On the linyphiid spiders from Thailand and West Malaysia
(Arachnida: Aranei: Linyphiidae)

О пауках-линфицидах из Таиланда и Западной Малайзии
(Arachnida: Aranei: Linyphiidae)

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ABSTRACT. The linyphiid spiders from Thailand and West Malaysia kept at the Muséum d’histoire naturelle de Genève are studied. Three new genera and nine new species are described: Aperturina gen.n. (the type species: A. paniculus sp.n.), Apophygone gen.n. (the type species: A. simplex sp.n.), Lamellasia gen.n. (the type species: L. mirabilis sp.n.), Asiagone siama sp.n., Batueta baculum sp.n., Nasoonaria magna sp.n., Oedothorax converter sp.n., Theoa elegans sp.n., and T. longicrusa sp.n. Twelve linyphiid species are recorded as new to the fauna of Thailand: Atypena cirrifrons (Heimer, 1984), Batueta voluta Locket, 1982, Erigone prominens Bösenberg et Strand, 1906, Hylyphantes graminicola (Sundevall, 1830), “Linyphia” chiridota (Thorell, 1895), Microbathyphantes palmarius (Marples, 1955), Nasoonaria crucifera (Thorell, 1895), Nasoonaria sinensis Wunderlich et Song, 1995, Neriene oxycera Tu et Li, 2006, Parameioneta spicata Locket, 1982, Tapinopa varia Locket, 1982 and Theoa tricaudata (Locket, 1982). Three linyphiid species, Gongylidioides pectinatus Tanasevitch, 2011, Nasoonaria crucifera and Plectembolus quinqueflectus Millidge et Russell-Smith, 1992, are newly recorded from West Malaysia. Based on the new data, the spider faunas of Thailand and West Malaysia are known to contain 43 and 24 linyphiid species, respectively.

Introduction

The linyphiid faunas of Thailand and West Malaysia are among the best studied ones in continental SE Asia, comprising 22 and 19 species respectively. Such a relative progress is mostly due to the studies by Locket [1982], Millidge & Russell-Smith [1992] and Millidge [1995], who in total have described some 30 new taxa of Linyphiidae from the area at hand. Recently, a new paper on the Laotian linyphiids describing two new genera and six species has been published [Tanasevitch, 2014]. Some of the species described in the latter paper also occur in Thailand and Malaysia, which is understandable due to geographical closeness of the territories studied and a high vagility of the group.

Studies on the SE Asian linyphiids still proceed at the alpha-taxonomy level (descriptions of new species and genera), though it is already clear that the regional fauna of this basically boreal group is in fact extraordi-
narily rich and peculiar. Many taxa of the Oriental linyphiids possess the amazingly complex structure of copulative apparatus, as well as diverse forms and sizes of the genital sclerites. Therefore, it is rather difficult to compare them to similar or related taxa from the neighboring Palearctic fauna, resulting in descriptions of numerous new monotypic genera. At the same time, the poor knowledge of SE Asian linyphiids allows one to suspect that due to the finding of new species from both the mainland and insular parts of the vast Oriental Region the monotypic genera will become at least oligotypic ones, and the connections of this evidently autochthonous aboriginal fauna with those of other large zoogeographic regions will become clearer.

This is the second paper of mine on the SE Asian linyphiids devoted to the fauna of Thailand and West Malaysia. The aim is to describe three monotypic genera and nine new species. As a result, two of the previously described monotypic genera have become oligotypic ones: viz., *Asiagone* Tanasevitch, 2014 and *Nasoonaria* Wunderlich et Song, 1995.

**Material and methods**

This paper is based on the material collected from Thailand and West Malaysia that is kept at the Museum d’histoire naturelle de Genève, Switzerland (MHNG). If not mentioned otherwise, the material is deposited in the MHNG; some paratypes and non-types are placed to the collection of the Zoological Museum of the Moscow State University, Moscow, Russia (ZMMU). Sample numbers are given in square brackets.

The terminology of copulatory organs for Erigoninae mainly follows that of Tanasevitch [1998, 2014] and Hormiga [2000], the one for Micronetineae follows that of Saaristo & Tanasevitch [1996].

The chaetotaxy of Erigoninae is given in a formula, e.g., 2.2.1.1, which refers to the number of dorsal spines on tibiae I–IV. In Micronetineae, the chaetotaxy is given in a different formula, e.g., TII: 2-1-1-2(1), which means that tibia I has two dorsal spines, one pro-, one retrolateral spine, and two or one ventral spine (the apical spines are disregarded). The sequence of leg segment measurements is as follows: femur + patella + tibia + metatarsus + tarsus. All measurements are given in mm. Scale lines in the figures correspond to 0.1 mm unless indicated otherwise.

The following abbreviations are used in the text and figures: a.s.l. — above sea level; C — convexus; Co — column; Cy — cymbium; D — duct; DC — distal apophysis of convexus; DSA — distal suprategular apophysis; E — embolus; EG — entrance grooves; EP — embolus proper; Fe — femur; FD — fertilization duct; FG — Fickert’s gland; L — lamella caracteristica; MHNG — Muséum d’histoire naturelle, Geneva, Switzerland; MM — median membrane; Mt — metatarsus; N.P. — National Park; P — paracymbium; PMP — posterior median plate; Ps — proscape; Pt — patella; R — radix; Re — receptacula; St — stretcher; TA — terminal apophysis; Ti — tibia; TP — tail piece of embolus; TmI — relative position of trichobothrium on metatarsus I; ZMMU — Zoological Museum of the Moscow State University, Moscow, Russia; WSC — World Spider Catalog.

**Results**

*Aperturina* gen.n.

**TYPE SPECIES:** *Aperturina paniculus* sp.n.

**ETYMOLOGY.** The genus name refers to the large epigynal aperture; the gender is feminine.

**DIAGNOSIS.** The new Erigoninae genus is diagnosed by the peculiar structure of copulatory organs in both sexes, as well as by the micronetine-type of chaetotaxy. The male is distinguished by a combination of the following characters: the narrowed distal part of cymbium, the presence of the convexus and the long, whip-shaped embolus; by the specific shape of small paracymbium, as well as by the hypertrophied panicle-shaped median membrane. The female is diagnosed by the large fringed aperture, as well as by the narrow coiled receptacula.

**DESCRIPTION.** Medium-sized erigonines, total length 1.55–1.73. Male carapace somewhat modified, cephalic part slightly elevated, sulci present, eyes normal. Chelicerae weak, without mastidion. Chaetotaxy: all tibiae with two dorsal spines; in addition, tibia I with one pro- and one retrolateral spines, tibia II with a retrolateral spine; spines long and strong. Metatarsi spineless. Each of MtI–III with a trichobothrium. TmI, 0.25–0.30. Palpal tibia small, unmodified. Distal part of cymbium much narrower than its proximal part. Paracymbium small, simple, pockets absent. Tegulum enlarged, swollen. Distal suprategular apophysis relatively large, of irregular shape. Median membrane panicle-shaped, transparent, well protruding outside palp. Embolus thin and long, whip-shaped. Convexus present. Epigyne with the large, shallow, triangular aperture surrounded by a sclerotized swelling interrupted laterally in some places. Abdomen grey to pale grey, without clear dorsal pattern.

**SPECIES INCLUDED.** Only the type species.

**TAXONOMIC REMARKS.** At present, it is not possible to assign the type species to any of the existing genera. Yet, it is unique amongst the typically erigonine genera having the micronetine-type of chaetotaxy such as that of *Improphantes* Saaristo et Tanasevitch, 1996, *Palliduphantes* Saaristo et Tanasevitch, 2001, *Tchakalophantes* Tanasevitch, 2001, etc. Only a few Erigoninae genera actually possess a prolateral spine on TiI, e.g., *Asthengaroides* Eskov, 1993, *Carorita* Duffey et Merrett, 1963, *Holminaria* Eskov, 1991, *Karita* Tanasevitch, 2007, *Schistogyna* Millidge, 1991, etc., but none of them has retrolateral spine(s) on TiI and/or TiII. A transformation of the median membrane into the remarkable structure resembling a panicle also seems to be a unique phenomenon.

**DISTRIBUTION.** Thailand and West Malaysia.
Aperturina paniculus sp.n.
Figs 1–7, 22, 23.

HOLOTYPE: ♂, WEST MALAYSIA, Perak, Taiping, Maxwell Hill, 1320 m a.s.l., 11.XII.1997, leg. P. Schwendinger.
PARATYPES: 3 ♀♂, 1 ♀, collected together with holotype; 2 ♀♀, Perak, Maxwell Hill, Taiping, 1200 m a.s.l., 5.I.1991, leg. P. Schwendinger; 1 ♂, Maxwell Hill, 10 km E of Taiping, 1200 m a.s.l., 4°52′N 100°49′E, 22.XII.2004, leg. A. Schulz [sample AS-04/25]; 1 ♂, 2 ♀♀, Lake Kenyir, 50 km SW of Kuala Terengganu, 5 km SW of dam, 4°58′N 102°49′E, 300–400 m a.s.l., 8.VII.2001, leg. A. Schulz & K. Vock; 1 ♂, 1 ♀, Pahang, Pulau Tioman, Gunung Kajang, 600–1000 m a.s.l., 2°46′N 104°09′E, 22.VIII.2004, leg. A. Schulz [sample AS-04/06]; 1 ♂, THAILAND, Ranong Prov., Kapoe Dist., Khlong Nakha Wildlife Sanctuary, E of Kampuan, near Phya Nak Waterfall, 600 m a.s.l., 5.XII.1997, leg. P. Schwendinger.

ETYMOLOGY. From the Latin noun meaning “panicel”, referring to the peculiar shape of the median membrane.

DIAGNOSIS. See above, under the generic diagnosis.

DESCRIPTION. Male (paratype from Perak, Maxwell Hill). Total length 1.70. Carapace 0.75 long, 0.65 wide, yellowish-grey. Cephalic part slightly elevated. Chelicerae weak, unmodified, 0.33 long. Legs pale brown. Leg I, 2.79 long (0.78+0.15+0.68+0.50), IV, 2.62 long (0.73+0.18+0.68+0.65+0.38). Chaetotaxy: TiI: 2-1-1-0, TiII: 2-0-1-0, TiIII–IV: 2-0-0-0, length of spines about 2–2.5 diameter of segment. Metatarsi I–IV spinless. Metatarsi I–III with a trichobothrium each. Tml, 0.29. Palp (Figs 1–7): Palpal tibia small, unmodified. Cymbium abruptly narrows in its middle part and then still remains narrow. Proximal part of paracymbium is much wider than its distal part. Distal suprategular apophysis with two claw-shaped apophyses medially, it distal part bends at 90º, slightly widened. Each of Mt I–III with a trichobothrium. TmI, 0.29. Abdomen 1.00 long, 0.70 wide, grey. Epigyne with a semicircular plate, entrance shaped tailpiece, embolus very long, coiled, almost transparent. Epigyne with a semicircular plate, entrance ducts straight, receptacula relatively small, oval. Abdomen pale, dorsal pattern absent.

TAXONOMIC REMARKS. According to Merrett [1963], the strong development of distal suprategular apophysis is a characteristich feature of the Savignia genus-group, specifically of Dactylopisthes Simon, 1884. However, the new genus, besides the hypertrophied distal suprategular apophysis, has nothing in common (including the chaetotaxy formula) with any genus of this group. The taxonomic position of Apophygone gen.n. and its relations within the subfamily Ergoninae remain obscure.

DISTRIBUTION. Thailand.

Apophygone simpulum sp.n.
Figs 8–13, 24, 25.

HOLOTYPE: ♂, THAILAND, Tak Prov., road from Mae Sot to Umphang, mountains N of Umphang, evergreen hill forest, 1250 m a.s.l., 10.II.1993, leg. P. Schwendinger.
PARATYPES: 6 ♂♂, 12 ♀♀, collected together with holotype; 2 ♀♂, 1 ♀, Chiang Mai Prov., Maeng Distr., Huay Nam Dang, 1400 m a.s.l., off the road Mae Taeng to Pai, 17.XII.1990, leg. P. Schwendinger; 1 ♂, 3 ♀♀, Fang Distr., Doi Angkhang, Ban Luang, 1600 m a.s.l., 2.XII.1990, leg. P. Schwendinger; 3 ♂♂, Doi Angkhang, 1650 m a.s.l., 22.IV.1987, leg. P. Schwendinger; 2 ♂♂, 4 ♀♀, Doi Angkhang, 1500 m a.s.l., 20.III.1987, leg. P. Schwendinger; 2 ♂♂, 3 ♀♀, Chiang Dao Distr., Doi Chiang Dao, Huay Mae Kok, 1500 m a.s.l., 27.I.1996, leg. P. Schwendinger; 2 ♂♂, 3 ♀♀, Chiang Dao Distr., Doi Chiang Dao, Huay Mae Kok, 1500 m a.s.l., 27.I.1996, leg. P. Schwendinger; 2 ♂♂, 4 ♀♀, Nan Prov., Doi Wao, 1908′12.77′N 100°38′28.8′E, 1380–1550 m a.s.l., evergreen hill forest, W of Tha Wang Pha, 17–18. XII.2002, leg. P. Schwendinger [sample TH-02/21]; 2 ♂♂, 1 ♀, Phetchabun Prov., Nam Nao N.P., 850 m a.s.l., 14.IX.1990, leg. P. Schwendinger; 1 ♂♂, Mae Hong Son Prov., Ban Maea Microwave, ca. 30 km S of Mae Hong Son, 1250 m a.s.l., 9.X.1990, leg. P. Schwendinger; 1 ♂, same locality, 15.XII.1990, leg. P. Schwendinger; 1 ♂♂, Nakorn Rat Chasima Prov., Pak Chong Distr., Khaoyai N.P., 750–830 m a.s.l., 26.XI–3.XII.1985, leg. D. Burckhardt & I. Löbl [sample No.28]; 5 ♂♂, 7 ♀♀ (ZMMU), Nakorn Rat Chasima Prov., Pak Chong Distr., Khaoyai N.P., Khao Kheo, 1020 m a.s.l., 24.XII.1992, leg. P. Schwendinger; 1 ♂♂, Nakorn Rat Chasima Prov., Pak Chong Distr., Khaoyai N.P., near headquarters, 750–
Figs 1–7. *Aperturina paniculus* sp.n. (♂ paratype from Maxwell Hill, W. Malaysia): 1, 2 — right palp, retro- and prolateral view, respectively; 3 — cymbium, paracymbium and tibia, dorsal view; 4 — paracymbium; 5 — distal suprategular apophysis; 6, 7 — embolic division, different aspects.

Рис. 1–7. *Aperturina paniculus* sp.n. (♂ паратип из Maxwell Hill, Зап. Малайзия): 1, 2 — правая пальпа, ретро- и пролатерально, соответственно; 3 — цимбium, парацимбиум и голень, вид сверху; 4 — парацимбиум; 5 — дистальная супратегулярная апофиза; 6, 7 — эмболюсный отдел, разный аспект.
On the linyphiid spiders from Thailand and West Malaysia

Figs 8–13. Apophygone simpulum sp.n. (♂ paratype from Khao Yai N.P.): 8 – carapace, lateral view; 9 – left palp, retrolateral view; 10 – palpal tibia, dorsal view; 11 – distal suprategular apophysis, prolateral view; 12 – embolic division; 13 – distal suprategular apophysis and embolic division.

Рис. 8–13. Apophygone simpulum sp.n. (♂ паратип из Khao Yai N.P.): 8 — карапакс, вид сбоку; 9 — левая пальпа, ретролатерально; 10 — голень пальпы, вид сверху; 11 — дистальная супратегулярная апофиза, пролатерально; 12 — эмбольсный отдел; 13 — дистальная супратегулярная апофиза и эмбольсный отдел.

850 m a.s.l., sifting in vegetation debris, 26.XI.–3.XII.1985, leg. D. Burckhardt & I. Löbl [sample No.28b].

ETYMOLOGY. From the Latin noun meaning “ladle”, referring to the peculiar shape of the distal suprategular apophysis.

DIAGNOSIS. See above, under the generic diagnosis.

DESCRIPTION. Male (paratype from Umphang).

850 m a.s.l., sifting in vegetation debris, 26.XI.–3.XII.1985, leg. D. Burckhardt & I. Löbl [sample No.28b].

ETYMOLOGY. From the Latin noun meaning “ladle”, referring to the peculiar shape of the distal suprategular apophysis.

DIAGNOSIS. See above, under the generic diagnosis.

Total length 1.33. Carapace 0.63 long, 0.50 wide, pale brown. Cephalic part elevated, sulci long and narrow, eyes normal (Fig. 8). Chelicerae weak, unmodified, 0.18 long. Legs yellow. Leg I, 1.70 long (0.50 + 0.20 + 0.35 + 0.35 + 0.30), IV, 1.81 long (0.50 + 0.18 + 0.45 + 0.38 + 0.30) Chaetotaxy 1.1.1.1, length of spines about
a diameter of segment. Metatarsi I–III with a trichobothrium each. TmI, 0.40. Palp (Figs 9–13): Tibia elongated, cone-shaped, with a few small denticles apically. Paracymbium simple, L-shaped. Distal suprategular apophysis proximally long and narrow, distally with a cap-like expansion bearing almost transparent pointed spikes of different sizes, and a strong claw-shaped apophysis on the lower part of expansion. Embolic division: radix with a hook-shaped tailpiece, embolus very long, almost transparent, forming a wide loop. Abdomen 0.78 long, 0.48 wide, grey.

Female (paratype from Umphang). Total length 1.40. Carapace 0.65 long, 0.50 wide, unmodified. Chelicerae 0.28 long. Leg I, 1.83 long (0.53 + 0.18 + 0.48 + 0.36 + 0.28), IV, 1.92 long (0.58 + 0.18 + 0.48 + 0.38 + 0.30). Chaetotaxy as in male, length of spines about 1–1.5 diameter of segment. Metatarsi I–III with a trichobothrium. TmI, 0.44. Abdomen 0.80 long, 0.53 wide, grey. Epigyne (Figs 24, 25) with semicircular plate, entrance ducts straight, receptacula small, almost spherical.

**TAXONOMIC REMARKS.** See above, under remarks to the genus.

**DISTRIBUTION.** Seems to be widespread in northern and northeastern Thailand.

**ASIAGONE SIAMA SP. N.**

Figs 14–21, 26–28.

**HOLOTYPE:** ♂, THAILAND, Chumphon Prov., near border Lang Suan – Phato Distr., Khao Kai Jae Waterfall, 9°55′30″N 98°56′33.77″E, 80 m a.s.l., semi-evergreen rainforest, 21–22.VIII.2004, leg. P. Schwendinger [sample TH-04/04].

**PARATYPES:** 2 ♀♂, Tak Prov., Doi Musoe, 950 m a.s.l., pitfall traps, 18.IX.1990, leg. P. Schwendinger; 1 ♂, Chiang Mai Prov., Chomthong Distr., Doi Inthanon, 1300 m a.s.l., 6.XI.1985, leg. P. Schwendinger; 1 ♂, Chiang Mai Prov. and Distr., Doi Suthep, 1180 m a.s.l., pitfall traps, 30.V.–2.VII.1986, leg. P. Schwendinger; 1 ♂ (ZMMU), Doi Suthep, 1150 m a.s.l., 17.XI.1987, leg. P. Schwendinger; 4 ♀♂, same locality, 30.III.–28.IV.1987, leg. P. Schwendinger; 4 ♀♂, same locality, 28.IV.–30.V.1987, leg. P. Schwendinger; 1 ♂, Doi Suthep, pitfall traps, 1250 m a.s.l., 15.IX.1986, leg. P. Schwendinger; 2 ♀♂ (ZMMU), Doi Suthep, 1150 m a.s.l., 17.XI.1987, leg. P. Schwendinger; 1 ♂, Doi Suthep, pitfall traps, 1155 m a.s.l., 10.I.–11.I.1997, leg. P. Schwendinger; 1 ♂, Doi Suthep, below Tham Rusee, 18°48′18″N 98°55′52″E, 1090 m a.s.l., evergreen hill forest, 13.II.2011, leg. P. Schwendinger [THMY-10/10]; 1 ♂, Pai Distr., Pang Mapha, 830 m a.s.l., KM 133.2 on road Pai — Mae Hong Son, 13.X.1995, leg. P. Schwendinger; 1 ♂, Chiang Rai Prov., Mae Chan, 530 m a.s.l., secondary forest along a stream, 24.X.1991, leg. P. Schwendinger; 1 ♂, Mae Sai Distr., Doi Tung, pitfall traps, 1160 m a.s.l., 17.XII.1992, leg. P. Schwendinger.

**ETYMOLOGY.** The species name is a noun in apposition, referring to Siam, the old name of Thailand.

**DIAGNOSIS.** The new species is distinguished by the absence of the specific “flag-shaped” chitinous outgrowth of the embolus which is present in the two known congeneres, and by the presence of the short thread-like part of the embolus in the male, as well as by the totally covered aperture of the epigyne in the female.

**DESCRIPTION.** Male (paratype from Doi Suthep). Total length 1.98. Carapace 0.90 long, 0.78 wide, with a postocular gently sloping elevation, pits absent, pale brown. Chelicerae unmodified, 0.38 long. Legs pale brown. Leg I, 3.90 long (1.05 + 0.25 + 1.00 + 0.95 + 0.65), IV, 3.61 long (1.00 + 0.25 + 0.98 + 0.88 + 0.50). Chaetotaxy 2.2.1.1, length of spines about 2–3 diameters of segment. All metatarsi with a trichobothrium. TmI, 0.38. Palp (Figs 14–21): Tibia unmodified, short, rounded. Paracymbium L-shaped, with a small tubercle in middle part. Distal suprategular apophysis highly sclerotized, curved, abruptly truncated apically. Radial part of the embolic division very small, rounded.

Convector highly developed, flat, its outer margin bent and forming a gutter which sheathing distal part of embolus. Distal part of convector (DC in figs) claw-shaped. Embolus long and thick, forming a loop, partly embedded in convector. Thread-like part of embolus short. Abdomen 1.00 long, 0.75 wide, dorsally pale, almost white, with a longitudinal row of three pairs of large grey spots.

Female (paratype from Doi Suthep). Total length 2.00. Carapace 0.80 long, 0.65 wide, unmodified. Chelicerae 0.43 long. Leg I, 3.37 long (0.88 + 0.23 + 0.85 + 0.83 + 0.58), IV, 3.31 long (0.95 + 0.23 + 0.80 + 0.83 + 0.50). Chaetotaxy as in the male, length of spines about 2–3 diameters of segment. All metatarsi with a trichobothrium. TmI, 0.42. Abdomen 1.25 long, 0.80 wide, dorsal pattern as in male. Epigyne (Figs 26–28): anterior wall fully covering epigynal aperture. Median plate with a short and narrow base, abruptly widening backward.

**TAXONOMIC REMARKS.** The species seems to be most similar to Laotian *Asiagone signifera* Tanasevitch, 2014, known from the male [Tanasevitch, 2014], and can be easily distinguished by the shorter and abruptly truncate palpal tibia, as well as by the absence of the frontal tegular apophysis.

**DISTRIBUTION.** Known from southern and northern Thailand.

**ATYPENA CIRRIFRONS** (Heimer, 1984)

**MATERIAL.** 4 ♂♂, THAILAND, Chiang Mai Prov. and Distr., Chiang Mai city, Ping River, 310 m a.s.l., 9.I.1992, leg. S. Mustowe.

**REMARKS.** The species is new to the Thai fauna.

**DISTRIBUTION.** Hanoi, Vietnam [Heimer, 1984], Guangxi, China [Zhu & Sha, 1992], Laos [Tanasevitch, 2014] and northern Thailand.

**BATHYPHANTES PARACYMBIALIS** Tanasevitch, 2014

**MATERIAL.** 2 ♀♂, THAILAND, Chiang Mai Prov. and Distr., Doi Suthep, 1180 m a.s.l., pitfall traps, 18.III.–22.IV.1986, leg. P. Schwendinger; 1 ♂, Sankamphaeng Prov., near Sankamphaeng Hot Springs, 410 m a.s.l., pitfall traps, 9.I.–18.II.1986, leg. P. Schwendinger; 1 ♂, WEST MALAYSIA, Pahang, Cameron Highlands, trail 9, sifting, 1400 m a.s.l., 27.III.1993, leg. I. Löbl & F. Calame [sample WM93-21]; 2 ♀♂, Kedah, Pulau Langkawi, Gunung Raya, 6°23′N 99°48′E, 700–800 m a.s.l., 1–7.I.2005, leg. A. V. Tanasevitch.
Figs 14–21. *Asiagone siama* sp.n. (♂ paratype from Doi Sutep, 1800 m a.s.l., Thailand): 14 — right palp, retrolateral view; 15 — palpal tibia, dorsal view; 16 — paracymbium; 17 — distal suprategular apophysis; 18 — embolic division and median membrane; 19 — median membrane; 20, 21 — convector, different aspects.

Рис. 14–21. *Asiagone siama* sp.n. (♂ паратип из Doi Sutep, 1800 м, Таиланд): 14 — правая пальпа, ретролатерально; 15 — голень пальпы, вид сверху; 16 — парацимбиум; 17 — дистальная супратегулярная апофиза; 18 — эмболиальный отдел и медиальная мембрана; 19 — медиальная мембрана; 20, 21 — конвектор, разный аспект.
Figs 22–28. Epigyne of *Aperturina paniculus* sp.n. (22, 23, ♀ paratype from Perak, 1250 m a.s.l., W. Malaysia), *Apophygone simpulum* sp.n. (24, 25, ♀ paratype from Khao Yai N.P., Thailand), *Asiagone siama* sp.n. (26–28, ♀ paratype from Doi Sutep, 1150 m a.s.l., Thailand): 22, 24–26 — ventral view; 23, 28 — dorsal view; 27 — posterodorsal view.

Рис. 22–28. Эпигина *Aperturina paniculus* sp.n. (22, 23, ♀ паратип из Перак, 1250 м.м.сл., Зап. Малайзия), *Apophygone simpulum* sp.n. (24, 25, ♀ паратип из Хао Яй Н.П., Таиланд), *Asiagone siama* sp.n. (26–28, ♀ паратип из Дой Сутеп, 1150 м.м.сл., Таиланд): 22, 24–26 — вид снизу; 23, 28 — вид сверху; 27 — вид сверху и сзади.
On the linyphiid spiders from Thailand and West Malaysia

Schulz [sample AS-04/29]; 1 ♀, Pahang, Fraser's Hill, 1 km S of town, 3°41′N 101°45′E, 1250 m a.s.l., 27.VIII.2004, leg. A. Schulz [sample AS-04/12].

DISTRIBUTION. Known from northern Thailand, Laos [Tanasevitch, 2014] and West Malaysia.

_Battueta baculum_ sp.n. Figs 29–34.

HOLOTYPE: ♂, THAILAND, Chiang Mai Prov., Chiang Dao Distri., Doi Chiang Dao, 510 m a.s.l., pitfall traps, 22.VIII.–22.IX.1990, leg. P. Schwendinger.

PARATYPES: 2 ♂♂, collected together with holotype; 2 ♂♂, same locality, 22.IX.–25.X.1990, leg. P. Schwendinger; 1 ♀ (ZMMU), same locality, 25.X.–23.XI.1990, leg. P. Schwendinger; 1 ♂, Chanthaburi Prov., Khao Sabap N.P. (= Namtok Phliu N.P.), 150–300 m a.s.l., 23.–24.XI.1985, leg. D. Burckhardt & I. Löbl [sample No.27]; 1 ♀, WEST MALAYSIA, Pahang, Cameron Highlands, trail 9, 1400 m a.s.l., sifting, 27.III.1993, leg. I. Löbl & F. Calane [sample WM93-21]; 1 ♀, 1 ♂, Perak, ca. 5 km W of Padang Gerus, along road to Taiping, rain forest, 200 m a.s.l., 15.I.1995, leg. P. Schwendinger.

ETYMOLOGY. From the Latin noun meaning "stick", referring to the strong stick-shaped seta on the male palp patella.

DIAGNOSIS. The new species can be easily distinguished by the presence of the thick, strong palpal tibial seta; by the shape of the posterodorsal cymbial projection in the male, as well as by the translucent, straight, spiral seminal ducts in the female.

DESCRIPTION. Male holotype. Total length 1.16. Carapace 0.56 long, 0.46 wide, pale reddish-brown, speckled with small shallow pits (Fig. 29). Cephalic part somewhat elevated, eyes slightly enlarged. Sternum black, speckled with white small pits. Chelicerae 0.23 long, a small mastidion present. Legs pale yellow. Leg I, 2.05 long (0.53 + 0.13 + 0.53 + 0.46 + 0.40), leg IV, 1.78 long (0.46 + 0.13 + 0.43 + 0.43 + 0.33). Chaetotaxy 1.1.0.0 (see Remarks), in addition, TiI with one dorsal seta on tibia, this seta is situated in the proximal part of the segment, whereas in _B. baculum_ it is located distally. Most probably, this taxon initially had the chaetotaxy formula 2.2.1.1 but for some reasons the proximal setae on tibiae were lost, and the formula became look as 1.1.0.0 in both sexes. Thus, at present, the only remaining seta both on TiI and on TiIII is situated on the distal part of the segment. In the original description of _B. voluta_ Locket, 1982 (the type species), the author mentioned that the chaetotaxy formula was 1.1.1.1. All the specimens of _B. voluta_ that have been at my disposal (see below) lack the spines on their remnants on TiIII & IV.

VARIABILITY. Coloration of the carapace can vary from light brown to red; on the abdomen grey spots may merge in longitudinal stripes or disappear and then the dorsal surface may become greenish brown. Patellar seta may be variously curved and provided with denticles distally.

DISTRIBUTION. Northern and eastern Thailand, West Malaysia.

_Battueta voluta_ Locket, 1982

Fig. 32.

MATERIAL. 1 ♂, 2 ♀♀, THAILAND, Krabi Prov., ca. 15 km N of Krabi, near Saengphet Cave, 8°09′45.7″N 98°53′12.0″E, 80 m a.s.l., evergreen forest at foot of limestone hill, 24–26.VII.2005, leg. P. Schwendinger [sample TH-05/11]; 1 ♂, 3 ♀♀, WEST MALAYSIA, Terengganu, Lake Kenyir, 50 km SW of Kuala Terengganu, 5 km SW of dam, 4°58′N 102°49′E, 300–400 m a.s.l., 9.VII.2001, leg. A. Schulz & K. Vock; 1 ♂, 1 ♀ (ZMMU), Pahang, Bukit Charas, 3 km N of Panching, 3°54′41.1″N 103°08′50.2″E, 60 m a.s.l., rain forest remnants at foot of limestone hill, 3–4.VI.2004, leg. P. Schwendinger [sample MAL-04/08]; 1 ♂, Charas Hill (= Bukit Charas), ca. 3 km N of Panching, evergreen forest on limestone, 03°54′41.1″N 103°08′50.2″E, 60 m a.s.l., 9–10.VII.2001, leg. P. Schwendinger [sample SIM-01/12].

NOTE. See above the comments on tibial spination of this species under 'Remarks' of _B. baculum_ sp.n.

REMARKS. The species is new to the Thai fauna.

DISTIIBUTION. Singapore, West Malaysia [Locket, 1982] and southern Thailand.

_Erigone prominens_ Bösenberg et Strand, 1906

MATERIAL. 1 ♂, THAILAND, Surin Prov. and Distri., Ban Lak Wo, 3 km W of Surin city, 170 m a.s.l., 22.XI.1992, leg. P. Schwendinger.

REMARKS. The species is new to the Thai fauna.

DISTIIBUTION. Cameroon to Japan, New Zealand [WSC, 2014], northeastern Thailand.

_Gongylidioides pectinatus_ Tanasevitch, 2011

MATERIAL. 1 ♂, WEST MALAYSIA, Kelantan, 1 km S of Gua Musang railway station, 4°52′31.3″N 101°58′06.5″E, 120 m a.s.l., rain forest remnants at foot of limestone hill, 13–14.VI.2004, leg. P. Schwendinger [sample MAL-04/13].

REMARKS. This species was recently described from Himachal Pradesh and Uttarakhand, India [Tanasevitch, 2011]; new to the West Malaysian fauna.
Figs 29–34. *Batueta baculum* sp.n. (29–31, 33, 34, ♂ & ♀ paratypes from Padang Gerus, W. Malaysia) and *Batueta voluta* Locket, 1982 (32, specimen from Kuala Terengganu, W. Malaysia): 29 — ♂ carapace, lateral view; 30 — right palp, retrolateral view; 31, 32 — palpal tibia, patella and posterodorsal outgrowth of cymbium; 33 — convector; 34 — epigyne, ventral view.

Рис. 29–34. *Batueta baculum* sp.n. (29–31, 33, 34, ♂ и ♀ паратипы из Padang Gerus, Зап. Малайзия) и *Batueta voluta* Locket, 1982 (32, ♀ из Kuala Terengganu, Зап. Малайзия): 29 — карапакс ♂, вид сбоку; 30 — правая палыпа, ретролатерально; 31, 32 — голень палыпы, колено и задний отросток цимбия; 33 — конвектор; 34 — эпигина, вид снизу.
403 On the linyphiid spiders from Thailand and West Malaysia

Figs 35–42. *Lamellasia mirabilis* sp.n. (♂ paratype from Doi Inthanon, 2300 m a.s.l., Thailand): 35, 36 — right palp, retro- and prolateral view, respectively; 37 — cymbium, dorsal view; 38 — palpal tibia, dorsal view; 39 — palpal tibia and paracymbium, lateral view; 40 — distal supratelateral apophysis and median membrane; 41 — embolic division; 42 — lamella characteristica.

Рис. 35–42. *Lamellasia mirabilis* sp.n. (♂ паратип из Doi Inthanon, 2300 м, Таиланд): 35, 36 — правая пальпа, ретро- и пролатерально, соответственно; 37 — цимбум, вид сверху; 38 — голень пальпы, вид сверху; 39 — голень пальпы и парацимбум, вид сбоку; 40 — дистальная супрателлярная апофиза и медиальная мембрана; 41 — эмболиальный отдел; 42 — ламелла.
Lamellasia mirabilis sp.n.

Figs 35–47.

HOLOTYPE: ♂, THAILAND, Chiang Mai Prov., Chomthong Distr., Doi Inthanon, 2300 m a.s.l. 23.V.1987, leg. P. Schwendinger.

PARATYPES: 2 ♀♀, collected together with holotype, 23.V.1987, leg. P. Schwendinger; 1 ♂, 2 ♀♀, Doi Inthanon, 2500 m a.s.l., pitfall traps, 23.X.—17.XII.1986, leg. P. Schwendinger; 1 ♂, 2 ♀♀, same locality, 16.II.—18.IV.1987, leg. P. Schwendinger; 4 ♂♂, 3 ♀♀, same locality, 18.IV.—23.V.1987, leg. P. Schwendinger; 3 ♂♂, 1 ♀, same locality, 11.VI.—14.VII.1987, leg. P. Schwendinger; 2 ♂♂, 3 ♀♀, same locality, 14.VII.—20.VIII.1987, leg. P. Schwendinger; 1 ♂, 1 ♀, same locality, 17.XII.—16.I.1987, leg. P. Schwendinger; 2 ♂♂, same locality, 19.XII.1990, leg. P. Schwendinger; 1 ♂, Doi Inthanon, 2530 m a.s.l., pitfall traps, 18.IV.—23.V.1987, leg. P. Schwendinger; 2 ♂♂, 2 ♀♀, same locality, 23.V.1987, leg. P. Schwendinger; 1 ♂, 1 ♀, same locality, 2450 m a.s.l., 9.XI.1985, leg. P. Schwendinger [sample No.19]; 4 ♂♂, 6 ♀♀, Doi Inthanon, 2300 m a.s.l., pitfall traps, 20.VIII.—8.X.1987, leg. P. Schwendinger; 3 ♂♂, same locality, 1680 m a.s.l., 25.II.1987, leg. P. Schwendinger; 1 ♂, Chomthong Distr., Doi Inthanon N.P., 2500 m a.s.l.; 28.X.2000; leg. P. Schwendinger [sample TH-00/03].

ETYMOLOGY. The species name is an adjective referring to the remarkable conformation of the genitalia in both sexes.

DIAGNOSIS. See above, under the generic diagnosis.

DESCRIPTION. Male (paratype from Doi Inthanon). Total length 1.88. Carapace 0.90 long, 0.73 wide, unmodified, yellow. Chelicerae 0.35 long. Legs yellow-brown. Leg I, 4.02 long (1.00 + 0.23 + 1.03 + 0.73), IV, 3.61 long (1.00 + 0.23 + 0.90 + 0.88 + 0.60). Chaetotaxy. TiI: 2-1-1-0, II: 2-0-1-0, III–IV: 2-0-0-0; MtI–IV: 1-0-0-0, spines long. Metatarsi I–III with a trichobothrium each. TmI, 0.18–0.24. Palp (Figs): Patella with a long, unmodified, narrow spine. Tibia and cymbium slightly modified. Paracymbium relatively small, V-shaped. Tegulum relatively large, markedly protruding outside palp. Distal suprategular apophysis and median membrane present but both poorly developed. Radix small, shapeless. Fickert’s gland absent. Lamella characteristica large, proximally wide and concave. Terminal apophysis totally reduced. Embolus with small and curved body and thin, straight, thread-like embolus proper. Epigyne with a broad proscape, median part of scape reduced. Entrance grooves relatively thick, extending to posterior median plate. Stretcher presence, lateral lobes reduced. Abdomen variegated, dorsal pattern present.

SPECIES INCLUDED. Only the type species.

TAXONOMIC REMARKS. Basically, a reduction of the genital sclerites or their parts is not infrequent in Micronetinae, whereas the presence of entrance grooves inside the posterior median plate is unique and has no analogues among the representatives of the subfamily. Usually, the entrance grooves pass inside the scape, then proceed along the lateral walls and end in the receptacles, but never penetrate the posterior median plate. The genus position is unclear, and at present it is impossible to indicate its close relatives.

DISTRIBUTION. Thailand.

Lamellasia sp.n.

Figs 35–47.

HOLOTYPE: ♂, THAILAND, Chiang Mai Prov., Chomthong Distr., Doi Inthanon, 2300 m a.s.l. 23.V.1987, leg. P. Schwendinger.

PARATYPES: 2 ♀♀, collected together with holotype, 23.V.1987, leg. P. Schwendinger; 1 ♂, 2 ♀♀, Doi Inthanon, 2500 m a.s.l., pitfall traps, 23.X.—17.XII.1986, leg. P. Schwendinger; 1 ♂, 2 ♀♀, same locality, 16.II.—18.IV.1987, leg. P. Schwendinger; 4 ♂♂, 3 ♀♀, same locality, 18.IV.—23.V.1987, leg. P. Schwendinger; 3 ♂♂, 1 ♀, same locality, 11.VI.—14.VII.1987, leg. P. Schwendinger; 2 ♂♂, 3 ♀♀, same locality, 14.VII.—20.VIII.1987, leg. P. Schwendinger; 1 ♂, 1 ♀, same locality, 17.XII.—16.I.1987, leg. P. Schwendinger; 2 ♂♂, same locality, 19.XII.1990, leg. P. Schwendinger; 1 ♂, Doi Inthanon, 2530 m a.s.l., pitfall traps, 18.IV.—23.V.1987, leg. P. Schwendinger; 2 ♂♂, 2 ♀♀, same locality, 23.V.1987, leg. P. Schwendinger; 1 ♂, 1 ♀, same locality, 2450 m a.s.l., 9.XI.1985, leg. P. Schwendinger [sample No.19]; 4 ♂♂, 6 ♀♀, Doi Inthanon, 2300 m a.s.l., pitfall traps, 20.VIII.—8.X.1987, leg. P. Schwendinger; 3 ♂♂, same locality, 1680 m a.s.l., 25.II.1987, leg. P. Schwendinger; 1 ♂, Chomthong Distr., Doi Inthanon N.P., 2500 m a.s.l.; 28.X.2000; leg. P. Schwendinger [sample TH-00/03].

ETYMOLOGY. The species name is an adjective referring to the remarkable conformation of the genitalia in both sexes.

DIAGNOSIS. See above, under the generic diagnosis.

DESCRIPTION. Male (paratype from Doi Inthanon). Total length 1.88. Carapace 0.90 long, 0.73 wide, unmodified, yellow. Chelicerae 0.35 long. Legs yellow-brown. Leg I, 4.02 long (1.00 + 0.23 + 1.03 + 0.73), IV, 3.61 long (1.00 + 0.23 + 0.90 + 0.88 + 0.60). Chaetotaxy. TiI: 2-1-1-0, II: 2-0-1-0, III–IV: 2-0-0-0; MtI–IV: 1-0-0-0, spines long. Metatarsi I–III with a trichobothrium each. TmI, 0.22. Palp (Figs): Patella with a long, unmodified, narrow spine. Tibia and cymbium slightly modified. Paracymbium relatively small, V-shaped. Tegulum relatively large, markedly protruding outside palp. Distal suprategular apophysis and median membrane present but both poorly developed. Radix small, shapeless. Fickert’s gland absent. Lamella characteristica large, wide, concave in proximal part, curved and narrowing distally. Terminal apophysis completely reduced. Embolus with a small curved body and thin, straight, thread-like embolus proper. Abdomen 0.98 long, 0.60 wide, dorsally pale, with narrow grey transverse stripes.

Female (paratype from Doi Inthanon). Total length 2.08. Carapace 1.00 long, 0.78 wide. Chelicerae 0.45 long, unmodified. Leg I, 4.01 long (1.03 + 0.28 + 1.00 + 1.00 + 0.70), IV, 3.72 long (1.03 + 0.28 + 0.90 + 0.93 + 0.58). TmI, 0.23. Abdomen 1.28 long, 0.88 wide, dorsally pale with broad grey transverse stripes. Epigyne (Figs 35–42) with the broad proscape, the median part of scape reduced. Entrance grooves pass along the edge of proscape, penetrating to the central part of posterior median plate through a narrow “bridge”, with a loop on the edges of the latter, passing outside, and finally reaching the receptacles. Body coloration and chaetotaxy as in the male.
Figs 43–51. Lamellasia mirabilis sp.n. (43–47, ♂ paratype from Doi Inthanon, 2500 m a.s.l., Thailand) and Nasoona chrysanthusi Locket, 1982 (48–51, ♀ specimen from Mt. Muntahak, W. Malaysia): 43–46 — epigyne; 47 — generalization scheme of epigyne; 48, 49 — palpal tibia, dorsal view, different aspects; 50 — convertor and part of embolus; 51 — convertor; 43, 48, 49 — dorsal view; 44, 45, 47 — ventral view.

Рис. 43–51. Lamellasia mirabilis sp.n. (43–47, ♂ паратип из Doi Inthanon, 2500 м, Таиланд) и Nasoona chrysanthusi Locket, 1982 (48–51, ♀ с г. Muntahak, Зап. Малайзия): 43–46 — эпигина; 47 — схема строения эпигины; 48, 49 — голень пальпы, вид сверху, разный аспект; 50 — конвектор и часть эмболюса; 51 — конвектор; 43, 48, 49 — вид сверху; 44, 45, 47 — вид снизу.
TAXONOMIC REMARKS. See above under ‘Remarks’ to the genus.

DISTRIBUTION. High altitudes of northern Thailand.

"Linyphia" chiridota (Thorell, 1895)

MATERIAL. 1♂, THAILAND, Loei Prov., Phu Rua District, Phu Rua N.P., 5–6.IX.1992, leg. P. Schwendinger.

REMARKS. The species was originally described by Thorell [1895] as Erigone Audouin, 1826 from Myanmar and has been provisionally transferred to Linyphia Latreille, 1804 by Tanasevitch [2010]. The still unknown male makes the taxonomic position of "L." chiridota unclear. It is new to Thai fauna.

DISTRIBUTION. Myanmar [Thorell, 1895], north-eastern Thailand.
Microbathyphantes palmarius (Marplés, 1955)

**MATERIAL.** 1 ♄, THAILAND, Chiang Mai Prov., Sankamphaeng Dist., near Sankamphaeng Hot Springs, 410 m a.s.l., pitfall traps, 9.II.–11.II.1986, leg. P. Schwendinger.

**REMARKS.** The species is new to the Thai fauna.

**DISTRIBUTION.** Sri Lanka, India, Seychelles, Myanmar, Micronesia, Polynesia [WSC, 2014] and northern Thailand.

*Nasoonia asocialis* (Wunderlich, 1974)

**MATERIAL.** 3 ♄♂, THAILAND, Surat Thani Prov., Ko Samui, Nathon Dist., Hin Lad Waterfall, 9°31′15″N 99°57′47″E, 100 m a.s.l., primary forest near stream, 5–6.VII.2011, leg. P. Schwendinger [sample TH-11/05]; 1 ♄, Ranong Prov., Lak Lek, 6 km S of road 4006 between Ranong and Lang Suan, semi-evergreen forest, 270 m a.s.l., 8.VIII.1991, leg. P. Schwendinger; 1 ♄, Krabi Prov., Ao Luk Dist., limestone hill ca 1 km E of Ao Luk Tai, 8°22′02″N 98°44′17″E, 60–80 m a.s.l., remnant of semi-evergreen rainforest, 9–10.VII.2009, leg. P. Schwendinger [sample TH-09/08]; 1 ♄, WEST TIONIAN ISLAND, path from Paya Village to Gunung Kajang, 200–600 m a.s.l., 02°46′34″N 104°57′63″E, 6–7.VI.2007, leg. A. Schulz [sample AS-WM07/1].

**REMARKS.** The species is new to the West Malaysian fauna.

**DISTRIBUTION.** Nepal, NE India [Wunderlich, 1974; Tanasevitch, 1998, 2011], Laos, Thailand, West Malaysia [Tanasevitch, 2014].

*Nasoonia chrysanthusi* Locket, 1982

**Figs 48–51.**

**MATERIAL.** 1 ♄, WEST MALAYSIA, Pahang, Genting Highlands, 1550 m a.s.l., disturbed forest near a construction site, sifting; 5.IV.1993, leg. I. Lölö & F. Calame [sample WM93-30]; 2 ♄♂, same locality, 1650 m a.s.l., primary forest on steep slope, sifting, 5.IV.1993, leg. I. Lölö & F. Calame [sample WM93-29]; 1 ♄, same locality, 1650 m a.s.l., primary forest on steep slope, sifting, 5.IV.1993, leg. I. Lölö & F. Calame [sample WM93-32]; 1 ♄, Temerloh, 27.VII.1972, leg. T. Jaccoud; 1 ♄, Tioman Island, above Japamala Resort, 2°44′42″N 104°07′27″E, 117 m a.s.l., rainforest, sifting, 23–27.I.2004, leg. L. Monod [sample VMI-12/16]; 1 ♄, Perak, Taiping, Maxwell Hill, 1320 m a.s.l., 1.IX.1997, leg. P. Schwendinger; 1 ♄, Cameron Highlands, 1600 m a.s.l., trail 14, Bukit Mertinga, top of hill, sifting, 23.III.1993, leg. I. Lölö & F. Calame [sample WM93-16a]; 1 ♀, Fraser’s Hill, 1 km S of town, 1250 m a.s.l., 3°41′10″N 101°45′45″E, 27.VIII.2004, leg. A. Schulz [sample AS-04/12]; 1 ♄♂, Fraser’s Hill, NE side, 1200 m a.s.l., 3°44′N 101°46′E; 25.VIII.2004, leg. A. Schulz [AS-04/08]; 3 ♄♂, Bukit Fraser (= Fraser’s Hill), Maxwell trail, 3°42′59″N 101°48′39″E, 1550 m a.s.l., evergreen hill forest, 12–16.V.2004, leg. P. Schwendinger [MAL-04/01]; 1 ♄♂, Taman Negara, trail from Nusa Camp to Abai Waterfall, 4°23′28″N 102°25′50″E, 110 m a.s.l., rainforest near stream, 16–17.VI.2004, leg. P. Schwendinger [MAL-04/14]; 1 ♄♂, Terengganu, 50 km SW of Kuala Terengganu, Lake Keniry, 5 km SW of dam, 4°58′N 102°49′E, 300–400 m a.s.l., 8.7.2001, leg. A. Schulz & K. Vock [sample M01-162]; 1 ♄♂, 50 km SW of Kuala Terengganu, Lake Keniry, 5 km SW of dam, 4°58′N 102°49′E, 300–400 m a.s.l., 9.VII.2001, leg. A. Schulz & K. Vock [sample M01-166]; 2 ♄♂, Kelantan, Jeram Pasu Waterfall, SW of Park Amat, 100 m a.s.l., 10–11.I.1999, leg. P. Schwendinger; 1 ♄♂, Gunung Stong, 8 km SW Danong, 5°20′22″N 101°58′15″E, 200 m a.s.l., rainforest near stream, 10.VI.2004, leg. P. Schwendinger [MAL-04/11]; 1 ♄♂, Perak, rain forest ca 5 km W of Padang Gerus, along road to Taiping, 200 m a.s.l., 15.I.1995, leg. P. Schwendinger; 1 ♄♂ (ZMMU), Gunung Ledang (= Mt. Ophir), Puteri Waterfalls, 2°11′22″N 102°37′48″E, 80–130 m a.s.l., rainforest near stream, 21–22.V.2004, leg. P. Schwendinger [sample MAL-04/03]; 1 ♄♂, SINGAPORE, Mandai Road, 30.XI.1978, leg. J.T. Huber; 1 ♄♂, Bukit Timnah N.R., 1°23′N 103°47′E, 100 m a.s.l. 16.VII.2004, leg. A. Schulz [sample AS-04/02]; 1 ♄♂, Bukit Timnah N.R., Jungle Fall Valley, rain forest along small stream, 100 m a.s.l., 9.VI.2001, leg. P. Schwendinger [sample SIM-01/01].

**TAXONOMIC REMARKS.** The male of *N. chrysanthusi* is very similar to that of *N. asocialis*, but it can easily be distinguished by the shape of the palpal tibia, as well as by the shape of the distal part of conductor (see Figs 48–51).

**DISTRIBUTION.** West Malaysia, Singapore [Locket, 1982].

*Nasoonia crucifera* (Thorell, 1895)

**MATERIAL.** 1 ♄, THAILAND, Chiang Mai Prov., Chiang Dao Dist., Doi Chiang Dao, 510 m a.s.l., 23.XI.1990, leg. P. Schwendinger; 1 ♄♂, WEST MALAYSIA, KELANTAN, 1 km S of Gua Musang railway station, 4°52′31.3″N 101°58′06.5″E, 120 m a.s.l., rainforest remnants at foot of limestone hill, 13–14.VI.2004, leg. P. Schwendinger [sample MAL-04/13]; 1 ♄♂, Pahang, Tioman Island, above Japamala Resort, 2°44′42″N 104°07′27.7″E, 117 m a.s.l., rainforest, sifting, 23–27.I.2012, leg. L. Monod [sample VMI-12/16].

**REMARKS.** The species is new to the Thai and West Malaysian faunas.

**DISTRIBUTION.** Southern China (Guangxi Autonomous Region) [Han & Zhu, 2008], Myanmar, Vietnam [WSC, 2014], Laos [Tanasevitch, 2014], northern Thailand and West Malaysia.

*Nasoonaria magna* sp.n.

**Figs 52–57.**

**HOLOTYPE.** ♄, THAILAND, Nakhon Ratchasima Prov., Pak Chong Dist., KhoaYai N.P., near Heo Suwat and Kong Kaeo Waterfalls, 580–680 m a.s.l., 28–30.IX.1994, leg. P. Schwendinger.

**ETYMOLOGY.** From the Latin adjective meaning “big”, referring to relatively large body size of the species.

**DIAGNOSIS.** The new species is distinguished by the shape of male carapace, by the peculiar shape of the hypertrophied distal supratergular apophysis, as well as by the well-developed column.

**DESCRIPTION.** Male (holotype). Total length 2.53, Carapace 1.10 long, 0.85 wide, brown, with a large, pale, postocular globular elevation bearing strong, slightly curved spines (Fig. 52). Sulci slanted, situated below elevation. Chelicerae 0.50 long, mastidion absent. Legs pale brown, partly broken. Leg I: Fe 1.28, Pt 0.28, Ti 1.23 long; leg IV, 4.22 long (1.18 + 0.25 + 1.08 + 1.08 + 0.63). Chaetotaxy: 2.2:1.1, length of spines about 2–3 diameters of segment. All metatarsi with a trichobothrium. Tm1, 0.68. Palp (Figs 53–57): tibia with a claw-shaped apophysis on prolateral side.
Cymbium without a posterodorsal outgrowth. Paracymbium relatively large, with a massive proximal part, hook-shaped distally. The middle part of distal suprategular apophysis very wide and flat, covering almost all prolateral side of tegulum, its distal part extending to a long spike. Radix very small, connecting to the well-developed column. Embolus thin and long, making a loop; its distal part is embedded into distal suprategular apophysis. Abdomen 1.53 long, 0.85 wide, pale, with a raw of four pairs of grey spots merging posteriorly into narrow transverse stripes.

Female unknown.

TAXONOMIC REMARKS. The new species can be easily distinguished from the single congener, *N. sinensis* Wunderlich et Song, 1995 (see below), by the presence of a globular elevation on male carapace behind the posterior median eyes, as well as by simple shape of the palpal tibia with the single apophysis.

**DIAGNOSIS.** Known from the type locality in northeastern Thailand only.

*Nasoonaria sinensis* Wunderlich et Song, 1995

**MATERIAL.** 1♂, THAILAND, Chiang Mai Prov., Chomthong Dist., Doi Suthep, near Phra Thad Doi Suthep, evergreen hill forest, 13.X.1994, leg. P. Schwendinger; 1♂, Chiang Mai Province and District, Doi Suthep, 1150 m a.s.l., 17.XI.1993, leg. P. Schwendinger.

**REMARKS.** The species is new to the Thai fauna.

**HOLOTYPE:** ♂, THAILAND, Chiang Mai Province, Mae Sai District, Doi Thung, evergreen hill forest, 13.X.1994, leg. P. Schwendinger.

**ETYMOLOGY.** The name is a noun referring to the complex shape of the convector, the sclerite in the embolic division.

**DESCRIPTION.** Male (holotype). Total length 1.68. Carapace 0.75 long, 0.55 wide, yellow, with grey central part. Cephalic part with a postocular globular elevation bearing posterior median eyes and many short, somewhat curved spines (Figs 64, 65). Chelicerae 0.30 long, unmodified. Legs pale yellow. Leg I, 2.76 long (0.75 + 0.20 + 0.70 + 0.68 + 0.43), leg IV, 2.75 long (0.75 + 0.20 + 0.63 + 0.75 + 0.42). Chelate leg: x: 2.2.1.1 (should be 2.2.1.1, like in all other representatives of the genus), spine on TiV about 2.5 diameters of segment. All metatarsi with a trichobothrium. TmI, 0.82. Palm (Figs 66–71): tibia with a narrow, slightly curved apical apophysis and almost transparent retrolateral lobe. Cymbium without posterodorsal outgrowth. Paracymbium narrow, hook-shaped. Protogulum forked. Distal suprategular apophysis short and wide. The radical part of embolus very small, drop-shaped; embolus short, curved. Convector complex, having three lobes of different shapes. Abdomen 1.00 long, 0.60 wide, pale, with a narrow longitudinal stripe in anterior part, and several narrow transversal bands.

Female unknown.

**TAXONOMIC REMARKS.** The new species has the normal and simple embolic division, typical of the majority of representatives of the genus, but possesses the unusually complex and strongly developed convector, which drastically distinguishes *O. convector* sp.n. from other congeners.

**DIAGNOSIS.** Known from the type locality in Thailand only.
Figs 58–63. *Nasoonaria sinensis* Wunderlich et Song, 1995 (♂ & ♀ specimens from Nam Khan, Laos): 58 – left palp, retrolateral view; 59 – palpal tibia, dorsal view; 60 – palpal tibia and paracymbium, lateral view; 61 – distal suprategular apophysis and embolic division; 62 – distal suprategular apophysis; 63 – epigyne, ventral view.

Рис. 58–63. *Nasoonaria sinensis* Wunderlich et Song, 1995 (♂ и ♀ из Nam Khan, Лаос): 58 – левая пальпа, ретролатерально; 59 – голень пальпы, вид сверху; 60 – голень пальпы и парацимбиум, вид сбоку; 61 – дистальная супратегулярная апофиза и эмболусный отдел; 62 – дистальная супратегулярная апофиза; 63 – эпигина, вид снизу.

*Parameioneta spicata* Locket, 1982

MATERIAL. 1 ♂, 2 ♀, THAILAND, Chiang Mai Province and District, Mae Hia, ca. 3 km SW of Chiang Mai city, pitfall traps, 30.VII.–14.XI.1987, leg. P. Schwendinger; 1 ♂, WEST MALAYSIA, Pahang, Tioman Island, Melina Beach, between Paya and Genting villages, 10–200 m a.s.l., 02°46′29.36″N 104°07′44.93″E, 3–5 VI.2007, leg. A. Schulz [sample AS-WM07/6].

REMARKS. The species is new to the Thai fauna.

*DISTRIBUTION*. West Malaysia [Locket, 1982] and northern Thailand.

*Plectembolus quinqueflectus* Millidge et Russell-Smith, 1992

MATERIAL. 1 ♂, WEST MALAYSIA, Perak, Taiping, Maxwell Hill, 1290–1320 m a.s.l., 7.–8.I.1996, leg. P. Schwendinger.
Figs 64–71. Oedothorax convector sp.n. (holotype): 64, 65 — carapace, lateral and dorsal view, respectively; 66, 67 — right palp, retro- and prolateral view, respectively; 68 — palp tibia and paracymbium, lateral view; 69 — distal suprategular apophysis; 70 — convector; 71 — embolus and median membrane.

Рис. 64–71. Oedothorax convector sp.n. (голотип): 64, 65 — карапакс, вид сбоку и сверху, соответственно; 66, 67 — правая пальпа, ретролатерально и пролатерально, соответственно; 68 — голень пальпы и парацимбиум, вид сбоку; 69 — дистальная супратегулярная апофиза; 70 — конвектор; 71 — эмболус и медиальная мембрана.
On the linyphiid spiders from Thailand and West Malaysia

Figs 72–79. *Theoa elegans* sp.n. (holotype): 72 – right palp, retrolateral view; 73 – cymbium, dorsal view; 74 – cymbium and paracymbium, lateral view; 75 – embolic division; 76 – terminal apophysis; 77–79 – embolus, different aspects.

Рис. 72–79. *Theoa elegans* sp.n. (голотип): 72 – правая пальпа, ретролатерально; 73 – цимбийум, вид сверху; 74 – цимбийум и парацимбийум, вид сбоку; 75 – эмболюсный отдел; 76 – терминальная апофиза; 77–79 – эмболюс, разный аспект.

REMARKS. The species is new to the West Malaysian fauna.
DISTRIBUTION. Northern Sumatra, Indonesia [Millidge & Russell-Smith, 1992] and West Malaysia.

**Tapinopa vara** Locket, 1982

MATERIAL. 1 ♂, THAILAND, Nan Prov., Pua Distr., Doi Phu Kha N.P., 1700 m a.s.l., 6.X.1991, leg. P. Schwendinger; 1 ♂,
Narathiwat Prov., Waeng Distr., Hala-Bala Wildlife Sanctuary, near Sirinthorn waterfall, 200 m a.s.l., 8.I.1999, leg. P. Schwendinger.

REMARKS. The species was originally described by both sexes from Fraser’s Hill, West Malaysia [Locket, 1982]. New to the Thai fauna.

DISTRIBUTION. West Malaysia [Locket, 1982], northern and southern Thailand.

Theoa elegans sp.n.

HOLOTYPE: ♂, THAILAND, Chiang Rai Prov., Mae Sai Distr., Doi Tung, 1160 m a.s.l., 17.XII.1992, leg. P. Schwendinger.

ETYMOLOGY. From the adjective referring to the slender habitus of the species.

DIAGNOSIS. The new species is distinguished by the bifid-shaped proximal outgrowth on the male cymbium, as well as by the rounded terminal apophysis.

DESCRIPTION. Male (holotype). Total length 1.23. Carapace unmodified, 0.58 long, 0.48 wide, pale brown. Eyes slightly enlarged. Chelicerae 0.23 long. Legs relatively long and narrow, yellow. Leg I, 2.25 long (0.60 + 0.15 + 0.60 + 0.50 + 0.40), leg IV, 2.01 long (0.55 + 0.13 + 0.50 + 0.45 + 0.38). Chaetotaxy: TiI: 2-1-1-0, II: 2–0–1–0, III–IV: 2-0-0-0; MtI–IV: 0-0-0-0, length of spines about 1.5–2 diameter of segment; no spines on metatarsi. Metatarsi I–III with a trichobothrium each. Tml, 0.14. Palp (Figs 72–79): Tibia unmodified, cymbium with a large, proximal bifid outgrowth. Paracymbium toothless, with a shallow apical pocket. Lamella characteristicia completely reduced. Terminal apophysis large, well-sclerotized, at observing palp looks like lamella characteristicia. Embolus with Fickert’s gland inside. Abdomen 1.00 long, 0.45 wide, pale grey.

Female. Unknown.

TAXONOMIC REMARKS. The new species is most similar to Theoa tricaudata (Locket, 1982), known from the Seychelles [Saaristo, 1995], West Malaysia [Locket, 1982] and Thailand (present data; see below), but clearly differs from it in the presence of two large, widely set apart teeth at the base of the bifid proximal cymbial outgrowth, as well as by round shape of the terminal apophysis.

DISTRIBUTION. Known from the type locality in northern Thailand only.

Theoa hamata Tanasevitch, 2014

MATERIAL. 1 ♀, 1 ♂, THAILAND, Nakhon Si Thammarat Prov., Khao Luang N.P., near Ban Kiriwong, 170 m a.s.l., 10.II.1991, leg. P. Schwendinger.

REMARKS. The species was originally described from the vicinity of Kuala Lumpur, West Malaysia as Theonina tricaudata Simon, 1929 [Locket, 1982]. Saaristo [1995] recorded this species from the Seychelles and described the genus Theoa. Saaristo, 1995, with Theonina tricaudata as its type species. New to the Thai fauna.

DISTRIBUTION. The Seychelles [Saaristo, 1995], West Malaysia [Locket, 1982] and southern Thailand.

Discussion

With the present addition of new taxonomic/faunistic data, the fauna of Thailand contains 43 linyphiid species, and that of West Malaysia 24 species. The vast majority of these species have been described from these regions or known from the neighboring areas of SE Asia. Only two species were recorded also from southern provinces of China: Nasoona crucifera and Nasoona crucifera.
Figs 80–86. *Theoa longicrusa* sp.n. (holotype): 80 — right palp, retrolateral view; 81 — cymbium, dorsal view; 82 — palpal tibia and paracymbium, lateral view; 83 — palpal tibia, dorsal view; 84 — pit hook; 85 — terminal apophysis; 86 — embolus.

Рис. 80–86. *Theoa longicrusa* sp.n. (голотип): 80 — правая пальпа, ретролатерально; 81 — цимбium, вид сверху; 82 — голень пальпы и парацитмбium, вид сбоку; 83 — голень пальпы, вид сверху; 84 — pit hook; 85 — терминальная апофиза; 86 — эмболос.
Nasoonaria sinensis; one species — Microbathyphantes palmarius — is widely distributed in the Oriental Region and Polynesia, whereas only two species display really wide ranges: the Palaearctic Hylyphantes graminicola and the Cosmopolitan Erigone prominens. This pattern of the fauna indicates a high specificity of the linyphiid fauna of SE Asia, its richness and autochthonous origin. Further studies should clarify this matter.

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