein, cells *bm* and *dm* confluent, and anal cell extremely narrow (Fig. 115). Anal vein strong though only slightly longer than ½ of distance of anal cell to wing margin.

Mid tibia with a long ventroapical. Hind tibia with a large, curved, subventral (anteroventral) spur, also mid tibia with an extremely long yellow ventroapical seta.

Abdominal sternites very broad.

Male syntergosterite 7–8 fused circularly (Figs 116–117). Subepandrial sclerites not long, contrary contrarily to *Stenomicra*. Surstylus symmetrical. Ejaculatory apodeme (Figs 122–123) very small. Genital (hypandrial) complex (Figs 120–121) almost completely symmetrical.

As for the differences to the other stenomicrid genera, see the key below.

Stenocyamops thaii L. PAPP, sp. n.
(Figs 115–123)

Holotype male (HNHM, abdomen with genitalia in a plastic microvial with glycerol): THAILAND: Doi Phuka National Park, headquarters, 26–27. XI. 2003, UV light, leg. L. PEREGOVITS, M. FÖLDVÁRI, Á. KŐRÖSI, A. SZAPPANOS & B. MAKLÁRI-KIS, No. 18.

Measurements in mm: body length 1.74, wing length 2.04, wing breadth 0.75.

Head all dark but face and genae light grey dusted. Face sharply angulate in profile, slightly narrowed below antennae: at antennae 0.23 mm, at narrowest 0.16 mm. Ocellar triangle well anterior on frons. Inner verticals 0.16 mm long, nearly perpendicular to frontal plane. Distance of bases of anterior and posterior pair of fronto-orbitals along orbitalia 0.07 mm. Genae at narrowest only 0.055 mm broad. Occiput only slightly broadening posteriorly (about middle of eye). First flagellomere with some cilia only apically. Arista with 6 dorsal and 2 ventral long rays behind apical fork.

Mesonotum dark brown. Anepisternum with strong, reflecting silvery microtomentum. Metanotum not bulging. Posterior notopleural seta emerging on a conical process, higher on mesonotum, than anterior pair. One pair of scutellar setae.

Mid tibial ventroapical seta yellow, 0.14 mm long.

Wing brown fumose apically, veins brown. Costa with long thin cilia. Costal section between R2+3 and R4+5 0.40 mm, R4+5 – M 0.16 mm, intracrossvein section of M 0.23 mm, dM-Cu 0.12 mm.

Abdomen dark brown, basal two segments yellowish brown. Epandrium yellow.

Syntergosternite 7+8 (Figs 116–117) circularly fused, slightly asymmetrical, with a small cranial process near sagittal line, rather short ventrally. Surstyli (Figs 118–119) wholly symmetrical, sharply bipartite: basal part with rounded base and with an almost sharp edge, apical part long, slightly medially curved, but straight in broadest view. Phallus membranous. Hypandrial (genital) complex (Figs 120–121) symmetrical, hypandrium medium-long sagittally, gonopods small, in lateral view with a narrow cranial apex (Fig. 121). Phallapodeme short. Ejaculatory apodeme tripartite (Figs 122–123), in contrast to the bipartite ejaculatory apodeme of *Stenomicra* or *Podocera*.

A KEY FOR THE GENERA OF STENOMICRIDAE
(except *Planinasus*)

1. Metanotum bulging. Supra-alar seta lacking. No anal lobe of wing, alula indistinct. Anal cell and anal vein reduced. Female segment 6 with tergite and sternite separated 2

– Metanotum not bulging. Supra-alar seta present. Anal lobe of wing present, alula distinct. Anal cell and anal vein well developed. Female segment 6 with tergite and sternite fused to form a complete ring (female not known in *Stenocyamops*) 3

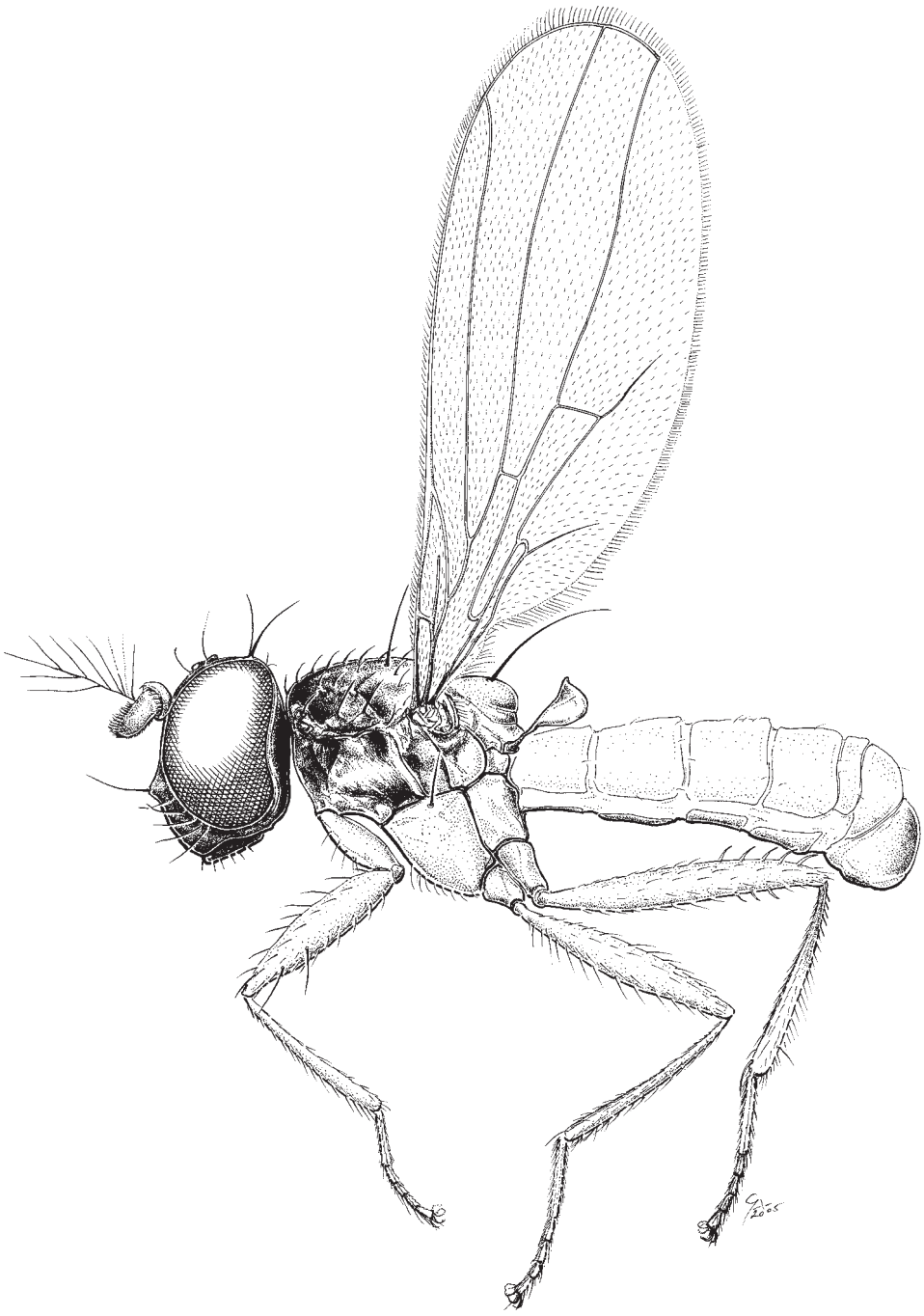
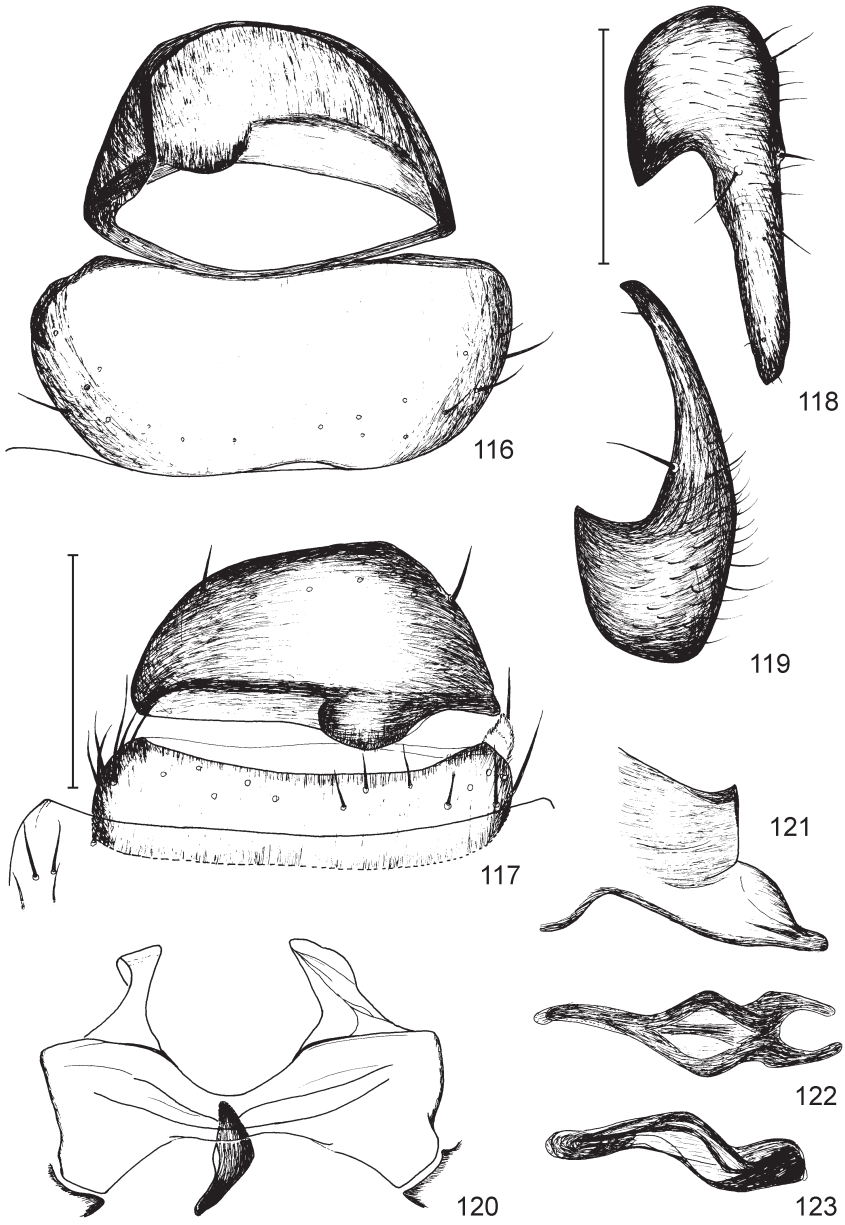


Fig. 115. *Stenocyamops thaii* sp. n., holotype male, habitus (del. A. SZAPPANOS)



Figs 116–123. *Stenocyamops thaii* sp. n., holotype male. 116–117 = pregenital abdominal sclerites: 116 = ventral view, 117 = dorsal view; 118 = surstylus, in broadest extension (epandrial insertion most dorsal), 119 = surstylus in a view perpendicular to basal part (epandrial insertion most ventral), 120 = hypandrial complex, dorsal view (phallus and ejaculatory apodeme omitted), 121 = cranial apex of hypandrial complex, lateral view, 122 = ejaculatory apodeme, dorsal view, 123 = same, lateral view. Scales: 0.2 mm for Figs 116–117, 0.1 mm for Figs 118–123

2. Two pairs of reclinate *ors*, anterior pair short and thinner. Facial genal setae shorter but more numerous. No postpronotal seta, posterior *np* far from suture. R2+3 – R4+5 section of costa much longer than R4+5-M section **Stenomicra** COQUILLETT

– Anterior pair of *ors* large and inclinate. Postpronotal seta present, posterior *np* only little higher on mesonotum than anterior one. R2+3 – R4+5 section of costa shorter than R4+5-M section **Podocera** CZERNY

3. Inner vertical seta absent. Face in profile shallowly arched. Hind tibia without a large ventroapical spur. Basal cross-vein present, cell *bm* distinct from *dm*. Abdominal sternites less broad. Male syntergosternite 7–8 fused on left side only. Male genitalia strongly asymmetrical, particularly so for surstyli. Ejaculatory apodeme very large **Cyamops** MELANDER

– Inner vertical seta present. Face in profile angulate. Hind tibia with a large ventroapical spur. Basal cross-vein lacking, cells *bm* and *dm* confluent. Abdominal sternites very broad. Male syntergosterite 7–8 fused circularly (Figs 116–117). Male genitalia almost completely symmetrical, surstyli completely so. Ejaculatory apodeme very small **Stenocyamops** L. PAPP, gen. n.

AULACIGASTRIDAE

There were no true aulacigastrids described from the Oriental region, until the HNHM 2003 expedition to Vietnam and Thailand, which resulted in four specimens of three species, which obviously represented a new genus. They were described most recently (RUNG *et al*. 2005). During our trip in 2004 we captured an additional specimen.

Curiosimusca maefangensis RUNG, MATHIS & PAPP, 2005 – 1 ♂: PF04/9. This is the first known male of the species.

SPHAEROCERIDAE

The sphaerocerid fauna of Thailand was formerly little known. No concrete record for them was in the CDO (HACKMAN 1977). As late as 1989 PAPP (1989*a*,*b*) described one species each of two genera: *Minocellina thaii* (L. PAPP, 1989) (now *Aptilotus thaii*) and *Pterogrammoides thaii* L. PAPP, 1989. Later HAYASHI (1990) described *Sphaerocera elephantis* from Chiang Dao. *Biroina burckhardti* L. PAPP, 1995 was described from Chiang Mai, Doi Suthep. Six paratypes

of *Poecilosomella affinis* HAYASHI, 2002 (p. 121) were described from Thailand. HAYASHI (2003) recorded *Lotophila nepalensis* HAYASHI, 1990 for the first time from Thailand. PAPP (2003) recorded *Achaetothorax malayensis* PAPP & NORRBOM, 1992 from Kaeng Krachan. HAYASHI & PAPP (2004) described three new species of *Lotobia* LIOY, 1864 also from Thailand (see below). The peculiar new genus of Copromyzinae, *Immoderatus* L. PAPP, 2004 was described most recently. The revision of the Oriental species of *Chaetopodella* DUDA, 1920 (actually the first record of the genus from the Oriental region) is published this year (HAYASHI & PAPP 2006) with two new species from Thailand (142 individuals). Finally, *Leptocera salatigae* (DE MEIJERE, 1914) and *L. sterniloba* ROHÁČEK, 1983 are listed in the World catalog (ROHÁČEK *et al*. 2001). All the other genera and species of Limosininae mentioned below are new for the fauna of Thailand.

Our new material is exceptionally rich. We selected and pinned 1988 sphaerocerid specimens in 2004. FÖLDVÁRI *et al*. collected nearly 700 specimens in 2003. All that material contains well over 100 species, about 70 of them seem to be new to science, incl. representatives of seven new genera.

SPHAEROCERINAE

Ischiolepta orientalis (DE MEIJERE, 1908) – 1 ♂ 1 ♀: PF04/37; 3 ♂ 2 ♀: PF04/43; 1 ♂: Trang Prov., Thung Khai Botanic G., on light, 12–16.11.2004, Orosz. It is a widespread Oriental species new to Thailand.

Ischiolepta sp. – 1 ♂: FSz03/25. It represents an extremely interesting new species, since it is related to *I. flava* (VANSCHUYTBROECK, 1951) from Zaire. The new species will be described in a separate paper.

Ischiolepta sp. – 1 ♀: FSz03/25. This is the smallest *Ischiolepta* specimen known to me. I described *I. minuscula* from Tanzania, but this female with its 1.02 mm long wing is even smaller. Being a female, its description as new would be premature.

Lotobia asiatica HAYASHI & PAPP, 2004 – 1 ♂: PF04/7. Though recently described, it is a widespread Oriental species.

Lotobia supraelegans HAYASHI & PAPP, 2004 – 1 ♀: PF04/4; 59 ♂ 21 ♀: PF04/5. It has been found on the dung of large hoofers in Nepal, India, Vietnam and Thailand, but mainly on elephant dung. The third species described from Thailand, *L. latipes* HAYASHI & PAPP, 2004, was not found in our material.

Sphaerocera elephantis HAYASHI, 1990 – 2 ♂ 4 ♀: PF04/5; 3 ♂: FSz03/25. It seems to be restricted to elephant dung.

COPROMYZINAE

Achaetothorax malayensis PAPP & NORRBOM, 1992 – 9 ♂ 13 ♀: PF04/5; 2 ♂: FSz03/25. Its description was based on two females. The first ♂ together with two ♀ were captured in the Kaeng

Krachan NP on fresh cattle dung (PAPP 2003). It is not abundant even on elephant dung, since the above specimens were selected from ca. 30000 specimens.

Immoderatus foldvarii L. PAPP, 2004 – 96 ♂ ♀: PF04/5 (plus its type series). Now it was captured in larger numbers very close to its type locality on elephant dung.

Metaborborus (M.) orientalis L. PAPP, 2003 – 66 ♂ 37 ♀: PF04/5; 2 ♂ 1 ♀: PF04/4; 1 ♂: PF04/32; 70 ♂ 27 ♀ (10 ♂ 5 ♀ in the NIIH): FSz03/25. It was described as the Oriental subspecies of *M. flavior* (VANSCHUYTBROECK, 1959), based on a single male from Nepal. Now I think, it deserves a species rank. It is common on elephant dung in Thailand (our specimens were selected from several hundreds of *M. orientalis* individuals captured there).

M. (Dudaborborus) saliens (DUDA, 1923) – 9 ♂ 25 ♀: PF04/5; 1 ♂: PF04/20; 3 ♂ 2 ♀: FSz03/25. It was described from Timor and hitherto known only from Timor and Malaysia. New to Thailand. After accumulating more material in *Dudaborborus*, it will be worth revising the specimens from the Asian continent and those from the Archipelago and other islands.

Norrbomia indica L. PAPP, 1988 – 27 ♂ 10 ♀: PF04/5; 1 ♂: PF04/7; 1 ♀: FSz03/25. A widespread Oriental species, known also from Thailand (ROHÁČEK *et al*. 2001).

Norrbomia marginatis (ADAMS, 1903) – 4 ♂ 2 ♀: PF04/5; 2 ♀: PF04/20; 4 ♂: FSz03/25. Widespread in the Old World tropical and subtropical areas, incl. Thailand (ROHÁČEK *et al*. 2001).

In addition to the above genera and species of the subfamily Copromyzinae, *Copromyza zhongensis* NORRBOM & KIM, 1985 was found in Vietnam (Sin Chai, "Legendary place", 15.11.2003, No. 6, along forest path & creek, leg. FÖLDVÁRI, PEREGOVITS, KŐRÖSI), thus its occurrence in Thailand is also expected. Four spp. of *Lotophila* have already been recorded from the Oriental region, so the representatives of the genus are also expected to occur in Thailand.

LIMOSININAE

Aspinilimosina sp. – This genus was described recently (PAPP 2004) including a species from Sri Lanka. 5 ♂ 3 ♀ of a *second* species, which will be described separately, were captured in Thailand.

Biroina burckhardti L. PAPP, 1995– 1 ♀: PF04/26. This female, which is from the type locality, seems conspecific with the holotype male.

Biroina spp. Six specimens of another three species were captured in Thailand.

Coproica ferruginata (STENHAMMAR, 1854) – 3 ♂ 1 ♀: FSz03/25; 1 ♂ 1 ♀: PF04/4. A common, almost cosmopolitan species, new to Thailand.

Coproica spp. More than 290 individuals, representatives of 6 or 7 species, incl. *C. rufifrons* HAYASHI, 1991. Our specimens were selected from several hundreds (or even, thousands) of individuals, which we captured first of all on elephant dung. However, it seems obvious, that while *Coproica* species dominate the dipterous populations on dung of large hoofers in the Palaearctic, other sphaerocerids are dominant there in the Oriental region (see below).

Elachisoma spp. Hitherto not recorded from the Oriental region (cf. ROHÁČEK *et al*. 2001). We have got 22 individuals from elephant, cattle and (possibly) buffalo dung. They represent probably four species (two of them close to *E. aterrimum* (HALIDAY), one sp. nr *E. pilosum* (DUDA)).

Leptocera spp. Several species (incl. *L. salatigae* DE MEIJERE, 1914 and *L. sterniloba* ROHÁČEK, 1983, which are listed in the World catalogue) represented by 128 specimens.

Minilimosina (Svarciella) spp. – ROHÁČEK & MARSHALL (1988) described ten Oriental species from Nepal and Malaysia. We captured 31 specimens, which will be published in a separate paper together with other Oriental materials preserved in the HNHM.

Minilimosina (Allolimosina) sp. – 1 ♀: PF04/35. It is the first representative of that subgenus from the Oriental region (cf. ROHÁČEK *et al*. 2001).

Opacifrons spp. We managed to collect a rich material of 139 individuals representing that genus.

Opalimosina spp. Ten specimens of four species from Thailand (one of them probably *O. pseudomirabilis* HAYASHI, 1989). A fifth species is from Vietnam.

Paralimosina spp. We seem to have a species rich material of the true *Paralimosina* species (52 indiv.).

Paralimosina eximia species group. 23 indiv. of several species. It seems obvious that these species do not belong to *Paralimosina* but to an undescribed genus. It is important to describe that in the near future, since these species are characteristic for the dung of large hoofers in the Oriental region (together with species of a related genus with unpaired mid tibial setae and with a subocular row of setae).

Philocoprella sp. 1 ♂ 1 ♀: PF04/25. Hitherto not recorded from the Oriental region (cf. ROHÁČEK *et al*. 2001). In the HNHM there are specimens also from Taiwan.

Phthitia (**Kimosina**) spp. In the HNHM there are three specimens of two species (Thailand 2, Vietnam 1). As far as I am informed, no representative of them has hitherto been reported from the continental part of the Oriental region.

Poecilosomella spp. Our collection in 2004 resulted in capturing 108 individuals, those in 2003 11 ones. They are representatives of 13 species. A paper is planned to publish in the near future with descriptions of seven new Oriental species (three of them from Thailand).

Pterogramma sp. – 1 ♀: PF04/28; 1 ♂: PF04/35; 1 ♂: PF04/36; 1 ♂ 1 ♀: PF04/43. We wholly agree with SMITH & MARSHALL's (2004) decision to confine the genus to species with a single fronto-orbital pair, etc. However, we seem to have a true *Pterogramma* from Thailand although it is advisable to study these specimens in the frame of a revision of the Oriental species excluded from *Pterogramma*.

"**Pseudopterogramma**" spp. Almost all the species described from regions other than the Neotropics, and a number of undescribed species from the Oriental region must be separated in a distinct, still undescribed genus (cf. SMITH & MARSHALL's 2004).

Pterogrammoides thaii L. PAPP, 1989 – 1 ♂: PF04/36. The types are from rather distant localities: Khao Sabap NP (Prov. Chanthaburi) and Kaeng Krachan NP (Prov. Phetchaburi). It was a surprise to find this flightless minute fly again. Our specimen was captured during a pouring rain along a path in a primary rain forest.

Pullimosina spp. Eleven specimens of two species. The extra-Holarctic species of the genus badly need a revision.

Rachispoda spp. Seventy individuals of several species are preserved from Thailand in the HNHM.

Spelobia (**Bifronsina**) spp. Seven indiv. of two species. There is at least one new Oriental species of the subgenus (also from Nepal).

S. (**Spelobia**) sp. The species of the true *Spelobia* are not so numerous in the Oriental than in the Holarctic region. However one specimen was found from Thailand and there are much more from Vietnam and Taiwan in the HNHM.

Spelobia dudai species group. sp. 1: 1 ♀: PF04/4; 1 ♀: PF04/6; 1 ♀: PF04/29; 1 ♂: FSz03/25; sp.2: 1 ♀: PF04/31. The first species must be a coprophagous one. There are species in several other

genera resembling to those of that species group. Their evenly medium-sized interfrontal setae and mid tibial chaetotaxy define them as true *Spelobia* species.

Spinilimosina spp. 106 specimens of several species. There is more than one undescribed new genus, which superficially resemble *Spinilimosina* in the Oriental region.

Telomerina sp. One male (PF04/4) belonging obviously to that genus was collected.

Terrilimosina sp. Only 1 indiv. from Thailand.

Trachyopella (**T.**) spp. 49 individuals of several species of the nominate subgenus.

Trachyopella (Insulomyia) spp. Thirty specimens of at least three species are preserved in the HNHM from Thailand.

Trachyopella (Nudopella) collinella (RICHARDS, 1946) – 18 ♂ 25 ♀: PF04/37. A widespread species (Oriental, Australasian and Oceanian) new to Thailand (cf. ROHÁČEK *et al*. 2001). Our specimens were captured on compost (rotten grass).

We have to note that a significant number of the sphaerocerid specimens from Thailand (more than 400 indiv.) belong to undescribed genera (which were not mentioned above).

HELEOMYZIDAE

In the CDO (HACKMAN 1977) six species of *Suillia* and two species of *Tephrochlamys* (under Heteromyzidae) were listed from the Oriental region, and there was no heleomyzid record from Thailand. OKADOME (1985*b*, p. 221) described *Suillia thaiensis* from Doi Suthep, Chiang Mai (Thailand). We do not know of any more heleomyzid record from the country and we did not capture any heleomyzid specimens.

SCATHOPHAGIDAE – B. MERZ

This family of mainly Holarctic distribution has its highest diversity in the northernmost parts of the Palaearctic and Nearctic Regions. It is therefore not surprising that the Scathophagidae are very poorly represented in the Oriental Region. Only 11 species (and only 4 of them named) are recorded in the CDO (VOCKEROTH 1977). A nice specimen of *Paralleloma* BECKER (using the key of DE JONG 1998) is the first species of this family recorded from Thailand. It is characterised by the apically darkened wing.

Paralleloma sp. – 1 ♂: N Thailand, 1720 m, Chiang Mai Province, Huai Nam Dang National Park, 18 km E of Pai, 22.X.2000, leg. B. MERZ & P. SCHWENDINGER (MHNG).

ANTHOMYIIDAE

In the CDO (ACKLAND & PONT 1977) *Anthomyia illocata* WALKER, 1856 and *Calythea limnophorina* (STEIN, 1915) were listed from Thailand. SUWA (2002, p. 167) described *Hylemya brevistyla* from Thailand. Although the Old World tropics are comparatively poor in anthomyiid species, the Thailand fauna must be more diverse than the published records indicate.

In 2004 we captured only one indiv., in 2003 six indiv.; they were not selected even to genera.

MUSCIDAE

In the CDO (PONT 1977) 56 spp. of 18 genera were listed: *Morellia* 1 sp., *Musca* (*Byomya*) 3 spp., *M*. (*Eumusca*) 3 spp., *M*. (*Musca*) 1 sp., *M*. (*Philaematomyia*) 1 sp., *M*. (*Ptilolepis*) 1 sp., *M*. (*Viviparomusca*) 2 spp., *Neomyia* 7 spp. (as *Orthellia*), *Pyrellia* 2 spp., *Hydrotaea* (as *Ophyra*) 1 sp., *Gymnodia* 2 spp., *Dichaetomyia* 5 spp., *Atherigona* (*Acritochaeta*) 1 sp., *Atherigona* (*A*.) 1 sp., *Graphomya* 1 sp., *Hebecnema* 1 sp., *Myospila* 3 spp., *Heliographma* 1 sp., *Limnophora* 2 spp., *Lispe* 6 spp., *Pygophora* 5 spp., *Haematobia* 2 spp., *Haematobosca* 1 sp., *Stomoxys* 3 spp. Of them only *Dichaetomyia nigridorsata* EMDEN, 1965 (p. 412) was described from Thailand.

After 1977 a good part of the extant Muscidae fauna of Thailand was made known. TUMRASVIN & SHINONAGA (1978, 1982) summarised and keyed the Muscidae fauna of Thailand in two papers: altogether they recorded 105 spp. Formerly they (TUMRASVIN & SHINONAGA 1977) keyed the species of *Musca* L. in the series of papers "Studies on medically important flies in Thailand". PONT (1977) described *Gymnodia tibiseta* (p. 355) from Thailand. In the same year SHINONAGA & KANO (1977) described *Musca asiatica* (p. 111), SHINONAGA & TUMRASVIN (1977) *Neomyia cuprea* (p. 125, as *Orthellia*). The papers of SHINONAGA & KANO (1989) (*Lispe siamensis*, p. 816) and SHINONAGA & TUMRASVIN (1978) included new species (*Morellia pseudonigrisquama*, p. 351, *Pyrellia ponti*, p. 353, *Pyrellia suchariti*, p. 352). The papers of SUCHARIT & TUMRASVIN (1981) and TUMRASVIN *et al*. (1978) included new records for the Thailand fauna.

Our material is rather diverse. In 2004 we captured, selected and pinned 266 indiv., in 2003 48 indiv. For lack of time they were not selected even to genera.

CALLIPHORIDAE

In the CDO (JAMES 1977) 18 spp. in of ten genera were listed (*Silbomyia* 1 sp., *Bengalia* 2 spp., *Hemipyrellia* 1 sp., *Hypopygiopsis* 1 sp., *Phumosia* 1 sp., *Chrysomya* 2 spp., *Cosmina* 2 spp., *Idiella* 3 spp., *Isomyia* 4 spp., *Rhinia* 1 sp.). Three of them were described from Thailand: *Silbomyia asiatica* CROSSKEY, 1965 (p. 80), *Isomyia facialis* JAMES, 1970 (p. 13), *Isomyia lugubris* JAMES, 1970 (p. 4).

After 1977 the calliphorid fauna of Thailand was intensively surveyed. For instance, in the series of papers "Studies on medically important flies in Thailand" TUMRASVIN *et al.* (1979) reported on 42 species of calliphorid flies. KURAHASHI & TUMRASVIN (1979) described *Chrysomya thanomthini* (p. 243, Doi Inthanon), TUMRASVIN & KANO (1977) described *Catapicephala kurahashii* (p. 127) and *C. michikoae* (p. 129). TUMRASVIN *et al*. (1977) recorded four *Lucilia* species new for the Thailand fauna. KURAHASHI & TUMRASVIN (1979) described six new calliphorid species from Thailand, later they (KURAHASHI & TUMRASVIN 1992) described three new species of the subfamily Rhiniinae. KURAHASHI (1995a, b) described two new species of *Dexopollenia* and three new *Cosmina* from Thailand.

We collected a well-preserved and species-rich material (55 indiv. in 2004, 14 indiv. in 2003), but for lack of expertise, they were not identified during this project.

SARCOPHAGIDAE – M. FÖLDVÁRI

In the CDO (LOPES *et al*. 1977) nine species in six genera were listed and two of them have been described from Thailand: *Sarcosolomonia shinonagai* KANO & SOOKSRI, 1977 (p. 234), *Sarcosolomonia (Parkerimyia) harinasutai* KANO & SOOKSRI, 1977 (p. 233). That work was given as "in press" in the CDO.

TUMRASVIN & KANO (1979) gave a list with 48 species that occur in Thailand. SHINONAGA & TUMRASVIN (1979) described a new genus *Kanomyia* from Thailand with type species *Kanomyia bangkokensis* (p. 136) together with the following species: *Pierretia melania* (p. 139), *Sarcorohdendorfia montana* (p. 141), *Sarcorohdendorfia multivillosa* (p. 142), *Sarcosolomonia aureomarginata* (p. 140), *Sarcosolomonia trifulcata* (p. 140).

PAPE (1989) described *Phylloteles argyrozogaster* (p. 197) as new species from Thailand. SCHWENDINGER & PAPE (2000) reported *Metopia sinensis* from Thailand. PAPE & BANZIGER (2000) described *Sarcophaga* (*Boettcherisca*) *krathonmai* (p. 204) and *Sarcophaga* (*Lioproctia*) *saprianovae* (p. 202) as new species from Thailand. PAPE & BANZIGER (2003) described three new species from

Thailand: *Sarcophaga* (*Sarcosolomonia*) *circa* (p. 50), *S. (Mehria) lanna* (p. 52) and *S.* (*Rosellea*) *suthep* (p. 52). BANZIGER & PAPE (2004) gave a list of 46 species that were collected during their studies and also list previously reported species, thus they give 67 as the total number of sarcophagid species in Thailand. KURAHASHI & SUKONTASON (2004) described a new species from Thailand: *Sinonipponia komi*.

Our material is not significant: we collected 12 specimens of Sarcophagidae in 2004 and one in 2003.

TACHINIDAE

In the CDO (CROSSKEY 1977) 33 spp. of 27 genera were listed (incl. some unnamed spp.) as follows:

Formicophania elegans TOWNSEND, 1916, *Hermya beelzebul* (WIEDEMANN, 1830), *H. micans* (WULP, 1881), *Lophosia angusticauda* (TOWNSEND, 1927), *Dexia divergens* WALKER, 1856, *Myostoma magnum* BARANOV, 1935, *Halidaya luteicornis* (WALKER, 1861), *Thelaira macropus* (WIEDEMANN, 1830), *Torocca munda* (WALKER, 1856), *Nemoraea grandis* (WALKER, 1852), *Ocypteromima* 1 sp. (unnamed), *Mikia patellipalpis* (MESNIL, 1952), *Servillia flavopilosa* (BIGOT, 1888), *S. ursinoidea* TOTHILL, 1918, *Peribaea orbata* (WIEDEMANN, 1830), *Trigonospila transvittata* (PANDELLÉ, 1896), *Urodexia penicillum* OSTEN SACKEN, 1882, *Euthelairosoma siamense* BARANOV, 1938 ("unplaced species of Blondeliini"), *Eozenillia* (unnamed sp.), *Exorista ladelli* (BARANOV, 1936), *Argyrophylax fumipennis* (TOWNSEND, 1926), *Carcelia* (*C.*) *iridipennis* (WULP, 1893), *C.* (*Senometopia*) *albosericea* (MESNIL, 1953), *Blepharipa zebina* (WALKER, 1849), *Drino argenticeps* (MACQUART, 1851), *D. facialis* (TOWNSEND, 1928), *Palexorista lucagus* (WALKER, 1849), *P. ophirica* (WALKER, 1856), *P. solennis* (WALKER, 1858), *Pseudogonia rufifrons* (WIEDEMANN, 1830), *Nealsomyia rufella* (BEZZI, 1925), unplaced species of Eryciini: *anomala* VILLENEUVE, 1929. Of them *Formicophania elegans* TOWNSEND, 1916 (p. 323), *Euthelairosoma siamense* BARANOV, 1938 (p. 411) and *Exorista ladelli* (BARANOV, 1936) (p. 108) were described from Thailand.

After 1977, SUN & MARSHALL (2003) described species and published new records also from Thailand in their monographic revision of *Phasia*. In a series of taxonomic papers H. SHIMA (1979, 1983, 1986, 1987, 1995, 1998, and SHIMA & CHAO 1988) described several new species of Tachinidae from Thailand (*Blondelia vibrissina* SHIMA, 1983 (p. 644, Doi Inthanon), *Linnaemyia atrisetosa* SHIMA, 1986 (p. 67), *L. kanoi* SHIMA, 1986 (p. 48), *L. persimilis* SHIMA, 1986 (p. 82), *L.*

ruficauda SHIMA, 1986 (p. 49), *L. siamensis* SHIMA, 1986 (p. 44), *Dexiomimops curtipes* SHIMA, 1987 (p. 94), *Crosskeya assimilis* SHIMA & CHAO, 1988 (p. 356), *C. longicornis* SHIMA & CHAO, 1988 (p. 354)).

Our material is not large: 29 indiv from 2004 and 15 indiv. from 2003.

OESTRIDAE

In connection with a human external ophthalmomyiasis, NACAPUNCHAI *et al*. (1998) recorded *Oestrus ovis* (LINNAEUS) from Thailand.

HIPPOBOSCIDAE

In the CDO (MAA 1977) 27 species in 8 genera were listed from Thailand (*Icosta* (*Ardmoeca*) 2 spp. *I*. (*Icosta*) 8 spp., *I*. (*Ornithoponus*) 3 spp., *Ornithoica* (*Lobolepis*) 4 spp., *Ornithomyia* 2 spp., *Ornithophila* 1 sp., *Phthona* 2 spp., *Pseudolynchia* 2 spp., *Hippobosca* 1 sp., *Lipoptena* 2 spp.). Of them, ten spp. were described from Thailand: *Icosta* (*Ardmoeca*) *macclurei* MAA, 1969 (p. 194), *I*. (*Icosta*) *bucerotina* MAA, 1969 (p. 133), *I*. (*I*.) *corvina* MAA, 1969 (p. 128), *I*. (*I*.) *elbeli* MAA, 1969 (p. 101), *I*. (*I*.) *fenestella* MAA, 1969 (p. 109), *I*. (*I*.) *tarsata* MAA, 1969 (p. 103), *I*. (*Ornithopponus*) *sensilis sensilis* MAA, 1969 (p. 74), *Ornithoica* (*Lobolepis*) *curvata* MAA, 1963 (p. 15), *Phthona leptoptera* (MAA, 1963) (p. 168), *Phthona modesta* (MAA, 1963) (p. 166).

We did not capture any hippoboscids.

NYCTERIBIIDAE

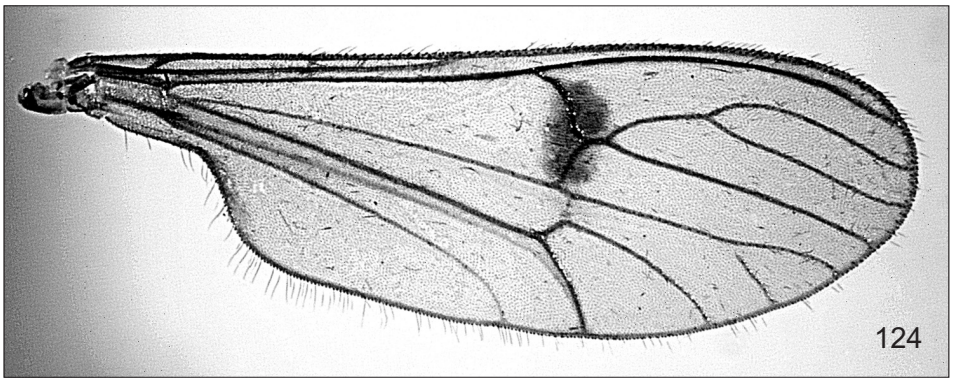
In the CDO (MAA 1977) six genera with 15 spp. were listed (*Cyclopodia* 1 sp., *Eucampsipoda* 3 spp., *Leptocyclopodia* 3 spp., *Basilia* (*B*.) 2 spp., *B*. (*Paracyclopodia*) 2 spp., *Penicillidia* 1 sp., *Phthiridium* 3 spp.). Of them *Leptocyclopodia* (*L*.) *thaii* MAA, 1968 (p. 11), *Basilia* (*B*.) *benkingi* MAA, 1968 (p. 25), *B*. (*Paracyclopodia*) *chlamydophora* (SPEISER, 1903) (p. 123), *Penicillidia actedona* THEODOR (1967) (p. 379), *Phthiridium burmense siamense* (THEODOR, 1967) (p. 143) and *Phthiridium maximum* (THEODOR, 1967) (p. 155) were described from Thailand. PAKARUSEREE (1979, 1980) published host records and species list of the nycteribiids and streblids collected on bats in Thailand, but we do not know his papers.

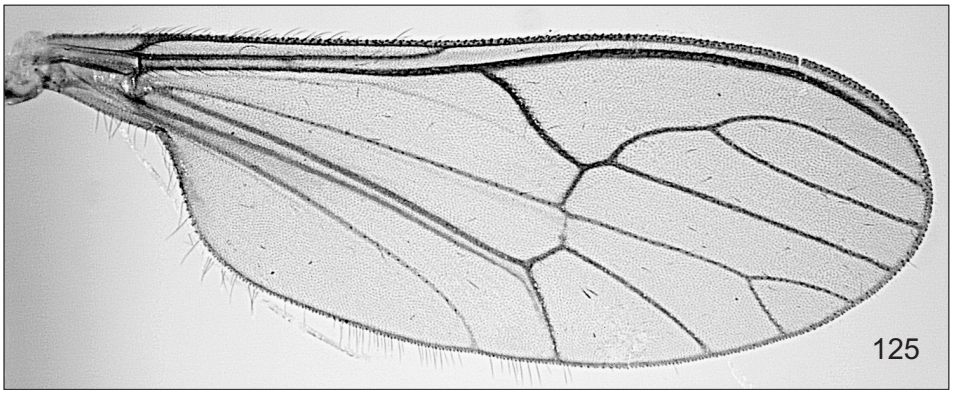
For lack of special collecting techniques we did not capture any specimen.

STREBLIDAE

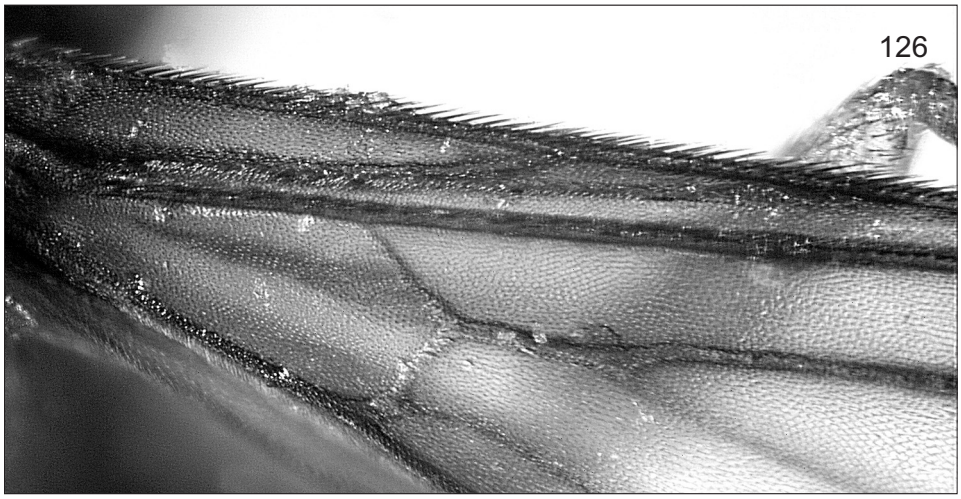
Ascodipteron siamense SPEISER, 1903 (p. 125) was described from Thailand, and other four spp., *Brachytarsina* (*B.*) *amboinensis* RONDANI, 1878, *B.* (*B.*) *falcozi* (JOBLING, 1934), *Megastrebla* (*M.*) *parvior parvior* (MAA, 1962) and *Raymondia pseudopagodarum* JOBLING, 1951, were recorded (CDO, MAA 1977).

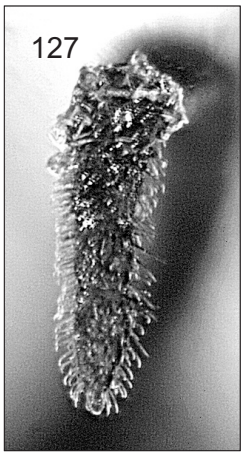
We did not capture any streblid specimens.



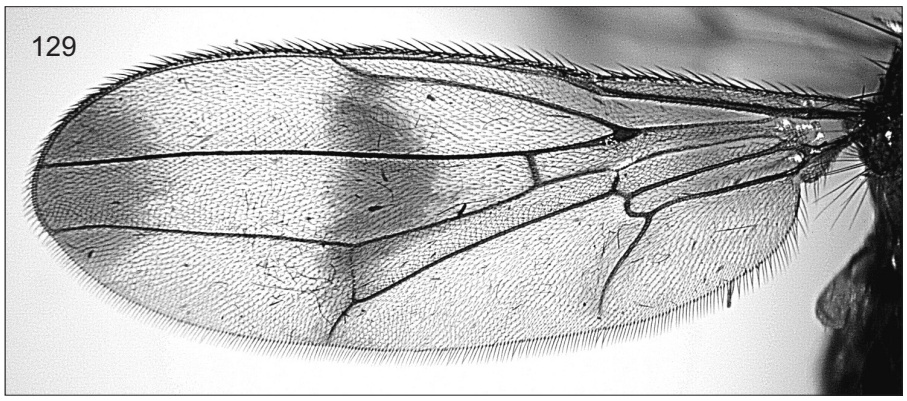


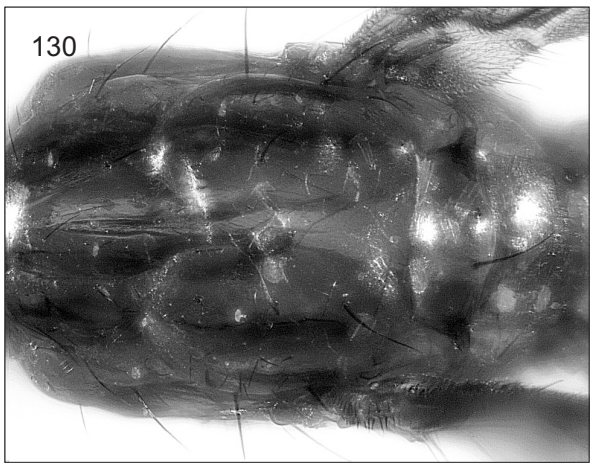
Figs 124–125. *Asiodixa* spp., wings .124 = *A. maculosa* sp. n.; 125 = *A. pura* sp. n.

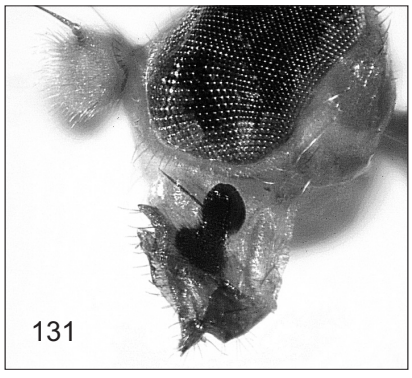




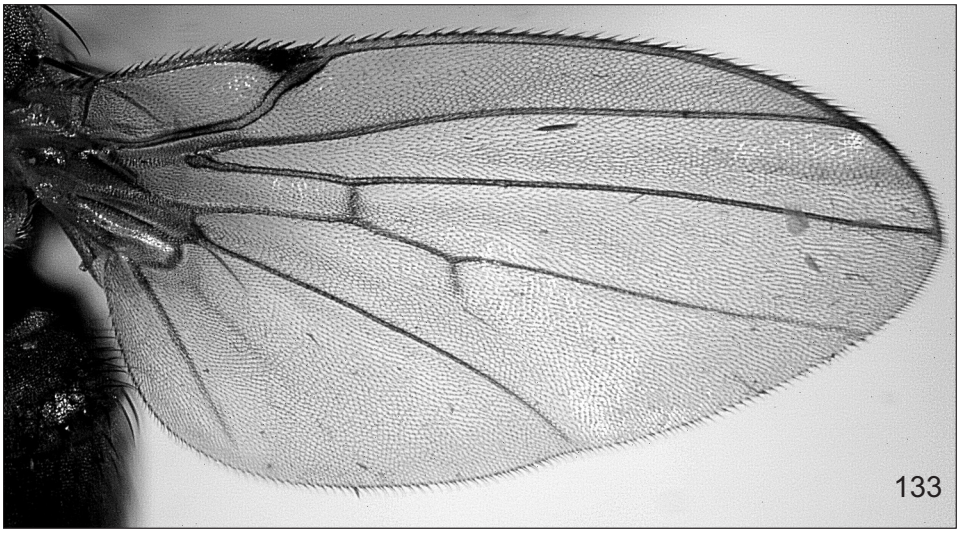
Figs 126–128. *Biscubcosta oligoneura* sp. n., holotype. 126 = base of right wing, 127 = apical half of left wing, 128 = apex of flagellums

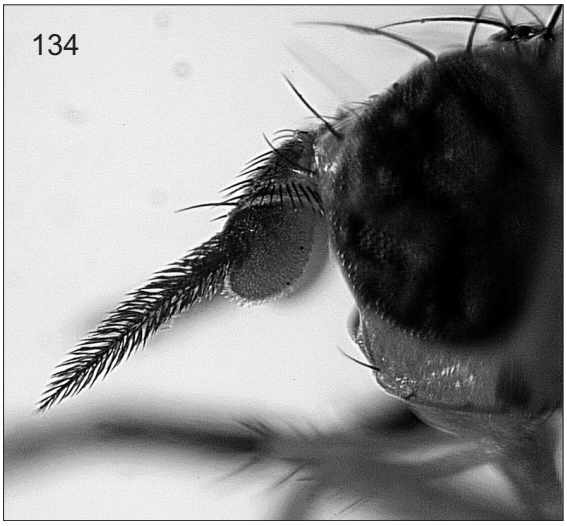


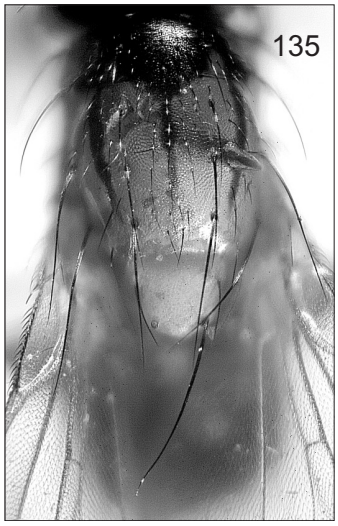




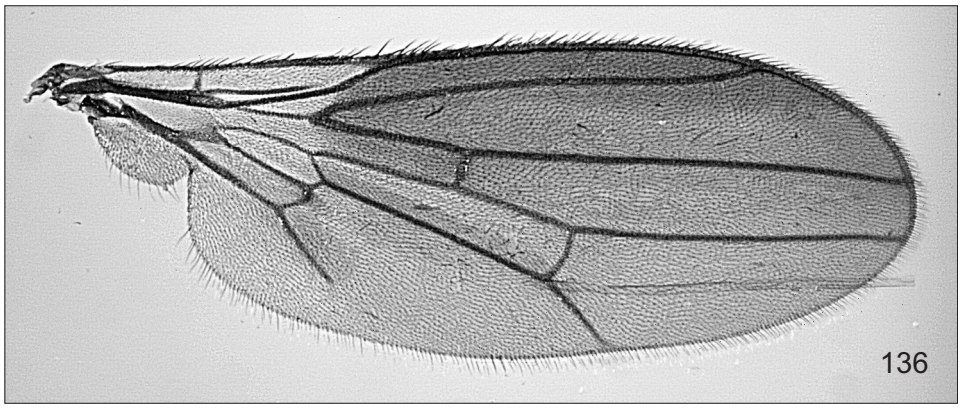
Figs 129–132. *Strongylophthalmia* spp. 129–130 = *S. dorsocentralis* sp. n., holotype female: 129 = wing, 130 = mesonotum dorsally; 131 = *S. palpalis* sp. n., male palpus, lateral, 132 = *S. punctata* HENNIG, male antenna, lateral

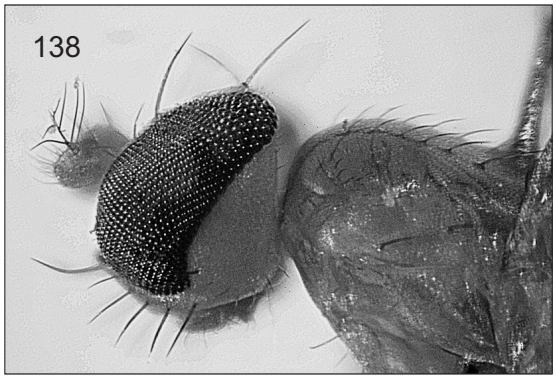






Figs 133–135. 133 = *Odinia thaii* sp. n., holotype male, left wing from below. 134–135 = *Aldrichiomyza iwasai* sp. n., holotype female: 134 = antenna, lateral, 135 = mesonotum, dorsal view





Figs 136–139. 136 = *Cyamops fumipennis* sp. n. wing; 137 = *Stenomicra flava* sp. n., holotype male, head laterally; 138 = *Podocera claripennis* sp. n., holotype male, head, lateral view, 139 = *Podocera variegata* sp. n., holotype female, abdomen, dorsal view

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