Short Communication

A SYSTEMATIC NOTE ON THE GENUS TRISSOLCUS ASHMEAD (HYMENOPTERA: SCELIONIDAE) WITH A KEY TO SPECIES FROM INDIA

INTRODUCTION

Compared to the enormous diversity exhibited by Scelionidae in India, our taxonomic knowledge on the group is still naive. There has been no in-depth taxonomic studies on Indian Telenominae, the notable egg parasites of our agroecosystems. While more than 600 species of Telenomus Haliday and 175 species of Trissolcus Ashmead have been reported globally, we have only some scattered and superficial information on Indian species accounting to just about 19 of Telenomus and 7 of Trissolcus (Rajmohana, 2006).

During the course of our taxonomic studies on Trissolcus of India, three different species of Trissolcus were found bearing the same species name viz., "indicus", a certain case of taxonomic homonymy. They are Trissolcus indicus Mani (1936), Trissolcus indicus (Narayanan & Kaur, 1959) and Trissolcus indicus (Subba Rao and Chacko, 1961). At the time of publication all the three were placed in different genera, viz. Dissolcus indicus Mani, Microphanurus indicus Narayanan & Kaur and Allophanurus indicus Subba Rao and Chacko. Later through generic transfer by Johnson (1981, 1992) and Fergusson (1983) all the three species came under Trissolcus Ashmead, though no attempts were made to solve the problem of homonymy.

In the present study, the original descriptions of the three species were considered in detail, thus reconfirming the distinct species status of those species. Hence to solve the issue of homonymy, two new species names, based on their taxonomic characters, viz. Trissolcus nigrus (since body is black in colour) for T. indicus (Narayanan & Kaur) and T. hyalinipennis (since wings are transparent) for T. indicus (Subba Rao & Chacko) are hereby proposed. The original name has been retained for T. indicus (Mani).

Thus the seven species of Trissolcus in India are T. barrowi Dodd, T. carinifrons (Cameron), T. orontes (Nixon), T. latisulus (Crawford), T. indicus (Mani), T. hyalinipennis Rajmohana & Narendran nomen. nov. and T. nigrus Rajmohana & Narendran nomen. nov.
Of these, *T. carinifrons* and *T. barrowi* were originally described from Dalhousie and Dehradun (India) respectively. *T. orontes*, was first recorded from Bombay, but later was also reported from Senegal by Risbec (1950). *T. latissulcus*, seen throughout the Oriental region (Johnson, 1992), was reported from South India by Ramakrishna Ayyar (1927). *T. hyalinipennis*, *T. nigrus* and *T. indicus* were originally described from Delhi.

The following dichotomous key distinguishes the seven species in India.

**Key to the species *Trissolcus* Ashmead of India**

1. Mesonotum posteriorly with notauli .......................................................... 2
   - Mesonotum posteriorly without notauli .................................................. 3

2. Scutellum with coarsely rugulose sculpture; antenna predominantly yellow ........
   ........................................................................................................... *T. latissulcus* (Crawford)
   - Scutellum with reticulate sculpture; antenna predominantly dark reddish brown ....
   ........................................................................................................... *T. indicus* (Mani)

3. Radicle of antenna nearly half as long as scape ...................... *T. carinifrons* (Cameron)
   - Radicle of antenna distinctly less than half of scape ......................... 4

4. Frons with distinct bulges between orbital margin and antennal insertions .............. 5
   - Frons without bulges between orbital margin and antennal insertions .... *T. orontes* (Nixon)

5. Scape darker and blackish, compared to radicle ...................... *T. barrowi* (Dodd)
   - Scape lighter and yellowish, compared to radicle .................................. 6

6. Metasomal T2 almost striated till tip medially .......................................................... 7
   ........................................................................................................... *T. nigrus* Rajmohana & Narendran nomen. nov.
   - Metasomal T2 almost plain and smooth medially .................................... 8
   ........................................................................................................... *T. hyalinipennis* Rajmohana & Narendran nomen. nov.

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