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# A new synonym and two new records for Taiwan of Thripidae related to *Trichromothrips* (Thysanoptera)

## CHIN-LING WANG

Agricultural Research Institute, 189, Chung-cheng Road, Wufeng, Taichung, Taiwan, ROC

Masumoto & Okajima (2005) reviewed 12 closely related genera of Thripidae as the *Trichromothrips* genusgroup. In this group they included *Octothrips* Moulton, of which the type species *O. suspensus* Moulton (1940) is known only from a single male taken on *Cyperus* in Papua New Guinea. The only other species described in this genus is *O. lygodii* Mound (2002), from *Lygodium* ferns in S.E. Asia. Bhatti (2003) synonymised *Apollothrips* Wilson (1972), and transferred to *Octothrips* the two involved species, *O. bhattii* (Wilson) and *O. karnyi* (zur Strassen). In this paper, *O. lygodii* is considered a synonym of *O. bhattii* and is newly recorded from Taiwan.

The genus *Trichromothrips* was erected by Priesner (1930) for a single species *T. bellus*, but Bhatti (1999) transferred into it all 20 species of *Dorcadothrips* Priesner. Subsequently, Bhatti (2000) provided a review of the genus to include 27 species, and arranged these into 10 sections. In Taiwan, *T. xanthius* (Williams) was the first member of this genus recorded (Wang, 2002), and subsequently Masumoto &.Okajima (2005) described from Taiwan *T. formosus*, *T. fragilis* and *T. taiwanus*. This paper reports *T. priesneri* (Bhatti) as the fifth member of this genus from Taiwan.

Most of the character states of *Trichromothrips* are found also in *Octothrips*. The shared characters include: body size medium to large, usually with bulging eyes and long cheeks; antennae and wings slender; antennal segment I with dorsal apical setae; abdominal tergum VIII with no posteromarginal comb; male often with a pair of drepanae or long setae on posterior margin of abdominal tergum IX; male with small scattered glandular areas on abdominal sterna (Masumoto & Okajima, 2005). The species of *Octothrips* differ from those of *Trichromothrips* in: dense sculpture on head, pronotum and metanotum; submarginal position of sternal marginal setae; ninth tergite of males with pair of long setae rather than long drepanae.

## Trichromothrips priesneri (Bhatti)

Apothrips priesneri Bhatti, 1967: 20–21. Trichromothrips priesneri (Bhatti); Bhatti, 1978: 167.

**Female** (macropterous): Head and pronotum brown with median area pale, pterothorax yellow, abdomen brown with red pigment. Antennal segments I–II brown, III–IV grayish brown except basal 1/3–1/2 of IV white, V white with distal end grayish, VI–VIII grayish brown. forewing brown; all legs yellow. Head square, strongly constricted behind eyes; cheeks shorter than eyes, ommatidia transparent; interocellar setae long, arising between anterior margins of hind ocelli. Pronotum smooth; two pairs of long posteroangular setae, two pairs of inner posteromarginal setae. Mesonotum almost smooth, median pair of setae situated in front of submedian pairs. Metanotum smooth; median setae near anterior margin; campaniform sensilla absent. Forewing first vein with 2 distal setae, second vein setal row complete. Abdominal tergite VIII without posterior marginal comb.

**Male**: Not recorded from Taiwan. According to Bhatti (2000): abdominal tergite IX with pair of long drepanae; sternites III–VIII with 6–8 glandular areas, 2 to 3 median areas anteriorly and 2 to 3 circular areas laterally.

**Specimens examined**: **Taiwan**, Pingdung, Manshu, 21.xi.2001, 5 females from grass; Nantou, Wushu, 30.xi.2001, 1 female from *Ipomoea nil*.

**Remarks**: Known otherwise only from India, *T. priesneri* has a similar color pattern to *elegans* Masumoto & Okajima. These species can be distinguished as follows. 1. *T. priesneri* with cheeks only about half the length of eye, and length of head and pronotum about the same, while *elegans* with cheeks longer than eye and head much longer than pronotum. 2. median pair setae on metanotum of *priesneri* are not on anterior mar-

gin of metanotum as *elegans*. 3. *priesneri* has 6 basal upper vein setae on forewing and *elegans* has 5 such setae. 4. *priesneri* and *elegans* have different antennal color, the former has whole antennal segment V white and segment VI grayish brown, the latter has antennal segment V yellowish white with distal half brown, and segment VI brown with basal third yellowish white.

# Octothrips bhatti (Wilson)

Apollothrips bhatti Wilson, 1972: 52–54. Octothrips lygodii Mound, 2002: 219–220. new synonym.

**Female** (macropterous): Body light brown, color of abdomen and antennae variable. Antennal segments light brown, III–IV uniformly light brown or with apical portion yellow. Forewing brown; all legs yellow. Abdominal tergites II–VIII with dark brown antecostal ridges, tergites all brown to median 1/3 brown but yellow laterally. Head and pronotum with dense sculpture, cheeks shorter than eyes; interocellar setae arise between front and hind ocelli. Pronotum with one pair of posteroangular setae, 4 pairs of inner posteromarginal setae. Mesonotum with dense sculpture; median pair of setae situated in front of submedian pairs. Metanotal sculpture of longitudinal reticles; median setae posterior to anterior margin; campaniform sensilla absent. Forewing first vein with 2 distal setae, second vein setal row complete. Abdominal tergites II–VIII with median and lateral sculpture, VIII without posterior marginal comb.

Male: Similar to female; abdomen with 50-70 small pale circular glandular areas on sternites III-VII.

**Specimens examined: Taiwan**, Hualien, 22 females, 2 males, on *Nephrolepis*, 22.ix.1993. **Malaysia**, Kuala Lumpur, University of Malaya, vii.2006, 2 females, 2 males from *Lygodium*, **India**, holotype female, allotype male of *Apollothrips bhatti* on *Nephrolepis* sp., 24.xi.1969.

**Remarks**: This species is now known from China, Taiwan, Hong Kong, Singapore, Malaysia, Thailand, Indonesia, India and Japan. Bhatti (2003) used three characteristics in his key to separate *bhattii* and *lygodii*: shape and length of split on tergite X, body colour, and sternal glandular areas of males. However, among the specimens listed above no differences were found, either in tergite X or in the body colour. The glandular areas on the sternites of the male allotype of *bhatti* are difficult to see, but appear to be the same as in *lygodii*, and these two are therefore considered the same species.

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