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Redescription of some poorly known species of *Cytaea* Keyserling, 1882 (Araneae: Salticidae), with new synonymies

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Abstract

Eight nominal species of *Cytaea* were studied. The poorly known *Cytaea fibula* Berland, 1938, *C. flavolineata* Berland, 1938 and *C. oreophila* Simon, 1902 are redescribed, diagnosed and illustrated. *Cytaea aeneomicans* Simon, 1902 and *C. guentheri* Thorell, 1895 are synonymized with *C. dispalans* (Thorell, 1892), while *C. whytei* Prószyński & Deeleman-Reinhold, 2010 is synonymized with *C. haematica* Simon, 1902.

Key words: jumping spiders, taxonomy, Australia, Pacific area

Introduction

The genus *Cytaea* was established by Keyserling in 1882. Since its proposal, many species have been reported from Australia, New Guinea, and other parts of SE Asia and SW Pacific (Prószyński 1984; Berry *et al.* 1998; Patoleta & Gardzińska 2010; Prószyński & Deeleman-Reinhold 2010, 2013), and 42 of these are presently considered valid (World Spider Catalog 2015). Unfortunately, many older descriptions of *Cytaea* species lack good diagnoses and documentation. To avoid multiple descriptions and synonyms, their redescriptions are absolutely necessary. While many species have already been re-studied (Davies & Żabka 1989; Prószyński 1976, 1984; Żabka 1991), the present work is an additional contribution to fulfil this task. This study is part of a taxonomic revision of the genus *Cytaea*, based on type and new material, mostly from Australia and New Guinea, areas considered biodiversity centres of this genus.

Material and methods

The current study is based on type and comparative material from the Muséum National d'Histoire Naturelle, Paris (MNHN), Swedish Museum of Natural History, Stockholm (SMNH), Collection of C.L. Deeleman-Reinhold donated to Rijksmuseum Leiden (CDML), Lee Kong Chian Natural History Museum, Singapore (LKCNHM) and the Australian Museum Sydney (AMS). The drawings were made using a grid system. The dissected epigyne was digested in 10% KOH, later stained in alcohol solution of Chlorazol Black E, and mounted in 2-Hydroxypropanoic acid for examination under transmission microscope. Dimensions (in mm) were taken with MultiScan software. Photographs were taken with a Nikon D5100 camera and a Nikon SMZ1000 stereomicroscope, and digitally processed with ZoomBrowser and HeliconFocus software.

Abbreviations used: AEW: anterior eye row width, AL: abdomen length, ALE: anterior lateral eyes, AME: anterior medial eyes, AW: abdomen width, CH: cephalothorax height, CL: cephalothorax length, CW: cephalothorax width, DAM: diameter of anterior median eye, EFL: eye field length, fI: femur I, mI: metatarsus I, PEW: posterior eye row width, pI: patella I, PLE: posterior lateral eyes, PME: posterior medial eyes, RTA: retrolateral tibial apophysis, tI: tibia I.

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AEW 1.92, PEW 1.54, leg I: 7.01 (1.93 + 1.08 + 1.83 + 1.56 + 0.61), leg II: 5.66 (1.74 + 0.88 + 1.26 + 1.26 + 0.52), leg III: 5.91 (1.97 + 0.86 + 1.04 + 1.53 + 0.51), leg IV: 5.53 (1.70 + 0.67 + 1.18 + 1.50 + 0.48).

Female. See Prószyński & Deeleman-Reinhold (2010, as *C. whytei*). Here we present only the figure of general appearance to complete the documentation (Fig. 53).

Cytaea oreophila Simon, 1902

Figs 56–62

Cytaea oreophila Simon, 1902: 392–393; Prószyński, 1984: 29 (male holotype from Java, Mons Teugger, Fruhstorfer, MNHN, 20576, examined); World Spider Catalog 2015.

Additional material examined. Singapur: 2♂, Mandai Lake Road, 12–14 February 1988 (LKCNHM); 1♂, Enq Konq Garden, 31 October 1988; 1♂, Malmcolm Road, 18 September 1988 (LKCNHM).

Diagnosis. Distinguishable from all members of *Cytaea* for the brown transverse stripe on chelicerae (Fig. 57). Differs from *C. carolinensis* Berry, Beatty & Prószyński for having a shorter embolus with one spiral and smaller anterior projection of the tegulum; also, RTA has a distal notch (Figs 61–62).

Redescription. **Male** (holotype). Cephalothorax dark-brown, covered with sparse white scales, more numerous on the sides. Eye surroundings black. Eye field wider than long, its length 51% of CL. PME halfway between PLE and ALE. Fovea short, located between PLE. Abdomen yellowish, with many gray-brown spots, anterior part covered with white scales, sides with brown hairs (Fig. 56). Spinnerets pale-yellow. Clypeus yellowish, narrower (38%) than AME diameter, covered with very long and dense white hairs (Fig. 57). Chelicerae slender, vertical, whitish, with long white hairs at the base (Fig. 57); promargin with three teeth, retromarginal tooth bicuspidate (Fig. 59). Sternum pale, elongate (Fig. 58). Venter greyish-brown. Pedipalps light-brown, tibia and patella prolaterally dark-brown, femur proximally greyish, with 1-1-1 dorsal spines. Cymbium with small posterior projection (Fig. 60). Seminal reservoir meandering. RTA short and wide, slightly hooked (Figs 60–62). Legs I brown, distal tibiae and patellae lighter; spination: fI: dorsal 1-1-5; pI: prolateral 1, retrolateral 1; tI: dorsal 1-0, prolateral 1-1, retrolateral 1-1, ventral 2-2-2; mI: prolateral 1-1, retrolateral 1-1, ventral 2-2. Other legs light brown. Dimensions. CL 2.72, CW 2.01, CH 1.52, AL 5.64, AW 3.06, EFL 1.39, AEW 2.03, PEW 1.88, leg I: 5,64 (1.60 + 0.96 + 1.39 + 1.15 + 0.54), leg II: 5.54 (1.63 + 0.94 + 1.27 + 1.15 + 0.55), leg III: 5.99 (1.79 + 0.97 + 1.20 + 1.51 + 0.52), leg IV: 6.03 (1.84 + 0.77 + 1.26 + 1.62 + 0.54).

Female. Unknown.

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