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NEW SPECIES AND NEW GENERA OF PALAEARCTIC SUPERFAMILY CERCOPOIDEA WITH A TABULAR KEY TO THE CLASSIFICATION (II)

By

SHONEN MATSUMURA (松 村 松 年)

Peuceptyelus yatugadakeanus n. sp.

Closely allied to P. medius MATS., but differing from it as follows:

Body with tegmina somewhat darker in colour. Crown more deeply depressed, more closely and roughly punctured, with some testaceous parts; the median carina robuster and paler in colour. Frons paler, in the middle not infuscated. Pronotum more numerously punctured in the middle, with a transverse row of fuscous stripes. Scutellum in the middle with the depression smaller, the transverse wrinkles obsolete. Tegmina darker, but the marking nearly similar, the median fuscous spot at the costa not continuous with the triangular middle patch.

Length—8 mm. (incl. tegm.).

Hab. - Honsyu.

Holotype, 9, Mt. Yatugadake, 23, IX, 1932, collected by the author.

Phymatostethus yunnanensis n. sp.

Resembles P. sema Dist., but differs from the latter in the following points:

Body dark brown. The anterior third and the lateral sides of crown reddish. Frons reddish, the gena and tempora as well as the clypeus fuscous; the inner side of eye brownish. Rostrum dark brown. Pronotum with the ante-lateral margins, the anterior margin, as well as three spots in the disk, one of which at the middle is longer, reddish, transversely strongly wrinkled, with no punctures. Scutellum in the middle excavated, at the lateral sides and the apex reddish. Tegmina with a reddish spots and lines in the following places: one line at the base of clavus, one line near the middle of the same, three spots at the costal area and other three spots along the claval suture, of which the

apical one is curved, one spot in the middle of corium beyond the claval apex; the costal margin narrowly reddish. Body beneath pitchy black. Some spots and conical projection on the mesosternum reddish. Abdomen black, the connexivum and the anterior margin of each ventral segment largely reddish; the last two segments reddish. Legs reddish, coxae, a ring-spot near the apex of each femur, the larger parts of the anterior and middle tibiae as well as the base of the posterior tibia, fuscous; the tibial spines at the extreme apices fuscous.

3. The genital segment dark reddish, at the base fuscous; the genital plates obconically upturned, at the apices being fuscous; the anal style somewhat suffused.

Length-20 mm. (incl. tegm.).

Häb.—China.

Holotype, &, Yunnan, 29, VIII, 1938, collected by the Fan Memorial Institute Biology, Peking, and sent to the author for identification.

Philagra kuskusuana n. sp.

Differs from P. longirostris Schum. as follows:

Body larger and broader, the caphalic process less upturned dorsad; the antennal ledge narrowly pale yellow. Frons in the middle at the lower half flat, with a broad longitudinal groove, where is transversely wrinkled. Pronotum at the hind margin in the middle with a pale yellowish stripe, in the disk with a broad longitudinal groove. Scutellum before the apex pale yellow. Tegmina with 2 fuscous bands, the inner one being oblique and short, the outer one longer and less oblique. Body beneath darker; the legs brownish, the anterior and middle coxae fuscous.

\$\varphi\$. The genital segment brownish, the coleostron at the basal lateral margins infuscated; ovipositor somewhat longer than the coleostron, grayish pubescent, the pubescence at the apex brushy.

Length-15 mm. (incl. tegm.).

Hab.—Formosa.

Holotype, \mathcal{P} , Kusukusu, near Koshun, 19, VI, 1939, collected by S. HI-RAYAMA.

Sabphora n. g.

Resembles much Omalophora MATS., but differs from the latter as follows:

Body with tegmina generally testaceous. The jugal socket open to the base of antenna. The tylal furrow shorter, occupying $\frac{1}{3}$ of the tylal ridge. From shorter, the lateral sulci less eminent. Pronotum with the antelateral

margins much narrowly ridged. Tegmina with the veins narrower.

- 3. The genital plates not separated from each other, at the apices rounded, building a narrow fissure between them; the anal style less protruded beyond the apices of the plates.
- φ . Ovipositor longer, about $\frac{1}{2}$ protruding beyond the apex of coleostron which is narrower in the middle, not much dilated; the anal style shorter, only reaching to the middle of the exposed part of ovipositor.

Genotype—Aphrophora takagii MATS.

Sabphora holonbairuna n. sp.

Superficially allied to Europhora alpina Melich., but differs from the latter as follows:

Body with the tegmina distinctly narrower. Head somewhat longer, the tylal furrow broader, scarcely narrower at the inner end, not contiguous with the jugal socket; head produced more anteriorly, but the tylus at the anterior margin nearly truncate. Pronotum narrower, at the posterior area more and at the anterior part less numerously punctured. Tegmina narrower; the anterior branch of the inner ante-apical cell in the middle lacking the yellowish spot.

Q. Abdomen at the venter fuscous, the last segment at the hind margin testaceous; the genital segment testaceous, the ovipositor about $\frac{1}{3}$ protruding beyond the coleostron; the anal style smaller, shorter, remaining at the base of the exposed part of ovipositor, being fuscous in colour.

Length-11 mm. (incl. tegm.).

Hab.-Manchoukuo.

Holotype, \circ , Yakeshi, Holonbairu, 9, VIII, 1940, collected by T. Sato and sent to the author for identification by H. HASEGAWA.

Sabphora kuccharonis n. sp.

Similar to S. kusironis MATS., but can be easily distinguished from the latter as follows:

Body and tegmina not scattering ochraceous pigments. Pronotum more sparsely punctured, the punctures being smaller and fuscous in colour; the median carina higher and broader; along the ante-lateral margins with each a fuscous stripe. Scutellum at the lateral angles broadly callous. Tegmina with the punctures distinct, while in *S. kusironis* Mats. being obsolete, owing to the ochraceous pigments. Body beneath darker, only the frons in the lower part yellowish. Abdomen dark fuscous, more longly and densely grayish pubescent.

Q. The genital segment fuscous, the coleostron at the base and the ovipositor being somewhat paler. Ovipositor shorter, about $\frac{1}{4}$ protruding beyond

the coleostron; the anal-style brownish, reaching about to the middle of the exposed part.

Length-9 mm. (incl. tegm.).

Hab.-Hokkaido (Kuccharo).

Holotype, \circ , Kuccharo in the Prov. Kusiro, 18, VIII, 1907, collected by the author.

Sabphora kusironis n. sp.

Resembles much S. takagii MATS., but differs from it as follows:

Body smaller, more ochraceous in colour. The tylus at the anterior half brownish and more deeply punctured. The tylal ridge narrower. Pronotum more numerously punctured, the punctures being concolorous with the body. Scutellum in the middle transversely wrinkled. Tegmina scattered with some irregular ochraceous pigments.

- 3. The genital plates together at the apices building an acute triangular fissure.
 - \circ . The anal style far not reaching to the apex of ovipositor.

Length-9-9.5 mm. (incl. tegm.).

Hab.—Hokkaido (Kusiro).

Holotype, ô, Allotype, ♀, Paratype, ô, 18, VIII, 1907, collected by the author.

Sabphora takagii MATS.

Aphrophora takagii MATS., Jour. Facul. Agr., Hokkaido Imp. Univ., XIV, Pt. 2, p. 64, Q (1940).

3. Differs from the female in having less ochraceous shade; at the dorsum more infuscated. The genital plates distinctly longer than the last ventral segment, together quadrate, at each apex rounded, between them building a narrow fissure, the anal style protruding beyond the apices of the plates, at the base dorsally infuscated.

Hab.-Manchoukuo.

Allotype, &, Oshoden, 8, VIII, 1940, collected by the author.

Numerous specimens were collected on 8-9, VIII, 1940, collected by the author at Oshoden and Tonka (Shinkairei).

Sagophora n. g.

Allied to Dophora Mars., but differing from it in the following characters:

- 1. Antennal ledge with narrower sulci.
- 2. Callous spots on the vertex much smaller.
- 3. Vertex at the hind margin obtuse-angularly incised.
- 4. Frons less inflated, in the middle somewhat lower.

- 5. Pronotum with a trace of one pair of intermediate carinae.
- 6. Scutellum not depressed in the middle.
- 7. Tegmina at the apices much narrower. Genotype—Aphrophora tsuruana MATS.

Sappoptyelus n. g.

Allied to *Peuceptyelus* SAHL., but differing from the latter in the following points:

Body and tegmina cylindrical. The antennal ledge grooved only at the inner half, the triangular thickening smaller. Crown deeply depressed, with a very obsolete median carina. Frons more inflated, with the lateral sulci weaker, with a few punctures, lacking the median carina; clypeus with the median carina higher. Rostrum longer, reaching to the basal third of the posterior femur. Pronotum with no trace of intermediate carinae; the inner depressed callous spots nearly horizontal, while in *Peuceptyelus* distinctly much more oblique. Tegmina when closed each other much narrower, subhyaline and shiny.

Genotype—Sappoptyelus jozanus MATS. (n. sp.).

Sappoptyelus jozanus n. sp.

Pale grayish testaceous. Crown at the hind half much finer punctured than on the anterior half, at the inner side of eye with some longitudinal wrinkles; tylus along the hind margin grooved except at the middle. Face brown, shiny, the frons at the apex broadly testaceous and where are very finely sparsely punctured. Pronotum on the disk punctured more sparsely than on the margins. Scutellum in the middle fuscous till to the base; sparsely punctured and transversely wrinkled; at the sides broadly callous. Tegmina pale testaceous, near the base at costa with a grayish oblong patch, outwardly lined with fuscous; at the base of the first and second sectors above the oblong patch with a fuscous patch, followed by a white patch outwardly; near the apex at costa with a fuscous spot; veins concolorous with the ground colour. Body beneath the mesosternum, the pro- and mesopleurae as well as the abdomen at venter fuscous. Legs testaceous, at the tips of the anterior and middle femora, as well as the tibiae somewhat brownish.

 \circ . Coleostron and the last ventral segment testaceous; ovipositor at the apical half and the anal style brownish, the latter scarcely reaching to the apex of ovipositor.

Length—7 mm. (incl. tegm.). Hab.—Hokkaido.

Holotype, 9, Sapporo, 28, VIII, 1908, collected by the author at Jozankei.

Sappoptyelus menoko n. sp.

Peuceptyelus nigroscutellatus MATS., Ann. Zool. Jap., V, p. 45 (1904) (Part.).

Differs from S. jozanus MATS. in the following points:

Body smaller. Crown at each inner side of the eye with a small spot, and the tylus fuscous. Frons black, at the apical testaceous area with two fuscous transverse bands; the antennal ledge narrower, the transverse sulci infuscated; the antennal socket and the middle area of lora fuscous. Pronotum more numerously punctured, with two pairs of broad oblique intermediate carinae. Scutellum with the depression deeper and larger, being black in colour. Tegmina darker, scattering more numerous fuscous markings. Body beneath largely fuscous, shiny; only the metasternum testaceous. The anterior and middle legs largely fuscous, only the knees and tarsi, as well as the posterior legs testaceous.

Length-6 mm. (incl. tegm.).

Hab.-Hokkaido.

Holotype, &, Sapporo, 28, IX, 1908, collected by the author on Abies sachalinensis.

This species was mixed in Peuceptyelus nigroscutellus MATS.

Seiphora n. g.

Allied to Aphrophora Germ., but differs in the following characters:

Body with tegmina in a cilindrical form. Head with the eyes distinctly narrower than the pronotum; the antennal ledge foliaceous, much narrower than the diameter of antenna; the tylal furrow long, but not reaching to the middle. Frons nearly flat, the median carina being distinct, becoming broader at the clypeus. Pronotum somewhat higher than in the vertex; the ante-lateral margins nearly $\frac{1}{2}$ of the ocular length, somewhat diverging posteriorly; the the median carina distinct, continuing to the vertex. Scutellum somewhat depressed in the middle. Tegmina somewhat broader in the middle, about $3\frac{1}{2}$ times as long as broad in the middle, at the apices broadly obconical, the apical cells with some sooty coverings being not very distinct.

Genotype—Seiphora seitonis MATS. (n. sp.).

Seiphora seitonis n. sp.

Brownish yellow, with short silvery hair. Crown in the middle fuscous, the middle carina being paler, at the inner side of eye sparsely rugosely punctured. From with the clypeus yellowish, the punctures in the transverse

sulci and along the longitudinal median carina fuscous. Rostrum yellow the third joint except the base fuscous. Pronotum rugosely, rather sparsely fuscous punctate, the punctures at the anterior margin much smaller, on the disk irregularly wrinkled; along the ante-lateral margins with each a fuscous stripe. Scutellum sparsely punctate, transversely wrinkled. Tegmina mottled with fuscous sooty substance, in the middle of the brachial vein with an ochraceous callous spot. Meso- and metasternum, as well as the legs brownish testaceous, the anterior and middle tibiae, as well as the tarsi paler in colour. Abdomen at the venter castaneous brown, the last segment somewhat shorter than the genital plates, the latter at the apices rounded, leaving no fissure between them. Ovipositor somewhat shorter than the rest of abdomen, the former somewhat protruding beyond the apex of coleostron.

Length— ô, 10 mm. ♀, 12 mm. (incl. tegm.). Hab.—China.

Holotype, &, Allotype, &, Paratype, &, 21, VI, 1937, collected by S. Takagi at Seito (Tingtau) and sent to the author for identification.

Sinophora chuzenjiana n. sp.

Resembles S. japonica MATS., but differs from the latter as follows:

Body and tegmina infuscated. Tylus at the sides and at the inner side o eye fuscous. Frons in the middle paler, with deep lateral sulci; lora at the outer side not testaceous, obliquely wrinkled. Pronotum much less elevated, between the callous spots not excavated, at the anterior and lateral areas more numerously punctured. Scutellum more transversely wrinkled, at the apex fuscous. Tegmina more densely punctured; the middle oblique fuscous band reaches to the costal margin; from the wavy fuscous marking at the claval apex runs an oblique fuscous band to the apex and where the veins are mostly infuscated. Body beneath darker.

 \circ . Coleostron at the back fuscous, the ovipositor about $\frac{1}{2}$ protruding beyond the apex of coleostron; the anal style fuscous.

Length-12 mm. (incl. tegm.).

Hab.-Honsyu.

Holotype, ♀, Paratype, ♀, Chuzenji, 24, XII, 1939, collected by B. Kubota and sent to the author by H. Hasegawa for identification.

Sinophora hasegawai n. sp.

Allied to S. japonica MATS., but differs from the latter as follows:

Body entirely brownish, crown and pronotum with no marking. The antennal ledge at the lateral sides testaceous, the median carina of crown

distinct. Genae and all the pleurae dark fuscous. Pronotum with the median carina dark fuscous, in the disk longitudinally depressed. The median carina not very distinct, more numerously punctured. Scutellum more deeply depressed, punctured till to the corner of the triangle, at the lateral sides being ridged. Tegmina more numerously punctured, the punctures being not confluent; at the middle of the costa with a fuscous spot from which runs an oblique fuscous band to the humeral angle. Genae, pro- and mesopleurae, as well as the abdomen at the venter fuscous; the last 2 ventral segments and the genitalia testaceous.

- 3. The genital plates downwardly curved, at the apices pointed and curved inwardly, enclosing an ellipsoidal area; the anal style fuscous at the base, not protruding beyond the apices of the plates.
- Q. Ovipositor about $\frac{1}{3}$ protruding beyond the apices of coleostron; the anal style fuscous, somewhat reaching to the middle of the exposed part of ovipositor.

Length—II mm. (incl. tegm.).

Hab.—Honsyu.

Holotype, &, Yatsugadake, 20, VII, 1939, collected by H. Hasegawa. Allotype, &, Chujenji, 7, VIII, 1939, by M. Kubota. Paratype, &, Towada, 15, VIII, 1905, by the author; &, Morioka, 19, VIII, 1936, by H. Hasegawa; &, Karuizawa, 27, VII, 1939, by H. Hasegawa;

Sinophora hatimantaiana n. sp.

In form this species resembles S. japonica MATS., but differs from it as follows:

Tylus fuscous, the median carina paler testaceous, only distinct at the hind margin. Pronotum with the median carina concolorous, lower, in the disk with a transverse short fuscous band and where few transverse wrinkles are visible. Scutellum fuscous, with finer wrinkles. Tegmina with deeper, not fused denser punctures; no fuscous marking, on the stalk of the first ante-apical cell infuscated. Genae below the eye, and the propleurae largely, fuscous. Abdomen brownish testaceous, the last two ventral segments and the genitalia pale testaceous.

3. The genital plates upturned, contact, pointed, and incurved, enclosing an oblong area; the anal style downwardly curved, somewhat protruding beyond the apices of the plates.

Length—II.I mm. (incl. tegm.).

Hab.-Honsyu (Iwate).

Holotype, 3, Hatimantai, 3, VIII, 1937, collected by H. HASEGAWA, and sent to the author for identification.

Sinophora hoshiana n. sp.

Differs from S. japonica MATS. as follows:

Unicolorously castaneous brown, only the crown somewhat paler in colour. Tylus transversely more deeply excavated, the median carina white. Frons at the apical half somewhat paler in colour, more inflated, in the middle less and more shallowly punctured, at the lateral sides scarcely sulcated; genae and lorae fuscous; at the base of clypeus paler. Pronotum near the anterior border more closely punctured; in the disk with more numerous transverse wrinkles and distinct punctures. Scutellum with more transverse wrinkles. Tegmina at the costal region somewhat paler, with no distinct marking, clavus at the base with less confluent punctures. Body beneath somewhat paler in colour than on the upper surface; legs pale brown with the markings darker.

 \circ . The last ventral segment about $\frac{1}{2}$ of the penultimate; coleostron at the base darker in colour, about as long as the foregoing three segments taken together; ovipositor nearly $\frac{1}{3}$ protruding beyond the apex of coleostron.

Length—12.5 mm. (incl. tegm.).

Hab.—Honsyu.

Holotype, \circ , 10, VIII, 1937, collected at Hoshi in the Prov. Gunma. Paratype, \circ , 10, VIII, 1905, by the author at Towada, in Prov. Aomori. Paratype, \circ , 3, VIII, 1939, by H. HASEGAWA at Hatimantai, in the Prov. Iwate.

Sinophora iwateana n. sp.

Closely comes near also to S. japonica MATS., but distinguished from the latter as follows:

Head and the anterior half of pronotum paler. Crown with the median carina much higher, at the hind margin in the middle carina much higher, at the hind margin in the middle nearly rightangularly incised; tylus scarcely punctate; at the outer side of the callous spot somewhat elevated. Frons fuscous, in the middle longitudinally narrowly testaceous. Pronotum in the disk with about 7 transverse wrinkles. Tegmina concolorously brownish, with some whitish spots; the apical veins infuscated. Abdomen concolorous with the sterna.

3. The genital plates soldered together with each other, at the outer sides and the apices presenting a shallow depression; the anal style downwardly curved, scarcely reaching beyond the apices of the plates.

Length—10 mm. (incl. tegm.).

Hab.—Honsyu.

Holotype, &, Hatimantai, 2, VIII, 1940, collected by H. HASEGAWA and sent to the author for identification.

Sinophora japonica n. sp.

Sinophora maculosa MATS., Jour. Coll. Agr., Tohoku Imp. Univ., II, p. 46 (1903) (nec MELICHAR). Differs from S. maculosa MELICH. as follows:

Body with the tegmina brown, much shiny, more roughly rugosely punc-Head and vertex largely testaceous, the latter at the posterior half pitchy brown. Vertex less excavated, behind the tylus not longitudinally acciculated. Frons with the middle longitudinal yellowish line inconspicuous, the tempora and gena concolorous with the ground colour. Rostrum reaches to the posterior trochanter. Pronotum at the posterior half much roughly, in the disk less numerously, punctured, with a few transverse wrinkles. Tegmina grayish subhyaline, in the female paler at the apical third, roughly punctured, the punctures on the clavus mostly confluent, with the fuscous marking on the following parts: two small spots near the base, a broad oblique band from the the humeral angle to the radial vein; a geniculate patch near the apex of clayus: one brownish patch on each of the pro- and metapleurae, the prosternum not infuscated. Abdomen at the venter vellowish brown.

- ô. The genital plates at the pointed apices enclosing a narrow fissure, at the lateral dorsal sides more narrowly excavated.
- φ . The last ventral segment somewhat shorter than the foregoing; coleostron somewhat brownish, about $\frac{1}{3}$ of the ovipositor protruding beyond the apex of coleostron; the anal style far not reaching to the apex of ovipositor.

Length—♦, 11 mm. ♀, 12.5 mm. (incl. tegm.).

Hab.—Hokkaido: Honsyu.

Holotype, &, Mt. Daisetu (Hokkaido), 8, VIII, 1926, collected by the author. Allotype, &, Shikaribetu, Hokkaido, 26, VII, 1931, by C. Watanabe. Paratype, &, Yatugadake, 19, VII, 1939, by H. Hasegawa; &, Nebazawa, 27, VII, 1938, by S. Kanda; 3 & &, Chuzenji, 28, VIII, 1935, by M. Kubota; 3, Mt. Daisetu, by T. Uchida and H. Kôno.

Sinophora koreana n. sp.

Closely related to S. japonica MATS., but distinguished from the latter in the following characters:

Tylus with the median carina only distinct at the hind margin, the tylal ridge obsolete. Frons at the lateral sides concolorous with the surrounding areas; in the middle longitudinally shallowly grooved; tempora and gena paler, being not pigmented. Pronotum at the anterior area less numerously, but at the lateral sides more roughly, punctured; at the posterior part somewhat paler than on the disk. Scutellum paler than the posterior part of pronotum, in the middle somewhat more deeply depressed. Tegmina with the veins at the base

of the first ante-apical cell and the veins near the apices of the first and second ante-apical cells not infuscated. Legs very obsoletely fuscous maculated on the anterior and middle femora as well as on the tibiae. Body beneath somewhat paler, the last three ventral segments and the genitalia testaceous.

Length—II mm. (incl. tegm.).

Hab.-Korea.

Holotype, &, Kantairi, 23, VII, 1936, collected by S. HIRAYAMA.

Sinophora mitakeana n. sp.

Similar to S. hoshiana MATS., but differing from the latter as follows:

Head and the anterior half of pronotum testaceous. Frons in the middle longitudinally broadly testaceous, becoming linear towards the clypeal suture; the lora at the outer margin testaceous. Pronotum more elevated, at the anterior half the median carina infuscated; in the disk transversely roughly wrinkled, the lateral angles being broadly testaceous. Scutellum in the middle more deeply depressed, at the apex being grayish. Tegmina rather more finely punctured.

3. The genital plates resembles more those of S. japonica MATS., but at the apices together more broadly incised, much diverging posteriorly; the lateral incision trapezoidal; the anal style fuscous, longer, larger and far protruding beyond the apices of the plates.

Length—12 mm. (incl. tegm.).

Hab.—Honsyu (Musasi).

Holotype, &, 26, VII, 1936, collected at Mt. Mitake by H. Higasino.

Sinophora nigroscutellata n. sp.

Resembles much S. hoshiana Mars., but differing from it as follows:

Body with the tegmina smaller, paler in colour. Tylus with the median carina concolorous with the vertex. Frons in the middle with a white transverse sulci. Pronotum in the middle between the callous spots deeply depressed; behind the callous spots much more roughly punctured; the median carina at the posterior third flat. Scutellum much more deeply excavated, the punctures being less in number. Tegmina more finely and densely punctured. Body beneath paler, genae not infuscated, meso- and metasternum as well as the the abdomen pale testaceous.

 φ . Ovipositor about $\frac{1}{3}$ protruding beyond the apex of coleostron; the anal style fuscous, much longer, nearly reaching to the apex of ovipositor.

Length—12 mm. (incl. tegm.).

Hab.—Honsyu.

Holotype, \circ , Hatimantai, 3, VIII, 1939, collected by H. HASEGAWA, in the Prov. Iwate.

Sinophora yatugadakeana n. sp.

Allied to S. japonica MATS., but differs from the latter as follows:

Tylus fuscous, longer, at the anterior margin not upturned, irregularly densely punctured; vertex at the inner side of eye near the anterior margin with fuscous spots; the antennal ledge testaceous at the extreme anterior margin. Pronotum flatter, in the disk longitudinally not impressed, the median carina lower, in the disk transversely roughly deeply wrinkled; the posterior half deeper and at the hind margin paler in colour. Scutellum transversely wrinkled, at the extreme apex ivory white. Tegmina more deeply but more finely punctured, before the middle at the costa with a large fuscous patch; all the veins with fuscous spots, so that building in the disk a series of an oblique band, lacking a fuscous marking across the claval apex, but the veins of there being infuscated. Mesosternum fuscous. Abdomen at the venter fuscous, the connexivum and the last 2 segments, as well as the genital plates paler.

3. The genital plates longer than the foregoing segment, on the apices pointed, together building an oval fissure; the anal style paler, somewhat protruding beyond the plates.

Length—12 mm. (incl. tegm.).

Hab.—Honsyu.

Holotype, &, Paratype, &, Mt. Yatugadake, 20, VII, 1939, collected by H. HASEGAWA and presented to the author for identification.

Taihorina tomon n. sp.

Taihorina geisha Kato (nec Schumacher), Three Col. Ill. Ins. Jap., III, pl. 46, f. 6 (1933).

Differs from T. geisha Schum. as follows:

Crown with no curved transverse furrow along the anterior border; the punctures distinct. Frons with the transverse fuscous striae obscure. Pronotum not transversely wrinkled, having much fine punctures; the lateral angles distinctly rounded. Scutellum longitudinally deeply grooved, the apex with no fuscous marking. Tegmina with finer punctures which are concolorous with the ground colour; the longitudinal series of fuscous punctures along the extreme costal margin much finer, lacking the same along the apex and the hind margin; the brownish band near the middle narrower and more distinct. Body beneath and the legs paler, the hind femur at the apex not infuscated. Abdomen at the venter with no fuscous marking.

Length—7 mm. (incl. tegm.).

Hab.-Mandchoukuo and Korea.

Holotype, ♀, Tomonrei, 11, VIII, 1939. Paratype, 2♀♀, Rasin (Korea), 11, VIII, 1940, by the author.

Takagia n. g. /

Head with the eyes much narrower than the pronotum, at the hind margin nearly straight; tylus as long as the hind margin, parabolically rounded, with an obsolete median carina, not reaching to the anterior margin of crown; the frontal and tylal ridges being well separated; vertex somewhat shorter than the tylus which is rounded at the anterior margin, with an obscure median carina, not reaching to the apex; ocelli nearly equidistantly separated from each other and from the eyes; jugum at the apex conically rounded, far not reaching to the anterior margin of crown; the antennal ledge foliaceous. oblong, in the middle flat, no median carina, the lateral sulci robust, not punctate. Clypeus centrally with a broad carina, strongly constricted at the suture. Rostrum broad, short, reaching to the middle coxae, 3-jointed, the first shortest, the second somewhat shorter than the third. Pronotum near the anterior margin with 4 callous spots in a transverse row, where the area is depressed; in the middle with an obsolete longitudinal carina at the anterior half, at the posterior half somewhat grooved; the ante-lateral margins much longer than the longitudinal axis of eye, strongly diverging posteriorly, at the hind margin obtuse-angularly incised. Scutellum longer than broad, in the middle transversely depressed, near the apex longitudinally grooved. Tegmina nearly similar to Cercopis F. (Ptyelus F. et S.), opaque, nearly three times as long as broad in the middle; the longitudinal veins distinct, in the middle with 2 long parallel veins which unite together just near the apex and building a very long median cell, with numerous irregular cross-veins. The hind tibia strongly pubescent, with 2 spines which are situated far apart from each other, the upper one very small, being obsolete.

♀. Ovipositor a little surpassing the apex of coleostron; the anal style long, downwardly curved, protruding beyond the apex of ovipositor.

This genus resembles much *Cercopis* F., but distinguished from the latter by having 3-jointed rostrum.

Genotype—Ptyelus lugubris LETH.

This genus resembles also Gallicana LALLEM., but differs from it as follows:

Vertex upturned; the posterior margin nearly straight, the tylus broadly obconical, occupying more than half of the crown. Face moderately globose, in the middle longitudinally flat; clypeus in the middle longitudinally broadly elevated. Rostrum reaches to the middle coxae. Pronotum broader than the

head with the eyes, the ante-lateral margins subequal to the longitudinal axis of eye, in the middle longitudinally grooved, the hind margin obtuse-angularly emarginate, the posterior lateral margins somewhat emarginate below the lateral angles. Scutellum about $\frac{2}{3}$ of the pronotum, in the middle shallowly excavated, the lateral ridges not distinct. Tegmina with 4 parallel longitudinal veins in the corium, at the apical half with irregular veinlets.

This genus much differs from those genera of *Cercopidae* in having three-jointed rostrum and it may be necessarily to elect a new subfamily *Takaginae* to receive this new genus.

Takagia lugubris LETH.

Ptyelus lugubris LETH., Ann. Soc. Ent. Belg., XIX, pp. LXXVI-LXXXVIII (1876).

- §. Black. Vertex near the anterior margin on each side of tylus with a spot and the anterior edge of tylus narrowly, testaceous; face largely testaceous; a longitudinal marking which is pointed towards the anterior border in the frons, the genae and lorae except the margins, and a spot on each side of the clypeus, black. Pronotum with 4 callous spots near the anterior border and the hind margin narrowly, testaceous. Tegmina with about 7 testaceous patches; the costal two of which are larger and three at the claval suture smaller. Body beneath largely fuscous, at the lateral sides and the posterior margin of each ventral segment testaceous. Legs testaceous, the knees and the apices of the tarsal apical joints brownish.
- φ . Coleostron testaceous, distinctly shorter than the abdomen, the ovipositor brownish, the latter protruding beyond the coleostron.

Length-16 mm. (incl. tegm.).

Hab.—Manchoukuo; three females were collected by Saburo Takagi, 14-28, VIII, 1938, at Odokasi. This species was originally described from Ussuri.

Takaphora n. g.

Closely resembles Aphrophora GERM., but distinguished from the latter in the following points:

Crown with the posterior margin carina-like elevated; the compound eyes much narrower. Frons less elevated, the frontal ridge at the anterior margin distinct, on both sides near the apex distinctly depressed, the median carina and the transverse lateral sulci distinct; the tylal furrow longer and narrower. Rostrum longer, reaching to the 5th abdominal segment. Pronotum very finely punctate, with a very narrow longitudinal carina throughout. Tegmina with finer longitudinal veins, being not much elevated, and very finely pubescent, about 2.5 times as long as broad in the middle.

 \circ Ovipositor a little longer than the coleostron; the anal style protruding beyond the apex of coleostron.

Genotype—Aphrophora brevis MATS.

Tamaphora n. g.

Allied to Tobiphora MATS., but differs from it as follows:

Body shorter. The antennal ledge at the inner margin with a triangular thickening which resembles also *Trigophora* MATS. Pronotum with no intermediate carinae. Scutellum in the middle scarcely depressed. Tegmina shorter, about three times as long as broad in the middle; the apical cells shorter.

- 3. The genital plates somewhat shorter than the foregoing segment, at each apex rounded, together building a broad obtuse angle at the apices; the anal style somewhat longer than the plates.
- $\$. Coleostron somewhat shorter than the ovipositor; the anal style shorter, not reaching to the apex of ovipositor.

This genus resembles also *Trigophora* Mars., differing from it in having thinner antennal ledge and a smaller triangular thickening; the frons less tumid, in the middle longitudinally flat; pronotum with no intermediate carina, the median carina much narrower; tegmina with narrower veins, etc.

Genotype—Tamaphora domonsis MATS. (n. sp.).

Tamaphora domonsis n. sp.

Closely allied to T. sericella MATS., but differs from the latter as follows:

Body larger. Across the crown much more excavated and at the anterior margin more reflexed. Frons in the middle with a yellowish carina, in the lateral sulci and along the median carina fuscous punctured. Pronotum more finely punctured, but more roughly than in *T. sericella* MATS. Scutellum more broadly and deeply depressed, being more roughly transversely wrinkled. Tegmina much longer, more densely and finely punctured, with no fuscous spots on the longitudinal veins and no paler oblique band before the middle. Abdomen much longer.

3. The genital plates much shorter than the last ventral segment which is somewhat inflated and cylindrical at the apices, building a very narrow fissure between them; the anal style longer, distinctly protruding beyond the apices of the plates.

Length—11 mm. (incl. tegm.).

Hab.—Manchoukuo.

Holotype, &, Domonrei, 11, VIII, 1940, collected by the author.

Tamaphora kuccharensis n. sp.

Much resembles T. magana Mars., but differing from it as follows:

The punctures on pronotum and tegmina not fuscous, being concolorous with the body. Frons with the lateral sulci scarcely punctured, the median carina being broader. Pronotum more roughly and confusedly punctured. Scutellum less excavated, more finely punctured and wrinkled, Tegmina in the female near the middle at the costa with an obsolete fuscous patch; the veins at apices not infuscated.

- 3. The genital plates distinctly shorter than the last ventral segment, towards the apices much slenderer; the anal style concolorous with the plates, much protruding beyond the apices of the plates.
- φ . Ovipositor beneath infuscated; the anal style at the base somewhat infuscated; coleostron paler.

Length—11 mm. (incl. tegm.).

Hab.-Hokkaido; Manchoukuo.

Holotype, &, Kuccharo (Hokkaido), 14, VIII, 1917. Allotype, &, Oshoden (Manchoukuo), 8, VIII, 1940. Paratype, &, Oshoden, 8, VIII, 1940, collected by the author.

Tamaphora magana n. sp.

Resembles much A. sericella MATS., but differing from it as follows:

Body much more roughly punctured. Crown in the middle more deeply depressed, the median carina robuster. Frons with the lateral sulci black, punctured, the median carina narrower; tempora with no fuscous patch; clypeus not fuscous at the apex. Pronotum distinctly more rugosely_punctured, the median carina much broader; at the ante-lateral margins with no fuscous stripe. Tegmina more roughly punctured; the apical veins pigmented with some fuscous colour. Body beneath and the legs pale testaceous, with no marking.

- 3. The genital plates at the extreme apices fuscous, somewhat shorter than the last ventral segment, finely transversely wrinkled, together building an acute triangle between them; the anal style somewhat darker in colour.
- \circ . Abdomen at the venter darker in colour being somewhat longer than the genital segment; coleostron and ovipositor concolorous with the venter, about $\frac{1}{4}$ of the ovipositor protruding beyond the coleostron.

Length—10 mm. (incl. tegm.).

Hab.—Manchoukuo.

Holotype, \Diamond , Allotype, \Diamond , Paratype, $2 \Diamond \Diamond$, Oshoden, 8, VIII, 1940, collected by the author.

Tamaphora matusitai n. sp.

Closely related to *T. kuccharensis* Mats., but differing from it as follows:

The punctures of body and tegmina much finer, fuscous in colour, but the punctures on the tylus much larger. Frons distinctly flatter, the lateral sulci largely fuscous, punctured, below the tylal ridge depressed and in the middle transversely fuscous maculated. Pronotum at the ante-lateral margins obscurely fuscous; at the depressed parts behind the callous spots fuscous maculated. Scutellum more finely punctured and transversely wrinkled. Tegmina with an oblique series of fuscous spots, which runs from the humeral angle to before the middle of costa; also three fuscous spots near the base of tegmina. Abdomen at the venter reddish brown.

3. The genital plates somewhat shorter than the last ventral segment, at the apices rounded, having a broad fissure between them; the anal style fuscous, somewhat protruding beyond the apices of the plates.

Length-12 mm. (incl. tegm.).

Hab.—Honsyu.

Holotype, &, Yarimi (the Nippon Alps), 7, VII, 1939, collected by D. Matusita.

Tamaphora sericella n. sp.

Resembles somewhat T. obtusa MATS., but larger and the pronotum more densely punctured.

- §. Grayish testaceous. Crown about half as long as broad in the middle, obtusely arched at the anterior margin, the longitudinal carina in the middle obsolete, the tylus finely punctured, the rest scarcely punctured. Frons with the lateral sulci fuscous, punctured, the median carina towards the apex broader, yellowish; the antennal socket fuscous; clypeus in the middle yellowish and elevated. Rostrum yellowish, at the apical third beneath fuscous. Pronotum very finely fuscous punctured, the punctures at the lateral sides scarcely larger; the ante-lateral margins longitudinally striped. Scutellum in the middle somewhat wrinkled. Tegmina somewhat more roughly punctured than on the pronotum; the outer claval vein in the middle and 2 longitudinal veins of the second sector near the apices with each a fuscous spot, near the middle touched the costal margin with an obsolete grayish white oblique patch. Mesosternum in the middle and the anterior coxae fuscous. Abdomen at the venter fuscous, the connexivum, the last two segments and the genitalia testaceous.
- §. The genital plates subequal to the foregoing segment, at the apices together building an acute triangle; the anal style much protruding beyond the apices of the plates.

Length—10 mm. (incl. tegm.). Hab.—Manchoukuo. Holotype, 3, Oshoden, 8, VIII, 1940, collected by the author.

Tilophora n. g.

Differs from Aphrophora GERM. in the following characters:

Crown not transversely depressed, at the anterior margin less upturned; tylus longer, semicircular, about $\frac{1}{2}$ protruding beyond the jugal margin; the tylal furrow can be seen from front; jugum short, not reaching to the apex; the antennal ledge much thinner, with no triangular thickening. Frons at the apical third centrally carinated. Rostrum shorter, only reaching to the posterior coxae. Pronotum narrower than the head with the eyes, the ante-lateral margins straight, much longer than the tegula, about $\frac{1}{2}$ of the longitudinal axis of eye, being not raised at the anterior margin. Scutellum much less depressed in the middle. Tegmina with the inner claval vein narrower and eminent, at the apex more acuminated.

- 3. The genital plates at the apices obtusely truncated, narrowly separated from each other, at the apices building an acute triangle; the anal style much protruding beyond the plates.
- $\mbox{$\varphi$}$. Coleostron less upturned; the anal style far not reaching to the apex of coleostron.

Genotype—Aphrophora flavipes UHL.

Tobiphora n. g.

Closely allied to Europhora Mars., but differing from it as follows:

The tylal furrow very short, the anterior ridge much thicker than the antennal ledge. Frons in the middle longitudinally flat. Pronotum with an obscure intermediate carina which is openning just before the posterior angle; the middle callous spot of pronotum posteriorly with a short oblique groove, at the posterior margin angularly incised, while in *Europhora Mats.* somewhat sinuated and not building an angle; the ante-lateral margins very thin, shorter than the tegula, about $\frac{1}{4}$ of the longitudinal axis of eye. Tegmina longer, about 4 times as long as broad in the middle.

- 9. The genital plates shorter than the foregoing segment, at the apices rounded, building a narrow fissure between them; the anal style somewhat protruding beyond the apices of the plates.
- 9. Coleostron shorter, at the base covered, a little shorter than the ovipositor; the anal style protruding beyond the apex of ovipositor.

Genotype—Aphrophora rugosa MATS.

To this genus belongs also the following known species: Aphrophora ishidae MATS.

Tobiphora nikkona n. sp.

Allied to T. ishidae MATS., but differs from it in the following points:

- 1. Crown fuscous, only the callous spots of vertex paler.
- 2. Frons in the middle fuscous, the middle carina only visible at the apex.
- 3. The tylal furrow longer, obsolete.
- 4. Pronotum with the intermediate carinae more distinct; the middle carina broader, more roughly punctured, the punctures being fuscous in colour.
- 5. Scutellum more deeply depressed in the middle.
- 6. Mesosternum infuscated.
- 7. Abdomen at the venter ferruginous.

Length-II mm. (incl. tegm.).

Hab.—Honsyu.

Holotppe, &, Nikko, 13, VIII, 1940, collected by M. Kubota and sent to the author for identification by H. HASEGAWA.

Tonkaephora n. g.

Closely related to Sabphora MATS., but differs from the latter in the following points:

- 1. The hind margin of crown building no angular incision.
- 2. Rostrum shorter, reaching only to the middle of the posterior coxae.
- Pronotum with no intermediate carinae; behind the callous spots not depressed.
- 4. Tegmina much longer, far protruding behind the apex of ovipositor; the inner claval vein much longer, being nearly straight.

Genotype—Tonkaephora oshodenella MATS. (n. sp.).

Tonkaephora nigriventralis n. sp.

Allied to T. oshodenella MATS., but differs from the latter as follows:

Body somewhat broader and shorter. Pronotum anteriorly at the sides of the median carina not depressed; very finely and sparsely fuscously punctured; behind the callous spots with a transverse wavy fuscous band; along the anterior margin narrowly infuscated; the median carina not very conspicuous. Tegmina finely and fuscously punctured, in the middle seen from above distinctly broader. Abdomen fuscous, grayish finely pubescent; the last ventral segment at the hind margin and in the middle, as well as the genital segment, testaceous.

Q. Ovipositor at the apex fuscous, about $\frac{1}{3}$ protruding beyond the apex

of coleostron which is infuscated at the back; the anal style fuscous, at the apex pale testaceous, far not reaching to the apex of ovipositor.

Length-10 mm. (incl. tegm.).

Hab.-Manchoukuo.

Holotype, &, Oshoden, 8, VIII, 1940, collected by the author.

Tonkaephora oshodenella n. sp.

Differs from Sabphora takagii MATS., to which this species most resembles superficially.

Body including tegmina slenderer, and paler in colour. Rostrum shorter, only reaching to the base of the posterior coxae, while in *S. takagii* reaching to the hind trochanter. Pronotum densely punctured, the punctures especially those of the posterior part mostly ocellated. Scutellum less punctured, and transversely wrinkled. Tegmina longer, much protruding beyond the apex of ovipositor. Body beneath paler.

 $\ensuremath{\circ}$. Ovipositor longer, with long grayish pubescence; the anal style straight.

Length—10 mm. (incl. tegm.).

Hab.-Manchoukuo.

Holotype, ♀, Oshoden, 8, VIII, 1940, collected by the author.

Tonkaephora tonkana n. sp.

Resembles also T. oshodenella MATS., but differing from it as follows:

Body broader. Tylus larger, the median carina being obsolete. Rostrum reaches beyond the middle of the posterior coxae. Pronotum less and more finely punctured, the punctures fuscous and not occilated. Tegmina more finely punctured.

 \circ . Ovipositor shorter; the anal style nearly reaching to the apex of the former.

Length—11 mm. (incl. tegm.).

Hab.—Manchoukuo.

Holotype, 9, Shinkairei near Tonka, 9, VIII, 1940, collected by the author.

Toroptyelus n. g.

Much resembles Ariptyelus Mats., but differs from it as follows:

Head with the eyes scarsely narrower than the pronotum, that is subequal to each other. The tylal furrow occupies $\frac{1}{3}$ of the tylal ridge; vertex at the hind margin nearly straight. From more elevated; at the anterior half with a trace of the median carina; the antennal ledge straight, while in *Ariptyelus*

distinctly curved downwardly. Pronotum at the anterior margin not angularly produced, an intermediate carinae which are diverging towards the hind margin; on each side of the same with a shallow rounded callosity. Tegmina shorter, about twice as long as broad in the middle, at the apex rounded, the apico-costal cells shorter, being mostly quadrate.

Genotype-Toroptyelus arisanus MATS. (n. sp.).

Toroptyelus arisanus n. sp.

Superficially resembles much Ariptyelus auropilosus MATS., but differs from it in having one pair of intermediate carinae on the pronotum. Body paler, much smaller, measuring 6 mm. in length including the tegmina. Head more acutely produced, with a black median carina, the inner side of eye brownish, wrinkled longitudinally, finely closely punctured; the punctures on the tylus being much Frons in the middle with a testaceous band, at the base black, only a small area at the base of clypeus testaceous. Pronotum nearly flat, with a much narrower median carina, more closely punctured, the punctures being not ocellated, the intermediate carinae opening at the posterior lateral sides. Scutellum concolorous with the body, somewhat transversely wrinkled. Tegmina more roughly punctured; the punctures on the clavus being mostly fused; at the costa near the middle with a quadrate fuscous patch, from its apex sending an obsolete interrupted fuscous curved band towards the humeral angle. Body beneath with the propleurae ivory white; rostrum at the apex of the third segment only fuscous. Legs pale spotted.

- 3. The last 3 ventral segments pale brown, the ultimate segment nearly as long as the foregoing 2 taken together, the genital plates nearly as long as the last segment, linear, somewhat curved upwardly towards the apex and at the apex with a narrow fissure.
- 9. Abdomen at the venter fuscous, only the last segment testaceous; coleostron longer, the ovipositor less protruding beyond the apex of the former.

Length—6 mm. (incl. tegm.).

Hab.—Formosa.

Holotype, \Im , Arisan, 18, V, 1927. Allotype, \Im , Toroen, 19, IV, 1907. Paratype, \Im , \Im , Kuyania, 25, IV, 1907; \Im , Kasha, 23, III, 1926, collected by T. Kano and the author.

Trigophora n. g.

Differs from Aphrophora GERM. in the following characters:

Crown at the anterior margin less upturned, much shallowly transversely excavated; tylus much shorter than the vertex, while in *Aphrophora* GERM.

subequal; the tylal ridge distinct, broad, the tylal furrow not reaching to the middle, being visible from front, the antennal ledge thick, triangularly thickened at the inner side of the antenna. Frons less elevated, with a median carina, the lateral sulci distinct and punctured. Rostrum shorter, not reaching beyond the hind coxae. Pronotum at the anterior third nearly in the same leval with the crown, more elevated posteriorly, but far lower than that of Aphrophora Germ.; along the ante-lateral margins longitudinally grooved, with a pair of an obsolete intermediate carinae. Scutellum in the middle scarcely depressed. Tegmina with the area between the costal margin and the subcosta being much broader.

- 3. The genital plates about as long as the foregoing segment, contact at the apices, flatly rounded; the anal style somewhat protruding beyond the apices of the plates.
 - 9. The anal style not reaching to the apex of ovipositor.

Genotype—Aphrophora alni FALL.

To this genus belongs also the following known species:

A. scutellata MATS., A. fallax MATS. and A. obliqua UHL.

Trigophora lushanensis n. sp.

Testaceous, the hind half of pronotum and the scutellum fuscous, the latter at the apex grayish. Tylus more finely punctured than on the vertex, at the lateral sides somewhat infuscated; the median carina obsolete; eyes longitudinally fuscous striped, at the inner sides of eye longitudinally roughly wrinkled. Face fulvous at the apex, with a narrow transverse fuscous line; genae and lorae with short silvery pubescence. Rostrum at the apex fuscous. Pronotum with the median carina distinct, at the anterior half very finely punctured. Scutellum finely punctured in the middle, somewhat excavated and very finely transversely wrinkled. Tegmina grayish, subhyaline, at the base and in the middle broadly banded, the middle one being somewhat oblique and deeper in colour at the inner side, the interspace between these bands being white. Body beneath fulvous, with no marking. Legs brownish, fulvous, the posterior one being paler.

3. The genital plates somewhat shorter than the last ventral segment, nearly oval in shape.

Length—9 mm. (incl. tegm.).

Hab.—China.

Holotype, &, Lushan (Kiangsi) collected by the Fan Memorial Institute, Biology, Peking, and sent to the author for identification.

This species superficially resembles somewhat Obiphora rectella MATS., but

much smaller, and the median fuscous band of tegmina distinctly oblique. This also resembles T. obliqua UHL, but the white band of the tegmina much broader.

Trigophora hakonensis n. sp.

Aphrophora obtiqua Mats. (nec UHLER), Jour. Coll. Agr., Tohoku Imp. Univ., II, p. 31 (1903) . (Part.).

Somewhat resembles T. obliqua UHL, but differing from it as follows:

Body slenderer, paler in colour. Tylus at the lateral sides narrowly infuscated. Frons entirely testaceous except the apex below the tylal ridge. Pronotum more finely and smoothly punctured. Scutellum more finely transversely wrinkled, being scarcely excavated in the middle. Tegmina more confluently punctured in the middle, with an oblique fuscous band which runs from the humeral angle before the middle of costa, its inner white band not conspicuous, being nearly in the same colour with the body, scattering no paler spot in the middle part of corium. Legs paler.

- 3. The genital plates at the apices blunt, obconically pointed, between them building a narrow triangle; the anal style scarcely protruding beyond the apices of the plates.
- 9. Ovipositor about $\frac{1}{4}$ protruding beyond the apex of coleostron; the anal style at the tip infuscated, reaching to the apex of ovipositor.

Length-9 mm. (incl. tegm.).

Hab.—Honsyu.

Holotype, 3, Allotype, 9, Paratype, 3, 28, VII, 1907, collected by the author at Hakone.

Trigophora oshodensis n. sp.

Closely allied to T. hakonensis MATS., but differing from the latter as follows:

- Tylus at the lateral sides not infuscated. Frons unicolorously testaceous, more inflated; the lateral sulci shallower, at the apex on the lateral sides of the median carina not infuscated; clypeus darker. Pronotum less numerously and more roughly punctured. Scutellum in the middle deeply excavated, with fine transverse wrinkles. Tegmina less and roughly punctured; the outer claval vein in the middle fuscous. Legs unicolorously testaceous, with no marking. Abdomen at the venter darker, the last 2 ventral segments and the genitalia testaceous.
- 3. The genital plates longer, at the apices together enlosing a narrow fissure between them; the anal style much more protruding beyond the apices of plates.

Q. Face fuscous; frons broader, except the apex largely testaceous; tegmina with the base of the inner claval vein fuscous; body beneath and the legs darker, abdomen at the venter fuscous, the last 2 segments and the genitalia paler, the ovipositor at the apex fuscous; anal style not reaching to the apex of ovipositor.

Length-8 mm. (incl. tegm.).

Hab.--Manchoukuo.

Holotype, &, Allotype, &, Oshoden, 8, VIII, 1940. Paratype, 2 & &, 2 & P, Shinkairei.

Trigophora tokatiana n. sp.

Closely allied to T. alni FALL, but differing from it as follows:

Body larger, paler in colour. The median carina of tylus only distinct at the inner margin, the tylal furrow shorter; the triangular thickening on the side of the antennal ledge larger. Frons in the middle elevated, the median carina higher. Pronotum more roughly punctured at the sides, along the antelateral margins not infuscated; in the disk at the sides of the median carina with no fuscous marking. Scutellum with a median carina. Tegmina with an oblique fuscous band which becomes broader at the costa, not building a triangular marking in the middle; at the apex not infuscated, the veins only infuscated. Abdomen at the venter reddish brown.

 $\mbox{$\wp$}$. The last ventral segment much shorter than the foregoing; the anal style paler.

Length—11.5 mm. (incl. tegm.).

Hab.--Hokkaido.

Holotype, P, Paratype, P, Sintoku (Tokati), 8, VIII, 1927, collected by the author.

Tukaphora n. g.

Resembles much Tobiphora Mars., but differs from it as follows:

Body with the tegmina oblong; head obtusely rounded; tylus with its hind margin obsolete, the tylal furrow very short, the frontal ridge somewhat thicker than the antennal ledge. Frons broader. Rostrum longer, reaching a little beyond the posterior trochanter. Pronotum with the intermediate carinae more distinct, these interspaces longitudinally depressed beyond the disk; the anterior and posterior margins nearly in parallel, being somewhat curved; the ante-lateral margins somewhat shorter than the tegula, about $\frac{1}{3}$ of the longitudinal axis of eye. Scutellum shallowly transversely depressed, in the middle, somewhat longer than broad. Tegmina shiny, broader, about 3 times as long as

broad in the middle.

Q. Coleostron longer, at the base naked; ovipositor longer, the anal style not reaching to the apex of ovipositor.

Genotype—Tukaphora sinalca MATS. (n. sp.).

Tukaphora sinalca n. sp.

Superficially allied to *Tobiphora arisanella* MATS., but differs from it as follows:

Crown in the disk more deeply excavated, so that the median carina more prominent. Frons more elevated in the middle, with a yellowish longitudinal stripe. Pronotum on the lateral sides more deeply longitudinally excavated, so that the median carina more prominent, the punctures being mostly fuscous. Scutellum in the disk darker and more deeply excavated. Tegmina shorter, the media in the middle with a testaceous spot, both the claval veins near the middle infuscated, the outer vein on both sides of the fuscous spot testaceous.

Q. Coleostron grayish, the ovipositor longer, the protruded part being subequal to the last ventral segment in the middle.

Length—10 mm. (incl. tegm.).

Hab.—China.

Holotype, 9, Lushan (Kiangsi), collected by the Fan Memorial Institute Biology, Peking, and sent to the author for identification.

Yamaphora n. g.

Much allied to Jembra M. et H., but differs from the latter as follows:

The two pairs of the obsolete intermediate carinae on pronotum not parallel to the median carina, diverging posteriorly and parallel to each other. Tegmina not rugose, the veins moderate. The tibial lower spine of the posterior leg larger, nearly equidistant from the upper spine and the lower end. Rostrum longer, far protruding beyond the apex of the posterior coxa. This resembles also Hosophora Mats., from which differs in having the tegmina much broader in the middle, while in Hosophora Mats. narrower and nearly parallel with each other towards the apex.

Genotype—Yamaphora yatugadakeana MATS. (n. sp.).

Yamaphora yatugadakeana n. sp.

Superficially resembles much Tamaphora kuccharensis MATS., but differs from it in the following characters:

Body much slenderer and flatter. Pronotum with 2 pairs of intermediate carinae. Frons with the lateral sulci stronger, much deeper and more roughly

punctured; below the frontal ridge somewhat depressed; the tylal furrow contiguous with the jugal socket. Vertex in the middle with no fuscous punctures. Pronotum much finely punctured, the median carina narrower. Scutellum more deeply excavated. Tegmina narrower, with no fuscous spot, distinctly more roughly punctured than on the pronotum. Body beneath darker. Rostrum at the apical third fuscous.

3. The genital plates longer than the last ventral segment, at the apices broad conically pointed, together building an acute triangular fissure which is somewhat narrower than rightangles; the anal style distinctly protruding beyond the apices of the plates.

Length-9 mm. (incl. tegm.).

Hab.—Honsvu.

Holotype, &, Yatugadake, 23, IX, 1934, collected by C. Yohena.

Yaphora n. g.

Resembles much Aphrophora GERM. superficially, but differs from it as follows:

Body broader, ellipsoidal, being depressed. Head with the eyes distinctly narrower than the pronotum, the compound eyes not prominent. Frons narrower, longer, in the middle longitudinally flat, the median carina distinctly higher; the antennal ledge broader, straight, being much broader than the diameter of antenna; tylus at the ends with each a triangular short furrow. Pronotum flat, near the anterior margin on each side of the median carina; the ante-lateral margins diverging posteriorly, about $\frac{1}{3}$ of the longitudinal axis of eye, nearly in the same level with the crown; the median carina narrower, continuing to the vertex and scutellum. Scutellum longitudinally depressed. Tegmina nearly 3 times as long as broad in the middle, with 8 apical cells of which the posterior one is ellipsoidal and the largest.

 \mathcal{P} . Ovipositor longer, about $\frac{1}{3}$ protruding beyond the coleostron. Genotype—Aphrophora yatsugadakensis MATS.

Yaphora palludina n. sp.

Differs from Y. yatsugadakensis MATS. as follows:

Grayish testaceous. Crown more deeply depressed; the tylal furrow much shorter. Frons narrower, the lateral sulci fuscous punctured; gena at the inner side of eye fuscous; pronotum with somewhat deeper oblique depression near the anterior margin, building an acute angle with the median carina which is distinct to the hind margin. Scutellum in the middle more deeply depressed. Tegmina covered with distinctly shorter grayish silky hair. The anterior and

posterior tibiae on both ends infuscated. Body beneath paler, the abdomen at the venter fuscous, the hind margins of each segment paler.

3. The genital plates testaceous, together contact, at the apices rounded, leaving a very narrow triangular fissure between them; the anal style fuscous, downwardly curved, not reaching to the apices of the plates.

Length—13 mm. (incl. tegm.).

Hab.—Honsyu.

Holotype, &, Yatugadake, 20, VIII, 1940, collected by Hitosi Hasegawa.

Yezophora MATS.

Yezophora Matsumura, Jour. Facul. Agr. Hok. Imp. Univ., XLV, pt. 2, p. 61, pl. III, f. 7 (1940).

This genus is allied to *Miphora* MATS., but the body of this genus is longer, 2 pairs of the intermediate carinae to pronotum oblique, more conspicuous, and the veins of tegmina much more elevated.

Genotype—Yezophora kurilensis MATS.

To this genus belongs also the following known species:

- 1. Aphrophora flavomaculata MATS.
- 2. A. koreana Mats.
- 3. A. major UHL.

Yezophora bizona n. sp.

Similar to Y. koreana Mars., but separated from the latter as follows:

Body with the tegmina shorter. The tylal ridge narrower, the tylal furrow longer. Frons with the lateral sulci much narrower. Pronotum less elevated; along the ante-lateral margins fuscous striped. Scutellum with no median carina. Tegmina with two obscure fuscous bands across the corium. All the legs paler and unicolorous.

Length—10 mm. (incl. tegm.).

Hab.—Manchoukuo.

Holotype, &, Domonrei, 11, VIII, 1940, collected by the author.

Yezophora fukuokana n. sp.

Superficially resembles *Europhora alpina* Melich., but differing from it as follows:

Body distinctly slenderer. Frons with the median carina yellowish, with no fuscous spot before the clypeal suture. Pronotum fuscous punctured. Scutellum more numerously punctured. Tegmina with a large triangular fuscous marking at the clavus, so that seen from above presenting a rhomboidal marking, being paler in the middle. Mesosternum only below the rostrum infuscated.

3. The genital plates small, subequal to the last ventral segment which is much narrower than the penultimate.

Hab.—Kyusiu.

Holotype, &, Hirao, 30, VIII, 1934, collected by S. KIRA and presented to the author by H. HASEGAWA for identification.

Yezophora leukasikini n. sp.

Allied to Y. satoi Mars. from Mongolia, but differs from the latter as follows:

Body with the tegmina slenderer and longer. Head fuscous, only the median carina and two callous spots on the hind margin testaceous. Pronotum with two fuscous stripes on each lateral side, more finely and densely punctured; the median carina not transversely wrinkled. Scutellum more broadly excavated, and more extendedly dark fuscous, with finer punctures. Tegmina with some ochraceous pigments; especially near the basal part the punctures being smaller, the basal third of the costal area with some series of punctures, most of which are transversely fused. Aldomen dark fuscous, the genital plates and the foregoing two segments, as well as the hind narrow margin of each segment testaceous.

3. The genital plates shorter than the foregoing segment, at the apices leaving a very narrow fissure; the anal style fuscous, somewhat protruding beyond the apices of the plates.

Length—11 mm. (incl. tegm.).

Hab.—Manchoukuo.

Holotype, ô, Yablonia near Harbin, collected by A. LEUKASIKIN.

Yezophora sachalina n. sp.

Differs from Y. totsozana MATS. as follows:

Frons more inflated, in the middle longitudinally paler. Crown with the median carina yellowish, the callous spots near the hind margin triangular, while in *Y. tatsozana* Mars. roundish; pronotum paler, less densely punctured, with two fuscous maculae on the disk; the median carina in the middle infuscated. Scutellum in the middle not depressed, with a distinct median carina, being less punctured. Tegmina with the posterior fuscous band obsolete; the claval veins in the middle infuscated, at the outer side of the fuscous band at clavus and at the inner side of the same band on the costa paler. Legs pale testaceous.

3. The genital plates and the last ventral segment testaceous, the former altogether quadrate, between them building a narrow fissure, each at the apex somewhat rounded; the anal style scarcely protruding beyond the apices of the plates, downwardly curved, at the apex with a cluster of white hair.

Length-11 mm. (incl. tegm.).

Hab.—Saghalien.

Holotype, &, Mt. Totso, 29, VII, 1938, collected by H. HASEGAWA.

Yezophora satòi n. sp.

Closely allied to Y. koreana MATS., but differs from it as follows:

Abdomen at the venter fuscous. Tylus fuscous, at the hind margin testaceous, more roughly punctured. Pronotum in the middle with 3 longitudinal fuscous stripes, the lateral ones not reaching to the hind margin; much less sparsely punctured; the median carina higher and interrupted by some transverse wrinkles; along the ante-lateral margins fuscous. Scutellum roughly transversely wrinkled. Tegmina with only the oblique band, lacking the outer one.

§. The genital plates and the foregoing two segments testaceous, the former in the middle building a very narrow fissure between them; the anal style fuscous, somewhat protruding beyond the apices of the plates.

Length—11 mm. (incl. tegm.).

Hab.—Mongolia.

Holotype, 3, Yakesi (Holonbairu), 9, VII, 1940, collected by T. Sato and sent to the author for identification by H. HASEGAWA.

Yezophora totsozana n. sp.

Allied to Y. koreana MATS., but differs from it as follows:

Crown in the disk brownish, the tylus fuscous, the tylal furrow much longer. Pronotum in the disk with 2 fuscous patches, less numerously punctured especially at the posterior part; along the ante-lateral margins fuscous. Scutellum less depressed in the middle, with a distinct median carina. Tegmina with no exterior fuscous band. Abdomen fuscous, each hind margin of the ventral segments and the genital plates testaceous; the genital plates together with a very narrow fissure towards the apices; the anal style fuscous, with long grayish pubescence.

Length-11 mm. (incl. tegin.).

Hab.—Saghalien.

Holotype, 3, Mt. Totso, 29, VII, 1938, collected by H. HASEGAWA.

A synoptical Key to the palaearctic Genera and Families Key to the Families

I.	Anterior margin of pronotum rounded or angular; eyes moderately
	transverse
	Anterior margin of pronotum straight; eyes as long as broad Tomaspididae (Cercopidae)
2.	Scutellum strongly elevated, posteriorly compressed, often armed with a
	long apical spine
_	Scutellum flat or depressed, posteriorly not compressed, with no long
	apical spine
	Key to the Genera of Tomaspididae
Τ.	Anterior legs elongate; anterior femora extending beyond lateral margins
	of pronotum
_	Anterior legs of ordinary length; anterior femora extending but slightly
	beyond lateral margins of pronotum
2.	Frons with a median carina
_	From with no median carina
3.	Crown in male acutely produced in front of eye Abfidama Dist.
_	Crown in male not acutely produced in front of eye
4.	Posterior tibiae with more than one spine
- 5.	Posterior tibiae with one spine
<u> </u>	Tegmina not reticulate in the apical third
б.	Tegmina at costa with stigma
	Tegmina at costa with no stigma
7.	Frons with a longitudinal sulca
_	Frons with no longitudinal sulca
8.	Frons not compressed, frontal lateral sulci indistinct Eoscartoides MATS.
_	Frons compressed, frontal lateral sulci distinct Eoscartopsis MATS.
9.	Mesosternum short
-	Mesosternum long
10.	8, ,
-	From not strongly inflated, with an evident median carina
II.	
11.	Pronotum at hind margin obtusely produced so as to conceal scutellum

_	Pronotum at hind margin truncate or sinuate
12.	Pronotum at hind margin truncate
-	Pronotum at hind margin sinuate
13.	Scutellum large, deeply impressed Gynopygolax Schmidt
_	Scutellum of ordinary size
14.	Anterior border of mesosternum not elevated, posterior border with a
	pair of conical processes
-	Anterior border of mesosternum elevated
15.	Protuberance on posterior border of mesonotum duplex
_	Protuberance on posterior border of mesosternum simplex, sometimes
	not prominent
16.	Media and cubitus confluent; discal cells of the same length
·	· · · · · · · · · · · · · · · · · · ·
	about twice as long as anterior Ectemnonotum Schmidt
17.	
	Tegmina not rugulose; second discal cell reticulate apically
18.	Second discal cell longer than the first, not conspicuously widened
	apically Opistarsostetha Schmidt
_	Second discal cell but little longer than the first, distinctly triangular
19.	Tegmina at apices with some foveolate cells 20
_	Tegmina at apices with no foveolate cells
20.	Tegmina at apices with three foveolate cells Kuscarta MATS.
_	Tegmina at apices with more than three foveolate cells 22
21.	Tegmina at costa near apex with a broad excavation Horiscarta MATS.
	Tegmina at costa near apex with no excavation Kotozana MATS.
22.	Frons with a longitudinal ridge Baibarana MATS.
-	From with more than a longitudinal ridge
23.	Frons with 5 longitudinal keels
-	Frons with 3 longitudinal keels
	Key to the Subfamilies Aphrophoridae
ı.	Cephalic process elongated
– ·	Cephalic process not elongated 2
2.	Jugum not reaches to anterior margin
-	Jugum reaches to anterior margin
3.	Crown at posterior margin straight or slightly arched, usually with no

	median carina Cercopinae (Ptyelinae)
-	Crown at posterior margin angular, with a median carina Aphrophorinae
	X
	Key to the Genera of Aphrophoridae
ı.	Hind tibia with two spines
_	Hind tibia with four spines
2.	Head with eyes not broader than pronotum 3
_	Head with eyes broader than pronotum 29
3.	Antennal ledge with a sulca 4
·_	Antennal ledge with no sulca
4.	Anterior margin of tylus with no distinct transverse ridge 5
_	Anterior margin of tylus with a distinct transverse ridge II
5.	Frons with a longitudinal groove
_	Frons without a longitudinal groove 6
6.	Pronotum with intermediate carinae
-	Pronotum with no intermediate carinae Sappoptyelus MATS.
7.	Pronotum with a pair of intermediate carinae 8
-	Pronotum with 2 pairs of intermediate carinae Mimoptyelus MATS.
8.	Rostrum reaches beyond posterior coxae 9
-	Rostrum not reaches beyond posterior coxae 10
9.	Pronotum with straight intermediate carinae
-	Pronotum with oblique intermediate carinaeJembrana Dist.
ю.	Pronotum with straight intermediate carinae Iwaptyelus MATS.
-	Pronotum with oblique intermediate carinae Peuceptyelus SAHL.
II.	Tylal ridge not thinner than antennal ledge 12
-	Tylal ridge thinner than antennal ledge Oiptyelus MATS.
12.	Tylal ridge as thick as antennal ledge
	Tylal ridge thicker than antennal ledge
13.	Frons at apex on each side of median carina with a roundish depres-
	sion
	Frons at apex on each side of median carina with no roundish depres-
	sion
-	Pronotum with no intermediate carinae
-	Pronotum with 2 pairs of intermediate carinae Futaptyelus MATS.
-	Rostrum reaches beyond posterior coxae
	Rostrum reaches not beyond posterior coxae
10.	Pronotum much higher than vertex
_	Pronotum nearly in the same level with vertex 20

17.	Pronotum with intermediate carinae
_	Pronotum with no intermediate carinae
18.	Pronotum with a pair of intermediate carinae Seiphora MATS.
	Pronotum with 2 pairs of intermediate carinae
19.	Ocelli equidistant from anterior and posterior margins of vertex
	Kotophora Mats.
_	Ocelli much nearer to hind margin of vertex Macrofukia MATS.
20.	Antennal ledge with a triangular thickening
-	Crown longer than \(\frac{1}{2}\) length of pronotum \(\) Hiraphora Mats.
21.	Crown not longer than $\frac{1}{2}$ length of pronotum
-	Pronotum with intermediate carinae
22.	Pronotum with no intermediate carinae
	Pronotum with a pair of intermediate carinae Malophora MATS.
23. —	Pronotum with 2 pairs of intermediate carinae
24.	Rostrum reaches beyond posterior coxae
-	Rostrum reaches not beyond posterior coxae
25.	Ante-lateral margins of pronotum much oblique posteriorly, so that much
~ 3.	broader than head
_	Ante-lateral margins of pronotnm less oblique, so that not broader than
	head
26.	Ante-lateral margins of pronotum much longer than longitudinal axis
	of eye Jembrophora Mats.
_	Ante-lateral margins of pronotum shorter than longitudinal axis of eye 27
27.	Ante-lateral margins of pronotum subequal to longitudinal axis of eye
•	Jembropsis MATS.
_	Ante-lateral margins of pronotum shorter than longitudinal axis of eye 28
28.	Frons with distinct lateral sulci
-	Frons with no distinct lateral sulci Eguptyelus MATS.
29.	Antennal ledge with a sulca 30
-	Antennal ledge with no sulca
30.	Sulca of antennal ledge broad
-	Sulca of antennal ledge narrow 31
31.	Scutellum flat
-	Scutellum depressed Formophora MATS.
32.	Rostrum reaches beyond posterior coxae
-	Rostrum reaches not beyond posterior coxae
∙33∙	
-	Antennal ledge with no triangular thickening

34.	Ovipositor protruding beyond apices of tegmina Todophora MATS.
25	Ovipositor not protruding beyond apices of tegmina Takaphora MATS. Antennal ledge broad, not foliaceous
35.	Antennal ledge thin, foliaceous
36.	Antennal ledge with a triangular thickening
30. –	Antennal ledge with no triangular thickening
37.	Pronotum with two pairs of intermediate carinae Ogaphora MATS.
<i>57</i> .	Pronotum with one pair of intermediate carinae
3 8.	Tylal ridge distinctly thicker than antennal ledge Tamaphora MATS.
_	Tylal ridge not thicker than antennal ledge
39.	Vertex nearly in the same level with pronotum Petaphora MATS.
_	Vertex not in the same level with pronotum Trigophora MATS.
40.	Tegmina uneven, scattering granules Boniphora Mats.
	Tegmina even, not scattering granules 41
41.	Pronotum with intermediate carinae 42
-	Pronotum with no intermediate carinae
42.	Pronotum with two pairs of intermediate carinae
-	Pronotum with one pair of intermediate carinae 46
43.	Two pairs of intermediate carinae parallel to median carina
_	Two pairs of intermediate carinae oblique to median carina 44
44:	Rostrum reaches beyond posterior coxae
-	Rostrum reaches not beyond posterior coxae
45.	Vertex nearly in the same level with pronotum Hosoptyelus Mars.
-	Vertex distinctly lower than pronotum Yezophora MATS.
46.	Tegmina with a broad white band
~	Tegmina with no broad white band 50
47.	Antennal ledge with a sulca
~	Antennal ledge with no sulca
4 8.	Pronotum with obscure intermediate carinae Obiphora MATS.
	Pronotum with no intermediate carinae
49.	Frons flat
-	Frons inflated
50.	Tylal furrow not contiguous with jugal socket Europhora MATS.
 	Tylal furrow contiguous with jugal socket
51.	Pronotum with no intermediate carinae
<u>-</u>	Tylus about as long as vertex
52.	Tylus about I length of wester

Key to the Genera of Cercopoidae (Ptyelidae)

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-	Clavus at apex not truncate; vein distinct, with no conical appendage 4
4.	Scutellum long, its apex reaching to abdominal end Taihorina Schum.
_	Scutellum moderate, its apex not reaching to abdominal end 5
5.	Head much broader than pronotum
_	Head not broader than pronotum 6
б.	Scutellum in middle foveolate
	Scutellum in middle not foveolate Hindola Kirk.

摘 要

余は曩に北海道帝國大學農學部紀要 (Jour. Facul. Agr. Hokkaido Imp. Univ., XLV, pt. 2, 1940) に本邦産池吹蟲科の研究を發表した。

その後 SCHMIDT, METCALF 及び HORTON 等の論文を入手したので、その根本的研究が必要となった。本論文がそれに該當する。

本文にて 38 の新屬と 72 の新種を發表した。そこで日本を中心とする東亜には、合計 245 種の泡吹蟲科の昆蟲が産することが知れた。

而して従来使用せられた Aphrophora (GERMER) 屬は本邦には産しないのである。尚 Takaginae の I 新亜科を設けたが、これには Takagia lugubris LETH. の I 種が隷屬する。この種は滿洲國及 び朝鮮に産し、黄斑のある美麗種である。