

Taxonomic change of two species in the genus *Haploclostus* Simon, 1892 (Araneae, Theraphosidae)

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Abstract

The genus *Haploclostus* is represented by eight species in India. In this paper, we synonymise *Haploclostus robustus* Pocock, 1900 with *H. validus* Pocock, 1899. *H. himalayensis* Tikader, 1977 is transferred to the genus *Chilobrachys* based on a generic character, the presence of enlarged paddle setae on prolateral side of maxillae. We provide additional information on morphometry and photographs of the palp and stridulatory setae that are lacking in the original description.

Keywords

Haploclostus spp., new synonym, transfer, Thrigmopoeinae

Introduction

The genus *Haploclostus* Simon, 1892 of the subfamily Thrigmopoeinae is endemic to India. This genus was established with the description of *H. cervinus* Simon, 1892 from Palni Hills, South India, based on few morphological characters. Later, three more species, *H. nilgirinus* Pocock, 1899, *H. kayi* Gravely, 1915, and *H. tenebrosus*

Gravely, 1935 were described in this genus (Pocock 1899, Gravely 1915, 1935). Raven (1985) synonymised the genus *Phlogiodes* Pocock, 1899 with *Haploclastus* based on the presence and the arrangement of stridulatory setae. With the inclusion of four species of *Phlogiodes*, the genus *Haploclastus* comprises eight species which are restricted to India.

Abbreviations

RJR	Robert J. Raven
MCG	Museo Civico di Storia Naturale “Giacomo Doria”, Genoa, Italy
NHM	Natural History Museum, London
MS	Manju Siliwal
ZSI	Zoological Survey of India, Kolkata

Haploclastus Simon, 1892

Haploclastus Simon 1892, p.152. Type species by original designation, female, *Haploclastus cervinus* Simon 1892 (type in MCG, examined by RJR).

Phlogiodes Pocock 1899, p. 748. Type species by original designation, male, *Phlogiodes validus* Pocock 1899. First synonymised by Raven 1985. (type in NHM, examined by RJR).

Haploclastus validus Pocock, 1899

Phlogiodes validus Pocock, 1899, p. 748; 1900, p. 179.

Phlogiodes robustus Pocock, 1899, p. 748; 1900, p. 180. New synonymy.

Remarks. The species *Haploclastus validus* and *H. robustus* that were previously under *Phlogiodes* were first described by Pocock (1899) from two specimens at the Natural History Museum, London. These specimens, a male and female were originally collected by Phipson from Matheran, presently in the State of Maharashtra, India. Pocock (1899) described the male as *H. validus* and female as *H. robustus*. Another female specimen collected by Master from Jauli, Satara district, Maharashtra (about 150 km from Matheran) was also identified by Pocock (1900) as *H. robustus*. These species descriptions do not provide any details on key characters distinguishing the two species, and only make mention of those characters that are attributable to sexual dimorphism, which is now well established in theraphosid spiders (e.g. Dippenaar-Schoeman 2002). In September 2009 one of us (RJR) visited NHM, and examined *H. robustus* but could

not locate the type of *H. validus* and we assume that specimen is either lost or is deposited in some other European museum. Thereby, we synonymise *H. validus* with *H. robustus* based on the original description (Pocock 1899).

***Haploclastus satyanus* (Barman, 1978)**

Phlogiodes satyanus Barman 1978: 168.

Remarks. The *Haploclastus satyanus* (Barman 1978) was originally described under *Phlogiodes* was also based on a single specimen originally described under *Phlogiodes* was also based on a single specimen. The type specimen was deposited at Zoological Survey of India (ZSI), Kolkata. During a visit to ZSI, Kolkata in September 2007, MS could not locate the type specimen of *H. satyanus*, it was possibly misplaced in the museum or never deposited there by the describing author (Barman 1978).

***Chilobrachys himalayensis* (Tikader, 1977), comb. n.**

Figs. 1–4

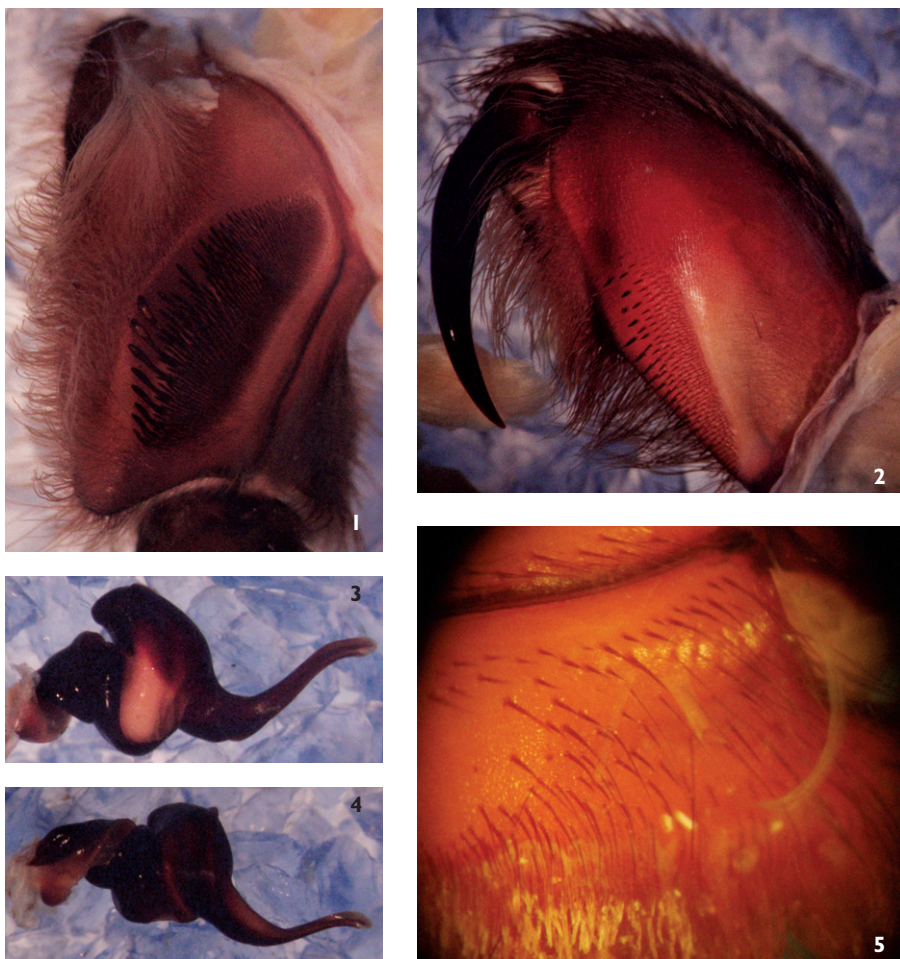
Phlogiodes himalayensis. Tikader 1977: 317, f. 36–38; Brignoli 1983: 139.

Haploclastus himalayensis Raven 1985: 157

Material examined. *Type material*: holotype, male, Birch Hill, Darjeeling, Eastern Himalaya, West Bengal, 22-iv-1974, coll. Bijan Biswas, registration number not given, Zoological Survey of India, Kolkata.

Additional information. All measurements in mm. Total length 34. Carapace 17.0 long, 15.0 wide. Legs (femur, patella, tibia, metatarsus, tarsus, total): I: 17.0, 8.0, 18.0, 11.0, 8.0, 62.0. II: 14.0, 7.0, 12.0, 10.0, 8.0, 51. III: 12.0, 7.0, 10.0, 11.0, 8.0, 48.0. IV: 17.0, 7.0, 13.0, 16.0, 8.0, 61.0. Palp: 12.0, 6.0, 10.0, –, 3.0, 31.0. Eye diameter: AME 0.6, PME 0.4, ALE 0.8, PLE 0.7; distance between eyes: AME-AME 0.5, PME-PME 2.0, PME-PLE 0.1, AME-ALE 0.4. Sternum 8.0 long and 7.0 wide, oval, three pairs of sternal sigilla. Twelve promarginal chelicerae teeth. Abdomen 17.0 long, 10.0 wide. Spinnerets: both pairs digitiform, posterior median spinnerets 1.5 long; posterior lateral spinnerets 8.0 long (3.0 basal, 2.0 medial, 3.0 apical). Maxillary lyra and cheliceral spinules as in figs 1–2; male palpal organ as in figs 3–4.

Remarks. On examining the stridulatory setae of the type specimen of *H. himalayensis*, it was found that maxillary lyra had enlarged paddle setae on prolateral side of the maxillae (Fig. 1) and thorn setae on retrolateral side of the chelicerae (Fig. 2), which is a characteristic feature of the genus *Chilobrachys* Karsch, 1891 rather than the genus *Haploclastus* Simon 1892, where the maxillary lyra consists of a transverse row of spinules on the prolateral face of the maxillae (Fig. 5). Therefore, *Haploclastus hima-*



Figures 1–5. *Chilobrachys himalayensis* (Tikader, 1977), male. **1** Prolateral side of left maxilla showing maxillary lyra **2** Retrolateral side of left chelicerae showing spinules **3** Dorsolateral view of left male palp **4** Ventrolateral side of left male palp **5** *Haploclostus kayi* Gravely, 1915, prolateral side of left maxillae showing maxillary lyra.

layensis is transferred here to the genus *Chilobrachys* based on the stridulatory structure on maxillae and chelicerae.

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References

- Barman M (1978) A new mygalomorph spider of the genus *Phlogiodes* from Khasi-Jaintia Hills, India (Araneae: Theraphosidae). *Journal of the Bombay Natural History Society* 75: 168–169.
- Dippenaar-Schoeman AS (2002) Baboon and Trapdoor Spiders of Southern Africa: An Introduction Manual. Plant Protection Research Institute Handbook No. 13, Agricultural Research Council, Pretoria, 128 pp.
- Pocock RI (1899) Diagnosis of some new Indian Arachnida. *Journal of the Bombay Natural History Society* 12: 744–753.
- Pocock RI (1900) The fauna of British India, including Ceylon and Burma. Arachnida. Taylor & Francis, London, 279pp.
- Raven RJ (1985) The spider infraorder Mygalomorphae (Araneae): Cladistics and systematics. *Bulletin of American Museum of Natural History* 182: 1–180.
- Tikader BK (1977) Studies on some mygalomorph spiders of the families Ctenizidae and Theraphosidae from India. *Journal of the Bombay Natural History Society* 74: 306–319.