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A New Leafhopper of the Genus *Trifida* Thapa et Sohi (Hemiptera, Cicadellidae, Typhlocybinae) from Japan

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Abstract. A new leafhopper, *Trifida bilobata* N. Ohara sp. nov. is described based on specimens collected from northern Kyushu, Japan.

Key words: Auchenorrhyncha, Dikraneurini, new species.

The unique dikraneurine genus *Trifida* Thapa et Sohi (type species: *Trifida quadripunctata* Thapa et Sohi) is comprised of two species known from Nepal and Sri Lanka (Dworakowska 1994, Thapa & Sohi 1986). It is characterized by the morphological characters of male genitalia: the anal tube process is bilobate basally and articulated with the pygofer caudally, the aedeagus is fused with the connective, the aedeagal shaft is bifurcated basally and having two gonopores. Among typhlocybine leafhoppers, the fusion of aedeagus and connective is found in the following dikraneurine genera, *Albodikra* Dietrich, *Anaka* Dworakowska et Viraktamath, *Kalkiana* Sohi, Viraktamath et Dworakowska, *Rakta* Dietrich, *Sweta* Viraktamath et Dietrich, *Takagioma* Thapa, *Togaricrania* Matsumura, *Zielona* Dworakowska, and some Empoascini. On the other, the bifurcated shaft and two gonopores are found only in this genus and *Notus* Fieber. Through my recent taxonomic study of Japanese leafhoppers, I recognized an undescribed species of this genus from northern Kyushu, Japan. In the following, I will describe it as a new species under the name of *Trifida bilobata* with the morphological figures.

The type material treated here is preserved at the Entomological Laboratory, Faculty of Agriculture, Kyushu University, Fukuoka.

Trifida bilobata N. Ohara sp. nov.

(Figs. 1–10)

Diagnosis. This leafhopper resembles closely to *Trifida melichari* (Distant, 1908) described from Dikoya, Sri Lanka, but is distinguishable by the following characters of male genitalia: dorsal apodeme of aedeagus slender in ventral view; aedeagal shaft nearly straight in ventral view, with two processes ventrally.

Etymology. The specific name is derived from the configuration of anal tube process of male genitalia.

Type material. Holotype: ♂, Yahata High School, Kiyota, Kitakyushu, Fukuoka Pref., Kyushu, 22. VI. 2012 (light trap), N. Ohara leg. Paratypes: 1♂ 2♀, same data except 19. VI. 2012 (light trap), S. Okudera *et al*.; 5♂ 28♀, same data except 20. VI. 2012 (light trap); 1♀, same data except 22. VI. 2012, N. Ohara leg.; 8♂, 16♀, same data as holotype; 4♀, same data except 22. VI. 2012, S. Okudera *et al*.; 2♂, same data except 28. VI. 2012; 20♂ 6♀, same data except 28. VI. 2012 (light trap); 1♂ 1♀, same data except 8. VII. 2012 (light trap); 1♂ 2♀, same data except 14. VII. 2012 (light trap); 8♀, same data except 27. VII. 2012 (light trap); 4♀, same data except 3. VIII. 2012; 2♀, same data except 4. VIII. 2012 (light trap), N. Ohara leg.; 1♂ 1♀, same data except 28. X. 2012, S. Okudera *et al*.; 1♂, same data except 23. XI. 2012.

Distribution. Japan (Kyushu).

Description. Body length to tip of fore wing (mean): ♂, 2.7–2.9 mm (2.8 mm); ♀, 2.9–3.2 mm (3.0 mm).

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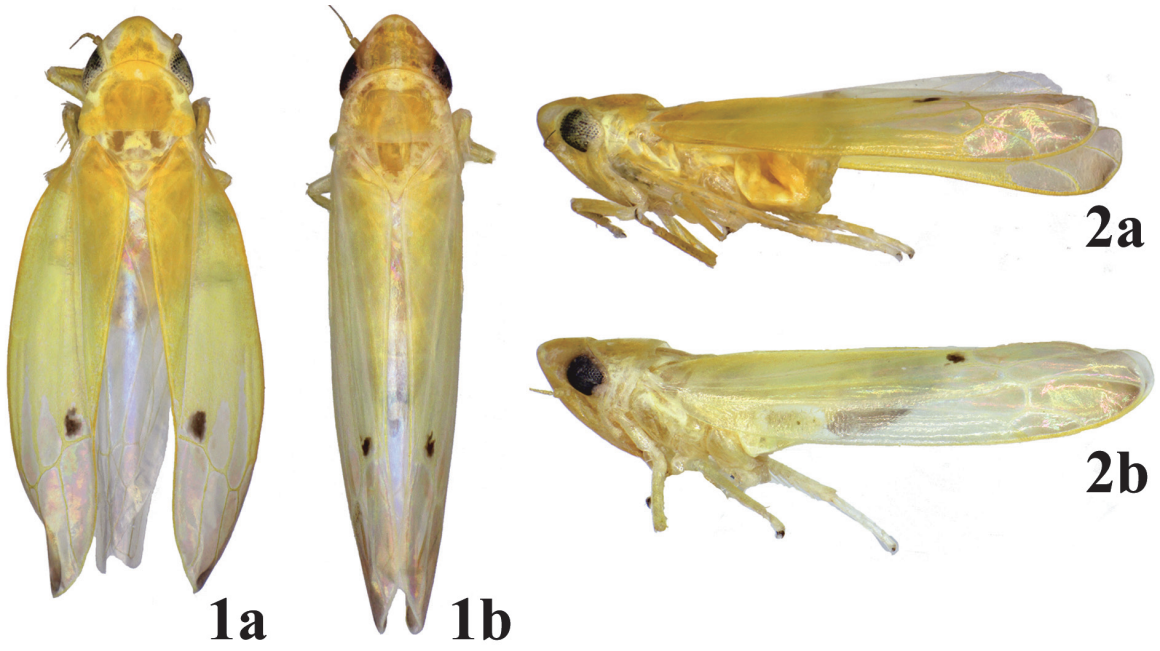

Figs. 1-2. Dorsal (1) and lateral (2) habitus of *Trifida bilobata* N. Ohara sp. nov. — a, Male; b, female. Body length: ♂, 2.8 mm; ♀, 3.1 mm.

Body pale yellow in male, creamy white in female. Vertex and pronotum pale yellow with lateral margins creamy white in male; creamy white with two sublateral longitudinal striations pale yellow in female. Mesonotum creamy white; fore wing semitransparent, with black spot near apex of clavus; hind wing transparent.

Head triangular, blunt apicad, as wide as pronotum; vertex produced anteriorly beyond anterior angle of eyes, slightly longer in female, 1.4 times as wide as long at dorsal midline, 0.7 times as long as pronotum; coronal suture short, distinct in basal 1/4; face longer than width. Pronotum 1.6 times as wide as median length, slightly longer than mesonotum. Male abdominal sternal apodemes elongate, extending beyond posterior margin of 4th sternite. Female 7th abdominal sternite quadrilateral, with posterior margin produced.

Male genitalia. Pygofer strongly concave caudally, with dorsocaudal part finger-like and truncate apically, with pygofer lobe weakly sclerotized ventrocaudally. Subgenital plate triangular, widened in basal 1/3, with angulate lateral margin, bearing few marginal subbasal setae. Style elongate, widened apically, with apical margin concave near middle, ornamented with preapical lobe distinct. Connective fused with aedeagus, provided with arm expanded and long. Aedeagus with pair of shaft, ornamented with dorsal apodeme elongate, extending caudally, strongly curved cephalad in apical 1/3, narrowed at apical 1/3 in ventral view; shaft broad, gradually curved dorsad, gently narrowed near middle and rounded apically in lateral view, bearing two apical processes slender, extending inward and cephalad; gonopore apical on caudal surface. Anal tube long, with large bilobate process basally; caudal part of process slender and tapering, extending ventrally; cephalate part broad, swollen.

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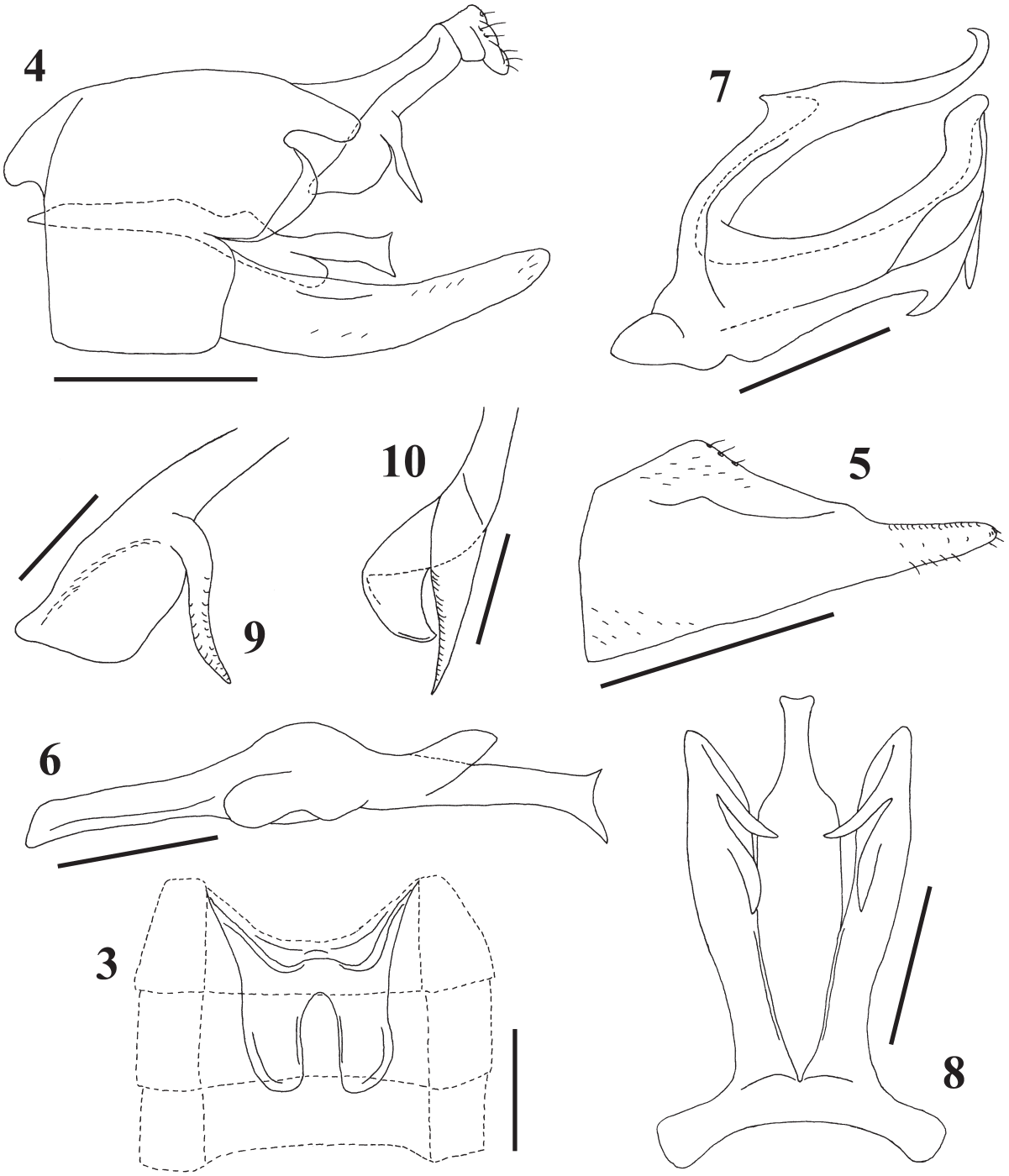

Figs. 3-10. Male abdominal sternal apodemes (3) and ♂ genitalia (4–10). — 4, Pygofer in lateral view; 5, subgenital plate in ventral view; 6, style in ventral view; 7–8, aedeagus and connective in lateral (7) and ventral (8) views; 9–10, anal tube process in lateral (9) and caudal (10) views. Scales: 0.2 mm (3–5), 0.1 mm (6–8), 0.05 mm (9–10).