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New species and records of linyphiid spiders from Laos (Araneae, Linyphiidae)

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Abstract

Recent linyphiid collections from Laos as well as some additional specimens from Thailand and West Malaysia are examined. Six species and two genera are described as new to science: *Bathyphantes paracymbialis* n. sp., *Nematogmus asiaticus* n. sp., *Theoa hamata* n. sp.; *Asiagone* n. gen. is erected for *Asiagone signifera* n. sp. (type species) and *A. perforata* n. sp.; *Laogone* n. gen. is established for *Laogone cephalo* n. sp. The following new synonyms are proposed: *Gorbothorax* Tanasevitch, 1998 n. syn. = *Nasoona* Locket, 1982; *Paranasoona* Heimer, 1984 n. syn. and *Millplohrys* Platnick, 1998 n. syn. = *Atypena* Simon, 1894; *Gorbothorax unguibus* Tanasevitch, 1998 n. syn. = *Oedothorax asocialis* Wunderlich, 1974; *Hylyphantes birmanicus* (Thorell, 1895) n. syn. = *H. graminicola* (Sundevall, 1830). The following new combinations are proposed: *Atypena cirrifrons* (Heimer, 1984) n. comb. ex from *Paranasoona*; *A. pallida* (Millidge, 1995) and *A. crocata* (Millidge, 1995) both n. comb. ex *Millplohrys*; *Nasoona asocialis* (Wunderlich, 1974) n. comb. ex *Oedothorax* Bertkau, 1883; *N. asocialis* (Wunderlich, 1974), *N. comata* (Tanasevitch, 1998), *N. conica* (Tanasevitch, 1998), *N. setifera* (Tanasevitch, 1998) and *N. wunderlichi* (Brignoli, 1983), all n. comb. ex *Gorbothorax*. Eight linyphiid species are newly recorded from Laos: *A. cirrifrons* (Heimer, 1984), *Bathyphantes floralis* Tu & Li, 2006, *Hylyphantes graminicola* (Sundevall, 1830), *Nasoona asocialis*, *N. crucifera* (Thorell, 1895), *Nasoona sinensis* Wunderlich & Song, 1995, *Neriene birmanica* (Thorell, 1887), and *N. oxycera* Tu & Li, 2006. The linyphiid spider fauna of Laos currently contains 15 species and is unusually highly specific. All species, except the Palearctic *H. graminicola*, are probably represented by Southeastern Asian or Oriental autochthons.

Key words: Southeast Asia, new genus, new species, new synonyms, new combinations, new records

Introduction

Tropical climates are commonly considered as being unfavourable for linyphiid spiders. Indeed, most of linyphiid diversity at all levels is confined to temperate and, especially, boreal latitudes. It is in boreal, largely tundra-zones, as well as high up in the mountains, that Linyphiidae appear to reach their maximum abundance and faunistic richness (Chernov 2008; Marusik & Koponen 2002).

The relatively low number of linyphiid species hitherto recorded in Southeast Asia cannot be accounted for by the territory still being poorly surveyed and its fauna remaining insufficiently known. At present, the fauna of Linyphiidae of Southeast Asia counts a little more than 110 species (Platnick 2014), most of which are potential endemics probably restricted to islands.

The continental linyphiid fauna of Southeast Asia is studied as patchily as incompletely. Thus, only 18 species are currently known from Thailand, 18 from Vietnam, 17 from West Malaysia, six from Myanmar, one each from Bangladesh and Laos, while no linyphiids are known yet from Cambodia (Tanasevitch 2014). Most of these are distributed widely enough to be shared at least by two, usually more, of those countries.

Since 2003, Dr. Peter Jäger (Frankfurt/M., Germany) has been actively collecting spiders in Laos. After ten research visits and numerous joint publications with Prof. Bounthob Praxaysombath, his counterpart at the National University of Laos, as well as with several other specialists, a total of 265 spider species have hitherto been revealed in Laos (Jäger & al. 2012, unpublished data), with only a single of them representing the family Linyphiidae. The goal this paper is to study the undetermined material from the aforementioned collections as well as to produce the first list of Laotian linyphiids.

Theoa hamata new species

Figs 75–80

Types. Holotype. ♂, LAOS, Vientiane Prov., W of Vang Vieng, Tham Pou Kham, 260 m a.s.l., 18°55.549'N 102°23.734'E, in front of limestone cave, leaf litter, sieving, 13.III.2007, leg. P. Jäger & F. Steinmetz. Paratypes. 1♂ (MHNG), THAILAND, Chiang Mai Prov. and Distr., Doi Suthep, below Phrathat Doi Suthep Temple, 960 m a.s.l., pitfall traps, 1.–30.I.1987, leg. P. Schwendinger. 1♂ (MHNG), same site, pitfall traps, 5.III.–4.IV.1987, leg. P. Schwendinger.

Etymology. The species name is derived from the Latin word “hamatus, -a, -um”, meaning “hook-shaped” and refers to the peculiar shape of the cymbium; adjective.

Diagnosis. The new species is similar to *T. tricaudata*, but differs well by the hook-shaped posterior cymbial outgrowth (versus nipper-shaped in *T. tricaudata*), as well as by the shape of the more compact terminal apophysis.

Description. Male holotype. Total length 1.40. Carapace unmodified, 0.63 long, 0.51 wide, pale brown. Eyes normal. Chelicerae 0.23 long. Legs yellow, with longitudinal dark stripes. FeI, 0.78, Leg IV, 2.45 long (0.68+0.18+0.58+0.63+0.38). Chaetotaxy unknown (usually, all tibia with two dorsal spines), spines mostly lost, in type species all tibiae with 1 dorsal spine, no femoral or metatarsal spines. Metatarsi I–III with a trichobothrium each. TmI, 0.16. Palp (Figs 75–80): Tibia without special spine. Cymbium with a large, proximal hook-shaped outgrowth. Paracymbium relatively small, toothless. Lamella characteristica totally reduced. Terminal apophysis large, well-sclerotized, looks like lamella characteristica. Embolus with Fickert’s gland inside, thumb present. Opisthosoma 0.75 long, 0.48 wide, dark grey with vague, irregular, white, small spots.

Female. Unknown.

Taxonomic remarks. The monotypic genus *Theoa* was erected by Saaristo (1995) for *Theonina tricaudata* Locket, 1982, which had originally been described from West Malaysia (Locket 1982) and later found in the Seychelles (Saaristo 1995). The palp structure, i.e., modified cymbium, totally reduced lamella characteristica and the position of Fickert’s gland inside the embolus, clearly supports the generic inclusion of the new species in genus *Theoa*.

Discussion

As a result, the linyphiid spider fauna of Laos currently contains some 15 species and is unusually highly specific. Only one species, *Hylyphantes graminicola*, is originally trans-Palearctic in distribution, just marginally occurring in Southeast Asia as well. The remaining diversity is probably represented by southeastern Asian or Oriental autochthons. There still are a few undetermined females in the already existing material from Laos, but, unfortunately, the absence of corresponding male specimens makes the identity of these species unclear.

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