Bull. Biogeogr. Soc. Japan
48 (2) : 56-59. Dec. 30, 1993

日本生物地理学会会報
第48巻第2号 1993年12月30日

A New Orthotyline Plant Bug (Heteroptera: Miridae), Associated with *Rhododendron macrosepalum* (Ericaceae) in the Kii Peninsula, Japan

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Abstract. *Orthotylus gotohi* is described as new, and a new subgenus of *Orthotylus*, *Kiiorthotylus*, is proposed to accomodate the new species. A description of the last-instar nymph is also provided. This species is associated with a semievergreen shrub, *Rhododendron macrosepalum*, which is endemic to Japan.

During my recent collecting trip in the Kii Peninsula of Honshu, many nymphs of an orthotyline plant bug were collected from *Rhododendron macrosepalum* (Ericaceae, Japanese name: Mochi-tsutsuji). These nymphs were reared with young leaves and stems of this plant in the laboratory, and 31 ♂ 4 ♀ adults emerged after several days. Subsequently, additional adults were offered by Mr. S. Gotoh of Tanabe City and I could get enough materials to examine.

These mirids can be regarded as a species of the genus *Orthotylus*, judging from the external appearance, but the male genital structure sufficiently differs from those of any known subgenera and species groups previously proposed by several authors (Southwood and Leston, 1959; Wagner and Weber, 1964; Wagner, 1972). In addition to such structural differences, this new species has a special host preference; it is associated only with *Rhododendron macrosepalum* which is restricted to western Japan (Horikawa, 1972).

In the present paper, both adult and last-instar nymph of the new species, *Orthotylus gotohi*, are described and figured, and a new subgenus *Kiiorthotylus* is proposed for the new species.

All measurements in the text are given in millimeters.

Genus ***Orthotylus*** Fieber, 1858

Orthotylus Fieber, 1858, Wien. ent. Monat., **2**: 315, type species: *Cimex nassatus* Fabricius, 1787, by subsequent designation by Kirkaldy, 1906, Trans. Am. ent. Soc., **32**: 127.

This is a large Holarctic genus, including more than 90 species; only 3 species, *O.* (*O.*) *pallens* (Matsumura, 1911), *O.* (*Melanotrichus*) *flavosparsus* (Sahlberg, 1842) and *O.* (*Neomecomma*) *bilineatus* (Fallén, 1807), have been recorded from Japan (Miyamoto and Yasunaga, 1989).

Most species of the genus are plant-feeders and several are of economic importance, while predation on psylla and aphids has been reported (Wheeler and Henry, 1992).

Kiiorthotylus, n. subgen.

Type species: *Orthotylus gotohi*, n. sp.

Similar in general coloration and shape to *Orthotylus* s. str., but differing in having the smaller body, extremely long rostrum, and peculiar shape of the male genitalia as follows: sensory lobe of left paramere with a median rounded spinulate process and toothed apical-inner margin; hypophysis slender and strongly hooked at middle (Fig. 2 C-E); right paramere widened and flattened, with marginal teeth apically (the teeth are variable in number and shape as in Fig. 2 A-B) and basal long shaft; vesica composed of three lobes (F); lobe α (seminal lobe) almost membranous and not elongate; lobe β sclerotized and 3-branched—two apical branches bifurcate; lobe γ sclerotized, curved and elongate, with a median short branch.

Orthotylus* (*Kiiorthotylus*) *gotohi, n. sp.

Adult (Fig. 1 A). Body generally pale green,

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