Notes on two Asian species of the spider family Deinopidae (Aranei)

Заметки о двух азиатских видах пауков семейства Deinopidae (Aranei)

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KEY WORDS: Araneae, *nomen dubium*, new combination, Southeast Asia. КЛЮЧЕВЫЕ СЛОВА: Araneae, *nomen dubium*, новая комбинация, Юго-Восточная Азия.

ABSTRACT. The taxonomic status of two Asian species of the spider family Deinopidae is discussed. *Asianopis aruensis* (Roewer, 1938) comb. n. is transferred from *Deinopis* MacLeay, 1839. *Deinopis gubatmakiling* Barrion-Dupo et Barrion, 2018 is treated as a *nomen dubium*. Additionally, the placement of five other species of Southeast Asian *Deinopis* in *Asianopis* Lin et Li, 2020 is proposed.

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РЕЗЮМЕ. Обсуждается таксономический статус двух азиатских видов пауков семейства Deinopidae. Asianopis aruensis (Roewer, 1938) comb.n. перенесен из рода Deinopis MacLeay, 1839. Deinopis gubatmakiling Barrion-Dupo et Barrion, 2018 рассматривается как nomen dubium. По-видимому, остальные пять видов рода Deinopis, описанные из Юго-Восточной Азии, также принадлежат к роду Asianopis Lin et Li, 2020.

Introduction

Deinopidae is a small family with three genera and 67 extant species from tropical regions of the world, including two genera and 13 species from Asia [Li, 2020]. Currently, the genus *Asianopis* Lin et Li, 2020 includes eight species, and *Deinopis* MacLeay 1839 includes eight species from South and Southeast Asia [WSC, 2020]. It is possible that all Asian *Deinopis* species belong to *Asianopis*, but currently this cannot be confirmed because the original descriptions of these Asian *Deinopis* are very poor. Also, the type material of Asian *Deinopis* species, besides *D. aruensis* Roew-

er, 1938 are not available in European museums. One Indian species, *Asianopis goalparaensis* (Tikader et Malhotra, 1978) has recently been redescribed [Basumatary *et al.*, 2020]. The aim of this paper is to redescribe the type material of *D. aruensis. D. gubatmakiling* Barrion-Dupo et Barrion, 2018 is treated as a *nomen dubium*.

Material and methods

Specimens were preserved in 70% ethanol and examined and illustrated with a Leica MZ16 stereomicroscope with a camera lucida attachment.

Collections: RBINS — Royal Belgian Institute for Natural Sciences, Brussels, Belgium; SMF — Senckenberg Museum, Frankfurt am Main, Germany; UPLB — Museum of Natural History, Los Baños, Laguna, Philippines.

Taxonomic survey

Genus Asianopis Lin et Li, 2020

Lin et Li in Lin et al., 2020: 70.

TYPE SPECIES. *Asianopis zhuanghaoyuni* Lin et Li, 2020, from Fujian, China.

COMMENTS. This recently described genus differs from *Deinopis*, the only other genus occurring in Asia, by: the presence of a prominent setal fringe; the embolic tip with an apophysis or folded apically; the median apophysis distal lobe small and with a basal lobe; the female chelicerae with many denticles between the promarginal and retromarginal teeth or without denticles; the epigynal median plate lateral margins anchor shaped and the spermathecal duct narrow throughout its length.

DISTRIBUTION. Southeast Asia (China, Vietnam, Indonesia, India, 9 species, including one given herein). *Asianopis celebensis* (Merian, 1911) and *A. dumogae* (Merian, 1911) described from Sulawesi by the male and the female, respectively, are possibly conspecific.

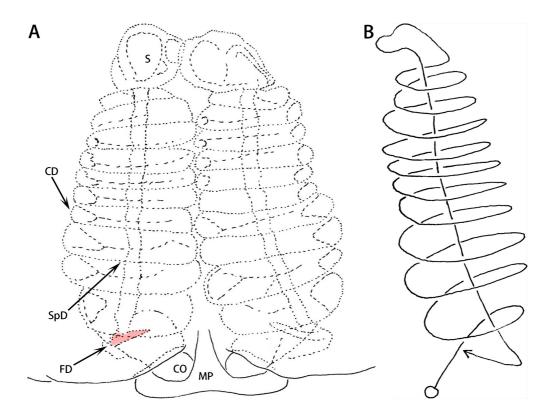


Fig. 1. Asianopis aruensis (Roewer, 1938), holotype \mathcal{P} : A — epigyne, ventral; B — schematic course of internal duct system, ventral. Abbreviations: CD — copulatory duct, CO — copulatory opening, FD — fertilization duct, MP — median plate, S — spermatheca, SpD — spermathecal duct.

Рис. 1. *Asianopis aruensis* (Roewer, 1938), голотип ♀: А — эпигина, вентрально; В — внутренняя система каналов, вентрально, схематично. Сокращения: CD — копуляторный канал, CO — копуляторное отверстие, FD — оплодотворительный канал, MP — срединная пластинка, S — сперматека, SpD — канал сперматеки.

Asianopis aruensis (Roewer, 1938) comb.n. Fig. 1A, B.

Deinopis aruensis Roewer 1938: 29, figs 18, 19 (2).

TYPE MATERIAL EXAMINED. Holotype ♀ from Indonesia, Maluku, Aru Islands, Soengai Manoembaai [ca. 6°01′37.08″S, 134°18′52.40″E, 15 m], 26.3.1929 leg. (RBINS: female; SMF 13716: epigyne, microscope slide; SMF 13717: leg III distal metatarsus, tarsus, leg IV distal tibia, metatarsus, tarsus, microscope slide).

DIAGNOSIS. The female has characters present in both the *liukuensis*-group and the *zhuanghaoyuni*-group: epigyne with an anchor-shaped median plate, with distinct copulatory openings, and a copulatory duct with 10 coils (Fig. 1A). Other *Asianopis* spp. have different combinations of characters: Either the copulatory duct has 3 coils, the epigyne has an anchor-shaped median plate, and the copulatory openings are distinct (*liukuensis*-group) or the copulatory duct has 10 coils, the epigyne has a well-developed triangular median plate, and the copulatory openings are obscured (*zhuanghaoyuni*-group).

DESCRIPTION. See Roewer [1938]. For an illustration of the epigyne see Figure 1.

DISTRIBUTION. Indonesia (Aru Islands).

COMMENTS. A diagnostic character of *Asianopis* is having the spermathecal duct narrow throughout its length, as found in this species, supporting its placement in *Asianopis*. However, which species group that this species belongs to is ambiguous given that it has diagnostic characters from

both species groups. The epigyne has an anchor-shaped median plate, the copulatory opening is distinct and easily visible in ventral view, diagnostic characters for the *liukuensis*-group. The copulatory duct has 10 coils, which is characteristic for the *zhuanghaoyuni*-group. We place this species in the genus *Asianopis* Lin et Li, 2020, without suggesting an affiliation to one of the known species groups.

Genus Deinopis MacLeay, 1839

TYPE SPECIES. *Deinopis lamia* MacLeay, 1839, from Cuba.

COMMENTS. Currently the genus includes 46 species occurring in all continents. Species of *Deinopis* from the region with adequate descriptions were transferred to *Asianopis* [Lin *et al.*, 2020]. It is likely that all eight species from Southeast and South Asia belong to *Asianopis*.

Deinopis gubatmakiling Barrion-Dupo et Barrion, 2018, nomen dubium

Deinopis gubatmakiling Barrion-Dupo, Barrion, 2018: 5, figs 1A-G, 2A-E, 3.

TYPE MATERIAL. Holotype subadult male from Philippines, Luzon Island, Laguna Province, Los Baños, Mount Makiling forest reserve, Molawin Creek, secondary forest, at night, A.T. Barrion leg. 2–3.04.2013 (UPLB ARA-00636); 4 subadult female paratypes with same data as holotype (UPLB ARA-00637–40). Not examined.

NOTES. The description of this species [Barrion-Dupo, Barrion, 2018] was based on immatures only. The characters provided are not sufficient for species identification.

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Compliance with ethical standards

Conflict of Interest: The authors declare that they have no conflict of interest.

Ethical approval: No ethical issues were raised during our research.

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