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NOTE OF THE EDITORS.

It may interest our readers to know some of the leading principles of the chief contributors to "Novitates Zoologicae," which are laid down in the following short notes. Most of these points of view and theories have so often been discussed, or are of such eminent practical usefulness, or else are merely postulates of logical reflection, that we think it unnecessary to dilate upon them.

1. The basis of truly scientific, systematic work is the knowledge of the species and their geographical distribution.

2. Therefore we ought to distinguish between the different forms, even if their differences are very "slight"—provided they are constant.

3. If very closely allied forms are connected by intermediate specimens (as is often the case in the countries where their areas meet or overlap) it is practically not advisable to admit them as distinct species, but they ought to be degraded to the rank of subspecies.

4. Island-forms, however slight may be their differences, will in most cases be more readily recognised as worthy of specific rank than similarly closely allied forms with a mainland distribution.

5. The initials of generic terms are written in Capitals, the specific names with small initials.

6. The author's name is put in brackets if it was originally connected with any other generic term than at present.

7. The term "variety," especially among entomologists, has been indiscriminately used to denote an individual variation within a species as well as climatic or geographical races. We therefore, to avoid all possible errors, have determined to discard the term "variety" altogether. To denote individual variations we shall, in this periodical, employ the word aberration, and for geographical forms, which cannot rank as full species, the term subspecies.

EDITORS.
NEW SPECIES OF THE GENUS SCYMNUS KUGEL.
FROM THE EAST AND NEW GUINEA.

(Pl. VIII., figs. 10—21.)

By DR. K. JORDAN.

WORKING out the coleopterous insects recently taken in the Indo- and
Austro-Malayan Archipelago by the well-known entomologist and excellent
collector William Doherty, of Cincinnati, U.S.A., I found a rather large
number of specimens of the genus Scymnus Kugel. As we know many species of
Scymnus from Ceylon and the southern and central parts of the Asiatic continent
described by Walker (Ann. Mag. N. H., 1859), Mulsant (Spec. Col. Tri. S. e., 1851,
and Oposr. Ent., 1853), Motschoulsky (Ent. Ent., 1858 and 1859, and Bull. Mus.,
1866), Crotch (Rev. Coccin., 1873), Weise (Hor. S. E. Ross., xxiv.), and as only
a very few species are described until to-day from Sumatra (Gorham, Nat. Leyd.
Mus., 1884, pp. 126—128), Java (Bohemann, Freg. Eng. Resa, 1859), Manila
(Bohemann, ibid.), it may prove useful to give the descriptions of those species
from the East in the Museum which are new, as far as I am aware.

The well-known specialist the Rev. S. A. Gorham, describing three Scymnus
from Sumatra, says (l. e., p. 127) : " Crotch (Cocc. Rev., p. 273) has proposed a genus
Anisoseymus for Sc. rufigus Fabr., which he says will be well represented in the
Malay Archipelago. But he has not described any species. I do not see that the
punctuation of any of the three species here described is unequal either in the size
of punctures or in the mode of its distribution."

I may add that I have not been able to find characters common to the species
of the East Indian Archipelago which I have before me, sufficient to justify the found-
ing of the genus Anisoseymus. Indeed, there are species with a very remarkable
"unequal" punctuation, as they have at the base of each elytron, besides the usual punctuation, a number of larger punctures with the exterior border more raised (which gives the punctures a semilunar appearance), forming one or two short rows not extending, in front, to the basal margin, and running nearly to the middle of the elytron (fig. 11); but these species (Sc. thoracicalis, celebensis, wiesel, etc.) are more closely allied to European ones than other species without that "unequal" punctuation (Sc. aberrans, dhoerti, etc.). Moreover, as some species have only one row of punctures (for example, Sc. applciatus), others slight traces of rows only, while others again—although closely allied with regard to other important characters—have no traces of rows. I believe it certain that the existence or absence of rows of punctures is merely a specific character, and that there is no need to put those species into different genera.

The punctures of the metasternum * of most of the species described in the following paper are of the same semilunar shape as the larger punctures on the elytra, and their arrangement may give us specific characters rather easily to be seen. Another very important character of the species is the shape of the "coxal line" engraved at each side of the first abdominal segment. The coxal lines, being more or less semicircular (figs. 19 and 21) in many species, have in Sc. aberrans and its nearest allies (Sc. dhoerti, biimpressus, conformis, sternalis, varians) their exterior part close to or confluent with the hind margin of the segment (figs. 17 and 18), a character upon which Mulsant founded his sub-genus Diomus (Spec. Col. Tri. Sc., 1851, p. 351), and I am not quite sure whether Diomus may be only a section of Scymnus or a different genus. In studying Sc. aberrans and its allies, I found that their antennae proved to be a little longer than they usually are in European and Asiatic true Scymnus, as chiefly their third joint is rather slender and long (figs. 12, 13, and 14); the second joint, being narrowed at the base, is very distinctly separated from the first; the latter is much slenderer in Sc. aberrans and its allies, than in some Brazilian Diomus I have examined with regard to this question. The last antennary joint is rather broad, and strongly truncate at the apex, especially in Sc. aberrans and varians.

The mandibles have the tip so very slightly bifid in Sc. dhoerti (fig. 15), that, looking at the broad side, we may scarcely see the bifid character: the bifurcation is stronger and more evident in Sc. varians (fig. 16), but not at all so strong as in Brazilian Diomus and European Scymnus. Moreover again, Sc. aberrans and its allies have the tip of the posterior episterna (figs. 17 and 18) broader and more straightly truncate than is the case in true Scymnus.

Most of the Eastern species I have seen are very convex, some nearly hemispherical (cf. Gorham, l. c.); but that is not a character common to all of them, as for example Sc. thomasi is feebly convex and rather oblong.

I. Coxal lines reaching the hind margin of the segment, with their exterior portion parallel to the hind margin, or confluent with it.

A. Elytra black, with the apex testaceous.

a. Prothorax testaceous.

a'. Elytra without impression at each side of the scutellum, size more than $2\frac{3}{4}$ mm. : Sc. aberrans sp. nov.

b'. Elytra with a slight impression at each side of the scutellum, size about $1\frac{1}{2}$ mm. : Sc. biimpressus sp. nov.

* The punctuation of the metasternum in figs. 17 to 21 is not quite exact.
b. Prothorax black, at least in front of the scutellum.
c'. Head black: *Sc. sternalis* sp. nov.
d'. Head testaceous.

\[a''\] Punctuation of elytra not so close as that of the prothorax; size more than 2 mm.: *Sc. varians* sp. nov.

\[b''\] Punctuation of elytra quite as close as that of the prothorax; size 1 1/2 mm.: *Sc. confusus* sp. nov.

B. Elytra with fulvous bands, or at least with two fulvous spots: *Sc. dohertyi* sp. nov.

11. Coxal lines reaching the hind margin of the segment or not, with the exterior portion more or less running towards the base of the segment.

C. Coxal lines reaching the hind margin of the segment.

c. Exterior portion of the coxal lines flexuose, not reaching the base of the segment: *Sc. flexuoseus* sp. nov.

d. Exterior portion of the coxal lines nearly straight, reaching the base of the segment.

c'. Epiplura of the metasternum pitchy; size about 2 1/2 mm.: *Sc. perakensis* sp. nov.

d'. Epiplura of the metasternum black; size about 2 1/4 mm.: *Sc. granis* sp. nov.

D. Coxal lines not reaching the hind margin of the segment, recurring towards the base in about 3/4 the length of the segment.

c. Prothorax uniformly testaceous, rufous, or pitchy.

g'. Elytra without short rows of punctures.

\[c''\] Base and apex of elytra rufous: *Sc. socius* sp. nov.

g''. Elytra black, with the apex only rufous.

\[d''\] Coxal lines incomplete, with the exterior portion scarcely arcuate.

\[a^{d}\] A small space at the base common to both elytra smooth, legs pale ochreons: *Sc. brevis* sp. nov.

b'. Elytra without a smooth space at the base, legs rufo-testaceous: *Sc. hemorrhous* sp. nov.

\[b''\] Coxal lines complete: *Sc. conformis* sp. nov.

c'. Elytra and prothorax brown: *Sc. hemmecus* sp. nov.

\[b''\] Each elytron, in front, with one or two short rows of larger punctures.

\[f''\] Rows very irregular and indistinct; size more than 2 1/2 mm.: *Sc. grossus* sp. nov.

g''. Interior row only distinct, the exterior one obsolete: *Sc. dubius* sp. nov.

\[b''\] With two distinct rows.

\[c''\] Elytra black, with the apex rufous: *Sc. thoracicalis* sp. nov.

\[d''\] Elytra uniformly pitchy brown: *Sc. celebensis* sp. nov.

f. Prothorax bicolorons, with a black or pitchy-black patch in front of the scutellum, or nearly quite black.

\[i''\] Elytra without short rows of punctures.

\[i''\] Elytra testaceous, with the suture brown: *Sc. chinensis* sp. nov.

\[k''\] Elytra black, with the apex rufo-testaceous.

\[e''\] Strongly convex, elytra minutely punctuated: *Sc. oralis* sp. nov.
f'''. Slightly convex, elytra strongly punctured: \emph{Sc. thomasi} sp. nov.

E. Each elytron with one distinct row of larger punctures at the base.

\( l'' \). Coxal lines with their exterior part abruptly deconvex: \emph{Sc. uniplicatus} sp. nov.

\( n'' \). Coxal lines semicircular: \emph{Sc. rubrocentralis} sp. nov.

\( l' \). Each elytron, in front, with two distinct rows of larger punctures.

\( n' \). Elytra very finely corrugate, scarcely punctuated; size about \( 2\frac{1}{4} \) mm.: \emph{Sc. normequinac} sp. nov.

\( o'' \). Elytra distinctly and rather densely punctured.

\( q'' \). Prothorax black, with the anterior margin and the fore-angles narrowly rufous: \emph{Sc. gibbosus} sp. nov.

\( h'' \). Prothorax rufous, with a large black macula in front of the scutellum: \emph{Sc. wiesi} sp. nov.

1. \textit{Scymnus aberrans} sp. nov.

(Pl. VIII., figs. 13 and 16.)


Long. \( 2\frac{1}{4} \) mm., elytr. \( 2\frac{1}{3} \), lat. 2.

Black, with the head, prothorax, tip (about \( \frac{1}{12} \) of the length) and epipleura of elytra, abdomen and legs of a buff colour, with the antennae and legs very pale; the meso- and metasternum dark brown; the basal margin of the prothorax in front of the scutellum very narrowly, and the first segment of the abdomen slightly pitchy. Ovate, with the sides of the elytra somewhat sinuate, the outline slightly rounded at the sides, and strongly rounded in front and near the apex of the elytra. The prothorax finely and rather sparingly punctuated, with the fore margin covering about half the eyes, with the fore angles depressed and rounded; the sides feebly rounded in front, nearly straight towards the posterior angles; with the base sinuate at each side and produced in front of the scutellum. The punctuation of the elytra somewhat stronger than that of the prothorax, but not dense, as the interstices are much larger than the punctures. Metasternum with the sides densely and rather coarsely, with the middle more sparsely and finely punctured, and the very centre of the middle smooth; besides the punctuation there is a number of irregular transverse and exceedingly fine ridges on the metasternum. Punctuation of the abdomen fine and sparse, scarcely denser at the sides. The coxal lines have the interior portion arenate and the exterior one confluent with the hind margin of the segment.

\textit{Hab.} Humboldt Bay, New Guinea (W. Doherty, 1892).
2. Scymnus biimpressus. sp. nov.


Long. 1½ mm., elytr. 1¼, lat. 1½.

Black, short ovate, rather convex, covered with a greyish pubescence which has a faint yellowish tint on the testaceous parts of the body. The head, prothorax, tip of the elytra (very narrowly), legs, and abdomen testaceus, with the first segment of the abdomen pitchy; the meso- and metasternum brownish black. The prothorax rather finely and not very densely punctuated, with the fore angles rounded and scarcely prominent. The elytra have the punctuation somewhat stronger and denser than the prothorax; each elytron has a small transverse impression at the side of the scutellum. The metasternum convex, with the middle finely and very sparsely, and with the sides a little more coarsely and closely punctuated, besides which there are some very fine transverse wrinkles. The abdomen has the punctuation sparse on the first segment, denser on the remainder. The coxal lines have the interior portion curved, the exterior one confluent with the hind margin of the segment.


3. Scymnus sternalis sp. nov.


Long. 2 mm., elytr. 1½, lat. 1½.

Black, moderately convex, sparingly clothed with a short greyish pubescence. Mouth, antennae, tibiae, and tarsi luteus; the anterior margin of the prothorax and the extreme tip of the elytra, the femora, and abdomen (except the first segment, which is black) rufo-testaceus, somewhat pitchy. The posterior margin of the prothorax sinuate at each side and widened in front of the scutellum. The punctuation of the prothorax is distinctly coarser than that of the elytra, and all punctures are but slightly impressed. The elytra have no rows of punctures. Metasternum with the middle convex, not impressed, and rather coarsely punctuated, with some obsolete transverse wrinkles. The first segment of the abdomen also with its middle a little convex, nearly as coarsely punctuated as the metasternum;
the three last segments more densely and finely punctured. Coxal lines reaching the hind margin of the segment, with their interior portion areate, their exterior portion straight, parallel to the hind margin of the segment, and abbreviated.

_Hab._ Malay Peninsula.

4. Scy~nus varian~s sp. nov.

_(Pl. VIII., figs. 14, 16, 17.)_

_Sc. niger, parum longe pubescens, breviter oblongus, modice convexus; 3 capite, prothoraece (macula basali semicirculare nigra excepta), prosternum, abdomine (segmento primo piceo excepto) pedibusque testaceis; 2 capite, prothoracis angulis antieis et margine angusto antico, femoribus apicibus, tibiais, variae abdominique (basi picea excepta) testaceis. Supra dense et fortiter punctatns; prothorax ad angulos antieis rotundatos depressus, lateribus paulo rotundatus, basi utrinque sinuata. Elytra lateribus in medio vix rotundata, tuberculis humerorum prominulis et punctatis. Metasternum ad latera parum fortiter dense, in medio sparsim subtiliter punctatum, spatio angustissimo mediano ante marginem posticum sito laevi. Abdomen punctis parum grossis dense instructum. Lineae coxales inter arcuatae, extus cum margine posteriore segmenti confluentes.

Long. 2.5 mm., elytr. 1.7, lat. 1.4.

Black, somewhat oblong, moderately convex, covered with a rather long greyish pubescence. The _male_ has the head, prothorax, fore breast, abdomen, and legs testaceos, with a large black and semicircular macula at the base of the prothorax in front of the scutellum, and with the first segment of the abdomen a little pitchy; the _female_ has the head, anterior margin and fore angles of the prothorax, the abdomen, coxae, tip of the femora, all the tibiae and tarsi, pale testaceos, with the base of the abdomen pitchy. The fore angles of the prothorax somewhat depressed and rounded, the sides slightly but distinctly rounded; the base sinuate at each side, the punctuation very dense and rather coarse. The elytra have the punctures nearly as strong, but not so close, as the prothorax; the humeral tubercles prominent and punctuated. The metasternum is a little depressed in the middle, and has an exceedingly fine median line; its sides are strongly, the middle rather sparingly and finely punctuated, with a small and very narrow space in front of the hind margin smooth. The punctuation of the abdomen is coarse and close. The coxal lines have the interior portion curved, the exterior one confluent with the hind margin of the segment.

_Hab._ Humboldt Bay, New Guinea (W. Doherty, 1892).

5. Scy~nus confluen~s sp. nov.

_Sc. niger, griseo-pubescent, breviter ovatus, paulo convexus; capite, prothoracis angulis antieis, pedibus abdominique rufo-testaceis, femoribus et abdominis basi piceis. Prothorax elytraque densiter grasse punctata; prothoracis angulis antieis depressis subrotundatis, basi bisinuata. Metasternum lateribus punctis grossis, medio subtilioribus instructum; abdomen fortiter punctatum. Lineae coxales inter arcuatae, extus cum margine postico confluentes.

Long. 1.7 mm., elytr. 1.4, lat. 1.4.

This form resembles very much the female of the foregoing species (Sc. varian~s), but as it differs in being much smaller, shorter, and less convex, in the
punctuation of the elytra being quite as strong and close as that of the prothorax, it may be considered a distinct species.

*Hab.* Humboldt Bay, New Guinea (W. Doherty).

6. *Scymnus dohertyi* sp. nov.

(Pl. VIII., figs. 12, 15, and 18.)

*Sc.* convexus, brevior ovatus, cinereo-pubescent, testaceus; elytris nigris, apice et fasciis duabus transversis, lateraliiter abbreviatis, in sutura interruptis, testaceis. Supra dense et minunte, infra grosse (metasterni medio minunte) punctatiss. Lineae coxales intus arcuatae, marginem segmenti posteriorum attingentes, extus margini posteriori parallelae abbreviatae.

Elytron color variat:

(a) Elytris nigris, apice et fasciis duabus transversis lateraliiter abbreviatis, in sutura interruptis testaceis (form. typ.).
(b) Elytris nigris, singulo maculis duabus rufo, apice testaceo.
(c) Elytris testaceis, basi et fasciis anto-apicali nigris; in medio fascia rufo-picea, ad suturam interrupta, indistincta aut obsoleta notatiss.
(d) Elytris nigris, fasciis duabus extus arenatim connectis apiceque testaceis.

Long. 1\(\frac{1}{2}\) mm., elytr. 1\(\frac{3}{4}\), lat. 1\(\frac{1}{4}\).

Rather strongly convex, short ovate, clothed with a short greyish pubescence. Testaceous, base of the abdomen somewhat pitchy; densely and finely punctured above; body beneath rather coarsely punctatiss, except the middle of the metasternum, where the punctures are fine. Coxal lines reaching the posterior margin of the segment; their interior part evenly curved, the exterior portion parallel to the hind margin and abbreviated. The colour of the elytra varying as described above.

*Hab.* Tenimber Is. (W. Doherty).

7. *Scymnus flexuosus* sp. nov.

(Pl. VIII., fig. 19.)

*Sc.* ater, ovatus, subconvexus, dense pubescent, capite, prothorace, elytron apice, abdomine pedibusque testaceis. Prothorax postice non latior quam antice; lateribus parum rotundatis; angulis anticis productis fere acutis, posticis rotundatis; basi utrine sinuata, versus scutellum dilatato-rotundata; dense punctatiss. Elytra prothoracei fortius punctata; singulum antice seriebus duabus punctorum grossorum instructum. Metasternum lateribus dense et grosse, medio minus dense sed multo grossius et parum seriatim punctatum; spatio parvo mediano laevi. Abdominis segmentum primum caeteris grossius, sed minus dense punctatum. Lineae coxales marginem posteriorum segmenti attingentes, parte interiore leviter arenata, parte mediana margini parallela, parte exteriore declivi, flexuosa, abbreviata.

Long. 2\(\frac{1}{2}\) mm., elytr. 1\(\frac{3}{4}\), lat. 1\(\frac{1}{4}\).

Black, ovate, densely covered with a greyish pubescence. Head, prothorax, apex of the elytra, abdomen, and legs testaceos, with a slight tint of pitch-colour. The prothorax is rather finely punctatiss, and has the sides a little rounded and not dilated towards the base; the anterior angles are prominent and somewhat acute, the posterior ones rounded; the base sinuate at each side, and produced and rounded in front of the scutellum. Elytra more strongly punctatiss, each with two rows of
larger punctures near the suture, being distinctly divergent in front, the interior one nearly extending to the scutellum. Metasternum with the sides very densely, the middle less densely but more coarsely punctuated, with the punctures forming irregular rows; a small triangular space in the middle of the metasternum smooth. Abdomen densely, the first segment more coarsely and less densely punctuated. The coxal lines extending to the hind margin of the segment, first slightly curved, then parallel to the hind margin, and lastly strongly declivous and flexnose, abbreviated, and reaching neither the outer margin nor the base of the segment.

**Hab.** Perak.

The shape of the prothorax and coxal lines is very remarkable in this species, which, as regards its colour, is closely allied to *Sc. thoracalis* sp. nov. (described below).

8. **Scymnus perakensis** sp. nov.

*Sc. niger*, breviter oblongus, subconvexus, cinereo-pubescens; capite, prothorace, elytrum apice, abdomen pedibusque testaceis; metasterni lateribus anguste piceis. Prothorax minute, elytra parum fortiter punctata, singulam ad basim striis duabus punctorum grossorum instructum. Metasternum medio spatio ovali laevi, vix impresso; punctis grossis instructum, fere seriatim punctatum. Abdomen dense et parum grosse punctatum. Lineae coxales compleiae, marginem posteriorem segmenti attingentes, partibus medianis margini paralleli, deinde segmenti angulos antiores petentes.

Long. 2 3/2 mm., elytr. 1 3/4, lat. 1 1/2.

Black, densely covered with a rather long greyish pubescence; short oblong, rather convex. The head, prothorax, apex of elytra (about a tenth of the length of the elytra), abdomen, and legs testaceans, epipleura of the metasternum pitchy-colour. Prothorax produced in front of the scutellum, finely punctuated; the punctures of the elytra somewhat stronger. Each elytron has two short rows of larger punctures at the base and a distinct trace of a third one. Metasternum very coarsely punctured, with the punctures forming rows, which are curved and more or less longitudinal; a space in the middle of the metasternum smooth, sharply limited at the sides by the inner row of punctures. Abdomen densely and rather strongly punctuated. Coxal lines extending to the hind margin of the segment, first arcuate, then parallel to the margin, and lastly strongly declivous, running to the fore angles of the segment.

**Hab.** Perak.

There is one specimen which has the apex of the elytra more broadly testaceans, and this colour ill-defined; the first segment of its abdomen is pitchy.

Closely allied in colour to *Sc. flexuosus* sp. nov. and *Sc. thoracalis* sp. nov., from which it differs in the shape of the coxal lines; besides this character, it may be at once distinguished from both species by the much more oblong shape of the body, and by the punctuation of the elytra and metasternum.

9. **Scymnus grandis** sp. nov.

(Pl. VIII., fig. 20.)

*Sc. niger*, griseo-pubescens, ovalis, convexus; capite, prothorace, elytrum apice, abdomen pedibusque rufo-testaceis; abdominis segmenti primo medio piceo. Prothorax punctis minutis instructus; elytra sparsatim punctata, singulam ad

Long. $2\frac{3}{4}$ mm., elytr. $2\frac{1}{4}$, lat. $1\frac{4}{4}$

Black, covered with a greyish pubescence, short ovate, rather convex. Head, prothorax, apex of elytra (about $\frac{1}{3}$ of the length), abdomen, and legs rufo-testacei: the middle of the first segment of the abdomen blackish pitch-colour. Prothorax finely and densely punctuated all over, with the fore angles prominent and their tips somewhat rounded, and with the base sinuate at each side. Elytra with the middle sparingly and the sides more densely punctured, the punctures being small and circular; each elytron has two rows of larger punctures and traces of a third one: the rows are rather long and, in front, somewhat parallel to the suture; an oblong space at the suture between the inner rows, common to both elytra, nearly smooth; the apex not covering the last segment of the abdomen, and having the sutural angles rounded. The punctuation of the metasternum strong and coarse, and very dense at the sides; the punctures in the middle of the metasternum are very large, and form irregular rows: a space in the middle smooth and triangular. The abdomen is also densely punctuated, but not quite so coarsely as the metasternum, and the middle of the first segment has the punctures a little less dense. The coxal lines are complete, reaching the hind margin of the segment, and have the interior portion slightly curved and the exterior one nearly straight and declivious.

_Hab._ Martapura, S.E. Borneo (W. Doherty, 1891).

10. _Scymnus socinus_ sp. nov.

_(Pl. VIII., fig. 21.)_

_Sc._ niger, pubescens, breviter ovatus, convexus; capite, prothorace, elytron apice, mesosterno, abdominaline (segmento primo piceo excepto) pedibusque luteis, elytron basi angusta et scutello ferrugineisque. Supra minute, elytra grossius punctata; infra parnum grosse et dense punctatus; metasternum medio linea minuttissime impressa instructum. Lineae coxales semicirculares, segmenti marginem posteriorum non attingentes.

Long. $1\frac{3}{4}$ mm., elytr. $1\frac{1}{4}$, lat. $1\frac{4}{4}$

This species is allied to _Sc. thoeiicratis_, from which it may be easily distinguished by the elytra having no rows of punctures and being narrowly Rufous at the base, and by the coxal lines having their outer portion more curved.

_Hab._ Martapura, S.E. Borneo (W. Doherty, 1891).

11. _Scymnus brevis_ sp. nov.

_Sc._ luteus; elytris (apice luteo excepto), segmento primo abdominali meta-
sternoque nigris; griseo-pubescent, breviter convexus. Prothorax postice ante-
scutellum leviter productus, dense et sat minite, elytra fortius punctata, haec antice
spatio parvo laevi saturei instructa. Infra parnum crasse, in metasterni medio vix
impresso fortius punctatus. Lineae coxales intus arcuatae, segmenti apicem non
attingentes, extus oblique, abbreviatae.
Long. 2\(\frac{1}{2}\) mm., elytr. 1\(\frac{1}{2}\), lat. 1\(\frac{1}{2}\).

Of a buff colour, with the elytra (except the lateous apical fifth), metasternum, and the first abdominal segment black: scutellum and posterior episterna pitchy black. Short ovate, strongly convex, covered with a greyish pubescence. Upper surface punctured all over, with the punctures of the elytra somewhat coarse; a small space at the base, common to both elytra, is impunctate. Elytra without rows of punctures. Metasternum coarsely punctured, convex in the middle, and scarcely with a trace of a medium impression. First segment of the abdomen also somewhat convex; abdomen not so coarsely punctured as the metasternum. The coxal lines have a very remarkable form: they do not reach the apex of the segment and are evenly curved interiorly: their exterior part is first nearly straight and parallel to the hind margin, then arched and abbreviated, ending farther from the base than from the exterior margin of the segment.

_Hab._ Borneo.

12. _Scymnus haemorrhous_ sp. nov.


Long. 2 mm., elytr. 1\(\frac{1}{2}\), lat. 1\(\frac{1}{2}\).

Black, with the head, prothorax, tip of elytra (about \(\frac{1}{2}\) the length), abdomen, and legs rufo-testaceos: the first segment of the abdomen and the base of the second black. Ovate, rather convex, covered with a short greyish pubescence. The prothorax has the fore angles a little prominent and rather sharp, and is very slightly narrowed behind, with the sides nearly straight, the base produced in front of the scutellum and sinuate at each side: densely covered all over with rather fine punctures. The elytra are more coarsely punctured, and have no rows of punctures. The metasternum is convex, devoid of a median line or impression, densely punctured at the sides, the punctuation stronger and less dense in the middle before the hind margin, and much finer towards the mesosternum. Abdomen densely punctuated, with the punctures sparser in the middle of the first segment. Coxal lines incomplete, not reaching the hind margin of the segment, with the interior portion arcuate, the exterior one oblique and not extending to the lateral margin of the segment.

_Hab._ Martapura, S.E. Borneo (W. Doherty, 1891).

This species agrees with the preceding in the shape of the coxal lines; it has, however, a much more oblong outline, a finer punctuation on the elytra, and the colour of its head, prothorax, legs, etc., is much more rufous, and the scutellum and sides of the metasternum are black.

_Sc._ thoracicalis, described below, is nearly of the same colour, but has a shorter shape, complete coxal lines, and rows of punctures on the elytra.
13. Scymnus conformis sp. nov.


Long. 2 mm., elytr. 1½, lat. 1¼.

Black, rather convex, short ovate, covered with a greyish pubescence. Head, prothorax, tip of the elytra (about ⅓ the length), abdomen, and legs testaceous; the first segment of the abdomen pitchy brown, with the middle more blackish. The prothorax rather finely and not very densely punctated, its fore angles slightly prominent and rounded, the base inimiate at each side. Elytra a little more coarsely punctuated than the prothorax, the punctures rather sparse at the suture, denser towards the sides; there are no rows of punctures, and there is no smooth space at the base. The metasternum has the sides densely and strongly, the middle more sparingly punctuated; a very narrow space in the centre before the hind margin smooth. The punctures of the abdomen dense and rather fine, sparse in the middle of the first segment. The coxal lines are complete, forming a rather flattened arc, extending only to two-thirds of the length of the segment.

Hab. Martapura, S.E. Borneo (W. Doherty, 1891).

As regards the punctuation of the elytra and the colour, this species is allied to Sc. haemorrhous, from which it may be at once distinguished by its shape being evidently shorter, the coxal lines complete, the punctures of the metasternum not finer towards the mesosternum than behind, etc. It differs from Sc. brevis in the punctuation of the elytra and metasternum, in the shape of the coxal lines, the colour of the scutellum and metasternum; from Sc. thoracicus in the elytra having no rows of punctures, etc.


(Not. Leyd. Mus., 1885, p. 125.)

There are in the collection made by William Doherty in the Tenimber Islands three specimens which agree with the description of Sc. brunneus Gorh. from Sumatra. The coxal lines, not mentioned in the description, are complete, not reaching the hind margin of the segment, with the exterior portion less curved and more declivous than the interior one.

15. Scymnus grossus sp. nov.

Sc. niger, ovatus, convexus, densiter pubescens : capite, prothorace, elytrorum apice, abdomen pedibusque rufo-testaceis, mesosterno et lateribus metasterni brunneo-piceis. Prothorax dense sat minute, elytra subtiliter, ad basim fortius et minus dense punctata, anticis spatio oblongo naturali laevi instructa, hoc spatio punctis grossis series irregularares formantibus cineto; elytrorum apicibus rotundatis, abdominis segmentum ultimum non tegentibus. Metasternum dense fortiter
punctatum, spatio mediano subrotundato impunctato, linea mediana indistincta, instructum; abdomen dense fortiler punctatum. Lineae coxales semicirculares, fere complete, margine posticum segmenti hand attingentes.

Long. 2† mm., elytr. 2†, lat. 2.

Black, with the head, prothorax, tip of the elytra (about † the length), abdomen, and legs rufous, with the mesosternum and sides of the metasternum pitchy brown. Ovate, rather short, upper and under surface covered with a long pile. Prothorax densely but not coarsely punctuated; its fore angles prominent, with their tip rounded; the base produced in front of the scutellum and sinuate at each side. Elytra rather finely (at the base coarsely) and not densely punctuated, with a number of larger punctures which are arranged in quite irregular basal rows, extending in front to the suture and surrounding a smooth suttural space. The last segment of the abdomen is not covered by the elytra, as the apex of each elytron is rather strongly rounded. Metasternum densely and coarsely punctured, with a nearly rounded smooth space in the middle. Abdomen coarsely and very densely punctured. Coxal lines not reaching the hind margin of the segment, almost semicircular, but externally not quite extending to the base.

Hab. Martapura, S.E. Borneo (W. Doherty, 1894).

Differs from Sc. grandis sp. nov. in the coarser punctuation of prothorax and elytra, in the elytra having only quite irregular rows of punctures, in the metasternum having a rounded smooth space in the middle and being pitchy brown at the sides, in the semicircular lines not reaching the apical margin of the segment, and in some minor characters.

There is one specimen from Martapura which is smaller, and has the whole metasternum pitchy brown. But as I cannot find other characters in which it differs from Sc. grossus, it may be considered to be only a small specimen of this species with the colour not quite developed.

16. Scymnus dubius sp. nov.

Sc. thoracicalis sp. nov. affinis; differt: major, forma oblongiore; singulo elytro una serie distincta punctorum grossorum instructo, secunda obsoluta; metasterno medio linea, non spatio triangulare laevi; elytrum apicibus minus late testaceis.

Long. 2 mm., elytr. 1½, lat. 1½.

This species is closely allied to Sc. thoracicalis sp. nov., both in punctuation of the upperside and in colour. It is distinguished by the larger size, the more oblong shape, and by the elytra having only one distinct row of punctures; moreover, the metasternum of Sc. dubius has nearly the whole middle punctuated, having only a very narrow and somewhat impressed smooth median line. As the exterior part of the coxal lines is less declivous, the lines seem to be less strongly curved. The apex of the elytra is not so broadly testaceous as in Sc. thoracicalis sp. nov.

Hab. Perak.

17. Scymnus thoracicalis sp. nov.

Sc. niger, cinereo-pubescent, brevior ovalis, fortiler convexus; capite, prothorace, elytrorum apice, abdomen (segmentis primo piceo-nigro, secundo piceo exceptis) pedibusque intereo-flavus. Prothorax basi ante scutellum rotundato-dilatatus. Supra minute punctatus, singulo elytro ad basim duabus seriebus punctorum crassorum instructo; infra dense punctatus; metasternum subconvexus,
medio fortiter et oblique seriatis punctatatis, spatio mediano parvo triangulare laevi. Lineae coxales completae, tere semicircularares, marginem posticum segmenti non attingentes.

Long. 1\(\frac{1}{4}\) mm., elytr. 1\(\frac{1}{2}\), lat. 1\(\frac{1}{4}\).

Black, rather sparingly covered with a short greyish pubescence; ovate and strongly convex. Head, prothorax, apex of elytra (not quite \(\frac{1}{2}\) the length), legs, and abdomen pale yellow; the first abdominal segment blackish, the second pitchy brown. Scutellum pitch-black. Upper surface finely punctured. Elytra with four short basal rows of punctures near the suture, two on each elytron; the rows are oblique, a little arched and rather strongly convergent in front; the sutural space between the two inner rows impunctate. Body beneath somewhat more strongly punctured than above, with the punctures very coarse in the middle of the metasternum, and arranged in oblique rows; metasternum without a median impression, but with a triangular smooth space in the middle. Coxal lines almost semicircular, not reaching the posterior margin of the segment, with the exterior part more declivitous than the inner one and rather straight.

_Hab._ Borneo.

18. _Scymnus chinensis_ sp. nov.


Long. 1\(\frac{1}{2}\) mm., elytr. 1\(\frac{1}{2}\), lat. 1\(\frac{1}{4}\).

Rufous, covered with a short yellowish grey pubescence; slightly convex, ovate. Prothorax strongly punctured all over, brownish, with the sides broadly and the anterior margin very narrowly rufous; the base simata at each side and produced in front of the scutellum. Elytra rufous, with a long and narrow triangular ill-defined marking on the suture of a brown colour; coarsely and a little more strongly punctured throughout than the prothorax, with the punctures confluent here and there, which gives the elytra a feebly rugose appearance; there are no rows of punctures. Metasternum brown, coarsely and thickly punctured, and slightly rugose, especially at the sides; the middle longitudinally impressed, but not smooth. Abdomen strongly and closely punctured, with the first segment brown and the second pale brown. Coxal lines complete, not reaching the hind margin of the segment, strongly and rather uniformly arched.

_Hab._ "China" (without exact locality).

It differs from the very closely allied European _Sc._ _suturalis_ (Thunb.) chiefly in the shorter shape, the paler colour, and in the punctuation of the middle of the metasternum being very much closer and coarser.

19. _Scymnus celebensis_ sp. nov.

_Sc._ obscure rufus, breviter ovatus, convexus, sat longe griseo-pubescent; pedibus anticens et intermediis rufis, posticis brunneo-pieciis, omnibus tarsis ruis. Supra sat sparsim et subtiliter punctatis; singulum elytrum basiliter juxta suturam duabus seriebus punctorum grossorum antice suturam approximatis instructum.
Metasternum medio fortissime dense punctatum, spatio mediano triangulare laevi. Lineae coxales marginem posticum segmenti non attingentes, semicircularares.

Long. 2 1/2 mm., elytr. 1 1/2, lat. 1 1/2.

Of a deep tawny colour, clothed with a rather long pile; strongly convex, not very densely and almost finely punctured above. Each elytron with two rows of larger punctures at the base; the inner rows of both elytra limiting a nearly smooth sutural space common to both elytra. Metasternum densely and, in the middle, very coarsely punctured, with a small and somewhat triangular median space before the hind margin smooth. Segments of the abdomen narrowly bordered with pale pitchy brown. Fore and intermediate legs rufous, speckled with pitch-colour; hind legs pitchy brown; all tarsi rufous. Coxal lines not reaching the hind margin of the segment, almost semicircular, but exteriorly not quite extending to the base of the segment.

_Hab._ Celebes (W. Doherty).

20. _Scymnus oralis_ sp. nov.

_Sc._ niger, densiter cinereo-pubescent, ovalis, foriiter convexus; ore, antennis, prothoracis angulis anticus et margine anteriore angustissimo pedibusque rufotestaceis; abdomen piceo, basi nigro-piceo. Supra minutissime, infra metasternae lateribus grosse, medio et abdomen minus grosse, punctatus. Lineae coxales complete, semicircularares, marginem posteriorum segmenti non attingentes.

Long. 2 1/2 mm., elytr. 1 1/2, lat. 1 1/2.

Black, strongly convex, ovate, clothed with a dense and rather long greyish pubescence. Antennae, mouth, fore margin of the prothorax (narrowly) and its anterior angles, and the legs rufotestaceae; fore legs paler than the other ones; the base of the abdomen pitchy black, the three last segments rufous. Upper surface with a very fine punctuation; the elytra without short rows of punctures, but at the base with a small and nearly smooth space common to both elytra (as in _Sc._ brevis). Body beneath, chiefly the prosternum and the sides of the metasternum, rather strongly and coarsely punctuated; the middle of the latter and the first segment of the abdomen have the punctures sparser and finer; a slight depression in the middle of the metasternum before the hind margin smooth. Coxal lines complete, semicircular, not reaching the hind margin of the segment.

_Hab._ Tenimber (W. Doherty).

21. _Scymnus thomasi_ sp. nov.

_Sc._ piceo-niger, ferre niger, longe pubescens, paulo convexus, oblongus; ore, prothoracis margine antico et lateribus, elytrorum et abdomenis apicibus pedibusque piceo-testaceis; antennis, tibis tarsisque testaceis. Caput et prothorax sparsatum et minute punctati; prothorax postice parum angustatus; angulis posticis rotundatis; basi ante scutellum leviter dilatata. Elytra prothorace forius punctata, praeterea punctis grossis instructa. Metasternum lateribus grosse, medio leviter et minus dense punctatum, linea mediana tenuissime impressa. Abdomen dense punctatum; lineae coxales semicircularares, marginem posticum segmenti non attingentes.

Long. 2 mm., elytr. 1 1/2, lat. 1 1/2.

Dark pitchy black, covered with a rather long pubescence, oblong, slightly convex. The mouth, prothorax (except a very large macula in front of the scutellum), apex of the elytra (ill-defined), last segment of the abdomen, and legs
pale pitchy brown; tibiae, tarsi, and antennae almost luteous. The head as finely and sparsely punctuated as the prothorax; the latter, having the posterior angles strongly rounded, seems to be narrowed posteriorly; its base is slightly dilated in the middle. The elytra more strongly punctuated than the prothorax, without short rows of punctures. Metasternum with the sides coarsely and the middle finely punctuated; a very fine median line slightly impressed. Abdomen densely punctuated; coxal lines semicircular, complete, not reaching the hind margin of the segment.

_Hab._ Nias (J. W. Thomas).

22. _Scymnus uniplicatus_ sp. nov.

_Sc._ niger, infra piceo-niger; breviter ovatus; cinereo-pubescens; capite, prothoracis margine antico et lateribus tenuiter, abdomine (basi excepta) fumorumibusque rufo-testaceis; ore, antennis, tibis tarsisque luteis. Prothorax angulis anticus fortiter rotundatis, basi medio producta, utrinque similata. Supra dense parum rugose punctatus, elytris singulis basaliter breviter unistriato-punctatis, lutea stria obliqua; spatio suturali inter strias sito impunctato. Metasternum medio parum impressum, fortiter punctatum, punctis forma sat transversa. Abdomen segmentis primo et secundo medio sparsim, lateribus dense fortiter punctatis. Lineae coxales marginem posteriorem segmenti non attingentes, brun oblique arcuatæ, extus subito declines et leviter impressae.

Long. 1\(\frac{3}{4}\) mm., elytr. 1\(\frac{1}{2}\), lat. 1\(\frac{1}{4}\).

Black, covered with a greyish pubescence; under surface dark blackish brown; last segments of the abdomen, femora, head, narrow fore and outer margins of the prothorax, pale rufous; mouth, antennae, tibiae, and tarsi of a buff colour; hind femora a little darker than the others. Sides of the prothorax almost straight; fore angles rather strongly rounded, posterior ones sub-rectangular; middle of the base somewhat dilated. Elytra more coarsely and corrugately punctured than the prothorax, each with one short row of punctures at the base; since the interstices and exterior borders of the punctures are distinctly raised, the row forms an elevated line; a sutural space between the two rows smooth. Middle of the metasternum visibly impressed, and very coarsely, but not densely punctured; sides finely punctuated. Middle of the two basal segments of the abdomen sparingly but coarsely, the rest of the abdomen densely punctured. Coxal lines not reaching the hind margin of the segment, with the interior part slightly arched, and the exterior one abruptly declivous and becoming obsolete towards the middle of the segment.

_Hab._ Malay Peninsula.

23. _Scymnus rubroventralis_ sp. nov.

_Sc._ niger, ovatus, convexus, pube brevi cinereo dense vestitus; capite, prothorace marginibus latis lateralis et margine antico angusto, elytris apice, pedibus, abdomineque (segmento primo nigro-piceo excepto) rufis. Supra minute punctatus, elytra ad basim una serie punctorum grossorum instructa. Metasternum fortiter punctatum, medio ante marginem posticum pance depressum, spatio mediano triangulare laevi et linea mediana tenuissima instructum. Abdomen medice grosse, segmento primo medio sat sparsatim, punctatum. Lineae coxales completæ, semi-circulares, marginem posticum segmenti non attingentes.

Long. 1\(\frac{3}{8}\) mm., elytr. 1\(\frac{1}{4}\), lat. 1\(\frac{1}{8}\).
Black, ovate, moderately convex; densely clothed with a short greyish pubescence. Head, apex of the elytra—about 1/4 the length—legs, abdomen, sides of the prothorax, broadly and its front margin narrowly rufous; first abdominal segment pitch-black. Upper surface rather finely punctured; elytra with some scattered large punctures, and each with one distinct row of punctures at the base and traces of a second at the outside of the first. Metasternum coarsely punctured; the middle posteriorly feebly depressed, with a fine central line and a triangular smooth space. Abdomen also rather coarsely punctured, with the punctures sparser in the middle of the basal segment. Coxal lines not reaching the hind margin of the segment, semicircular.

Hab. Timor (W. Doherty).

This small species differs from its nearest ally, *Sc. samatrensis* Gorham (†), especially in size and punctuation.

24. Scymnus novaeguineae sp. nov.


Long. 2 1/2 mm., elytr. 2, lat. 1 1/3.

Black, somewhat oblong, covered with a greyish pubescence which has a yellowish tint on the last segments of the abdomen; convex, especially at the base of the elytra. The single specimen, which I suppose is a *male*, has the anterior margin of the prothorax exceedingly narrowly and the fore angles broadly rufous, head and legs the same, and hind femora pitchy brown. A second specimen, perhaps a *female*, is much more convex, and has only the mouth, antennae, tip of the anterior angles of the prothorax, tibiae, and tarsi rufous, and all femora pitchy black.

Prothorax covered throughout with moderately large punctures; the base rather strongly produced in front of the scutellum. Elytra devoid of a distinct punctuation, except the usual two basal rows of punctures, and their derm of a finely shagreened appearance. Metasternum coarsely and, at the sides, densely punctured; the punctures of the middle arranged in some more or less transverse rows; centre slightly depressed, with a fine median line and a rather large and somewhat rounded smooth space. Abdomen strongly and densely punctured, more sparingly so in the middle. Coxal lines complete, not reaching the posterior margin of the segment, with the exterior part less arched and less declivious than the interior one.


25. Scymnus gibbosus sp. nov.

*Sc. niger*, breviter ovatus, convexus, griseo-pubescentis; capite, prothoracis margine antico et angulis anticis, elytrorum apice, abdomen (basi piceo-nigra excepta), pedibusque fuso-testaceis. Prothoracis basis ante scutellum producta, truncata. Elytra prothoraci densius punctata, singulo striis duabus punctorum
grosso rum, elytron medium attingentibus, instructo; spatio suturali inter stra- 
interiores minutissime punctato. Metasternum lateribus densiter grosse, medio 
parum sparsi us punctatum; spatio mediano triangulari laevi; linea longitudinali 
impresa. Abdomen dense grosse punctatum. Lineae coxale s completae, marginem 
posteriorum segmenti fere attingentes, extus paulo arcuatae.

Long. 2 mm., elytr. 1 3, lat. 1.

Black, with the head, anterior margin and fore angles of the prothorax, tip of 
elytra (about 1 the length), abdomen, and legs rufo-testaceus; first abdominal 
segment pitchy black, second pitchy brown. Clothed with a greyish pubescence, 
short ovate, convex, with the elytra somewhat abruptly raised behind the scutellum. 
Prothorax rather strongly produced and truncate in front of the scutellum, less- 
densely and coarsely punctured than the elytra. Each of the latter with two distinct 
rows of large punctures at the base extending to the middle of the disc, and with 
traces of two other rows: the space at the suture between the rows, common to both 
elytra, very finely punctuated. Metasternum with a coarse and dense punctuation 
at the sides: the middle with less close punctures, with a triangular smooth median 
space and a fine median line. Abdomen coarsely and densely punctured. Coxa 
lines complete, nearly reaching the hind margin of the segment, running for a little 
time parallel to the hind margin, where they approach the latter, and then extending 
down to the fore angles of the segment in an almost straight line.

_Hab._ Bantam, Java.

Differ from _Sc. sumatrensis_ Gorham (Not. Leyd. Mus., 1884, p. 126) especially 
in the distinct punctuation: from _Sc. cabrocentralis_ sp. nov. it may be differentiated 
by its size, shape, and punctuation.

26. _Scymnus weisei_ sp. nov.

_Sc._ niger, griseo-pubescent, breviter ovatus, subconvexus; capite, prothorace— 
plaga magna antescutellare nigra excepta—elytron apice, prosterno pedibusque 
rufo-testaceis; f abdomen basi piceo, apice pallide testaceo; ) abdomen fere 
nigro, apice piceo. Prothorax basi atroque simmiss, elyris paulo minus forti- 
riter punctatus; illis singulis ad basim duabus seriatim punctorum grossorum instructis. 
Metasternum grosse punctatum, medio spatio minuto laevi, linea mediana minu- 
tissime impressa instructum. Abdomen forti ter punctatum, punctis in medio 
segmenti primum parum sparsi us sitis. Lineae coxale s completae, semicirculares, 
marginem posticum segmenti non attingentes.

: Long. 2 mm., elytr. 1 3, lat. 1 3: ) paulo minor.

Black, clothed with a greyish pubescence. Upper surface densely punctured 
throughout, with the punctuation of the elytra a little stronger than that of the 
prothorax. Each elytron with two short rows of larger punctures at the base near 
the suture. Metasternum coarsely punctured, with a very small and narrow smooth 
space in the middle, and with a slightly impressed median line. Middle of the first 
abdominal segment less densely punctured than the rest of the abdomen. Coxa 
lines complete, semicircular, not reaching the hind margin of the segment.

Head, prothorax, tip of elytra (about 1 of their length), prosternum, and legs 
rufo-testaceus, somewhat pitchy in the _female_; prothorax with a large black 
macula in front of the scutellum extending nearly to the anterior margin; abdomen 
of the _male_ pitchy brown at the base, rufous at the apex; that of the _female_ almost 
black, with the apex pitchy brown.

_Hab._ Sumbawa (W. Doherty).
EXPLANATION OF PLATE VIII.

Fig. 1. Obrium longicolle sp. nov. 112
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11. Elytron of Scymnus thoracicalis sp. nov. 133
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(Facing Plate VIII.)