



Figs. 26-30. Male genitalia of *Orthotylus japonicus*. – 26, Genital segment with parameres in dorsal view; 27, left paramere; 28, right paramere; 29, the same, apex of another specimen; 30, apex of theca; 31, vesica. Scales: 0.2 mm.

widened, with a hooked hypophysis, apical pointed process and dorsal bifurcate extension (fig. 27); right paramere with 3 pointed processes (fig. 28) and sometimes with an apical small process ventrally (fig. 29); vesical sclerites I and II toothed but not branched; sclerite III bifurcate (fig. 31). Female genitalia (fig. 37): K-structure widened, with rounded inner lobe.

Dimensions. – ♂/♀: Body length 4.56-4.85/4.89-5.20; head width including eyes 0.91-0.94/0.98-0.99; vertex width 0.40-0.44/0.45-0.48; rostral length 1.39-1.42/1.44-1.61; mesal pronotal length 0.72-0.80/0.81-0.82; basal pronotal width 1.27-1.37/1.41-1.49; width across hemelytra 1.65-1.73/1.84-1.92.

Distribution. – Japan (Hokkaido, Honshu, Shikoku).

Biology. – As pointed out by Todo & Yasunaga (1996) and Endo et al. (1998), *O. japonicus* is associated with willow (*Salix* spp.) growing along rivers. It obviously has a univoltine life cycle, and hibernates as egg. Predation on dipteran and lepidopteran larvae by the final instar nymphs was observed in laboratory tests.

Subgenus *Kiorthotylus* Yasunaga

Orthotylus (*Kiorthotylus*) Yasunaga, 1993: 56, type species: *O. gotohi* Yasunaga, 1993, monotypic.

This subgenus is currently represented by a single Japanese species, *O. gotohi*, and is characterized by the small and slender body (fig. 39), long antennae, rostrum and legs, a mesal strong process and a smaller, left lateral blunt-tipped process on the male genital segment (fig. 46), unique shape of the parameres (figs. 47-48), 2-branched vesica that is curved at right angle (48), and asymmetrical K-structures (fig. 38).

Kiorthotylus is represented by a single, unique species inhabiting an azalea, *Rhododendron macrosepalum* Maxim. (Ericaceae).

Orthotylus (*Kiorthotylus*) *gotohi* Yasunaga (figs. 38, 39-40, 46-49)

Orthotylus (*Kiorthotylus*) *gotohi* Yasunaga, 1993: 56.

Diagnosis. – Recognized by the slender body, immaculate pale green general coloration, uniformly distributed, pale brown, suberect setae on dorsum, long antennae, rostrum and legs (fig. 39), and unique shape of the genitalia (figs. 38, 46-49). Length 4.5-4.7; width 1.3-1.5. Detailed descriptions of the adult and final instar nymph were provided by Yasunaga (1993).

Distribution. – Japan (restricted areas of Honshu and Shikoku*, where the host, *Rhododendron macrosepalum* grows).

Biology. – This interesting mirid is associated