

**Description.** — Body small, slender, parallel-sided; dorsal surface widely dark brown, shagreened, uniformly clothed with simple, pale, suberect setae. Head widely dark brown, granulated, bearing sparse, silky, erect pubescence; median part of vertex and lateral margin of frons sometimes pale brown; weak basal transverse carina of vertex darkened in ♂; frons shallowly striolate with 3-4 transverse rows of minute punctures. Antennae dark brown; segment I pale brown; basal part of segment II pale in ♂; lengths of segments I-IV ( $\delta/\varphi$ ): 0.43-0.46/0.46, 1.75-1.88/1.80, 0.86-0.94/0.96, 0.60-0.70/0.67. Rostrum pale brown, reaching apex of middle coxa; apical half of segment IV infuscate. Pronotum dark brown, shagreened, with pale mesal stripe and calli, uniformly clothed with simple, pale, suberect setae; mesoscutum and scutellum dark brown, sometimes partly or widely pale brown, bearing sparse, suberect setae; pleura usually widely darkened and irregularly pale brown. Hemelytra dark brown, shagreened, uniformly clothed with simple, suberect setae; embolium, cuneus and narrow lateral margin of corium pale green; membrane dark greyish brown, with dark veins. Coxae and legs yellow; tibial spines pale brown; tarsomeres III dark brown; lengths of hind femur, tibia and tarsus ( $\delta/\varphi$ ): 1.60-1.66/1.73, 2.40-2.55/2.59, 0.48-0.57/0.50; lengths of hind tarsomeres I-III ( $\delta/\varphi$ ): 0.15-0.17/0.16, 0.24-0.28/0.24, 0.24-0.27/0.24. Abdomen dark brown. Male genitalia (figs. 22-25): Genital segment with a bifurcate process above base of left paramere (fig. 22); parameres similar in general shape to *kurilensis*; median apical branch of right paramere narrow (fig. 24); vesical sclerite I developed basally; sclerite II slender, with a median branch; sclerite III strongly twisted apically, with a smooth, slender branch subapically (fig. 25). Female genitalia (fig. 36): K-structure rather flat, inwardly toothed, with slender extension at apex.

**Dimensions.** —  $\delta/\varphi$ : Body length 4.46-4.76/4.80; head width including eyes 0.81-0.84/0.86; vertex width 0.30-0.32/0.38; rostral length 1.44-1.52/1.56; mesal pronotal length 0.69-0.72/0.77; basal pronotal width 1.12-1.20/1.30; width across hemelytra 1.36-1.44/1.63.

**Distribution.** — Japan (Honshu).

#### *Orthotylus (Orthotylus) japonicus* sp. n. (figs. 5-6, 26-31, 37)

*Orthotylus (O.)* sp. 2 — Todo & Yasunaga 1996: 43; Endo et al. 1998: 17.

**Type material.** — Holotype ♂, Etanbetsu, Asahikawa C., Kamikawa, Hokkaido, Japan, on willow, 25.vii. 1998, T. & M. Yasunaga (HUES). — Paratypes: 202 specimens from the following localities in Japan: Hokkaido: Otoineppu Vil., Kamikawa; Moshiri-Shi-

rakaba, Horokanai T., Kamikawa; Engaru T., Abashiri (ZMAS); Mt. Arashiyama, Asahikawa C.; same as holotype; Pin'neshiri, Shin-totsugawa Vil., Sorachi; Hassamu, Sapporo C., Ishikari (MC); Ya'usuba, Ishikari C., Ishikari; Hokkaido Univ. Campus, Sapporo C. (ZMAS); Seicha, Hidaka-horobetsu Riv., Ura-kawa T., Hidaka; Iwabokki-Suimon, Akkeshi T., Kushiro; Aoyama, Tobetsu T., Ishikari. — Honshu: Nishimeya Vil., Aomori Pref.; Kodera, Oe T., Yamagata Pref.; Ozegahara, Gunma Pref. (NSMT); Niitsu, Niigata Pref. (MC); Kakenoue, Muika T., Niigata Pref.; Myoko Plateau, Nagano Pref. (MC); Karuizawa, Nagano Pref. (MC); Nomugi-toge, Gifu Pref. (NSMT); Minamihizue-Shirami, Wakayama Pref. — Shikoku: Haruno T., Kochi Pref.; Hakawa, Ino T., Kochi Pref.

**Diagnosis.** — Recognized by the rather small and suboval body, immaculate pale green coloration, densely pubescent dorsum, a distinct dark spot at the base of each tibia (fig. 5), and significantly specialized form of the parameres. This new species is at first sight similar in general appearance to *O. kerzhneri*, from which it is easily distinguished by the smaller and more oval body. Judging from the peculiar male genital structure, *O. japonicus* has only a remote relationship with any known congeners. The final instar nymph is readily recognized by the generally pale green body with a dark knee spot at the base of each tibia (fig. 6).

**Description.** — Body generally pale green, small, suboval; dorsal surface densely covered with silvery or silky, suberect pubescence. Head tinged with yellow, somewhat rounded, bearing silvery, erect pubescence; basal transverse carina of vertex weak. Antennae pale brown; apical part of segment II, and entire III and IV dark brown; lengths of segments ( $\delta/\varphi$ ): 0.43-0.48/0.43-0.48, 1.63-1.83/1.65-1.72, 0.93-1.01/0.93-0.96, 0.57-0.58/0.55-0.60. Rostrum pale brown, reaching apex of hind coxa; apical half of segment IV dark brown. Pronotum weakly shagreened, shining, rather tumid, densely clothed with silvery, suberect pubescence; calli indistinct; mesoscutum and scutellum shagreened, densely pubescent. Hemelytra shagreened, densely clothed with silvery, suberect pubescence; embolium somewhat tinged with yellow; membrane pale greyish brown. Legs pale green; extreme base (knee) of hind tibia infuscate; tarsi dark brown; lengths of hind femur, tibia and tarsus ( $\delta/\varphi$ ): 1.53-1.73/1.75-1.85, 2.18-2.45/2.35-2.62, 0.48-0.53/0.50-0.53; lengths of hind tarsomeres I-III ( $\delta/\varphi$ ): 0.18-0.20/0.19-0.20, 0.24-0.28/0.24-0.26, 0.24-0.29/0.22-0.26. Abdomen almost unicolorously pale green; apices of / valvulae darkened. Male genitalia (figs 26-31): Genital segment shortened, with a strong pointed projection near base of left paramere (fig. 26); parameres peculiar in shape; left paramere