Orthotylus (Melanotrichus) parvulus Reuter (figs. 61-63)

Orthotylus parvulus Reuter, 1879: 38.

- Orthotylus (Melanotrichus) parvulus Carvalho 1958: 117; Wagner 1973: 239; Kerzhner 1988a: 71; 1988b: 834; Lee & Kwon 1991: 34; Vinokurov & Kanyukova 1995: 112; Schuh 1995: 166.
- Orthotylus (Melanotrichus) namphoensis Josifov, 1976: 143 (synonymised by Kerzhner 1988a: 71).

Diagnosis. – Recognized by the tiny, oval body, pale green general coloration, brown setae on the dorsum, sparsely and uniformly distributed silvery pubescence on the hemelytra, and shape of the parameres (figs. 61-63). Length 3.0-3.2; width 1.1-1.3. Detailed redescriptions were provided by Wagner (1973) and Josifov (1976, as *O. namphoensis*). This is a close relative of *flavosparsus*, from which it can be distinguished by the even smaller body, brown setae and sparse silvery pubescence on dorsum, and different shape of the parameres.

Distribution. – Japan* (Tsushima Is.), Palearctic Region (from Mediterranean area to Korean Peninsula).

Biology. – Kerzhner (1988b) recognized Salicornia europaea L. (Chenopodiaceae) as its host plant. In Tsushima Island, Dr. M. Hayashi (pers. comm.) collected this mirid from *Suaeda maritima* (L.) Dumort. that also belongs to the Chenopodiaceae.

Material examined. -103, 29, Shushi, Kamiagata-gun, Tsushima Is., Nagasaki Pref., 16.vii.1995, M. Hayashi (HUES). - BULGARIA: 33, 39, Burgas, 8.x.1960, M. Josifov (ZMUH). - RUSSIA: 13, Ross. mer., Type no. 3442 (lectotype, Reuter (1879) indicated the locality as Astrakhan, see Kerzhner (1997b), ZMUH).

Blepharidopterus Kolenati

Blepharidopterus Kolenati, 1845: 107 (as subgenus of Polymerus of the Mirinae), type species: Lygaeus angulatus Fallén, 1807, subsequent designation by Kirkaldy 1906: 128; Schuh 1995: 83.

This genus has been liable to be confused with Orthotylus Fieber, but is distinct in having the rather small and slender body, long antennae and rostrum, pale brown or dark brown suberect setae and silvery recumbent pubescence on the semitransparent hemelytra, ventral spine-like setae on the male genital segment, birdhead-shaped left paramere, slender right paramere, and simple form of the vesica. Judging from the male genital structure, relationship between Blepharidopterus and Orthotylus is only superficial.

Blepharidopterus currently contains 10 species in the Holarctic Region.

Blepharidopterus ulmicola Kerzhner, 1977 (figs. 44-45, 64-67)

Blepharidopterus ulmicola Kerzhner, 1977: 19; 1988b: 832; Lee et al. 1994: 12; Schuh 1995: 85; Endo et al. 1998: 17.

Diagnosis. - Recognized by the small size, uniformly pale green general coloration (fig. 44, easily fading to yellow after death), pale suberect setae and silvery pubescence on the hemelytra, and shape of the male genitalia (figs. 64-67). The final instar nymph is recognized by the uniformly pale green, slender body (fig. 45). This species is closely related to the continental Palearctic B. diaphanus (Kirschbaum), from which it can be distinguished by the narrower head, shorter antennal segment III, long and sparse spinelike setae on the male genital segment, 3-4 apical teeth on the right paramere, and much shorter vesical appendage. In diaphanus, which may occur in Japan, the spine-like setae on the male genital segment are short and dense, the right paramere has 2-3 apical teeth, and the vesical appendage is much longer (figs. 71-73).

Redescription. - Body uniformly pale green, elongate oval, small; dorsal surface densely clothed with pale, suberect setae. Head vertical, bearing sparse, suberect, silky pubescence; vertex weakly margined by basal transverse carina. Antennae pale brown; segments III and IV brown; lengths of segments I-IV (3/9): 0.40-0.44/0.43-0.46, 1.56-1.64/1.60-1.76,1.17-1.32/1.20-1.40, 0.45-0.53/0.48-0.54. Rostrum pale brown, reaching hind coxa; apex of segment IV dark brown. Pronotum, mesoscutum and scutellum weakly shagreened, clothed with pale, suberect setae. Hemelytra semitransparent, clothed with pale, suberect setae and silvery, recumbent pubescence; membrane pale brown, semitransparent, with pale green veins. Legs pale brown, tibiae tinged with brown, with pale brown spines; tarsi dark brown; lengths of hind femur, tibia and tarsus (3/9): 1.65-1.68/1.68-1.90, 2.56-2.64/2.64-2.76, 0.43-0.44/0.48-0.51; lengths of hind tarsomeres I-III (3/9): 0.13-0.15/0.14-0.17, 0.20-0.22/0.21-0.24, 0.20-0.21/0.22-0.24. Abdomen uniformly pale green. Male genitalia (figs. 63-66): Spinelike setae on genital segment comparatively sparse (fig. 63); left paramere birdhead-shaped, provided with long setae (fig. 65); right paramere slender, with 3-4 apical teeth (fig. 64); vesica with a very short spine subapically (fig. 66).

Dimensions. $-\delta/9$: Body length 3.72-3.89/4.32-4.49; head width including eyes 0.76-0.77/0.72-0.75; vertex width 0.24-0.27/0.33-0.36; rostral length 1.27-1.32/1.39-1.44; mesal pronotal length 0.48-0.51/0.57-0.60; basal pronotal width 0.98-1.02/1.20; width across hemelytra 1.27-1.30/1.46-1.56.