SOME TINGITIDAE FROM JAPAN (HEMIP.)*

CARL J. DRAKE
Department of Zoology and Entomology, Iowa State College

Sometime ago the writer received, through the kindness of Mr. W. L. McAtee, a small collection of lace bugs or Tingitidæ from Japan. In addition to a few new records the collection contains a new genus and three new species. *Galeatus peckhami* Ashm. was wrongly recorded by Uhler from Japan; this insect seems to be limited in distribution to the northern portion of the Nearctic region. Although I have examined specimens of *Stephanitis pyrioides* Scott from Japan, the species listed by Uhler as this insect (*Tingis pyrioides* Scott) is *Tingis pyri* Fabr.

MONANTHIA FORMOSA n. sp.

Moderately large, rather robust. Head short, with five appressed spines; posterior spines much longer than the anterior spines, the latter short. Antennæ rather slender, moderately long; first and second segments subequal in length, the former a little thicker and stronger; third segment very long and slender, almost three times the length of the fourth; fourth segment slightly swollen, clothed with several long hairs. Rostral laminæ widely separated on the metasternum, meeting behind. rostrum reaching to the intermediate coxæ. Pronotum narrowed anteriorly, considerably and transversely swollen through the disc; Paranota strongly developed, reflexed back against the pronotum, the outer margins contiguous with the median carina, with prominent nervures, the nervure next to the outer margin strongly costate. Median carina distinctly raised, rather thin, with a row of small areolæ. Lateral carinæ short, not very prominent, divaricating posteriorly. Elytra moderately constricted a little beyond the middle, considerably longer than the abdomen, broadly rounded at the apex; tumid elevation moderately large; costal area uniseriate throughout, the areolæ rather large; subcostal area triseriate, the areolæ considerably smaller than those of discoidal area; discoidal area extending to the middle of the elytra, slightly unequally reticulated, narrow at the base and broadly rounded at the apex, the outer nervure at the base strongly, roundly and outwardly curved; sutural area rather widely and somewhat unequally reticulated. Wings a little shorter than the elytra. Length, 2.6 mm.; width about 1 mm.

---

* Contributions from Department of Zoology and Entomology, Iowa, State College, Ames, Iowa.

Legs and antennæ light testaceous. Body beneath black. Head black, the spine whitish. Paranota whitish, a few of the nervures fuscous. Nervures of apex of pronotum and of the elytra mostly fuscous (few testaceous), the areolæ largely whitish and nearly opaque. Most of the areolæ of sutural area broadly margined with fuscous.

Fifteen specimens, Kankau (Koshun), Formosa, Japan, 1912, collected by Mr. H. Sauter. *Type*, male, in the collection of Dr. Walter Horn, Berlin, Germany. *Paratypes* in the collections of U. S. National Museum, Dr. Horn and writer. In some specimens the fourth antennal segment is slightly embrowned. The smaller size, the lighter color of legs and antennæ, and size of paranota separate this species at once from the new form described below.

MONANTHIA SAUTERI n. sp.

Very closely allied to *M. formosa* n. sp., but readily separated from it by the stouter and more robust form, much narrower paranota (not contiguous with the median carina), nearly parallel lateral carinæ, and the lighter color of the reticulations of the elytra and paranota. Length, 2.82 mm.; width, 1.3 mm.

Pronotum transversely swollen through the disc, coarsely punctate; median carina well-developed, composed of a single row of small areolæ; lateral carinæ short, each composed of two small areolæ; paranota with two or three rows of punctures between its outer margin and the median carina. Elytra similar to *M. formosa* n. sp.; discoidal area not quite reaching the middle of the elytra; subcostal area mostly triseriate, with a few extra areolæ at its widest part (back of apex of discoidal area). Wings almost as long as elytra.

Antennæ testaceous, the fourth segment mostly fuscous. Legs testaceous, the tarsi fuscous. Head black, the spines testaceous. Pronotum and body beneath black; reticulations of paranota testaceous, the areolæ whitish. Reticulations of elytra mostly brown, the cells whitish.

Type, female, Kankau (Kushun), Formosa, Japan, May, 1912, collected by Dr. H. Sauter, in the collection of Doctor Walter Horn. *Paratype*, Tainan, Formosa, Japan, 1912, collected by H. Sauter, in my collection. In the latter specimens the nervures of the elytra are dark fuscous.

BELENUS DENTATUS Fieber.

Phyllontochila dentata Fieber, Ent. Monog., 1844, p. 71, Pl. VI, Figs. 2-4.
Phyllontochila dentata Stal, Enum. Hemip., III, 1873, p. 126.
Belenus dentatus Distant, Ann. Soc. Ent. Belg, LIII, 1909, p. 116, (*type* of genus).

Several specimens, taken at Anping and Taihorin, Formosa, 1911, by Mr. H. Sauter.

STEPHANITIS PYRI Fabricius.

Acanthia pyri Fabricius, Syst. Ent., 1775, p. 696.
Cimex appendiceus Geoffroy, Ent., Paris, 1785, p. 212.
Tingis pyri Syst. Rhyng., 1803, p. 126.
Tingis marginata Lamarch, Hist. Nat., III, 1816, p. 504.
Stephanitis pyri Horvath, Ann. Mus. Hung., IV, 1906, p. 54; Ann. Mus. Hung. X, 1912, pp. 320, 327.

This species was recorded by Uhler as *Tingis pyrioides* Scott from Japan. Numerous specimens of the true *S. pyri* Fabr. are before me from Japan, also one specimen from China.

STEPHANITIS PYRIOIDES Scott.

Stephanitis pyrioides Scott, Ann. Mag. Nat. Hist., Ser. 4, XIV, 1874, p. 440.
Stephanitis azalaea Horvath, Ann. Nat. Mus. Hung., IV, 1906, pp. 55, 56; Ann. Nat. Hist. Hung., X, 1912, pp. 323, 333.

Several specimens of the true *S. pyrioides* Scott have been examined by the writer from Japan.

STEPHANITIS GLOBULIFERA Matsumura.

Tingis globulifera Matsumura, Senchu-Zukai, II, 1905, p. 36, Pl. 19, Fig. 16.
Stephanitis globulifera Horvath, Ann. Mus. Nat. Hung. X, 1912, pp. 322, 330.

Specimens of this insect were taken in Japan by Mr. Koebele.

STEPHANITIS TYPICA Distant.

Cadamustus typicus Distant, Ann. Soc. Ent. Begl., XLVII, 1903, p. 47; Fauna Brit. Ind., Rhynch., II, 1903, p. 132, Fig. 95.
Stephanitis typica Horvath, Ann. Nat. Hist., Hung., X, 1912, pp. 320, 325.

A long series, taken at Hoozan, Formosa, during 1908, 1909, 1911 and 1912, by Mr. H. Sauter.

GALEATUS SPINIFRONS Fallen.

Tingis spinifrons Fallen, Mon. Cim. Svec., 1807, p. 38.
Tingis affinis Herrich-Schaeffer, Nom. Ent., 1, 1835, Wanz. Ins., III, p. 73, Pl. 95, Fig. 290.
Galeatus spinifrons Jakowleff, Bull. Soc. Mosc., I, 1880, p. 131; Horvath, Termes, Fuzetk., XX, 1897, p. 456.

This insect was listed by Uhler in "Summary of the Hemiptera of Japan, presented to the United States National Museum by Professor Mitzukuri," Proc. U. S. Nat. Mus., Vol. XIX, No. 1108, 1896, p. 265, as *Galeatus peckhami* Ashmead. The comment, "I can find no structural differences to separate these (four specimens from Japan) from the vertible type as it occurs in lower Canada" refers to the true *G. peckhami* of Ashmead. Horvath has recently described the form listed by Uhler, Proc. U. S. Nat. Mus., XXVII, 1904, p. 362, as a new species. According to specimens at hand *G. peckhami* Ashm. is entirely of Nearctic distribution and ranges from Wisconsin and Muskoka Lake, Canada, to the Atlantic. (*Fide* Bergroth).

XENOTINGIS n. gen.

Distinctly lacely like the genera Stephanitis, Cadmius, Leptodictya and Galeatus but distinguished at once from those or other allied genera by enormously developed paranota and the strongly recurved outer margin of each elytron. Pronotum tricarinate. Head mostly concealed by the hood, with five slender, rather short spines; hood narrow, extending to the apex of the head. Eyes small. Bucculæ meeting in front. Paranota enormously developed, strongly reflexed and recurved, the rostrum long and slender, the rostral groove uninterrupted. Elytra considerably longer than the abdomen, rounded at the apex; discoidal area broad, not quite reaching the middle of the elytra; costal area broad, the outer margin strongly recurved (rolled) and touching the discoidal and subcostal areas. Elytra and paranota widely reticulated. Metasternal orifice quite distinct.

Type of genus *Xenotingis horni* n. sp.

XENOTINGIS HORNI n. sp. (Fig. 1).

Pronotum distinctly punctate, transversely swollen through the disc, tricarinate; lateral carinæ thin, parallel, without areolæ; median carina more strongly raised than the lateral carinæ, especially behind. Hood narrow, projecting a little in front of the head, a little longer than high, widely reticulated. Paranota enormously developed, strongly recurved, projecting high above the pronotum, nearly semiglobose in shape, the areolæ very large and finely reticulated. Head rather short, the spines appressed. Rostrum reaching almost to the third ventral segment of the abdomen. Antenniferous tubercles moderately large. Antennæ rather long and slender; first segment a little longer and thicker than the second; third segment very long, slender, slightly curved, more than four times the length of the fourth. Elytra broadly rounded at the apex, considerably longer than the

abdomen, widely reticulated, the outer margin recurved; discoidal area broad, not reaching the middle of the elytra, with five rows of areolæ at its widest part; sutural area large, widely reticulated; costal area irregularly quadriseriate. Wings wanting. Length, 3.6 mm.; width, 1.58 mm.

General color above uniformly testaceous, the areolæ semi-transparent. Body, legs and antennæ a little darker, somewhat more brownish, the tarsi and fourth antennal segments fuscous.

Type, female, from Kosempo, Formosa, Japan, August, 1909, collected by H. Sauter, in the collection of Dr. Horn.

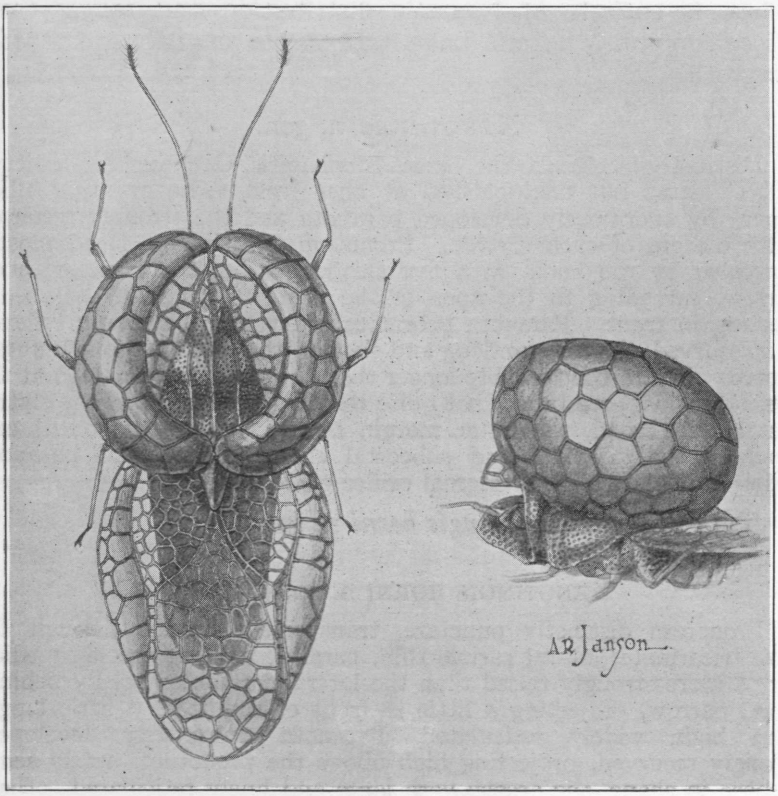

Fig. 1. *Xenotingis horni* n. gen. and sp.

This paper received for publication January 12, 1923.