

tirely dark brown, densely pubescent; segment I bearing a few, brown, suberect bristles; lengths of segments I-IV: 0.40-0.44, 1.63-1.64, 1.20-1.36, 0.48-0.51. Rostrum pale brown, reaching hind coxa; apical part of segment IV darkened. Pronotum yellow or yellowish green, shining, with darkened posterior margin, bearing pale brown, suberect setae; mesoscutum and scutellum yellow, weakly pruinose, sparsely clothed with silky, suberect setae; thoracic pleurite widely yellow except for darkened posterior margin of propleuron. Hemelytra yellowish green, semitransparent, with uniformly distributed, pale brown suberect setae and sparse, short, silvery pubescence; inner margin of clavus narrowly darkened; membrane pale smoky brown, semitransparent, with a dark spot near posterior corner of vein. Legs long; femora yellowish brown, densely pubescent; trichobothria on fore- and middle femora brown, prominent; tibiae dark brown, with brown spines, tarsi entirely dark brown; lengths of hind femur, tibia and tarsus: 1.68, 2.85-2.88, 0.48; lengths of hind tarsomeres I-III: 0.12-0.15, 0.21-0.24, 0.20-0.23. Abdomen pale brown except for darkened parameres. Male genitalia (figs. 68-70): Genital segment uniformly provided with long, spine-like setae apically (fig. 68); left paramere broadened subapically, with blunt-tipped hypophysis (fig. 70); apical part of right paramere flattened, distinctly and roughly toothed (fig. 69).

Female: Unknown.

Dimensions. – ♂: Body length 4.17-4.28; head width including eyes 0.69-0.71; vertex width 0.27-0.29; rostral length 1.24-1.25; mesal pronotal length 0.55-0.56; basal pronotal width 1.03-1.06; width across hemelytra 1.27-1.28.

Distribution. – Japan (Honshu).

Cyllecoris Hahn

Cyllecoris Hahn, 1834: 97, type species: *Cimex agilis* Fabricius, 1781, a synonym of *Cimex histronicus* Linnaeus, 1767, subsequent designation; Schuh 1995: 98.

Easily recognized by the slender, elongate body, shiny fuscous head, small eyes removed from anterior margin of the pronotum, long antennal segment I much longer than width of the head, and anteriorly constricted pronotum divided into two (anterior and posterior) lobes. Detailed diagnostic characters were provided by Wagner & Weber (1964), Wagner (1973), Josifov & Kerzhner (1984), etc. Many authors misspelled the generic name as *Cyllocoris*!

In Japan two deciduous broadleaf inhabiting species are currently known. They are considered to be wasp-mimic species as they behave like wasps when captured in insect nets.

Cyllecoris nakanishii Miyamoto (figs. 74-75)

Cyllecoris nakanishii Miyamoto, 1969: 79; Miyamoto & Yasunaga 1989: 162; Kerzhner 1988b: 829; Schuh 1995: 99; Endo et al. 1998: 17.

Diagnosis. – Recognized by the slender body, yellowish brown antennal segment I, dark, shagreened, glabrous pronotum with a mesal pale stripe, sombre yellowish brown hemelytra with obscure stripes, and a dark, anterior stripe of each femur (fig. 74). Length 5.9-6.6; width 1.4-1.5. A detailed description including the male and female genitalia was provided by Miyamoto (1969). The final instar nymph is recognized by the slender body, whitish green general coloration, a dark stripe of each femur, and infusate apex of the abdomen (fig. 75).

Distribution. – Japan (Hokkaido), Kuril Isls., Russia (Sakhalin).

Biology. – This species is known to be associated with elms, *Ulmus japonica* Nakai and *Ulmus laciniata* (Trautv.) Mayr (Ulmaceae).

Material examined. – 42 specimens (HUES, ZMAS) were examined from the following localities: JAPAN: Hokkaido: Moshiri, Horokanai T., Kamikawa; Etanbetsu & Inoh, Asahikawa C., Kamikawa; Aoyama & Hattari, Tobetsu T., Ishikari; Hokkaido Univ. Campus, Sapporo C., Ishikari; Takaoka, Tomakomai C., Iburu; Berabonai-Takuhoku, Ashoro T., Tokachi. – KURIL ISLS.: Dubovoe, Kunashiri Is. (ZMAS) – RUSSIA: Novoaleksandrovsk, S. Sakhalin (ZMAS).

Cyllecoris vicarius Kerzhner (figs. 76-77)

Cyllecoris vicarius Kerzhner, 1988a: 45; 1988b: 829; Miyamoto & Yasunaga 1989: 162; Josifov 1992: 122; Lee et al. 1994: 12; Schuh 1995: 100; Endo et al. 1998: 17. *Cyllecoris histronicus* sensu Miyamoto 1969: 82 (nec Linnaeus, 1767).

Diagnosis. – Easily recognized by the large size, reddish antennal segment I, shiny black pronotum with the continuously yellow posterior margin, and reddish corium (fig. 76). Length 7.0-7.5; width 1.9-2.0. Detailed description of the adult with figures of the male genitalia was provided by Kerzhner (1988a). The final instar nymph is easily recognized by the pure white general coloration, black antennal segment I and II, hind tibia and all tarsi, yellowish brown hind femur with a dark stripe, and 3 pairs of characteristic, dark, apical spots on the abdomen (fig. 77).

Distribution. – Japan (Hokkaido, Honshu, Shikoku, Kyushu), Kuril Isls., Russia (Primorskij Kraj, Amur).

Biology. – This species is associated with *Quercus crispula* Blume (Fagaceae). The final instar nymphs and adults of this univoltine mirid are found in late June.