



A NEW RECORD OF PEST SPECIES *PSEUDODENDROTHRIPS BHATTII* KUDÔ (THYSANOPTERA: THRIPIDAE: DENDROTHRIPINAE) FROM INDIA

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ABSTRACT

The mulberry thrips, *Pseudodendrothrips bhattii* Kudô, known as a pest of mulberry, is newly recorded from Karnataka. This species causes damage to mulberry plantations especially in summers.

Key words: *Pseudodendrothrips bhattii*, mulberry, new record, India

The Dendrothripinae is one of the four subfamilies recognized in the family Thripidae (Mound 2011). The members of this subfamily are saltatorial with elongated lyre-shaped metathoracic endofurca to which powerful muscles are attached for jumping. Fifteen dendrothripinae genera with 97 species are now recognized worldwide, and of these, five genera with 23 species are known from India (Mound 2011). Members of Dendrothripinae are easily separated from other thripids by the presence of elongated metathoracic endofurca extending into meothorax, body broad and flat with complicated sculpture, greatly enlarged hind tarsus and abdominal tergites with median setae closely spaced.

Pseudodendrothrips Schmutz is a small genus of leaf-feeding Dendrothripinae, currently includes 19 species across the globe (Mound 2011), of which 5 species were reported from India: *P. albana* Bhatti (1997), *P. kulshresthai* Chauhan & Vijay Veer (1992), *P. mori* (Niwa 1908), *P. ornitissimus* Schmutz (1913), *P. suvarna* Bhatti (1997). Recently, specimens of *Pseudodendrothrips bhattii* including all life stages have been collected on mulberry from Karnataka.

Pseudodendrothrips bhattii Kudô was earlier reported as a pest of mulberry from Pakistan and South East Asia (Akram *et al.* 2003, Mound 1999). Its infestation affects the quality and quantity of mulberry leaf, by direct feeding of leaves and the ingestion of sap, which in turn affects the silkworm cocoon crop.

MATERIALS AND METHODS

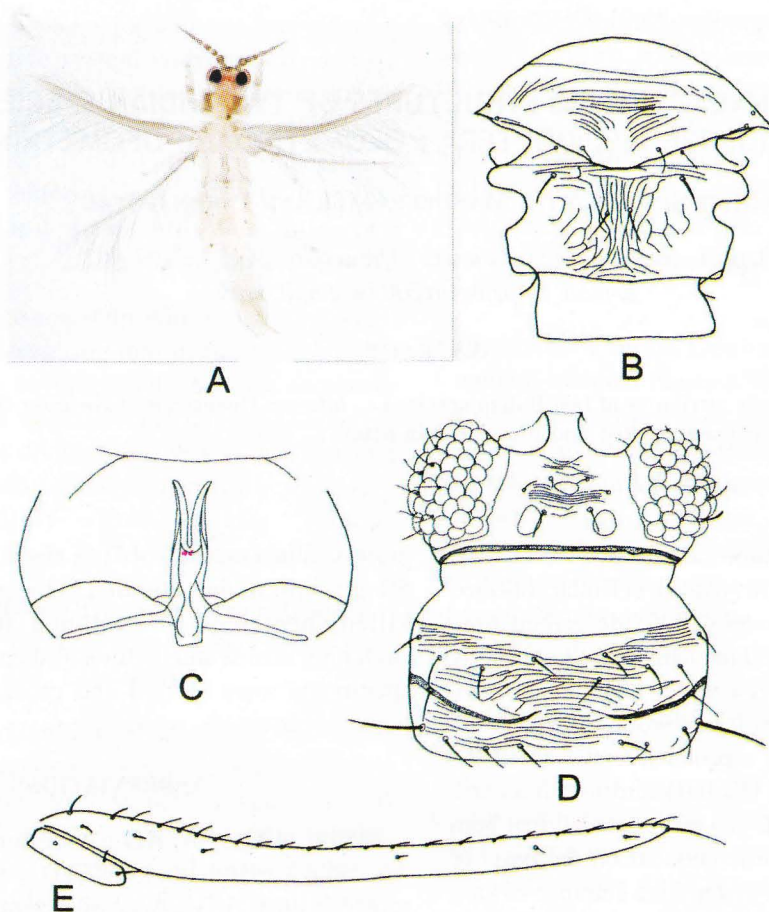
160 females, 40 males, 20 larvae and 5 pupae collected on mulberry from different area of Karnataka state (5 males, 20-iv-2009; 30 females, 20 males, 20 larvae, 5 pupae, 20-i-2010; 20 females, 24-i-2010, from Mallur; 50 females and 20 males, 16-iii-2011, from Kaiwara, coll. Kaomud Tyagi; 50 females, 5 males, 4-i-2008, from Harohalli, coll. Vikas Kumar).

Specimens were collected by beating mulberry leaf onto the white plastic trays and collected in solution containing 9 parts of 10% alcohol, 1 part of glacial acetic acid to which 1 ml of Triton X-100 in 1000 ml of the mixture was added. Few specimens have been mounted onto the glass slides with Canada balsam for observation and studying characters and a few preserved in absolute alcohol for colour study.

Pseudodendrothrips bhattii Kudô 1984 (Fig. A-E)

Both sexes are macropterous. Body white, except brown interocular area, lateral 1/3 of both sides of pronotum, lateral sides of mesonotum, median third of fore tibia. Antennal segments I to III dark gray, pedicel of segment III pale, segments IV to VIII gray, paler on basal third. Fore wing gray. Head irregularly sculptured with transversely, partly longitudinally anastomosing lines between eyes. Antenna 8-segmented. Pronotum with a strong transverse internal apodeme which is interrupted in middle. Metanotum with median pair of setae placed close together and

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Figs. A–E. *Pseudodendrothrips bhattii*. (A) female; (B) Meso- and metanota, female; (C) Metasternum, female; (D) Head and Pronotum, female; (E) Fore wing, female.

little ahead of the middle of sclerite; submedian pair placed along anterior margin. Abdominal tergite I with a pair of well developed setae at middle. Tergite VIII with comb of microtrichia at posterior margin. Tergite IX with long and stout microtrichia in posterior half, arranged in 3 rows; S1 and S2 setae on tergite IX subequal and about 2/3 as long as tergite. Male without pore plates on abdominal sternites.

This species can be easily separated from all other species in the genus by gray wings and presence of brown patches on interocular area, lateral 1/3 of both sides of pronotum, lateral sides of mesonotum. This species is very close to *P. suvarna* but can be differentiated by colour of body *i.e.* bicoloured (Head and thorax brown and abdomen yellow).

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