## TAXONOMIC ASSESSMENT OF TYPES OF ICHNEUMONIDAE IN FOREST RESEARCH INSTITUTE, DEHRA DUN, INDIA

(Hymenoptera: Ichneumonidae)

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Abstract: Ichneumonid holotypes present in the Forest Research Institute, Dehra Dun, have been re-examined to elucidate their correct taxonomic placements. Three new synonymies and several new combinations are proposed. The new synonymies are: Xanthopimpla theophilae Rao=X. punctator (L.); Diaborus indica Rao=Trichonotus nox (Morley); and Sinophorus wynaadensis Rao=Eugnomus wynaadensis Rao=Xanthocampoplex wynaadensis (Rao).

The Indo-Australian species of Ichneumonidae have recently been catalogued and reclassified by Townes, Townes & Gupta (1961). The correct taxonomic status of the species included there was determined by a re-examination of the types located in several museums of the world. The types present in Indian museums, however, could not then be studied and their taxonomic status was either judged from their published descriptions or left as advocated by the author of the species. Attempts have now been made to study the Indian collections and this paper reports on the study of the types in the Forest Research Institute, Dehra Dun.

The collections were studied in June 1962. There are 25 ichneumonid holotypes in that collection, all described by Dr. S. N. Rao in 1953. All of these have been examined and their correct generic placements and synonymies are given below in the same order in which Rao described them in his paper. In many cases the present study confirms the generic placements made in 1961. This fact is indicated by mentioning the page number of 1961 catalogue in parenthesis after the correct name of the species concerned.

- 1. Xanthopimpla theophilae Rao=Xanthopimpla punctator (L). New Synonymy. Identical in all respects; spots on propodeum and hind femur in Rao's specimens a little variable.
- 2. Xanthopimpla taprobanica Cameron, Rao.—Xanthopimpla cera Cameron. This is not a true taprobanica Cameron. The spots on abdomen, and notaulae, are like those of cera Cameron.
- 3. Xanthopimpla pyraustae Rao.—Superficially resembles X. cera Cameron, but is much larger in size. It is probably a distinct species.
- 4. Habropimpla sesamiae Rao=Xanthopimpla stemmator (Thunberg) (1961: 69).
- 5. Philopsyche hapaliae Rao=Acropimpla hapaliae (Rao) (1961: 16).
- 6. Paratanera indica Rao=Syzeuctus indicus (Rao) (1961: 207).
- 7. Leptobatopsis grandicolor Rao=Leptobatopsis v-maculata (Cameron) (1961: 209).

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- 8. Hemigaster eublemmae Rao=Brachycyrtus eublemmae (Rao) (1961: 118). It was described as a parasite of Eublemma sp. The host mentioned on the label is Eublemma silicula. I have reared this species from cocoons of a Chrysopa that was associated with lac at Ranchi, Bihar.
- 9. Neoarthula pierisae Rao=Diadegma pierisae (Rao) (1961: 238).
- Stictolissonota bicolor Rao. Appears to be a species of *Phytodietus*. Ovipositor swollen before tip and quite long. It was provisionally placed under *Stictolissonota* in 1961: 206.
- 11. Metopius sesamiae Rao=Xanthopimpla sesamiae (Rao) (1961: 67). Similar to X. impunctata in coloration. No black spots on body.
- 12. Promethus poonaensis Rao=Xanthopimpla poonaensis (Rao) (1961: 62).
- 13. Pristomerus panti Rao.—This is a species of Pristomerus. The type is badly preserved. It is probably allied to P. microdon Cushman.
- 14. Eugnomus wynaadensis Rao=Xanthocampoplex wynaadensis (Rao), n. comb. In 1961 (p. 224) this species was placed under *Devorgilla* with a query. The holotype has pectinate front tarsal claws—a feature not mentioned in the published description. Other tarsal claws broken; ovipositor tip with a dorsal notch.
- 15. Pseudochorus kuriani Rao=Perilissus cingulator (Morley) (1961: 214).
- 16. Mesochorus panti Rao=Stictopisthus panti (Rao) (1961: 298, placed here with a query).
- 17. Mesochorus hapaliae Rao=Stictopisthus hapaliae (Rao) (1961: 297, placed here with a query). One ∂' paratype of this species, however, belongs to *M. panti* Rao.
- 18. Mesochorella indica Rao.—This is probably a species of Diadegma. Ovipositor extends very little beyond tip of abdomen; clypeus not strongly convex; tarsal claws simple (only front ones visible). Appears like Diadegma pierisae in general shape, but is different in coloration.
- 19. Diaborus indica Rao=Trichonotus nox (Morley). New Synonymy. Two distinct species are represented in the series described by Rao (1953: 204-207). The holotype and the paratypes belong to Trichonotus, while the ♂ allotype belongs to Aphanistes and agrees with identified specimens of A. eupterotes Cushman present in Forest Res. Inst. collections. In 1961: 311, it was placed under Aphanistes. The genus Trichonotus is the same as Labrorychus of Townes, Townes and Gupta (1961: 316). Perkins (1962: 433) has shown that the type of Labrorychus is Anomalon nigricorne Wesmael, 1849, and not (Labrorychus anaitidis Szepligeti)=tenuicornis Gravenhorst, as used by various authors. This alters the common usage of Labrorychus. The next available name for this genus is Trichonotus (see 1961: 316).
- 20. Sinophorus longiterebrae Rao=Devorgilla longiterebrae (Rao) (1961: 223, placed with a query). Tarsal claws pectinate; ovipositor tip with a dorsal notch; propodeum not deep in middle (cf. Sinophorus).
- 21. Sinophorus wynaadensis Rao=Xanthocampoplex wynaadensis (Rao). This is the same as Eugnomus wynaadensis Rao (no. 14 in the present paper). New Synonymy. The holotypes of both S. wynaadensis and E. wynaadensis are from Wynaad (Madras). Allotype and 1♀ paratype of S. wynaadensis bear the same data as the holotype of E. wynaadensis.

- 22. Mesostenus hapaliae Rao=Gotra hapaliae (Rao) (1961: 179, placed with a query).
- 23. Mesostenus wynaadensis Rao=Goryphus wynaadensis (Rao) (1961: 155, placed with a query).
- 24. Brachicentrus indica Rao.—"♂"=♀. This is probably a species of Barichneumonites. Areola bound by weak carinae; propodeum with 2 basal teeth touching post-scutellum; mandible narrow and almost parallel-sided in apical 2/3; lower tooth about 1/2 the upper; sternites 2 & 3 folded in middle.
- 25. Phaedraspis indica Rao=Necolio indicus (Rao), n. comb.
- 26. Pyramidophorus orientalis Rao=Cratichneumon? orientalis (Rao), n. comb. The genus Pyramidophorus does not occur in India and is one of the lesser known genera of Europe.

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