

Distant, 1883

Trans. Ent. Soc. Lond. 1883: 413-443

on computer (413)

catalogued

type info recorded

XX. First Report on the Rhynchota collected in Japan by
Mr. George Lewis. By W. L. DISTANT.

[Read November 7th, 1883.]

PLATES XIX, XX.

OF the extensive and interesting collection of *Rhynchota* made by Mr. Lewis, the present paper deals with the families *Pentatomidæ*, *Coreidæ*, *Lygæidæ*, and *Pyrrhocoridae*, with a few supplementary descriptions of species belonging to the *Reduviidæ*. The first four families alone are, however, now enumerated, the identification of the remaining Heteroptera and the small collection of Homoptera being reserved for a second paper. The present enumeration comprises 109 species, of which 33 are described as new; and three new genera are also proposed. The supplementary or anticipatory descriptions of *Reduviidæ* refer to four species, thus making a total of 37 presumed novelties.

The present material supports the conclusion that the Japanese subregion of the great Palæarctic region possesses but few European or Siberian species, and, what was much less expected, that those from the Amur are also, as a rule, distinct. Thus I formerly received a species of the genus *Tropicoris* from Japan, which seemed so to agree with the description of the Amurian *T. metallifer*, Motsch., that I had little doubt as to its identity. On subsequently receiving the true species from the Amur, I found that the Japanese specimens were alike in colour and size, but strikingly distinct in the structural character of the pronotal angles. Mr. Scott, who dealt with the former collection made by Mr. Lewis, also enumerated the common European species *Gastrodes* * *ferrugineus*, but in the same year the late Dr. Stål—who was no specific splitter—described the Japanese insect as a distinct species. The European species which I have found in these families are—

* The generic name *Platygaster*, as used by both Scott and Stål is preoccupied in Hymenoptera; I have therefore followed Dr. Puton in substituting that of *Gastrodes* of Westwood.

<i>Eurygaster maurus.</i>	<i>Tropicoris rufipes.</i>
<i>Zicrona cærulea.</i>	<i>Corizus maculatus.</i>
<i>Carpocoris nigricornis.</i>	<i>" crassicornis.</i>
<i>Dolycoris verbasci.</i>	<i>Lygæus equestris.</i>
<i>Rubiconia intermedia.</i>	

These are all familiar names of abundant species, and the inference which I thereby assume is, that when European species are found in Japan they are those which are widely distributed throughout the Palearctic region. Another very noticeable and peculiar character in such species—and one that has been already pointed out by the specialists in other orders—is in the large size they attain in Japan, *Carpocoris nigricornis* and *Tropicoris rufipes* being particularly developed in that respect, and the same structural increase is also evident in widely distributed species of the Oriental region when found in Japan, as is strikingly shown by *Plautia fimbriata*.

As regards the Oriental affinities of the Japanese Rhynchotal fauna much greater difficulty exists in forming an opinion, owing to the imperfection of the little-worked Oriental specific record. When the species of that region are even approximately enumerated, some of these now first described from Japan will doubtless be found to have a far wider range of habitat, and therefore it would be unscientific and misleading to speak of any of the species here described as endemic till we know more of the surrounding Rhynchotal faunas.

It is clear, however, that the Oriental species found in Japan are very considerable, and the conclusion derived from these imperfect data is that, as might reasonably have been predicted, the Rhynchotal fauna of Japan has been largely derived from Palearctic elements derived from and by the north, and from Oriental species which have evidently and necessarily entered by the south.

The following is an enumeration of the species belonging to the families to which this paper principally refers:—

PENTATOMIDÆ.

PLATASPINÆ.

✓ <i>Coptosoma cribraria</i> , Fabr., var.	..	Yokohama, Nagasaki.
✓ " <i>biguttula</i> , Motsch.	..	Nagasaki.

CYDNINÆ.

✓ <i>Cydnus nigritus</i> , Fabr.	..	Yokohama, Sendai.
✓ <i>Geotomus punctulatus</i> , Costa, var.	..	Yokohama, Nagasaki, Hitoyoshi.

✓ <i>Macroscytus javanus</i> , Mayr	..	Hakodatè, Kashiwagi, Kurigahara.
✓ <i>Chilocoris nitidus</i> , Mayr	..	Kobè.
✓ <i>Canthophorus triguttatus</i> , Scott	..	Kumamoto, Ichiuchi.
✓ " <i>niveimarginatus</i> , Scott.	..	Nagasaki, Hiogo, Seba.
✓ " <i>variegatus</i> , n. s.	..	Sapporo.

SCUTELLERINÆ.

✓ <i>Pæcilochroma lewisi</i> , n. s.	..	Yokohama, Nikkô, Kashiwagi.
✓ <i>Eurygaster maurus</i> , Linn.	..	Nikkô, Seba.

ASOPINÆ.

✓ <i>Zicrona cærulea</i> , Linn.	..	Yokohama, Shichinohè.
✓ <i>Neocazira confragosa</i> , n. g. and s.	..	Suyama.
✓ <i>Picromerus lewisi</i> , Scott.	..	Hakodatè, Fukushima.
✓ " <i>similis</i> , n. s.	..	Hakodatè.
✓ <i>Neoglypsus viridicatus</i> , Dist.	..	Chiuzenji.

PENTATOMINÆ.

✓ <i>Bolbocoris reticulatus</i> , Dall.	..	Kobè, Shimonosua, Wada togè.
✓ <i>Graphosoma lineata</i> , Linn.	..	Hakodatè.
✓ <i>Scotinophora lurida</i> , Burm.	..	Yokohama, Nagasaki.
✓ " <i>scottii</i> , Horv.	..	Konosè, Osaka, Fusan.
✓ " <i>horvathi</i> , n. s.	..	Yokohama.
✓ <i>Erthesina fullo</i> , Thunb.	..	Yokohama.
✓ <i>Caprius gastricus</i> , Thunb.	..	Nagasaki.
✓ <i>Anaria lewisi</i> , Scott.	..	Yokohama, Hiogo.
✓ " <i>assimulans</i> , n. s.	..	Nagasaki.
✓ <i>Halyomorpha picus</i> , Fabr.	..	Nikkô, Yokohama, Nagasaki, Ogura Lake, Kashiwagi.
✓ <i>Palomena angulosa</i> , Motsch.	..	Hakodatè, Fukushima, Kashiwagi, Yagohara.
✓ <i>Rubiconia intermedia</i> , Wolff.	..	Fukushima.
✓ <i>Carpocoris nigricornis</i> , Fabr.	..	Hakodatè, Yagohara.
✓ <i>Dolycoris verbasci</i> , DeGeer.	..	Hakodatè, through Nara.
✓ <i>Elia fieberi</i> , Scott.	..	Tokio, Kobè, Shimonosua.
✓ <i>Septoria ænea</i> , n. s.	..	Kumamoto, Yuyama.
✓ <i>Stollia guttigera</i> , Thunb.	..	Yokohama, Nagasaki.
✓ " <i>lewisi</i> , n. s.	..	Awomori, Niigata, Urasa and Seki.
✓ <i>Carbula humerigera</i> , Uhler.	..	Kashiwagi, Kobè.
✓ <i>Eurydema rugosa</i> , Motsch.	..	Hakodatè, Fukushima.
✓ <i>Alcimus borealis</i> , n. s.	..	Nara.
✓ <i>Parastrachia fulgens</i> , n. g. and s.	..	Yokohama, Konosè.
✓ <i>Nezara antennata</i> , Scott. <i>N. viridula</i> , Linn., var.?	..	Kumamoto, Kioto.
✓ <i>Plautia fimbriata</i> , Fabr.	..	Nagasaki, Ichiuchi.
✓ <i>Menida violacea</i> , Motsch.	..	Fukushima, Yagohara, Shimonosua, Niigata.
✓ " <i>japonica</i> , n. s.	..	Nagasaki.
✓ <i>Piezodorus rubro-fasciatus</i> , Fabr.	..	Yokohama.
✓ <i>Tropicoris rufipes</i> , Linn.	..	Hakodatè, Buno.
✓ " <i>japonicus</i> , Dist.	..	Hakodatè.
✓ <i>Compastes obtusa</i> , Walk.	..	Hiogo.

ACANTHOSOMINÆ.

✓ <i>Acanthosoma distincta</i> , Dall.	..	Yokohama, Nikkô, Hakodatè, Fukushima.
✓ <i>Sastragala scutellata</i> , Scott.	..	Hiogo.

✓ <i>Clinocoris nubilus</i> , Dall.	.. ..	Yokohama, Bukenji, Oyama.
✓ " <i>putoni</i> , Scott.	.. ..	Yokohama, Kobè.
✓ " <i>signoreti</i> , Scott.	.. ..	Horobetsu.
✓ " <i>gramineus</i> , n. s.	.. ..	Chiuzenji.
✓ <i>Prochela luteovaria</i> , Dist.	.. ..	Fukushima, Tagami, Seba.
✓ <i>Frostylis stricornis</i> , Scott.	.. ..	Hakodatè, Fukushima.

DINIDORINÆ.

✓ <i>Megymenum tauriformis</i> , n. s.	Kashiwagi, Nara.
--	-------	------------------

PHYLLOCEPHALINÆ.

✓ <i>Gonopsis affinis</i> , Uhler.	Yokohama, Hakodatè, Nagasaki.
------------------------------------	-------	-------------------------------

COREIDÆ.

COREINÆ.

<i>Prionolomia fuliginosa</i> , Uhler.	.. ..	Nikkò, Chiuzenji, Hakodatè, Seba, Kurigahara.
<i>Homæocerus unipunctatus</i> , Thunb.	.. ..	Nagasaki.
" sp. undeterm.	.. ..	—
<i>Pachycephalus opacus</i> , Uhler.	.. ..	Yokohama, Nagasaki.
<i>Acanthocoris sordidus</i> , Thunb.	.. ..	Yokohama, Nagasaki, Mayebashi.
<i>Cletus rusticus</i> , Stal.	.. ..	Yokohama, Nikkò, Nagasaki.
<i>Megalotomus costalis</i> , Stal.	.. ..	Tagami.
<i>Riptortus clavatus</i> , Thunb.	.. ..	Hitoyoshi, Kioto.
<i>Paralepsius unicolor</i> , Scott.	.. ..	Nikkò, Kobè.

CORIZINÆ.

<i>Corizus maculatus</i> , Fieb.	.. ..	Nagasaki.
" <i>crassicornis</i> , Linn.	.. ..	Yokohama.

LYGÆIDÆ.

LYGÆINÆ.

<i>Melanospilus elegans</i> , n. s.	.. ..	Niigata.
<i>Lygæus equestris</i> , Linn.	.. ..	Junsai, Nagasaki.
<i>Arocatus sericans</i> , Stal.	.. ..	Kumamoto.
" <i>melanostoma</i> , Scott.	.. ..	Kiga, Nagasaki.
<i>Nystius plebeius</i> , n. s.	.. ..	Yokohama.
" <i>expressus</i> , n. s.	.. ..	Niigata.

CYMINÆ.

<i>Ischnorhynchus nubilus</i> , n. s.	.. ..	Yokohama.
<i>Cymus aurescens</i> , n. s.	.. ..	Chiuzenji.

BLISSINÆ.

<i>Ischnodemus spinicaput</i> , Scott.	.. ..	Yokohama.
" <i>obnubilus</i> , n. s.	.. ..	Yokohama.
<i>Chauliops fallax</i> , Scott.	.. ..	Nagasaki, Seba.
<i>Blissus pallipes</i> , n. s.	.. ..	Yokohama, Niigata.
" <i>bicoloripes</i> , n. s.	.. ..	Yokohama, Nagasaki.

GEOCORINÆ.

<i>Geocoris varius</i> , Uhler.	.. ..	Yokohama.
" <i>proteus</i> , n. s.	.. ..	Yokohama, Nagasaki, Otsu, Niigata.

PACHYGRONTHINÆ

<i>Pachygrontha antennata</i> , Uhler.	Yokohama, Nagasaki, Hitoyoshi, Kobè.
--	-------	---

MYODOCHINÆ.

<i>Prosomæus brunneus</i> , Scott.	.. ..	Kobè.
<i>Pamera ejuncida</i> , n. s.	.. ..	Nagasaki.
" <i>exigua</i> , n. s.	.. ..	Nagasaki.
" <i>jejuna</i> , n. s.	.. ..	Kumamoto, Hosokutè.
" <i>erubescens</i> , n. s.	.. ..	Yokohama.
" <i>hemiptera</i> , Scott.	.. ..	Yokohama, Shibukawa.
" <i>lateralis</i> , Scott.	.. ..	Yokohama, Nagasaki.
" <i>rustica</i> , Scott.	.. ..	Nagasaki.
" <i>festiva</i> , n. s.	.. ..	Sanjo.
" <i>pallicornis</i> , Dall.	.. ..	Nagasaki.
" <i>albomarginata</i> , Scott.	.. ..	Kashiwagi.
<i>Plociamera japonica</i> , n. s.	.. ..	Nagasaki.
<i>Lasiosomus pallipes</i> , Scott.	.. ..	Yokohama, Nagasaki.
<i>Pachymerus japonicus</i> , Stal.	.. ..	Yokohama, Nagasaki, Wada togè.
<i>Tropistethus antennatus</i> , Scott.	.. ..	Nagasaki.
<i>Dieuches abbreviatus</i> , Scott.	.. ..	Yokohama, Nagasaki.
" <i>dissimilis</i> , n. s.	.. ..	Hakodatè, Ono.
<i>Paradièches lewisi</i> , n. g. and s.	.. ..	Yokohama.
<i>Pæantius lineatus</i> , Stal.	.. ..	Nagasaki.
<i>Gastrodes japonicus</i> , Stal.	.. ..	Nagasaki.
<i>Lethæus lewisi</i> , n. s.	.. ..	Nagasaki.
<i>Drymus marginatus</i> , n. s.	.. ..	Ichiuchi.
<i>Lamproplax membranæus</i> , n. s.	.. ..	Yokohama, Nikkò, Nagasaki.
" " var. <i>pallescens</i>.	.. ..	Nagasaki.

PYRROCORIDÆ.

LARGINÆ.

<i>Physopelta gutta</i> , Burm.	Ichiuchi, Hitoyoshi.
---------------------------------	-------	----------------------

PYRRHOCORINÆ.

<i>Pyrrhocoris tibialis</i> , Stal.	Nagasaki, Kumamoto, Kobè, Tagami.
-------------------------------------	-------	--------------------------------------

✓ *Coptosoma cribraria*, Fabr.

There appears to be a distinct race of this species in Japan. The typical Fabrician form is wide-ranging, and I have received it from Continental India, Malacca, and Formosa. In these habitats it does not vary, but possesses the usual pale colour, as is well shown in Herich-Schäffer's figure. In Japan, however, it is constantly darker in hue, and on the average larger in size; the last a character, however, of little moment, and of frequent occurrence with other Japanese examples of common Palæartic and Oriental species.

✓*Geotomus punctulatus*, Costa, var.

Cydnus punctulatus, Costa, 2^e Cent. Napol. (1847), 30, 8, pl. 5, f. 11; Sign., Ann. Soc. Ent. Fr., 1883, p. 54, 25, Cyd., pl. xix., f. 164.

Dr. Signoret, to whom I submitted this species, returned it with the following remarks:—" *Geotomus* très voisin du *punctulatus*, Costa, de l'Europe; en diffère par un seul poil sur le rebord de la tête près des yeux, par l'absence de point piligère sur le côté des élytres, par le radiale n'atteignant pas l'extrémité de la corie — du reste, même forme et même canal ostiolaire, voir fig. 160 Sign., planche 18 des Cydnides, ce qui le rapproche de *pygmæus*, Dall., fig. 160, et *Lethierryi*, fig. 159. Seulement le vôtre est plus obèse; revoir avec le type *pygmæus*, Dall., qui me semble plus étroit, et en faire une espèce nouvelle, si vous les trouvez assez différent."

Having submitted all the *Cydninae* which were at all doubtful to Dr. Signoret, who has recently made a profound and critical study of this subfamily, I here add his description of the following new species:—

✓*Canthophorus variegatus*, Sign.

"Long. 5 mill.; larg. 3 m. fort. Coll. Distant.

"Ovalaire, d'un brun noir métallique, ponctué. Les bords latéraux du prothorax, le rostre en partie, le second article des antennes, les élytres en grand partie, surtout le côté externe et le cubitus, le pourtour de l'extrémité de l'écusson, les tibias moins le sommet, le sommet et la base de chaque segment ventral, 3 taches sur les côtés de l'abdomen, d'un jaune brun.

"La majeure partie des élytres est d'un jaune brun, avec deux macules noirâtres, une à la base de la corie entre le radiale et le cubitale, l'autre plus grande, au sommet, laquelle s'étend aussi sur l'espace marginal. Tête échancrée, le lobe médian plus court que les latéraux qui le dépassent, mais sans le réunir au-de-là; ceux-ci légèrement réfléchis; antennes avec le second article beaucoup plus court que le 3^e, celui-ci trois fois plus long. Rostre atteignant les trochanters intermédiaires. Membrane brune, ne dépassant pas l'abdomen, avec des fortes nervures sinueuses. Poitrine ponctué. Plaques mates, grandes, ponctué, et légèrement striées. Canal ostiolaire sans ouverture visible, et occupant les $\frac{3}{4}$ transverses du métasternum. Abdomen brun métallique, varié de plus clair, surtout à la base et au sommet de chaque segment.

" Cette espèce ne peut être confondue avec aucune autre; en taille elle se rapproche du *Tritomegas bicolor*, en couleur du *Crocistethus Walllii*; mais par le canal ostiolaire sans ouverture ou fissure elle se distingue de tous les *Sehirides*.

"Hab. Sapporo."

✓✓*Pacilochroma lewisi*, n. s. (Pl. XIX., fig. 1).

♂. Above bright emerald-green, thickly and darkly punctate, and with the following red markings: pronotum with the posterior margin continued in an arcuate discal fascia and connected with a central longitudinal fascia; scutellum with two central basal <-shaped fasciæ, two discal oblique fasciæ angularly connected at centre (the connection sometimes imperfect) and with a transverse subapical fascia, which is lineately widened at centre and continued along the apical margin. Body beneath with the head and sternum bright emerald-green; posterior margin of prosternum—broadly at angles—ochraceous; posterior margin of mesosternum, and whole area of odoriferous apertures, opaque silky fuscous; abdomen ochraceous, with a broad central and outwardly angulate greenish-black fascia; the anal appendage and a marginal segmental row of large pyriform spots of the same colour; legs and rostrum bright emerald-green. Antennæ black, finely pilose; 3rd, 4th, and 5th joints subequal in length; eyes more or less ochraceous, ocelli red. Besides the punctuation above, there is also a more or less irregularly distributed dark carinate reticulation.

♀. Larger and broader than the male; markings above similar, beneath with the legs ochraceous; lateral margins of the head, bases of acetabula, some lateral suffusions on sternum, upper apices of femora, and the tibiæ, more or less bright and pale shining greenish; anal appendage, a lateral row of segmental spots and a few central basal spots to abdomen, and apical portion of the rostrum, very dark greenish black. ♂, long. 16 mm.; exp. lat. angl. pronot., 10 mm. ♀, long. 19 mm.; exp. lat. angl. pronot., 11½ mm.

Hab. Nikko, Kashiwagi, Chiuzenji, Yokohama.

This species is nearest allied to the North-east Indian *P. interrupta*, Hope.

✓*NEOCAZIRA*, n. g.

Head long and obliquely deflexed, lateral lobes slightly longer than the central, rugose, with two central short obtuse conical spines. Pronotum rugose, with two discal obtuse conical spines, a shorter spine near centre of lateral margins, and the lateral angles prominently but obtusely spinous. Scutellum broad, deeply and concavely sinuate near base, and then convexly widened and dilated to apex, which is rounded and almost reaches the abdominal apex; gibbous and obtusely crenulate at base, with a raised tubercle at centre, the apical portion deflexed, and the apical margin obtusely crenulate. Connexivum obtusely crenulate. Anterior femora incrassated, crenulate, and armed with some prominent spines on under surface; anterior tibiae broadly and concavely dilated, and armed near anterior margin with a distinct but somewhat obtuse spine; intermediate and posterior femora crenulate, armed with a prominent spine beneath near apex.

This genus is allied to *Cazira*, from which it is separated by the broader, longer, and posteriorly deflexed scutellum, &c.

✓*Neocazira confragosa*, n. s. (Pl. XIX., fig. 2).

Blackish, more or less covered with greyish pile. Antennae dark castaneous, the apical joint ochraceous, with its base castaneous, 2nd joint a little shorter than the 3rd, 3rd and 4th subequal in length, the 4th and 5th distinctly incrassated. Head thickly covered with greyish pile; the eyes dark fuscous. Pronotum less pilose at centre, where there is a central longitudinal posteriorly widened darker area; all the spines darker, and particularly rugulose at base. Scutellum with the central longitudinal area somewhat non-pilose and darker, the raised central tubercle pale castaneous, behind which the deflexed area is fuscous. Corium somewhat thickly and palely pilose. Membrane fuscous. Anterior legs dark fuscous, some of the tubercles on the femora and tibiae being obscure castaneous, the apices of the tarsal joints ochraceous. Intermediate and posterior femora dark fuscous, spotted with ochraceous, especially towards the apex; tibiae dark fuscous, their apical halves ochraceous, more or less tinged with castaneous; tarsi fuscous, the bases of the 1st joint and apices of the 2nd and 3rd

luteous. Body beneath (carded specimen) greyish ochraceous, mottled with fuscous, with an abdominal marginal series of fuscous spots. Long. $6\frac{1}{2}$ mm.; exp. pronot. angl., $4\frac{1}{2}$ mm.

Hab. Yuyama.

✓*Picromerus similis*, n. s.

In colour, markings, and general appearance almost undistinguishable from *P. lewisi*, Scott, but structurally differing from that species by the lateral angles of the pronotum, which are less produced, more obtusely pointed, and distinctly curved backward at their apices, where they are slightly castaneous. Long. 12 mm.; exp. pronot. angl. 8 mm.

Hab. Hakodatè.

✓*Graphosoma lineata*, Linn.

The varietal form *G. nigrolineata*, Rossi, was alone brought home by Mr. Lewis, although the form *G. rubrolineata*, Hope, is also found in Japan.

✓*Scotinophora horvathi*, n. s. (Pl. XIX., fig. 3).

Scotinophora vermiculata, Horv. (nec Vollenh.), Term. füzetek., iii., p. 143, n. 12 (1879).

Differs from *S. vermiculata*, Voll. (an Indo-Malayan species), by the lateral lobes of the head being distinctly longer than the central, and thus causing a strongly cleft excavation at the apex of the head; the anterior angles of the pronotum are very long and robust, curved and directed forwards, their apices truncate, but armed with three small spines; antennae black, the base of the 1st joint luteous. Long. 9 mm.; greatest abdom. width, 6 mm.

Hab. Yokohama.

✓*Enaria assimulans*, n. s. (Pl. XIX., fig. 4).

Closely allied to *E. lewisi*, but more ochraceous in hue; antennae with the 4th and 5th joints black, their apices luteous; pronotum with two small black spots on disk a little before anterior margin; scutellum with two small central black spots at base, and with two obscure lateral spots near apex.

This species structurally differs from *Æ. lewisi* in the following respects:—The anterior angles of the pronotum are more truncate and acute, and less rounded; the base of the pronotum is not truncate, but slightly though distinctly concave; and the scutellum is very different, the lateral margins being concavely narrowed nearly to the apex, and not abruptly sinuate a little beyond the middle, as in Scott's species. Long. 12—13 mm.

Hab. Nagasaki.

✓*Palomena angulosa.*

Cimex angulosus, Motsch., Etud., 10, p. 23 (1861).

This species varies from green—the prevalent and normal colour—to luteous above, thus approaching to *P. rubricornis*, Scott; a species not contained in the collection, and which, judging from the description and the absence of any "differentia specifica," appears to have been separated by the red antennæ.

✓*Sepontia ænea*, n. s.

Above, dark bronzy-green; anterior and lateral margins of the pronotum and three well separated spots at base of scutellum (the central largest), bright luteous; basal disk of pronotum and some discal suffusions to scutellum ochraceous: antennæ ochraceous, 4th and 5th joints darker, sometimes pitchy; eyes brownish; body beneath bronzy-green; lateral margins of sternum (widest at prosternum), and an abdominal marginal segmental row of spots (sometimes extending to sternum), luteous; legs ochraceous; the femora, and a basal and subapical annulation to tibiæ, bronzy-green. The head and pronotum are very thickly and coarsely punctate, the scutellum somewhat more finely punctate, especially near the base. Antennæ with the 2nd joint slightly shorter than the third, 4th longer than the 3rd, but shorter than the 5th. The body beneath is thickly and coarsely punctate. Long. $3\frac{1}{2}$ —4 mm.; lat. 3 — $3\frac{1}{2}$ mm.

Hab. Yuyama, Kumamoto.

This interesting genus was founded by Stål to contain two species, one from South Africa, the other received from Java and the Philippines; from the last the Japanese species is very distinct, both in colour and also by the relative lengths of the 2nd and 3rd joints of the antennæ.

✓*Stollia lewisi*, n. s. (Pl. XIX., fig. 6).

Luteous, coarsely and darkly punctate. Head shining purplish-black, rugosely punctate; antennæ luteous, the 5th joint, excluding base, and apical half or two-thirds of the 4th, black. Pronotum with the lateral angles very prominent, subacute and black, their apices somewhat recurved and their bases obtusely notched behind, the lateral and anterior margins luteous and glabrous, the whole surface coarsely covered with black punctures, and with two foveate black spots near anterior margin. Scutellum not reaching the apex of corium, covered with coarse black punctures, the basal angles blackish and containing a large glabrous, raised, luteous spot, the apex with a central and two lateral small black spots. Corium coarsely black-punctate; membrane fuscous, the apical margin paler. Body beneath as above, the disk of the abdomen blackish, and its lateral margins narrowly luteous and glabrous, broken with black at the segmental incisures. Legs luteous, faintly spotted with black, the femora more distinctly spotted, apices of the tarsi black. Long. 6 mm.; exp. pronot. angl. 5 mm.

Hab. Awomori, Urasa and Soki, Niigata.

The acutely produced lateral angles of the pronotum give this species anything but a congeneric appearance, compared with other species of the genus *Stollia*, and rather superficially allies it with *Carbula*, from which the broad scutellum will at once separate it.

✓*Alcimus borealis*, n. s.

Luteous, thickly covered with coarse dark brown or blackish punctures. Head greenish black, coarsely punctate, with a small central spot near base, an oblique spot at inner margin of each eye, and two frontal longitudinal fasciæ on inner margin of lateral lobes, luteous. Antennæ black, the 1st joint testaceous, 3rd joint slightly longest. Pronotum with the anterior margin, a cruciform spot behind centre of same, and the anterior portion of lateral margins in front of pronotal processes, luteous and levigate; the anterior space between the luteous margins and the apices of the pronotal angular processes greenish black, the last being notched above, and then acutely produced and slightly directed backwards. Scutellum with a somewhat large levigate luteous spot near

each basal angle. Corium with a narrow oblique castaneous stripe near centre. Membrane fuscous. Body beneath (imperfectly examined owing to the specimen being carded) dark brownish and punctate, much irrorated with luteous markings, generally levigate, of which the most prominent are some central spots on sternum, two large contiguous spots on lateral margins of prosternum, and the central base of same, two transverse lineate spots on each side of mesosternum, an oblong submarginal spot, and two narrow marginal spots to metasternum with base of same, lateral margins of abdomen broken at incisures, and anterior and posterior segmental margins. Femora dark shining fuscous, their apices luteous; tibiæ luteous, striped with fuscous; tarsi black. Long. 8 mm.; exp. pronot. angular apices, 8 mm.; lat. at base of corium, $4\frac{1}{2}$ mm.

Hab. Nara.

This species is allied to *A. coronatus*, Stål, which was received from the Deccan, but differs from the description of that species by the colour of the antennæ, femora and lateral margins of the pronotum, the longitudinal fasciæ in front of the head, and also by its relative size, which in Stål's species, though agreeing in length, has a greater expanse at pronotal angles, and also an increased breadth of body. From *A. japonicus*, Scott, it differs by the luteous markings of the head and pronotum, &c.

✓
cydn.
PARASTRACHIA, n. g.

Body elongate and ovate; head large, the lateral lobes longer than the central, not meeting in front, the lateral margins slightly amplified and very strongly reflexed; antennæ with the basal joint passing the apex of the head; pronotum with the lateral margins reflexed, the anterior lateral margins amplified, the anterior angles subacute, the posterior angles somewhat broadly rounded and subprominent; scutellum long, the lateral margins almost straight, the apex attenuated, the basal portion moderately gibbous, from which a central, longitudinal robust carination extends to near apex; corium with the lateral margins moderately convex; membrane passing the apex of the abdomen; rostrum passing the posterior coxæ; abdomen with a prominent central longitudinal ridge, but without a basal spine.

The position of this genus is somewhere between the genera *Strachia* and *Catacanthus*, with both of which it has affinities.

✓
Parastrachia fulgens, n. s. (Pl. XIX., fig. 5).

Body above red; antennæ, eyes, base of head, centre of anterior margin and a large transverse discal spot to pronotum, scutellum, clavus, a large rounded discal spot to corium and membrane, black; apical margins, a central linear apical line and the apex of scutellum, and apex of clavus, red; apical margins of membrane pale fuscous or reddish; body beneath red; rostrum, legs, disk of sternum, large submarginal segmental spots and anal appendage to abdomen, black; the 2nd and 3rd joints of the antennæ are subequal in length, the 4th slightly longer than the 5th; the pronotum is somewhat obscurely punctate; the scutellum has the central base levigate, the basal lateral margins transversely striate, and the apical half distinctly punctate; corium thickly and somewhat coarsely punctate; tibiæ very strongly setose. Long. 16—18 mm.

Hab. Konosé, Yokohama.

✓
Plautia fimbriata.

Cimex fimbriatus, Fabr., Mant., 2, p. 295, 162 (1787).

Plautia Stali, Scott, Ann. & Mag. Nat. Hist., Ser. 4, vol. 14, p. 11 (1874).

I quite agree with Horvath in considering Japanese specimens as conspecific with *P. fimbriata*, and can find no character sufficient to separate *P. Stali*. Japanese specimens are generally of a larger size, but this is quite a usual character with the Japanese examples of some of the common Palearctic species.

✓
Menida japonica, n. s. (Pl. XIX., fig. 7).

Pale obscure luteous, coarsely and darkly punctate; head greenish black, very thickly and coarsely punctate, with some obscure luteous lines on the ante-ocular area; antennæ dark fuscous, the 2nd joint and the bases of the remaining joints dull ochraceous; pronotum with the lateral and anterior margins narrowly luteous and glabrous, the lateral angles rounded and subprominent, the whole area coarsely and darkly punctate, the anterior

half with about seven black spots, two central and foveate near anterior margin, and five across disk (these last spots are inconstant in number), and a black spot at lateral angles; scutellum more sparingly and darkly punctate, a small black patch at basal angles containing a raised glabrous spot, two central black spots on anterior half (sometimes partly united) and two lateral black spots near apex, which is somewhat impunctate; corium coarsely and darkly punctate; membrane fuscous, the apical half pale hyaline; connexivum luteous, with black spots at the segmental incisures; body beneath luteous, punctured with black; legs luteous, apices of the femora, bases and apices of tibiae, and tarsi (excluding base), blackish; the anterior angles of the pronotum are obtusely pointed; the 2nd and 3rd joints of the antennae are subequal in length and a little shorter than the 4th and 5th, which are also subequal. Long. $8\frac{1}{2}$ mm.; exp. pronot. angl. 5 mm.

Hab. Nagasaki.

✓ *Clinocoris gramineus*, n. s. (Pl. XIX., fig. 8).

Bright yellowish green; head, anterior area of pronotum and scutellum, pale ochraceous; head sparingly and coarsely punctate; antennae with the basal joint ochraceous, the 2nd and 3rd fuscous, 4th and 5th black, with their bases narrowly ochraceous, 2nd joint a little shorter than the 3rd, 4th a little longer than the 5th; pronotum coarsely and darkly punctate, the lateral angles produced into long, slightly raised and recurved, shining black spines, which have a distinct central carination; scutellum coarsely and darkly punctate, the apex impunctate; corium thickly and coarsely punctate, somewhat paler at base; membrane fuscous, exhibiting a distinct broad central dark fascia; body beneath and legs ochraceous; rostrum with the apex pitchy, and reaching the base of the abdominal spine, which just extends beyond the intermediate coxae; mesosternal process reaching or just passing the anterior coxae; the body beneath is impunctate, with the exception of a series of coarse black punctures along the anterior margin of the prosternum. Long. 10—12 mm.; exp. pronot. angl. $7\frac{1}{2}$ —8 mm.

Hab. Chiuzenji.

✓ *Urostylis stricornis*, Scott.

Taking the species to be represented by a portion of the diagnosis, viz., 1st joint of the antennae with a fuscous streak exteriorly, the colour certainly varies from ochraceous to greenish. I consider the species to be variable within the limits of the superficial characters given for the three described forms, *U. stricornis*, *U. annulicornis*, and *U. westwoodii*, Scott. The describer, however, states that he has found structural characters in the genital segments to separate his species; and though not questioning his decision, as I have not the material for verification, I am still dubious whether dried specimens afford sufficient material for separating species on the character of the last genital segment having "an external spoon-shaped process," as compared with being "broad, flat, slightly dilated at the apex," or on the contrary "aculeate," especially when the species are practically indistinguishable in other respects.

✓ *Megymenum tauriformis*, n. s.

Very dark fuscous, with bronzy reflections; antennae with the 2nd and 3rd joints non-dilated, but somewhat flattened and channelled, the 3rd and 4th about equal in length, the last reddish ochraceous, with the base fuscous; head with two distinct conical spines on the lateral margins a little in front of the eyes, the posterior spine minute; pronotum with an anteriorly produced conically dentate angulation on the anterior lateral margins at a little distance from the eyes, lateral margins truncate, with a short central spine, their anterior angles truncate, their posterior angles rounded, the disk uneven and crenulate, with a distinct rounded callosity near centre of anterior margin; scutellum of ordinary structure, and as in *M. subpurpurascens*, Hope; membrane pale obscure ochraceous, the whole disk darker and sometimes fuscous; margins of the abdomen broadly and obtusely dentate; legs concolorous, tarsi somewhat castaneous. Long. $13\frac{1}{2}$ —15 mm.; greatest pronot. exp. 7— $7\frac{1}{2}$ mm.

Hab. Kashiwagi, Nara.

The structural characters of the non-dilated 2nd and 3rd joints of the antennae, with the 3rd and 4th joints of equal length, assign to this species a position in the subgenus *Pissistes*, Stål; whilst the curved and anteriorly directed

spines near the anterior angles of the pronotum render it very distinct.

Dr. Horvath, in his paper previously referred to, has enumerated the *Megymenum spinosum*, Burm., amongst his Japanese identifications, a course in which he was subsequently followed by Mr. Scott.

The above species is very distinct from *M. spinosum*, being in fact divided by subgeneric characters; and is the only one now brought home by Mr. Lewis.

Melanospilus elegans, n. s. (Pl. XIX., fig. 9).

Pale reddish; head, antennæ, two large central spots to pronotum, which are narrowed anteriorly and almost attain to the anterior and posterior margins, scutellum, clavus (excluding apex), a large irregular discal spot to corium, which outwardly does not reach the costal margin, membrane (excluding basal angle and apical margin), head beneath (excluding central line), a lateral spot to prosternum, anterior area of mesosternum, which is macular at lateral margin, lateral margins of metasternum, central lateral spots to abdomen, abdominal apex, coxæ, legs, and rostrum, black; basal angle and apical margins of membrane whitish. The head, antennæ, and legs are finely pilose, the central carinations of the pronotum and scutellum are very pronounced, and the corium is strongly concavely sinuate at base. Long. 9—10 mm.

Hab. Niigata.

This species differs from the description of *L. cruciger*, Motsch., by the colour of the scutellum, the absence of the spots described as "hemelytrorum quatuor cruciforme dispositis," by the presence of the central spots to the abdomen, &c. It is distinguished from *M. fimbriatus*, Dall., by the colour of the head, the apex of the clavus, and the abdomen beneath.

In his List of the Japanese Rhynchota, Mr. Scott (Ann. & Mag. Nat. Hist., ser. 4, vol. xiv. (1874)), includes in the family *Lygæidæ* a "*Melanocephalus cruciger*, Motsch.," and in the family *Pyrrhocoridæ* a "*Melanospilus cruciger*, Motsch." The first of these generic names must evidently be a misprint, whilst the second as clearly belongs to the *Lygæidæ*, and both evidently refer to the same species described by

Motschulsky as *L. cruciger* from the Amur. I doubt very much whether this species occurs in Japan, and incline to the opinion that the species here described is the one to which Mr. Scott's reference was made.

Nysius plebeius, n. s.

Head, pronotum, and scutellum, pitchy ochraceous, very coarsely punctate; head with the apex and central base distinctly paler; antennæ ochraceous, apices of 1st and 2nd joints infuscated, 2nd joint largest, 3rd and 4th subequal in length; eyes pale fuscous; pronotum with a central carinate line, a central spot at base and lateral angles paler, the last preceded by darker coloration, a faint transverse dark constriction before middle; scutellum with a distinct central dark carination, the basal margin also excavated and darker; corium very pale and semitransparent ochraceous, with two linear discal longitudinal series of spots, apex and a central spot on apical margin, and a few irregular spots on apical half of clavus, brownish; membrane pale hyaline, slightly tinged with ochraceous on disk; body beneath pitchy; posterior margins of pro-, meso-, and metasternum, coxæ, and legs, ochraceous; femora spotted with fuscous; apical joint of tarsi and the rostrum fuscous. Long. 4 mm.

Hab. Yokohama.

Nysius expressus, n. s.

Ochraceous; head with the eyes and a somewhat oblique fascia on each side extending from about base of antennæ to base of head, fuscous; antennæ brownish ochraceous; pronotum with two narrow transverse black constrictions near anterior margin, each connected therewith by two fuscous fasciæ; remaining portion with a few scattered dark punctures, with a central pale levigate line and the lateral angles brownish; scutellum fuscous and coarsely punctate; corium with two linear brown spots on apical margin, one at apex and the other about centre; membrane pale hyaline, through which the dark abdomen beneath is reflected; body beneath ochraceous, submarginal fasciæ to sternum and abdomen broadly fuscous, the last inwardly containing a series of small pale spots, and the former a large pale spot at metasternum, base of abdomen fuscous (owing to the

typical and unique specimen being carded, I am unable to fully describe the under surface of the body); coxæ and legs ochraceous; femora suffused and spotted with brownish; apices of the tibiæ, bases of the intermediate and posterior tibiæ, and apices of the tarsal joints, fuscous; antennæ with the 2nd joint longest, the 3rd and 4th subequal in length. Long. 4 mm.

Hab. Niigata.

Ischnorhynchus nubilus, n. s.

Head black, finely pilose; eyes and a basal spot brownish; antennæ black, the 2nd joint annulated with brownish near centre, and apex of 4th joint narrowly of the same colour; pronotum brownish ochraceous, sparingly but coarsely punctate, with an impressed transverse black fascia near anterior margin, and with some clusters of dark punctures forming four irregular brownish spots on posterior margin; posterior angles narrowly of the same colour; scutellum black, more or less covered with greyish pile, coarsely punctate, with a central brownish tubercular spot; corium brownish ochraceous, with a large irregular transverse fuscous spot at inner angle, containing a small testaceous spot at apical margin, which is also fuscous; above the fuscous spot, at outer margin of clavus, is a large pale olivaceous impunctate spot, and the apical 3rd is somewhat testaceous, the clavus is longitudinally and coarsely punctate, and the corium is coarsely punctate along the disk, the costal and claval margins being impunctate; membrane pale hyaline, the body beneath reflected at base; femora black, with their apices castaneous; anterior and intermediate tibiæ obscure castaneous, with their bases black; posterior tibiæ and the tarsi dark castaneous or fuscous; body beneath black, anterior margin of prosternum, coxæ, and posterior margin of metasternum ochraceous, prosternal lateral angles brownish. Long. 4 mm.

Hab. Yokohama.

Cymus aurescens, n. s. (Pl. XIX., fig. 10).

Bright shining ochraceous; apical joint of the antennæ, excluding base, a small spot at claval apex, a short discal longitudinal streak on corium (absent in a second

specimen), extreme apex of corium, and tarsal apices, black; eyes and basal joint of antennæ pale castaneous; scutellum pale castaneous, with a central longitudinal impunctate luteous fascia; outer margin of clavus pale castaneous; membrane pale smoky hyaline, with some black spots near base, and a curved pale brownish fascia near centre; body beneath somewhat darker (carded specimen); femora, excluding apices, tibial apices and tarsi, brownish. The basal joint of the antennæ does not quite reach the apex of the head, and is barely half the length of the 2nd, 2nd and 3rd subequal, 4th much shorter than 3rd; the head is obscurely punctate; pronotum coarsely punctate, the extreme posterior margin impunctate; scutellum punctate on basal and lateral margins; clavus sparingly punctate, coarsely so on outer margins; corium thickly punctate, the costal margin broadly and palely impunctate. Long. 4 mm.

Hab. Yokohama, Chiuzenji.

In general size and structure this species is allied to the European *C. glandicolor*, Hahn; from the North Indian *C. tabidus*, described by Stål, it differs by the basal joint of the antennæ not reaching the apex of the head.

Ischnodemus obnubilus, n. s. (Pl. XIX., fig. 11).

Body pilose. Head and pronotum black; eyes and lateral angles of pronotum castaneous. Antennæ black; apices of the 2nd and 3rd joints narrowly and indistinctly castaneous. Scutellum black. Corium ochraceous, with its apical 3rd piceous. Membrane either pale fuscous with the base narrowly greyish white, or altogether of the last colour, and only reaching the penultimate segment of the abdomen. Abdomen above piceous, the connexivum ochraceous. Body beneath and legs black; the femoral apices, tibiæ, and tarsi ochraceous, tinged with piceous, the tarsi palest; lateral margins of the abdomen narrowly castaneous. The basal area of the pronotum is finely transversely striate and somewhat non-pilose, margined posteriorly by a transverse carinate line, in front of which are two discal incised lines, which are anteriorly reflected and bent at right angles. Long. 5 mm.

Hab. Yokohama.

Blissus pallipes, n. s.

Head and pronotum black, somewhat shining; antennæ with the 1st and 2nd joints castaneous, the 3rd and 4th fuscous; eyes dark castaneous; scutellum black, opaque; corium very pale ochraceous, the apical angles broadly black, and a sublaval brownish oblique line on each side; costal margin narrowly ochraceous; clavus with about the basal half black, the outer margin ochraceous; membrane greyish white, the veins brownish; body beneath piceous; legs reddish ochraceous. The body both above and beneath is finely pilose; the membrane does not quite reach the penultimate segment of the abdomen, which is piceous and finely pilose. Long. 5 mm.

Hab. Niigata, Yokohama.

Blissus bicoloripes, n. s. (Pl. XIX., fig. 12).

Head, pronotum, and scutellum, black; antennæ piceous; corium pale stramineous; basal half and extreme apex of clavus, and apical area of corium, from which extend two short discal streaks, more or less black; membrane pale olivaceous-brown, the veins darker; abdomen above and body beneath black; femora and tibiæ piceous, their bases and apices ochraceous; tarsi ochraceous. The body is finely pilose; head and pronotum coarsely punctate; membrane neither reaching the apex nor lateral margins of the abdomen; anterior femora unarmed. Long. $3\frac{1}{2}$ mm.

Hab. Nagasaki, Yokohama.

This species appears to be allied to *B. gibbus*, Fabr., an Indian species, from the description of which it differs by its smaller size, different colour of the legs, and the scutellum not "dense punctatum," &c.

Geocoris proteus, n. s. (Pl. XX., figs. 1, 2).

Head black; eyes castaneous; antennæ black, the 4th joint, the apex of the 3rd, and sometimes the apex of the second joint, brownish ochraceous; pronotum black, very coarsely punctate, the lateral angles ochraceous, and with two very distinct transverse foveæ a little before centre; scutellum black, coarsely punctate;

corium dark olivaceous-brown, the lateral margins ochraceous, the apical 3rd and the clavus distinctly punctate; membrane greyish, tinged with pale olivaceous; body beneath, rostrum and femora black; coxæ, femoral apices, tibiæ and tarsi, ochraceous. The membrane does not quite reach the apex of the abdomen, which is black.

Var. Corium with the base and claval margin, as well as the lateral margin, ochraceous; the posterior angles of the metasternum also ochraceous. Long. 8 mm.

Hab. Nagasaki, Yokohama, Niigata, Otsu.

Pamera ejuncida, n. s. (Pl. XX., fig. 3).

Body linear and elongate; head and anterior lobe of pronotum black, the collar of the last brownish; posterior pronotal lobe ochraceous, sparingly but deeply punctate, brownish anteriorly, with a central piceous line, which does not reach posterior margin, and the lateral angles luteous and impunctate; scutellum castaneous, with either the basal half black and a central black line, or with a large central basal spot, the basal half of lateral margins, and a central line, black, apex luteous; corium pale ochraceous, sparingly punctured with brownish, the lateral margins pale and impunctate, a black spot near centre of apical margin, attached to which are some linear black punctures more or less enclosing a subtriangular pale spot at claval apex; clavus thickly and longitudinally brown punctured; membrane greyish white; head beneath and sternum piceous; abdomen castaneous, somewhat piceous at base, and with a few transverse stigmatal piceous spots; antennæ and legs ochraceous, the last with the tarsal apices black, the coxæ castaneous. The head is long and somewhat prominently exserted; the anterior lobe of the pronotum is distinctly longer than the posterior, the hind margin of which is prominently concave. Long. $7\frac{1}{2}$ mm.

Hab. Nagasaki.

This and the two following-described species appertain to Stål's first section of the genus, and have their affinity with *P. longula*, Dall., an American species.

Pamera exigua, n. s.

Closely allied to the preceding species, but differing by the shorter and less elongate anterior lobe of the pronotum, the apical joint of the antennæ distinctly infuscated, the whole of the body beneath uniformly piceous, and all the femora, excluding apices, more or less pitchy; the membrane is also pale fuscous, with the veins greyish. Long. 7 mm.

Hab. Nagasaki.

Pamera jejuna, n. s.

Head, anterior lobe of pronotum and scutellum, black, opaque, and more or less obscurely pilose; antennæ pale castaneous; basal and apical joints fuscous, with their bases sometimes distinctly paler; anterior collar of pronotum brownish; posterior pronotal lobe ochraceous, punctate, with three broad longitudinal brownish fasciæ, of which the central is darkest, and with a brown spot at lateral angles; scutellum transversely and coarsely punctate, with a central longitudinal carination; corium pale ochraceous, sparingly punctured with brown, the lateral margins pale and impunctate; at inner apical angle near apex of clavus a series of black punctures enclose a greyish impunctate spot; these black punctures are confluent and macular anteriorly and posteriorly; clavus thickly and longitudinally covered with piceous punctures; membrane pale olivaceous-brown, the veins greyish; body beneath piceous and finely pilose; femora shining piceous, with their bases and apices luteous; tibiae and tarsi luteous, the tarsal apices dark piceous. Long. $7\frac{1}{2}$ mm.

Hab. Hosokuté, Kumamoto.

This species differs from *P. exigua* by the longer and more attenuated anterior lobe of the pronotum; and from *P. ejuncida* by the different colour of the antennæ, scutellum, and legs.

Pamera erubescens, n. s.

Head, pronotum, and scutellum black, the first shining with a somewhat greenish tint, and the second opaque, sometimes with the posterior lobe more or less brownish; antennæ dull, obscure, ochraceous, the apices of the 1st,

2nd, and 3rd, and the whole of the 4th joint, fuscous; corium brownish ochraceous, thickly and darkly punctate, the costal margin from base to near apex and the extreme apex luteous; membrane dark fuscous, the veins paler, with a central apical paler triangular spot, and a small luteous spot at apex of corium; head and sternum beneath black; abdomen testaceous, with the basal disk blackish, and a few lateral dark stigmatal spots; legs ochraceous, the anterior femora generally broadly annulated with fuscous near apex, apices of the intermediate and posterior femora also sometimes infuscated, tarsal apices fuscous; rostrum ochraceous, with the base and apex somewhat pitchy. The head is finely but distinctly pilose, the posterior lobe of the pronotum distinctly punctate, the scutellum possesses some scattered coarse punctures and a central apical carination, the clavus is longitudinally punctate, and the corium punctate and somewhat distinctly pilose. The body is somewhat broad and ovate; the anterior femora strongly spined beneath on their apical halves. Long. 5 mm.

Hab. Yokohama.

This species, judging from Stål's description, would seem to be allied to *P. sinæ* of that author, a Chinese species, and one recorded from Japan by Dr. Horvath. The one here described is, however, a smaller insect, and without the "vitta prope commissuram apiceque corii nigro-fuscis" of Stål's diagnosis.

Pamera rustica.

Diplonotus rusticus, Scott, Ann. & Mag. Nat. Hist., ser. 4, vol. xiv. (1874).

Dr. Horvath has recorded *Pamera nietneri*, Dohrn, as collected by Xantus in Nagasaki, without mentioning the above species described by Mr. Scott. It is of course possible that they are synonyms, but I am unable at present to decide. Stål gives Ceylon, Java, and the Philippines as localities from whence he has received Dr. Dohrn's species, which thus coincides with the distribution of *P. pallicornis*, Dall., which we know is found in Japan.

Pamera festiva, n. s.

Head and scutellum black; eyes brownish; antennæ luteous, with the apical joint fuscous; pronotum with the anterior lobe reddish brown, the anterior collar ochraceous; the posterior lobe ochraceous, coarsely and darkly punctate, its lateral margins and angles luteous and impunctate, with a small brownish subangular spot, and the disk with three broad reddish-brown fasciæ; scutellum with a few scattered punctures near base, the apical half carinate and more coarsely punctate; clavus and corium luteous, the inner margin and apex of the clavus darkly punctate; corium with scattered dark punctures, a small obscure blackish spot near base, some macular series of black punctures near inner apex, which extend transversely to near costal margin, and an irregular subapical black spot, these enclosing a pale and almost impunctate spot, and with the extreme apex dark ochraceous; membrane pale olivaceous, with some darker markings; head beneath and sternum piceous; abdomen testaceous, with the basal disk piceous and some lateral stigmatal dark spots; legs ochraceous, anterior femora, excluding apices, pale testaceous, tarsal apices fuscous. The body is somewhat elongate, the head distinctly pilose, the anterior femora armed beneath on the apical halves with some long slender spines. Long. 6 mm.

Hab. Sanjo.

This species is allied to *P. annulicornis*, Dall.

Pamera pallicornis.

Rhyparochromus pallicornis, Dall., List. Hem., 2, p. 573, n. 37 (1852).

Plociomerus discoguttatus, Dohrn, Stett. Ent. Zeit., xxi., p. 404, n. 58 (1860).

Diplonotus luridus, Scott, Ann. & Mag. Nat. Hist., ser. 4, vol. xiv. (1874).

Pamera pallicornis, Horv., Term. füzetek., iii., p. 147, n. 47 (1879).

There can be no doubt as to the identity of this widely-spread and well-marked species. It was originally described by Mr. Dallas from Continental India; and again by Dr. Dohrn from Ceylon, as detected by Stål, who

received the species from the Philippines. I have also received it from North Borneo, where it was collected by Mr. Pryer; and, as these specimens do not differ from those brought home by Mr. Lewis, I have added Mr. Scott's proposed name to the synonymy.

Hab. Nagasaki.

Plociomerus japonica, n. s.

Head fuscous and pilose; antennæ ochraceous, 1st joint, excluding base and the apical joint, fuscous; pronotum with the anterior lobe fuscous, sometimes with the collar ochraceous, and sometimes wholly brownish; posterior lobe ochraceous, with five indistinct brownish fasciæ; scutellum dark brownish, the apex luteous; corium ochraceous, sparingly and darkly punctate, margins levigate, costal margin with two dark brown spots, one near middle and one at apex, a large triangular greyish white opaque spot near inner angle, at apex of which is a brown spot, and another small spot of the same colour near base of corium; membrane ochraceous, with longitudinal but curved and waved brown fasciæ; body beneath brownish or fuscous; legs ochraceous; apices of the femora, base of the tibiæ, and apical joint of the tarsi, fuscous. Antennæ with the 2nd joint largest, the 3rd and 4th subequal; pronotum with the anterior lobe slightly rugulose, the posterior lobe distinctly punctate; scutellum punctate, the punctures on apical portion larger but more scattered, the apical central carination distinct. Long. $3\frac{1}{2}$ — $4\frac{1}{2}$ mm.

Hab. Nagasaki.

Pachymerus japonicus.

Pachymerus (Graptopeltus) japonicus, Stål, En. Hem., iv., p. 160, n. 3 (1874).

Graptopelta albomarginata, Scott (nec. Uhler), Ann. & Mag. Nat. Hist., ser. 4, vol. xiv. (1874).

From specimens identified as *G. albomarginata*, Uhler, by Mr. Scott, and given to me by Mr. Lewis, I have satisfied myself as to the necessity of the above synonymy. As described by Mr. Uhler, his species reaches 11 mm. in length, and I have as yet seen nothing like it from Japan.

P. japonicus, as pointed out by Stål, is very—and, one might add, extremely—closely allied to *P. adspersus*,

Muls., but differs by the colour of the 1st joint of the antennæ and by the punctuation of the lateral margins of the pronotum. I possess a specimen of *P. adspersus* from the Amur, and find the above differences to be valid and distinct, thus affording further evidence to the experience which I have already acquired, and showing that, as a rule, Rhynchota from the Amur are distinct, though closely allied to those of Japan. The females are considerably larger and generally darker in colour than the males: the species altogether varies towards melanism, and the series recently brought home by Mr. Lewis are considerably darker than those he procured on his previous journey.

Mr. Lewis' localities are Nagasaki, Yokohama, Wada toge.

Dieuches dissimilis, n. s.

Head and pronotum black; lateral margins of pronotum (excluding extreme base and apex) luteous, castaneous before the lateral angles, which are black; antennæ with the 1st and 2nd joints ochraceous, the 3rd and 4th fuscous; eyes dark fuscous; scutellum black; corium luteous, apical margin and inner angle broadly castaneous, with an irregular elongate black spot (widest anteriorly) on apical claval margin, and two black costal spots beyond centre; membrane fuscous, paler at base and apex; body beneath black; legs reddish ochraceous. Head, pronotum, and scutellum coarsely but obsoletely punctate, clavus with three longitudinal series of punctures, corium with a distinct submarginal series of punctures curved inwardly towards apex, and preceded by a short discal series and an apical submarginal series. Long. 5 mm.

Hab. Ono, Hakodatè.

This species is rather aberrant to the generic character of *Dieuches*, by having the anterior femora somewhat incrassated. In general structure it is allied to *D. armipes*, Fabr.

PARADIEUCHES, n. g.

Allied to *Dieuches* (section *D. armipes*, Fabr.), but with the anterior femora strongly incrassated and distinctly spined beneath near apex; pronotum with the anterior margins convex, transversely constricted a little behind the middle, before which the anterior area is

subglobose, the lateral margins dilated but not extending to apical margin, which is alone as wide as the head; posterior margin concavely sinuated before the scutellum.

This genus appears to be somewhat intermediate between *Dieuches* and *Neurocladus*.

Paradieuches lewisi, n. s. (Pl. XX., fig. 4).

Head black, with the apex brownish; antennæ with the 1st and 2nd joints brownish ochraceous, the 3rd and 4th black, with their bases brownish ochraceous; pronotum black, the posterior lobe somewhat purplish, the dilated margins luteous, except at lateral angles, where they are purplish black; scutellum black; clavus purplish, with a longitudinal paler streak on each side near apex; corium with the basal third luteous, the remainder purplish, with two black costal spots near centre (between which the colour is luteous), a similar spot near centre of claval margin, and the apex broadly black; corial apical and the posterior half of claval margin black; basal angle narrowly black; membrane black, the base and apical margin narrowly brownish ochraceous, with a large white spot on each side near apex of corium; body beneath black; legs castaneous, the femora with their apices very narrowly black. The posterior lobe of the pronotum has a distinct central foveate impression; the scutellum is somewhat gibbous; the clavus longitudinally punctate; and the disk of the corium is sparingly punctate. The pronotum has the posterior lobe thickly but obsoletely punctate, and the anterior lobe somewhat pilose. Long. 6 mm.

Hab. Yokohama.

Pœantius lineatus.

Pœantius lineatus, Stål, En. Hem., iv., p. 162, n. 2 (1874).

The type specimens, male and female, of this species were received from the Philippines, but, judging from the description of the same, I have little doubt that I have correctly identified the Japanese specimen collected by Mr. Lewis.

Only two species of this genus are at present described, one from South Africa and the other apparently common to the Philippines and Japan.

Gastrodes japonicus.

P. (Platygaster) japonicus, Stål, En. Hem., iv., p. 164, n. 1 (1874).

Platygaster ferrugineus, Scott (nec Linn.), Ann. & Mag. Nat. Hist., ser. 4, vol. xiv. (1874).

Lethæus lewisi, n. s. (Pl. XX., fig. 7).

Head black, the base impunctate, and from the ocular area somewhat finely punctate, apex of central lobe castaneous; antennæ with the 1st joint black, its base narrowly ochraceous; 2nd joint brownish ochraceous, its apex black; 3rd joint black, its base narrowly brownish ochraceous, and its apex broadly luteous; 4th joint black, its apex very narrowly brownish; pronotum black, with the anterior area glabrous and shining, the posterior area rugulosely punctate; lateral margins (broadest at posterior angles) ochraceous; scutellum black, coarsely punctate; corium piceous, coarsely punctate, lateral margins ochraceous and impunctate, an obscure transverse greyish streak near apex and a short ochraceous line near claval apex; membrane pale fuscous; body beneath black; femora black, with their apices narrowly castaneous; tibiæ and tarsi ochraceous; rostrum ochraceous, its tip piceous. Long. $7\frac{1}{2}$ mm.

Hab. Nagasaki.

This species is allied to the *L. indicus*, Dall., from Bengal; but the colour of the antennæ and of the lateral margins of the pronotum will alone distinguish it.

Drymus marginatus, n. s. (Pl. XX., fig. 6).

Body above black, lateral margins of the corium narrowly obscure castaneous; head and anterior area of the pronotum thickly and finely punctate; posterior pronotal area, scutellum, and corium thickly and coarsely punctate; membrane very pale olivaceous; body beneath and legs black, tarsi brownish; antennæ black, apex of the 4th joint narrowly brownish. Long. $4\frac{1}{2}$ mm.

Hab. Ichiuchi.

Lamproplax membranæus, n. s. (Pl. XX., fig. 5).

Head, pronotum, and scutellum black; pronotum with an oblong spot at lateral angles, and sometimes with the centre of basal margin ochraceous; corium brownish

ochraceous, the costal margin broadly ochraceous (narrowest at base); membrane pale hyaline, with an olivaceous tinge; body beneath black, the abdomen sometimes somewhat castaneous towards apex; legs pitchy castaneous, the tarsi more or less ochraceous; antennæ with the 1st joint castaneous, its base and apex narrowly ochraceous; 2nd joint black, with its extreme base and apex a little paler; 3rd pitchy, with the apex ochraceous; 4th castaneous, its apex paler (in a second specimen all the joints are castaneous). The pronotum has the reflexed lateral margins somewhat ochraceous, its anterior area somewhat gibbous and shining, the posterior area strongly and rugosely punctate, and with a few scattered punctures at lateral and anterior margins; scutellum coarsely punctate, the disk rugulose; clavus and corium coarsely and longitudinally punctate; sternum coarsely punctate; posterior and intermediate tibiæ strongly setose; anterior femora with two slender spines beneath near apex. Long. $4\frac{1}{2}$ —5 mm.

Hab. Yokohama, Nikko, Nagasaki.

Var. *pallescens*.

Differing from typical forms of the species by its smaller size, and by the 1st joint of the antennæ and legs being entirely ochraceous; abdomen beneath castaneous. Long. 4 mm.

Hab. Nagasaki.

A single specimen of this variety was brought home by Mr. Lewis, in which I can find no structural characters to specifically separate it from the species I have described above.

Ectrychotes delibutus, n. s. (Pl. XX., fig. 12).

Head, antennæ, anterior lobe of pronotum, scutellum, body beneath, and legs, black; posterior lobe of pronotum red, with the incisures black, and in some specimens the whole disk is pitchy; corium black, with the lateral margins broadly reddish, widened at base, and either attenuated or in some specimens slightly broadened at apex; membrane black; connexivum above and beneath black, with subquadrate red spots at segmental incisures; in the female its apex is black; abdomen beneath with a central segmental row of transverse red spots, which in

some specimens amalgamate with the marginal spots at apex; tarsi pitchy brown; antennæ strongly setose. Long. $8\frac{1}{2}$ —9 mm.

Hab. Kumamoto.

Labidocoris splendens, n. s. (Pl. XX., fig. 8).

Coral-red, shining; antennæ, eyes, corium (excluding lateral margins, which are slightly widened at base and triangularly amplified at apex), membrane, sternum, coxæ, a submarginal segmental row of large spots to the abdomen and disk of anal appendage to same, basal annulation to the femora, apices of the tibiæ, and tarsi (excluding base and claws), black; antennæ with the 1st, 2nd, and 3rd joints prominently setose, the extreme base of the 1st joint red, anterior femora armed beneath near apex with a prominent and robust spine. Long. 14 mm.

Hab. Yokohama.

This specimen is labelled "Old fig 'God tree,' Japan."

Labidocoris insignis, n. s. (Pl. XX., fig. 9).

Black; posterior lobe of pronotum, lateral margins of corium (widened at base and somewhat triangularly amplified at apex), connexivum, and abdomen above and beneath, coral-red and shining; disk of anal appendage black; coxæ, extreme bases and apices of femora, and tarsi, ochraceous and somewhat pitchy. As in the preceding species, the first three joints of the antennæ are strongly setose, and the anterior femora are armed beneath near apex with a prominent and robust spine. Long. 11—12 mm.

Hab. Kobé.

Hæmatoloecha rubescens, n. s. (Pl. XX., fig. 11).

Allied to *H. nigro-rufa*, Stål,* but differing in the following particulars:—The head is red, with the eyes black; the pronotum is not marked with black at the incisions; the scutellum is red; corium red; with a large black spot occupying clavus and adjacent part of corium, as in *H. nigro-rufa*, but with the apex also broadly black; legs red, anterior femora with a broad

* Plate XX., fig. 10.

obscure fuscous annulation at base, intermediate and posterior femora with a darker central annulation, tibiæ, excluding base, fuscous, tarsi ochraceous, the apices fuscous; head beneath and prosternum red; meso- and metasternums black, with the coxæ red; abdomen red, with broad transverse black fasciæ at the segmental incisures; rostrum red. The lateral carinæ of the scutellum are more raised, and the basal central excavation somewhat less broad than in Stål's species. Long., male and female, 12—13 mm.

Hab. Nagasaki.

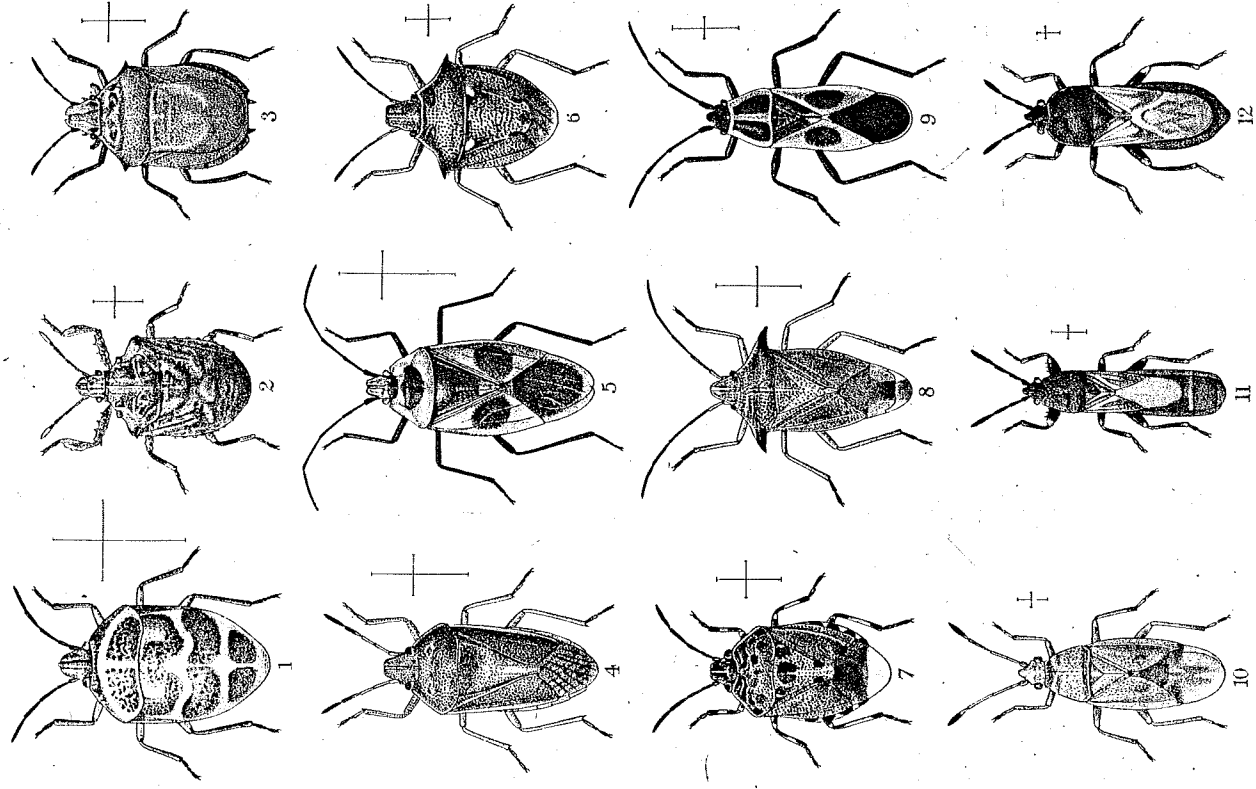
EXPLANATION OF PLATES.

PLATE XIX.

- FIG. 1. *Pœcilochroma lewisi*.
 2. *Neocazira confragosa*.
 3. *Scotinophora horvathi*.
 4. *Ænaria assimulans*.
 5. *Parastrachia fulgens*.
 6. *Stollia lewisi*.
 7. *Menida japonica*.
 8. *Clinocoris gramineus*.
 9. *Melanospilus elegans*.
 10. *Cymus avrescens*.
 11. *Ischnodemus obnubilus*.
 12. *Blissus bicoloripes*.

PLATE XX.

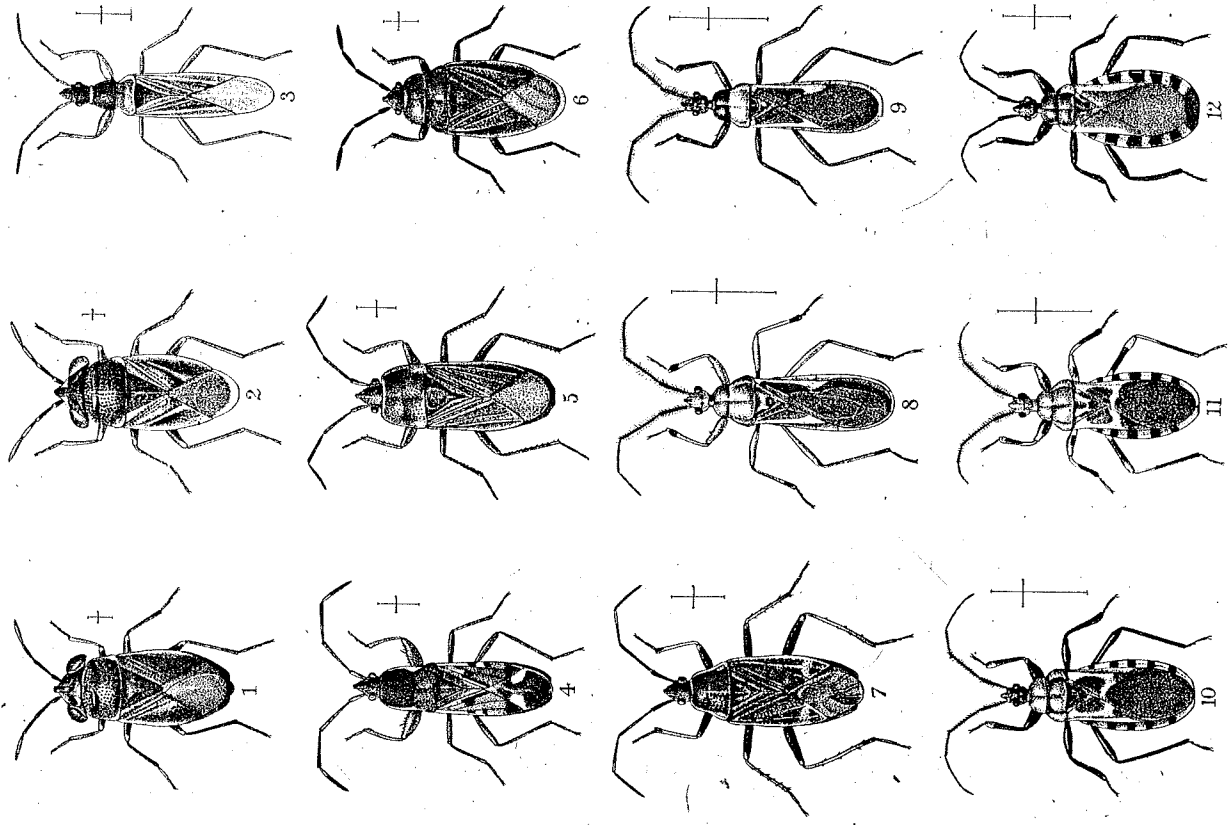
1. *Geocoris proteus*.
 2. " " var.
 3. *Pamera ejuncida*.
 4. *Paradieuches lewisi*.
 5. *Lampyrolæ membranæus*.
 6. *Drymus marginatus*.
 7. *Lethæus lewisi*.
 8. *Labidocoris splendens*.
 9. " *insignis*.
 10. *Hæmatoloecha nigro-rufa*, Stal.
 11. " *rubescens*.
 12. *Ectrychotes delibutus*.



W. Purkiss lith.

Heubert imp.

JAPANESE RHYNCHOTA.



W. Purkiss lith.

JAPANESE RHYNCHOTA

Hanhart imp