

New species of the genus *Lygocoris* (subgenus *Neolygus*) from China (Heteroptera: Miridae)

N. LU & L. Y. ZHENG

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Abstract: Seven new species of the subgenus *Neolygus* of the genus *Lygocoris* Reuter are described from China: *L. wuyiensis*, *L. rufilorum*, *L. keltoni*, *L. yulongensis*, *L. salicicola*, *L. simillimus* and *L. xizangensis*.

Keywords: Subgenus *Neolygus*, genus *Lygocoris*, Miridae, new species, China.

Department of Biology, Nankai University, Tianjin 300071, P. R. China.

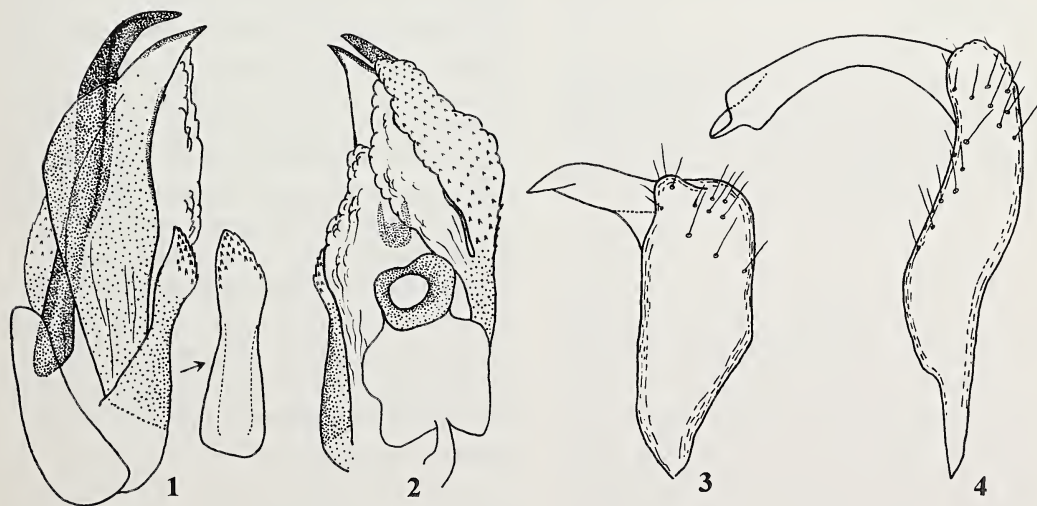
Introduction

The holarctic subgenus *Neolygus* Knight of the genus *Lygocoris* Reuter was established in 1917. Since then more than 70 species belonging to this subgenus have been described (Knight, 1917, 1941; Kelton 1971a, 1971b; Linnavuori, 1963; Kulik, 1965, Kęrzner, 1976, 1988; Yasunaga, 1991a, 1991b, 1992; Josifov, 1992; Lu & Yasunaga, 1994). Seven new species from China are described in this paper.

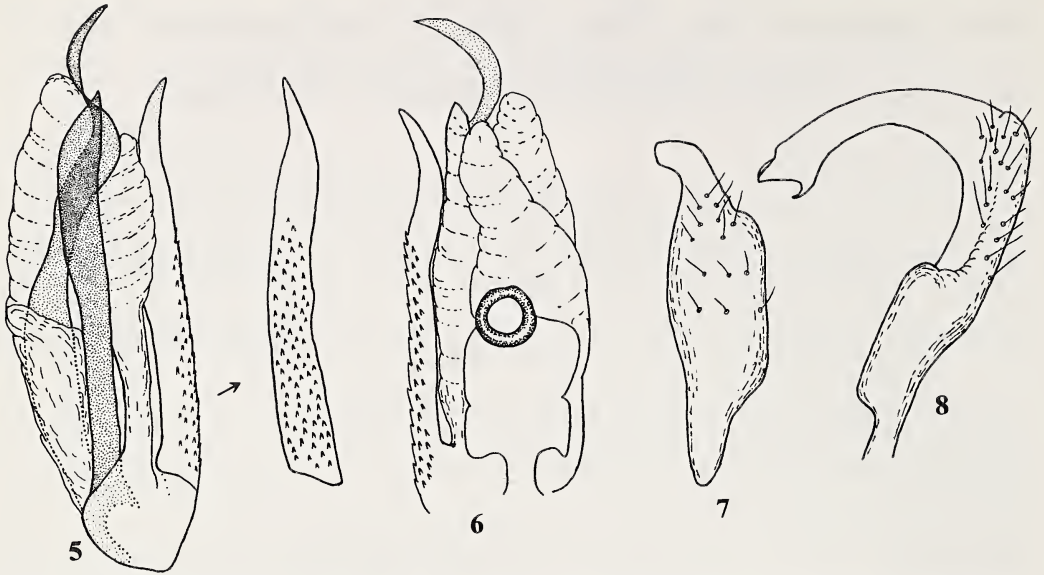
In the descriptions, 'body length' is given

as the distance from head apex to hemelytral apex, 'body width' as the maximum width across both hemelytra at repose, and 'pronotum length' as the length of pronotum including collar. Measurements are given in millimeters.

The terminology of vesical structure and the female genitalia follows Kelton (1955). All the material used in this paper was collected in China. The type specimens of the new species are deposited in the Department of Biology, Nankai University except if mentioned otherwise.



Figs 1-4. *Lygocoris* (*Neolygus*) *wuyiensis* spec. nov. 1, vesica in ventral view; 2, vesica in dorsal view; 3, right paramere; 4, left paramere.



Figs 5-8. *Lygocoris (Neolygus) rufilorum* spec. nov. 5, vesica in ventral view; 6, vesica in dorsal view; 7, right paramere; 8, left paramere.

The following abbreviations of depositories are used. IZAS: Institute of Zoology, Academia Sinica, Beijing, China; BAUC: Department of Entomology, Beijing Agricultural University, Beijing, China.

***Lygocoris (Neolygus) wuyiensis* spec. nov.**
(figs 1-4)

Type material

Holotype: ♂, China, Fujian Prov., San'gang, Mt. Wuyi, Chong'an County (27°36'N, 117°36'E), 9.viii.1982, leg. L. Y. Zheng. Paratypes: 1♂, China, Zhejiang Prov., Qingyuan County, Mt. Baishanzu (27°42'N, 119°6'E), alt. 1600 m, 20.viii.1993, leg. H. Wu; 1♂, Mt. Baishanzu, alt. 1300 m, 3.x.1993, light trap, leg. H. Wu.

Description

Body oblong-oval; dorsal surface yellowish brown, densely covered with golden pubescence, subshining. Vertex 0.29 times as wide as head; median longitudinal furrow shallow, basal carina distinct; apical 1/3 of tylus black. Antennal segment I and basal 3/4 of segment II yellowish brown, apical 1/4 of segment II brown, segment III and IV dark. Rostrum yellowish brown, apex of segment IV dark, ex-

tending beyond hind coxae. Pronotum pale brown. Mesoscutum yellowish brown. Apical half of scutellum yellowish green, basal half yellow; distinctly rugose. Corium with a dark marking at apical inner corner; cuneus about 1.5 times as long as basal width; membrane smoky brown. Body beneath yellowish white. Legs yellowish brown, apex of each tarsal segment III dark brown; hind femur with two dark rings, obscure; tibial spines pale brown, each with a dark brown basal spot. Vesical spiculum bending abruptly at apical 1/3; lobe sclerite broad, apex pointed; rasp middle-sized, apical 1/4 spinose; loop distinct; median sclerite broad; seminal duct swollen; leftmost conjunctival lobe cylindrical, spinose. Sensory lobe of left paramere with a protuberance; sensory lobe of right paramere with a narrow protuberance.

Measurements: Body length 5.32, width 2.17. Head length 0.27, width 1.01. Antennal segment lengths 0.51 : 1.80 : 1.05 : 0.60. Pronotum length 0.85, width 1.67. Corium length 2.25. Claval commissure length 0.90. Cuneus length 1.04.

Remarks

Similar to *Lygus (Neolygus) tillicola* Ku-

lik, from which it can be distinguished by its smaller size and the structure of the male genitalia.

Etymology

Named after its occurrence on Mount Wuyi.

Lygocoris (Neolygus) rufilorum spec. nov.
(figs 5-8)

Type material

Holotype: ♂: China, Fujian Prov., Yonghe, Longyan City (24°48'N, 117°0'E), 18.vii.1965, leg. S. L. Liu. Paratypes: China, Guangxi Zhuang Autonomous Region, Mt. Miaoer, Xing'an County (25°48'N, 110°24'E), alt. 1000-1300 m, 24.viii.1992, leg. L. Y. Zheng, 1♀; Yunnan Prov., Nanjingli, Ruili County (24°0'N, 97°48'E), 4.v.1981, leg. F. S. Li, 1♂ (BAUC).

Description

Body oblong-oval, small, dorsal surface yellowish brown, immaculate, covered with golden pubescence. Head vertical, yellowish brown, dull; vertex 0.26 times as wide as head in male, 0.33 times in female, with a shallow median longitudinal furrow, basal carina distinct, tylus pale brownish. Middle area of lora with a longitudinal red strip. Antennal segment I and basal 4/5 of segment II yellowish brown, apical 1/5 of segment II, segment III and IV dark brown. Rostrum yellowish brown, each side of segment I with a longitudinal red strip, apex of segment IV dark brown, extending beyond hind coxae. Pronotum subshining, yellowish brown, calli slightly darker. Scutellum yellowish brown, finely rugose. Hemelytra yellowish brown, immaculate, subshining; cuneus about 1.3 times as long as basal width, apical corner and outer margin dark brown; membrane smoky brown. Body beneath yellowish brown, evaporative area of scent gland yellowish white. Legs yellowish brown; both middle and hind femur with two subapical reddish brown rings; at middle of hind femur scattered with some dark brown spots mixed with some red ones, the latter also distributed near femoral rings; tibia with some red markings on basal

and inner part, tibial spines brown, each with a dark brown basal spot. Vesical spiculum slender and twisted; lobe sclerite very narrow and strongly sclerotized; rasp very slender, basal 2/3 spinose, apex pointed; loop and median sclerite weak; seminal duct swollen; leftmost conjunctival lobe partly spinose. Left paramere with a small sensory lobe; apex of hypophysis with a sharp spine; right paramere with a very short hypophysis.

Measurements: Body length 4.06-4.10, width 1.80-1.94. Head length 0.22-0.24, width 1.04-1.05. Antennal segment lengths 0.50-0.51; 1.58-1.60; 0.97-0.99; 0.60-0.61. Pronotum length 0.80-0.82, width 1.65-1.69. Corium length 2.00-2.07. Claval commissure length 0.89-0.90. Cuneus length 0.69-0.72.

Remarks

Easily recognised by its small size, the red strips on the lora and the first rostral segment, the red markings on the legs and the characteristic structure of the male genitalia.

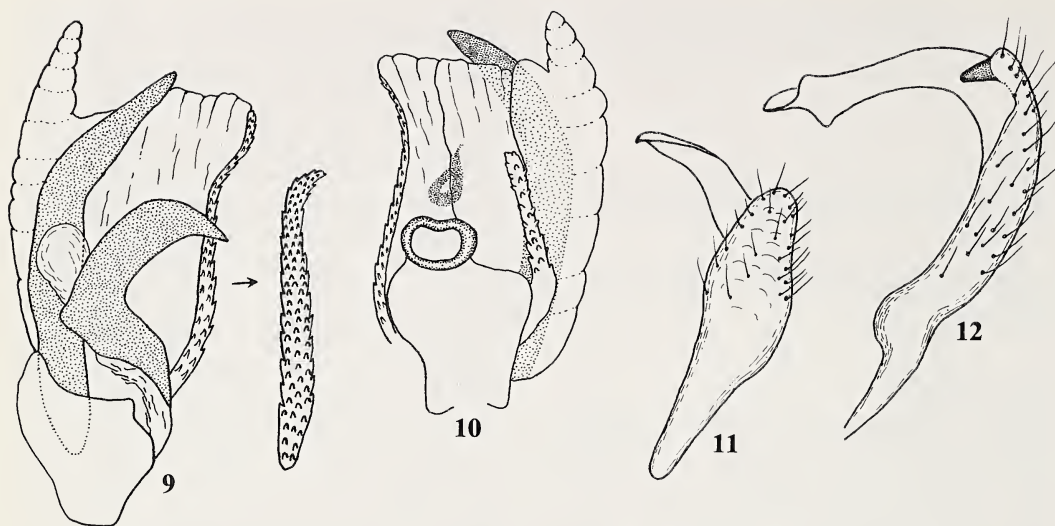
Etymology

Named after its reddish lora.

Lygocoris (Neolygus) keltoni spec. nov.
(figs 9-12)

Type material

Holotype: ♂, China, Yunnan Prov., Xujiaba, Mt. Ailao (24°0'N, 101°30'E), alt. 2700 m, 4.vii.1982. Paratypes: same locality as holotype, 11.v.1982 (2♂), 12.iii.1982 (1♀), 13.iii.1982 (1♀), 16.iii.1982 (1♀), 14.iv.1982 (1♂), 20.iv.1982 (1♀), 17.v.1982 (1♀), 23.vi.1982 (1♀), 6.vii.1982 (1♀), 15.x.1982 (1♀), 25.xi.1982 (1♀), 8.v.1984 (1♀), leg. G. Q. Liu and 14.v.1984, leg. L. Y. Zheng & G. Q. Liu, 1♂; Yunnan Prov., Mensong, Jinghong County (22°0'N, 100°48'E), 28.iv.1958 (1♂), 22.iv.1958 (1♂) and 21.iii.1958 (1♂, 4♀) (IZAS); Mt. Emei (29°30'N, 103°18'E), alt. 600 m, Sichuan Prov., 6.v.1957, leg. L. Y. Zheng and H. H. Cheng, 1♂; Yunnan Prov., Mojiang County (23°24'N, 101°42'E), alt. 1300 m, 27.iii.1957, leg. V. Popov, 2♂ (IZAS); Taiwan Prov., Wu Sheh, alt. 600 m, 31.i.1962, leg. C. M. Yoshimoto, 1♂ (Bishop Museum, Honolulu); Yunnan Prov., 50 km SW of Mojiang County, alt. 1250-1300 m, 31.iii.1955, leg. Bushik, 1♂; Yunnan Prov., Pu'er County (23°0'N,



Figs 9-12. *Lygocoris (Neolygus) keltoni* spec. nov. 9, vesica in ventral view; 10, vesica in dorsal view; 11, right paramere; 12, left paramere.

101°0'E), alt. 1400 m, 31.iv.1955, leg. Bushik, 1 ♀; Yunnan Prov., Yuanjiang Hanizu Yizu Daizu Autonomous County (23°30'N, 101°54'E), alt. 400 m, 25.iii.1955, leg. Krezannovsky, 1 ♂; Yunnan Prov., near Jinping County (22°42'N, 103°12'E), alt. 1300 m, 20.v.1956, Bangfilov, 1 ♂ (IZAS).

Description

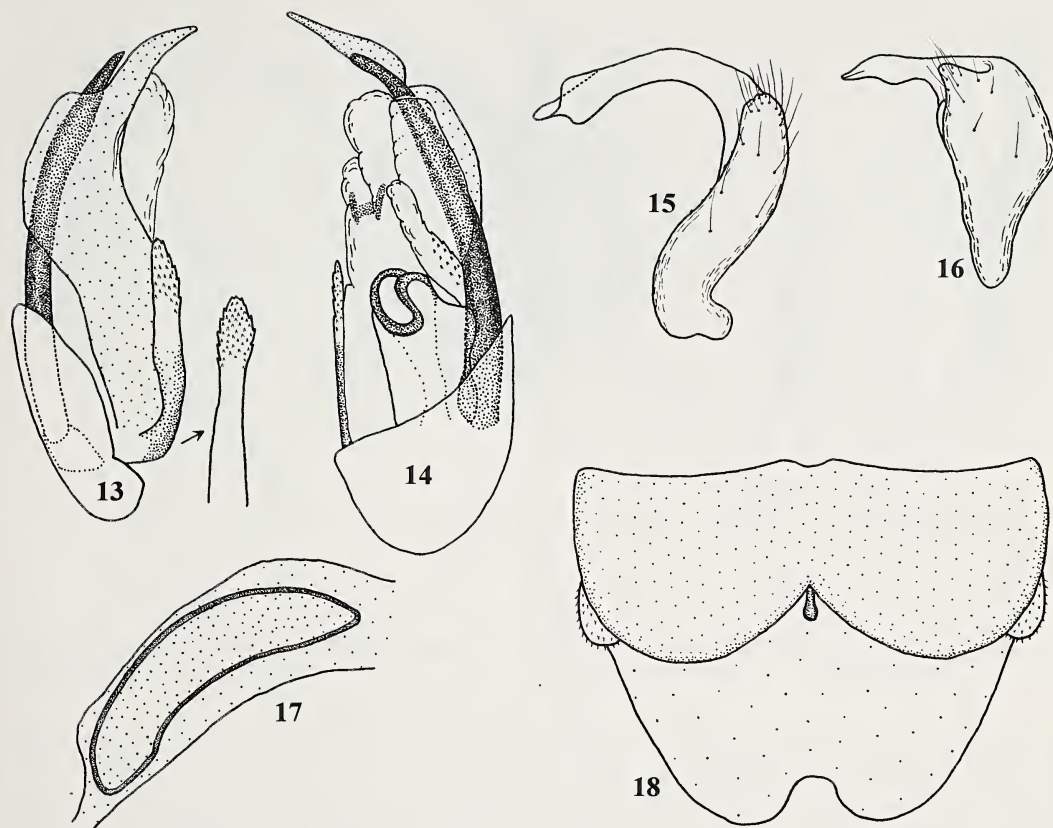
Body oblong-oval, yellowish brown to brown, dorsal surface densely covered with golden pubescence. Head vertical, yellowish brown to brown; vertex very narrow, 0.26 times as wide as head in male, 0.31 times in female, with a median longitudinal furrow, basal carina distinct, bending forward; apical 1/3 of tylus dark brown; lora reddish, some reddish brown. Antennal segment I yellowish brown to pale brown, segment II yellowish brown with apical 1/4-1/3 dark brown, segment III and IV dark brown. Rostrum yellowish brown, apical half of segment IV dark brown; extending beyond hind coxae. Pronotum yellowish brown to brown, calli slightly darker. Scutellum rugose, yellowish brown to brown. Corium with a darkened spot at apical inner corner; cuneus about twice as long as the basal width, sometimes with a reddish apex; inner half of clavus slightly darkened; membrane smoky brown, inner part of cells and mem-

branal area apicad to apex of large cell paler. Body beneath same coloured as dorsal surface; venter with a wide reddish strip on each side running along spiracles from segment II to IX. Legs yellowish brown; both middle and hind femur with two subapical dark rings, apical half of hind femur brown; tarsal segment III dark brown, tibial spines pale brown, each with a brown basal spot. Vesical spiculum long and bending abruptly at apical 1/3; lobe sclerite well sclerotized, hook-shaped; rasp very narrow and long, spinose; median sclerite not developed; seminal duct swollen; left-most conjunctival lobe membranous, basal part spinose. Left paramere with a cone-shaped protuberance at apex of sensory lobe, pointing parallel with hypophysis; right paramere hypophysis narrow.

Measurements: Body length 5.3-5.6, width 2.0-2.3. Head length 0.31, width 1.10; antennal segment lengths 0.59-0.62 : 1.94-2.00: 1.13-1.16 : 0.68-0.73. Pronotum length 1.0-1.04, width 1.8-1.86. Corium length 2.21-2.61. Claval commissure length 1.04-1.10. Cuneus length 0.63-0.85.

Remarks

Body shape and colour somewhat similar to



Figs 13-18. *Lygocoris (Neolygus) yulongensis* spec. nov. 13, vesica in ventral view; 14, vesica in dorsal view; 15, left paramere; 16, right paramere; 17, sclerotized ring; 18, posterior wall of the bursa copulatrix.

Lygus (Neolygus) honshuensis (Linnavuori), but differs in the structure of left paramere and the vesica.

Etymology

Named after L. A. Kelton, in honour of his contributions to mirid taxonomy.

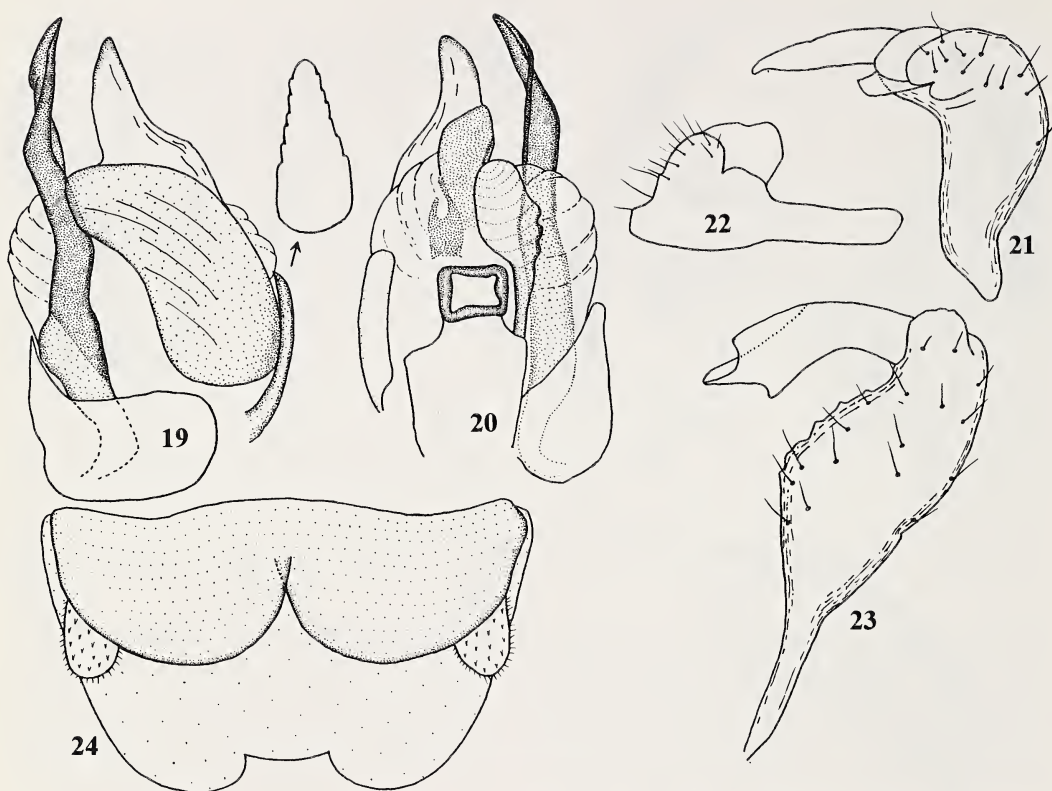
***Lygocoris (Neolygus) yulongensis* spec. nov.**
(figs 13-18)

Type material

Holotype: ♂, China, Yunnan Prov., Mt. Yulong, Lijiang County (27°6'N, 100°18'E), alt. 2800 m, 12.viii.1979, leg. H. G. Zou. Paratypes: 5 ♀, same data as holotype; 1 ♂, locality as holotype, 17.viii.1979, leg. H. G. Zou; 1 ♂, locality as holotype, 11.viii.1979, leg. L. Y. Zheng; 1 ♀, same data as holotype, leg. L. Y. Zheng; 2 ♀, same data as holotype, leg. G. Q. Liu.

Description

Body oblong-oval; dorsal surface immaculate, yellowish green to yellowish brown, densely covered with golden pubescence, shining. Head vertical, yellowish brown; vertex narrow, 0.26 times as wide as head in male, 0.36 times in female, basal carina distinct, median longitudinal furrow wide and shallow, tylus yellowish brown. Antennal segment I and II yellowish brown, segment III and IV brown. Rostrum yellowish brown, apical 1/3 of segment IV dark brown, reaching hind coxae. Pronotum yellowish green to yellowish brown, calli slightly darker. Scutellum yellowish brown, rugose. Hemelytra immaculate, yellowish green to yellowish brown; cuneus about twice as long as the basal width; membrane pale smoky brown; tarsal segment III brown. Body beneath yellowish brown. Legs



Figs 19-24. *Lygocoris (Neolygus) salicicola* spec. nov. 19, vesica in ventral view; 20, vesica in dorsal view; 21, right paramere; 22, right paramere in top view; 23, left paramere; 24, posterior wall of the bursa copulatrix.

yellowish brown, both middle and hind femur with two subapical dark rings, tibial spines brown, each with a brown basal spot. Vesical spiculum almost straight; lobe sclerite wide, apex pointed; rasp median sized, apical 1/3 spinose; loop small; median sclerite large; seminal duct swollen; leftmost conjunctival lobe with dense minute crenulations. Male genitalia: left paramere as in fig. 15; right paramere with a narrow protuberance on sensory lobe, middle of hypophysis swollen. Female genitalia: lateral lobe of bursa copulatrix posterior wall fused medially, median process water drop-like; sclerotized ring as in fig. 17.

Measurements: Body length 5.0-6.1, width 2.0-2.4. Head length 0.27-0.30, width 0.96-1.06. Antennal segment lengths 0.58-0.62 : 1.98-2.12 : 0.86-0.92 : 0.58-0.60. Pronotum length 0.88-0.94, width 1.60-1.70. Corium length 2.39-2.48. Cuneus length 0.99-1.06. Claval commissure length 0.99-1.08.

Remarks

Resembles *Lygus (Neolygus) contaminatus* (Fallén) in colouration and size, but can be distinguished from it by the structure of vesica and parameres.

Collected on *Sabina chinensis* (L.) (Pinaceae).

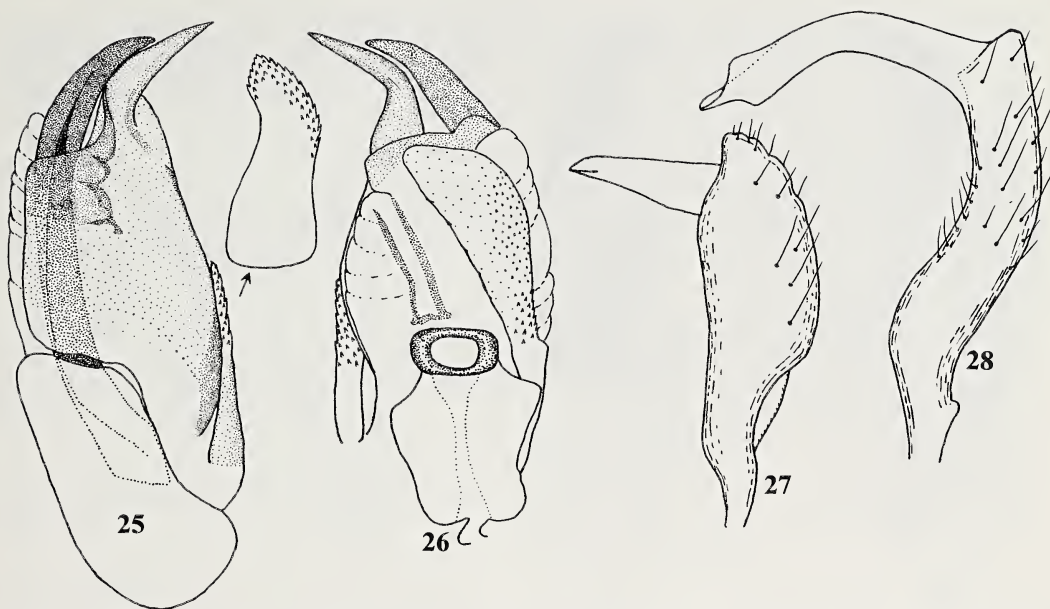
Etymology

Named after the type locality.

***Lygocoris (Neolygus) salicicola* spec. nov.**
(figs 19-24)

Type material

Holotype: ♂, China, Gansu Prov., Mt. Erlang, Min County (34°24'N, 104°0'E), alt. 2350 m, 29.vii.1986, leg. X. Z. Li. Paratypes: 4 ♀, same data as holotype.



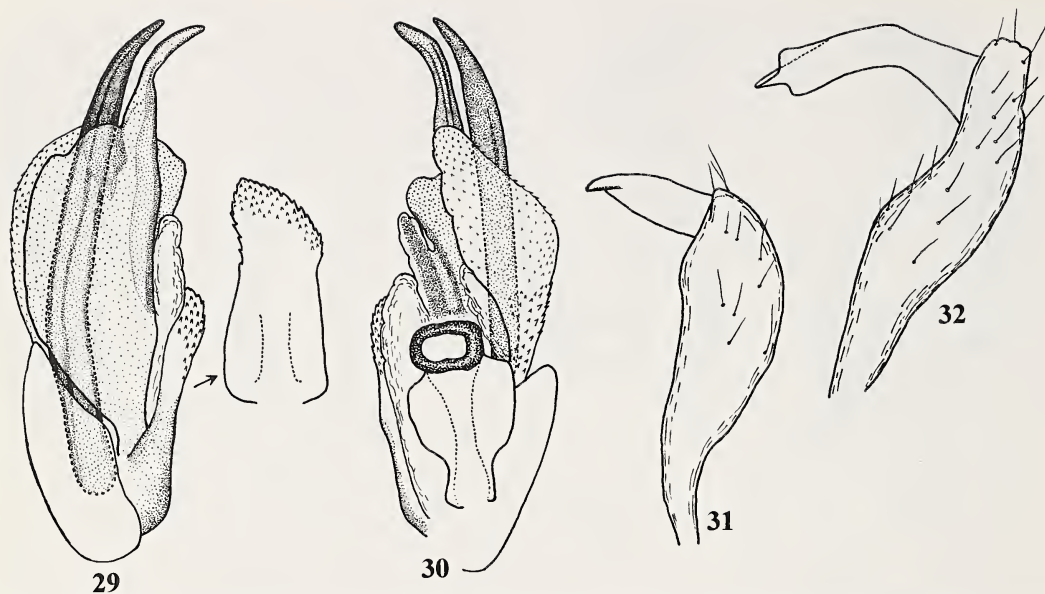
Figs 25-28. *Lygocoris (Neolygus) simillimus* spec. nov. 25, vesica in ventral view; 26, vesica in dorsal view; 27, right paramere; 28, left paramere.

Description

Body oblong-oval; yellowish green; dorsal surface with dense golden pubescence, shining. Head vertical, yellowish brown, tinged with red colour, shining. Vertex 0.24 times as wide as head in male, 0.35 times in female; median longitudinal furrow shallow, basal carina distinct; apical 1/3 of tylus slightly darker in male, colour in female uniformly yellowish brown. Antennal segment I and II brown, segment III and IV dark brown. Rostrum yellowish brown, apex of segment IV dark brown, extending beyond hind coxae, but not reaching posterior margin of abdominal sternite IV. Pronotum yellowish green to green; calli and area anterior to calli yellowish brown; collar yellowish white. Mesoscutum and basal margin of scutellum yellow to yellowish brown, rest of scutellum yellowish green; scutellum with distinct rugosities. Hemelytra yellowish green, shining; cuneus dirty brown, dull; 2.2 times as long as basal width; membrane pale smoky brown, with a broad dark brown strip at inside of cells, a dark marking beside small cell, a large dark brown marking posterior to large cell. Body beneath yellowish

brown. Legs yellowish green to yellowish brown, only apex of tarsal segment III brown; each femur with two subapical rings, dark brown, obscure; tibial spines pale brown, each with a dark brown basal spot. Male genitalia: vesical spiculum almost straight, twisted; lobe sclerite broad, with a membranous apex; rasp pagoda-shaped, not spinose; loop distinct; median sclerite strongly sclerotized; seminal duct swollen. Sensory lobe of left paramere well-developed, broad, with an apical protuberance, hypophysis short and stout; sensory lobe of right paramere with two protuberances, on which a lamella running across, perpendicular to the paramere body; hypophysis slender. Female genitalia: lateral lobe of posterior wall of the bursa copulatrix fused medially, without median process.

Measurements: Body length 5.75-6.72, width 2.42-2.49. Head length 0.37-0.41, width 1.17-1.19. Antennal segment lengths 0.61-0.68 : 2.11-2.21 : 1.12-1.22 : 0.75-0.78. Pronotum length 0.86-0.95, width 1.76-2.03. Corium length 2.93-3.15. Claval commissure length 1.21-1.35. Cuneus length 1.13-1.21.



Figs 29-32. *Lygocoris (Neolygus) xizangensis* spec. nov. 29, vesica in ventral view; 30, vesica in dorsal view; 31, right paramere; 32, left paramere.

Remarks

This new species differs from other known species of the genus *Lygocoris* in the characteristic structures of right paramere and vesica. Host plant: *Populus cathayana* and *Salix* sp. (Salicaceae).

Etymology

Indicating its host: willow tree.

Lygocoris (Neolygus) simillimus spec. nov. (figs 25-28)

Type material

Holotype: ♂, China, Sichuan Prov., Mt. Emei (29°30'N, 103°18'E), alt. 800-1000 m, 12.v.1957, leg. Z. Y. Wang (IZAS).

Description

Body oblong-oval; yellowish brown, with dense golden pubescence. Head vertical. Vertex 0.29 times as wide as head, basal carina distinct, with a shallow median longitudin-

al furrow; apical 1/3 of tylus black. Antennal segment I and II yellowish brown, apical 1/5 of segment II dark brown; segment III and IV dark brown. Rostrum yellowish brown, apex dark brown; reaching hind coxae. Pronotum yellowish brown. Scutellum yellowish brown, rugose. Corium with a dark spot at apical inner corner; cuneus about twice as long as basal width; pubescence on corium and clavus denser than those on cuneus, pronotum and scutellum; membrane dirty brownish. Body beneath yellowish brown. Legs yellowish brown, both middle and hind femur with two subapical dark rings; tibial spines pale brown, each with a dark brown basal spot. Vesical spiculum curved moderately; lobe sclerite broad, with a pointed apex; rasp broad, apical 1/4 spinose; loop long and distinct; median sclerite broad and well sclerotized; seminal duct swollen; leftmost conjunctival lobe spinose. Sensory lobe of left paramere with a tumid protuberance; right paramere body slender, hypophysis short, protuberance of sensory lobe well developed.

Measurements: Body length 5.3, width 2.3. Head length 0.33, width 1.16. Antennal segment lengths 0.59 : 1.85 : 0.68 : 0.59.

Pronotum length 0.90, width 1.94. Corium length 2.56. Claval commissure length 0.99. Cuneus length 0.99.

Remarks

Differs from other species in the structures of right paramere and vesica.

Etymology

Named after its close similarity with *Lygus* (*Neolygus*) *wuyiensis* spec. nov..

***Lygocoris* (*Neolygus*) *xizangensis* spec. nov.**
(figs 29-32)

Type material

Holotype: ♂, China, Xizang (= Tibet), Yi'ong (30°12'N, 94°54'E), alt. 2300 m, Bomi County, 14.viii.1983, leg. Y. H. Han (IZAS). Paratypes: 2♂, 2♀, locality as holotype, 31.vii.1978, leg. F. S. Li (BAUC); 1♀, Xizang, Tangmai, Bomi County (30°6'N, 95°0'E), alt. 2050 m, 27.vii.1978, leg. F. S. Li (BAUC).

Description

Body oblong-oval; dorsal surface yellowish brown, densely covered with golden pubescence, subshining. Head vertical, yellowish brown, shining; vertex very narrow, 0.24 times as wide as head in male, 0.30 times in female; with a median longitudinal furrow; basal carina distinct; apical 4/5 of tylus blackish brown. Antennal segment I and II yellowish brown with basal part and apical half of segment II dark brown, segment III and IV dark brown. Apical 4/5 of tylus dark brown. Rostrum yellowish brown, apical half of segment IV dark brown; reaching hind coxae. Pronotum subshining. Scutellum yellowish brown, rugose. Hemelytra tinged with green; embolium with a dark marking near base; corium with a large brown marking on apical inner corner, the marking reaching clavus and cuneus; clavus brown, with inner part dark brown; cuneus yellowish green, 2.1 times as long as basal width; membrane greyish brown. Body beneath yellowish brown. Legs yellowish

brown, tarsal segment III darkened; tibial spines brown, each with a dark basal spot. Vesical spiculum curved moderately; lobe sclerite broad, with a long and narrow apex; rasp broad, apical 1/4 spinose; loop long and distinct; median sclerite broad and well sclerotized; seminal duct swollen; leftmost conjunctival lobe spinose. Sensory lobe of left paramere with a large protuberance; right paramere body slender, hypophysis short, protuberance of sensory lobe tumid.

Measurements: Body length 5.30, width 1.80. Head length 0.33, width 0.99. Antennal segment lengths 0.50 : 1.65 : 0.80 : 0.50. Pronotum length 0.94, width 1.65. Corium length 2.21. Claval commissure length 0.82. Cuneus length 0.82.

Remarks

Similar to *Lygus* (*Neolygus*) *honshuensis* (Linnavuori) in body size and colouration, but differs from it in the narrower vertex and the structure of male genitalia.

Etymology

Named after its occurrence in Xizang (= Tibet).

References

- CARVALHO, J. C. M., 1959. A catalogue of the Miridae of the world. Part IV. – *Arquivos Mus. nac. Rio de J.* 48: 114-147.
- JOSIFOV, M., 1992. Neue Miriden aus Korea (Insecta, Heteroptera). – *Reichenbachia* 29 (20): 105-118.
- KELTON, L. A., 1955. Genera and subgenera of the *Lygus*-complex (Hemiptera: Miridae). – *Can. Ent.* 87: 277-301.
- KELTON, L. A., 1971a. Review of *Lygocoris* species found in Canada and Alaska (Heteroptera: Miridae). – *Mem. ent. Soc. Can.* 83: 1-87.
- KELTON, L. A., 1971b. Four new species of *Lygocoris* from Canada (Heteroptera: Miridae). – *Can. Ent.* 103: 1107-1110.
- KERZHNER, I. M., 1976. New and little-known species of Heteroptera from the Far East of the USSR. – *Trudy zool. Inst. Akad. Nauk SSSR* 62: 6-35 [in Russian].
- KERZHNER, I. M., 1988. *New and little-known Heteroptera insects from Far East of the USSR* (1987): 1-83. Nauka, Vladivostok [in Russian].
- KNIGHT, H. H., 1917. A revision of the genus *Lygus* as it

- occurs in America north of Mexico, with biological data on the species from New York. – *Bull. Cornell Univ. agric. exp. Stat.* (391): 555-645.
- KNIGHT, H. H., 1941. The plant bugs, or Miridae, of Illinois. – *Bull. Ill. nat. Hist. Surv.* 22: 1- 234.
- KULIK, S. A., 1965. New Miridae (Heteroptera) species from east Siberia and from the Far East. – *Zool. Zh.* 64: 1497-1505.
- LINNAVUORI, R., 1963. Contributions to the Miridae fauna of the Far East III. – *Annls ent. fenn.* 29 (2): 73-82.
- LU, N. & T. YASUNAGA, 1994. Two new species of the subgenus *Neolygus* Knight of the genus *Lygocoris* Reuter from China (Heteroptera: Miridae). – *Bull. biogeogr. Soc. Jap.* 49 (2): 99-103.
- YASUNAGA, T., 1991a. A revision of plant bugs, genus *Lygocoris* Reuter from Japan, Part II (Heteroptera, Miridae, *Lygus*-complex). – *Jap. J. Ent.* 59: 593-609.
- YASUNAGA, T., 1991b. A revision of the Plant Bugs, Genus *Lygocoris* Reuter from Japan, Part III (Heteroptera, Miridae, *Lygus*-complex). – *Jap. J. Ent.* 59: 717-733.
- YASUNAGA, T., 1992. A revision of the Plant Bugs, Genus *Lygocoris* Reuter from Japan, Part VI (Heteroptera, Miridae, *Lygus*-complex). – *Jap. J. Ent.* 60: 521-537.
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