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Revision of Mani's Figitidae types (Hymenoptera: Cynipoidea)

MATTIAS FORSHAGE¹ & GUILHERME COSTA BAIÃO²

Naturhistoriska Riksmuseet, Enheten för Entomologi, Box 50007, 104 05 Stockholm, Sweden.

E-mail: ¹mattias.forshage@nrm.se; ²gcbaiao@gmail.com

Figitid wasps are still a poorly known group, with a major part of the species diversity undescribed, and complete uncertainty about the identity of a large part of the available names.

Very few taxa in this group have been described from the Indian subcontinent. Mahadeva Subramania Mani (1908–2003), a pioneer in the exploration of the parasitic Hymenoptera of the subcontinent and mainly a chalcidologist, published descriptions of three species of Eucoilinae in two works (Mani 1936, 1941), descriptions that are far from sufficient for generic placement, and entirely without illustrations. These taxa have not been studied by any subsequent workers, but have been considered very doubtful. Since after clarification of generic limits in the subfamily, the genera in which two of these species are described, *Dieucoila* Ashmead and *Odonteucoila* Ashmead, have both been found to be restricted to the New World (Nordlander 1982). On the other hand, the genus that the third species was described in, *Hypoethria* Förster, is a junior synonym of *Trybliographa* Förster (Nordlander 1981) which does occur in India.

After contacting Dr Sheela Saroj at the Zoological Survey of India at Calcutta we found that the types of the two 1936 species are indeed still extant in their collection. At our request, photographs of the specimens were sent to us by Dr Girish Kumar with the support from Dr Krishnamoorthy Venkataraman, director of the unit. The photographs made it clear that these two species do not belong to Eucoilinae at all, but to a completely different subfamily of Figitidae, the Aspicerinae.

They belong to *Callaspidia* Dahlbom and *Prospicera* Kieffer respectively, two genera which have been recently revised on a global scale (Ros-Farré & Pujade-Villar 2009; 2006). The researchers conducting these revisions have not seen any reason to search for these types as they were supposed to belong to another subfamily.

Types of the third species were deposited at the National Pusa collection, Indian Agricultural Research Institute, New Delhi, according to the original description. We contacted Dr Debjani Dey, Principal Scientist at this institution, and she reported that no type specimens of this taxon could be found in the collection despite their best efforts, and they are apparently lost. The original description does not include enough details to allow a generic placement and the identity of the species remains unknown.

Type material of *Dieucoila indica* Mani, 1936 consists of three female specimens according to original description, however only two of them could be located in the collection of the Zoological Survey of India (an unspecified number of other specimens are also listed in the original publication but excluded from the type series). Dr Girish Kumar examined the type specimens at our request and confirmed they are very similar to each other except for slight color and size difference. The specimen that we received pictures of (Reference No 915/H3) is here designated as a lectotype, and the other (No 916/H3) is a paralectotype. The type series is associated with the following data: “Coll. H. S. Pruthi, Mussorie, 6000 ft, U. P. vii-1933. Nos. 915-17/H3”. Mani (1936) states “viii-1933” as the collection date, which is probably a typing error. The lectotype is pinned through the mesosoma and rather dirty, especially on the wings and left hind leg (Figure 1). The picture shows that the antennae are broken at approximately mid-length, but the insect seems otherwise complete.

The genus *Callaspidia* is readily recognizable by the characteristic scutellum, and identification of the specimen as *C. notata* (Boyers de Fonscolombe, 1832) is possible by the sculpture on the lateral aspect of the pronotum, which is smooth dorsally and ridged ventrally. This species has a broad distribution range through the Palearctic and Oriental regions, including India (Ros-Farré & Pujade-Villar 2009).

Thus: *Callaspidia notata* (Boyers de Fonscolombe, 1832) (*Dieucoila indica* Mani, 1936 **n. syn.**).

The unique male type (holotype) of *Odonteucoila kurseongensis* Mani, 1936 is also pinned through the mesosoma and somewhat dirty, particularly on the dorsal part of mesosoma and wings (Figure 2). On the picture it can be seen that the left antenna is broken at about mid length and that a few tarsomeres of the right hind leg are missing. The pin is in

very poor condition. The following information is associated with the specimen: “Coll. N. Annandale, Kurseong, E. Himalayas, 23-vi-1910. No. 920/H3”.



FIGURE 1. Lectotype of *Dieucoila indica* Mani, 1933. Habitus.



FIGURE 2. Holotype of *Odonteucoila kurseongensis* Mani, 1933. Habitus.

Prosaspicera can be recognized by the scutellar spine and the vertical medial furrow on the posterior area of the vertex. Identification of the specimen as *P. validispina* Kieffer, 1910 is possible by the elongate spine and by clearly observable strong, straight carinae on the lateral aspect of the pronotum. This species has Oriental distribution, including India (Ros-Farré & Pujade-Villar 2006).

Thus: *Prosaspicera validispina* Kieffer, 1910 (*Odonteucoila kurseongensis* Mani, 1936 **n. syn.**).

Type material of *Hypoethria ramachandrai* Mani, 1941 consisted of a female holotype, a female paratype and a male paratype (“allotype”) from Coimbatore, Tamil Nadu; a small number of supposedly conspecific individuals are mentioned in the description but not included as types. Since no types were found, and the description is lacking many

critical characters, and especially since the comparison of the 1936 descriptions with the actual specimens described revealed a large degree of discrepancy, we find it advisable to refrain from guesswork based on the characters in the original description. There is some biological data available, most importantly the type series is associated with Diptera in *Sorghum*, but since we do not know which Diptera, and the association is anecdotal rather than a controlled rearing anyway, this does not provide any more steady ground for an assessment of the identity of this species. Even though the genus *Hypoethria* is now a junior synonym of *Trybliographa*, nothing supports treating *H. ramachandrai* as a species of *Trybliographa*. We cannot even be certain that this species belongs to Eucoilinae, and in the absence of type material the name is best considered a *nomen dubium*.

In a poorly known group with a history of confusion, this is just one more example that it is necessary to look for types in a wider taxonomic range than just the target group; many generic assessments in original descriptions are not just outdated but more or less random and completely misleading.

It is also an example that sending photographs can be a great alternative in parts of taxonomic work, far cheaper and faster than traditional specimen loans, and especially so for institutions with limited funds for shipping, limited curatorial workforce, or unreliable postal service or customs.

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