Three New Manchurian Membracidae.

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Through the courtesy of Dr. Hans Sachtleben of the Deutsches Entomologisches Institut the writer has been permitted to examine an interesting lot of *Membracidae* collected in Manchukuo, near Charbin, by Mr. V. N. Alin.

This material contains three new species which are here described and figured as follows:

1. Gargara alini sp. nov. (Fig. 1).

Small, ferruginous brown, pubescent, punctate; metopidium convex with dark markings; posterior process tectiform, suddenly depressed at tip; tegmina hyaline, veins nodulate, a thin brown transverse line across center; undersurface dark brown; legs simple and ferruginous.



Fig. 1. Gargara alini. sp. nov.

Technical description:

Head subquadrate, wider than high, dark brown, finely punctate, sparingly pubescent; base regulary arcuate and sinuate; eyes ovate, light brown; ocelli inconspicuous, pearly, farther from each other than from the eyes and situated slightly above a line drawn through centers of eyes; inferior margins of genae sloping; clypeus extending for onethird its length below inferior margins of genae, tip rounded and weakly pilose.

Pronotum ferruginous brown, finely punctate and densely pubescent; metopidium broader than high, convex, rounded, a broad brown band on each side median line; humeral angles heavy, triangular, blunt; posterior process heavy, tectiform, slightly sinuate, depressed at base and suddenly depressed at extremity which just reaches the internal angles of the tegmina; scutellum narrowly exposed on each side.

Tegmina hyaline; base broadly brown, coriaceous and punctate; veins strong, nodulate and pilose; apical limbus narrow; five apical and three discoidal cells.

Sides of thorax and undersurface of body dark brown. Legs simple and ferruginous; femora cylindrical; tibiae triquerate; all tarsi equal in length; hind trochanters unarmed.

Length from front of head to tips of tegmina 4 mm; width between humeral angles 2 mm.

Type: female.

Type locality: Erzendjanzsy, Manschukuo.

Described from nine females and one male taken at the type locaity by Mr. Alin on June 18, 1939 and two males taken at Maoerschan on May 30, 1939. The males agree entirely with the females. Type and seven paratypes in collection of the Deutsches Entomologisches Institut; allotype and three paratypes in author's collection.

This species is close to *Gargara flavipes* Funkh., but may be distinguished by the nodulate veins of the tegmina and by the depressed tip of the posterior process.

2. Gargara albopleura sp. nov. (Fig. 2).

Large, robust, dark brown with sides of thorax snowy white tomentose, coarsely punctate, densely pubescent; metopidium convex; posterior process heavy, sharply tectiform, tip acuminate and just reaching internal angles of tegmina; tegmina hyaline with brown markings; undersurface of body black; legs ferruginous.

Technical description:

Head subquadrate, wider than high, very dark brown, finely punctate, densely pubescent; base arcuate and feebly sinuate; eyes large, globular; ocelli large, conspicuous, pearly, slightly elevated, equidistant from each other and from the · eyes and situated about on a line drawn through centers of eyes; inferior margins of genae sloping and sinuate; clypeus extending for half its length below inferior margins of genae, tip rounded and pilose.

Pronotum dark brown, coarsely punctate, densely pubescent; metopidium convex, about as broad as high; median carina percurrent; humeral angles heavy, triangular, blunt; posterior process nearly straight, heavy, tricarinate, tectiform, tip acute and just reaching internal angles of tegmina; scutellum broadly exposed on each side.

Tegmina hyaline with irregular brown markings; base narrowly brown, coriaceous and punc-



Fig. 2. Gargara albopleura sp. nov.

tate; apex rounded; apical limbus broad; five apical and three discoidal cells. Snowy white tomentose patches on meso and metathorax and showing through bases of tegmina; undersurface of body black; legs ferruginous -

Length from front of head to tips of tegmina 5,5 mm; width between humeral angles 26 mm.

Type: female.

Type locality: Tschen, Manschukuo.

Described from ten females and eight males, all taken at the type locality by Mr. Alin in July 1938. The males agree entirely with the females except that they are slightly smaller in size. Type and twelve paratypes in collection of Deutsches Entomologisches Institut; allotype and four paratypes in author's collection.

3. Maurya nodosa sp. nov. (Fig. 3).

Large, brown, coarsely punctate and densely white pubescent; supra-

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humerals large, flattened, blunt, projecting outward and upward; posterior process heavy, tectiform, lightly toothed at base, extending just beyond internal angles of tegmina; tegmina hyaline with veins strongly nodulate; sides of thorax densely white tomentose; undersurface and legs brown.

Technical description:

Head subquadrate, wider than long, dark brown, finely punctate, densely pubescent with white hairs; base highly arcuate and feebly sinuate; eyes ovate, amber-colored; ocelli large, conspicuous, pearly, equidistant from each other and from the eyes and situated slightly above a line drawn through centers of eyes; inferior margins of genae rounded and sloping; clypeus lightly trilobed, extending for half its length below inferior margins of genae, tip obtuse and pilose.



Pronotum light brown, finely punctate, densely pubescent with snow white tomentose hairs; metopidium vertical, twice as wide as high; median carina strongly percurrent; humeral angles heavy, triangular, blunt; suprahumeral horns broad, flattened dorso-ventrally, as long as the distance between their bases, tips broadly rounded, extending upward and outward; posterior process heavy, straight, tectiform, tomentose and nodulate, base weakly toothed above, tip blunt and reaching just beyond internal angles of tegmina; scutellum narrowly exposed on each side.

Tegmina hyaline; base lightly coriaceous, brown and punctate; tip faintly clouded with brown; veins distinct and strongly nodulate; apex pointed; apical limbus broad; five apical and three discoidal cells.

Sides of thorax densely white tomentose; undersurface brown; legs simple, brown; femora dark brown; tibiae light brown and pilose; all tarsi equal in length.

Length from front of head to tips of tegmina 7 mm; width between tips of suprahameral horns 4,1 mm.

Type: female.

Type locality: Erzendjanzsy, Manschukuo.

Described from twenty-four females and one male taken at the type locality on June 18, 1939; five females and one male collected at Sjaolim on May 25, 1938; and three females and one male taken at Maoerschan on May 30, 1939. All collected by Mr. Alin.

Type, allotype and twenty-seven paratypes in collection of Deutsches Entomologisches Institut; six paratypes in author's collection.