

the other beyond, the middle, blackish. The example is so much rubbed that it is impossible to say what the ground-colour of the fore wings may have been; the head and thorax appear to have been whitish.

2. Descriptions of new Species of Phytophagous Coleoptera from Kiukiang (China). By MARTIN JACOBY, F.E.S.

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The specimens now described have for the most part been received by Mr. J. H. Leech, from Kiukiang in China, unless otherwise stated, and are contained in that gentleman's collection and in my own.

*SAGRA LEECHI*, n. sp.<sup>1</sup>

Dark blue; thorax remotely punctured, the anterior angles prominent; elytra metallic golden cupreous, depressed below the shoulders, finely geminate-punctate-striate, the lateral margins violaceous blue.

*Var.* Elytra entirely metallic blue.

♂. The posterior femora slightly extending beyond the elytra, their upper margin in shape of an acute ridge, their inner surface with a large fulvous tomentose patch, the apex with a larger and a smaller tooth; the posterior tibiæ curved at the base, their outer margin furnished with a long tooth below the middle, the inner margin with a smaller one at the same place, the extreme apex also produced into an acute point.

♀. The posterior femora not extending beyond the elytra, their lower edge provided with a short denticulate ridge, their tibiæ simple, strongly curved through their entire length.

Length 3-6 lines.

Head with a few deep but distantly placed punctures, the space between the antennæ divided by deep grooves which cross each other obliquely; the clypeus depressed, impunctate. Antennæ half the length of the body, dark violaceous, the lower 7 joints shining, the rest opaque, terminal joint very long. Thorax subquadrate, scarcely longer than broad, the sides slightly concave, the anterior angles obliquely thickened and produced outwards, the disk irregularly impressed with scattered punctures; scutellum blue. Elytra broadly ovate, deeply depressed within the shoulders, and to a less extent below the base and at the sides, the basal margin raised; each elytron with 5 or 6 double rows of punctures, more distinctly visible anteriorly than below the middle, the interstices finely aciculate near the apex. Below shining, without punctures or pubescence.

This species, one of the most beautiful of the genus, is allied to *S. petelii* and *S. jansoni*, Baly, but differs from either in the very

<sup>1</sup> It is possible that this species is identical with *S. fulgida*, Weber, also from China.



prominent anterior angles of the thorax, the more sparingly punctured surface of the latter, and other particulars pointed out above. From *S. petelii* the present insect differs further in the possession of another tooth at the inner margin of the posterior tibiæ and in the less transversely wrinkled surface of the elytra. The size of the species is often reduced to half the general length. A great many specimens were obtained of either colour, but differing in no other way.

*CRIOCERIS CHINENSIS*, n. sp.

Black; thorax obscure fulvous, strongly and irregularly punctured; elytra very deeply and closely punctate-striate, the interstices costate and wrinkled near the apex; femora stained with rufous.

Length  $3\frac{1}{2}$ –4 lines.

Head black, the neck fulvous; the space surrounding the eyes covered with yellow pubescence; eyes very deeply notched; clypeus punctured and pubescent. Antennæ extending slightly beyond the thorax, black, the third and fourth joints equal, short, slightly longer than the second joint, the terminal joints thickened, but not broader than long. Thorax subquadrate, widened at the base and to a less extent at the apex, the sides moderately constricted, the surface irregularly impressed with larger and smaller punctures, leaving a narrow central space generally smooth and impunctate, fulvous or rufous; scutellum fulvous. Elytra without basal depression, deeply and closely punctured, especially at the sides, where the interstices are costate and transversely raised. Underside and legs black, sparingly covered with grey pubescence; the femora more or less rufous at the base.

*C. chinensis* is closely allied to *C. rugata*, Baly, from Japan, from which it differs in the anteriorly more widened thorax and in the much finer punctuation of the latter; in *C. rugata* the anterior portion of the thorax is rounded and not produced, and the disk is very deeply, almost rugosely punctate; the sculpture of the elytra, however, is exactly the same in both insects, but the femora are entirely black in *C. rugata*.

*CRIOCERIS TRIPLAGIATA*, n. sp.

Black; head deeply constricted behind; thorax longer than broad, nearly impunctate; elytra flavous or fulvous, remotely punctate-striate, a large ovate spot extending to the middle on each elytron, and the apex broadly, black.

Length 4 lines.

Head very deeply constricted behind the eyes; the vertex raised into two large tubercles; eyes very prominent, deeply notched. Antennæ half the length of the body, the four lower joints shining, the rest opaque, slightly thickened towards the apex, the joints longer than broad. Thorax about one half longer than broad, the sides concave at the middle, the surface without basal sulcation, black, very shining, with a few very fine punctures near the anterior margin; scutellum black. Elytra with a very faint depression before the



middle, the shoulders rounded, not grooved within; the punctures distinct, but only visible at the base near the suture and at the sides, the middle of the disk as well as the apex nearly impunctate; the lateral margin thickened and accompanied by a row of deep punctures. Underside and legs black, finely pubescent.

This handsome species will be easily recognized by the pattern of the elytra, the large ovate black spot occupying the middle of the disk anteriorly, but not extending to either margin; the apical third portion is entirely black, this colour forming a broad transverse subtriangular band, the anterior margin of which does not quite extend to the sides.

*CRYPTOCEPHALUS CHINENSIS*, n. sp.

Reddish fulvous; the antennæ, tibiæ, and tarsi black; thorax with three impressions; elytra flavous, strongly punctate-striate, the margins, a spot on the shoulder, and a narrow transverse band below the middle, black.

Length 2 lines.

Head fulvous, with a few very fine, remotely placed punctures, the clypeus and the space near the inner margin of the eyes flavous. Antennæ two thirds the length of the body, black, the three basal joints more or less flavous below, the third joint one half shorter than the fourth; thorax nearly three times broader than long, narrowed in front, the sides rounded and narrowly margined, the surface entirely impunctate, with a distinct oblique depression at each side and a very indistinct one at the base, reddish fulvous, very shining, the posterior margin very narrowly flavous; scutellum fulvous, margined with brown, strongly raised. Elytra subcylindrical, parallel, bright flavous, regularly punctate-striate on the disk, irregularly punctured at the sides, narrowly margined with black, the shoulders with a small black spot, and a similarly coloured narrow transverse band placed below the middle and extending to either margin; the elytral epipleuræ black, distinctly punctured. Below fulvous, finely punctured, the outer margin of the tibiæ and the tarsi black.

Of this species, of which I cannot find any published description, two specimens are before me, which only differ very slightly in the elytral black band being more deeply black and extending across the suture in one specimen, while in the other this band is slightly interrupted near the suture. *C. chinensis*, on account of its coloration, seems somewhat allied to *C. crucipennis*, Suffr.

*COPTOCEPHALA BIFASCIATA*, n. sp.

Black; the basal joints of the antennæ and the base of the tibiæ fulvous; thorax transverse, fulvous, impunctate; scutellum fulvous; elytra very finely semipunctate-striate, fulvous; a broad transverse band at the base, and another, variable in size, slightly oblique, below the middle, black.

Length  $2\frac{1}{2}$ –3 lines.

♂. Head swollen at the vertex, entirely impunctate, black, very shining, the space between the eyes irregularly depressed; the



anterior margin of the epistome triangularly emarginate; jaws large and prominent. Antennæ black, the three lower joints fulvous, the third joint very small, half the size of the second. Thorax three times broader than long, the sides nearly straight, the posterior margin rounded and produced in the middle, perfectly straight at the sides, the anterior margin narrowly raised at the sides; scutellum with a raised central ridge. Elytra very finely and rather closely punctured, the punctures arranged in irregular rows near the suture, fulvous, the base with a transverse black band extending to the suture but not quite to the lateral margin, its posterior edge rather deeply indented at the middle, another band, not quite extending to either margin and slightly oblique, is placed immediately below the middle. Underside and legs black, clothed with yellow pubescence, the base of the tibiae fulvous.

*C. bifasciata*, although very closely allied to several almost similarly coloured species (*C. nair*, Lac., *C. küsteri*, Kraatz), seems yet sufficiently to differ to justify its separation; the first elytral band extends quite to the basal and sutural margin, although not quite to the sides, and the second band is placed immediately below the middle, not so close to the apex as in several allied species; the fulvous base of the tibiae, the rest of the underside being black, will also help to distinguish *C. bifasciata*; the female has, as is usual, a much smaller head. Many specimens were obtained.

ACROTHINIUM CUPRICOLLE, n. sp.

Metallic blue or green; antennæ and legs black; head, thorax, and scutellum reddish cupreous, finely pubescent, closely punctured; elytra closely punctate-striate, violaceous blue, the suture greenish, the lateral margin bright cupreous.

Length 3 lines.

Head deeply and closely punctured, strigose on the vertex, the latter piceous at the base, the other portion bright cupreous; labrum and jaws black; antennæ more than half the length of the body, the terminal joints slightly thickened and short, the basal two joints more or less fulvous below. Thorax about one half broader than long, subcylindrical, the sides nearly straight, slightly narrowed towards the base, the surface sparingly covered with fulvous pubescence, bright metallic cupreous, strongly and closely punctured; scutellum metallic greenish cupreous, pubescent. Elytra with a distinct oblique basal depression and a longitudinal groove within the shoulders, closely and rather strongly punctured, the punctures arranged in closely approached semiregular rows, dark metallic violaceous, the suture narrowly metallic green or blue, the lateral margin bright reddish cupreous; the surface sparingly clothed with stiff blackish hairs. Underside dark blue or greenish, strongly punctured and sparingly pubescent; legs with a slight bluish gloss; the femora with a very small tooth; the anterior margin of the thoracic episternum convex.

This beautiful species, of which a great many specimens were received from Kiukiang, may be at once known from the only other



species of the genus, *A. gaschkevitchi*, by the colour of the thorax and that of the elytra.

*COLASPOIDES CHINENSIS*, n. sp.

Piceous ; above metallic green ; antennæ, labrum, and legs flavous ; head finely rugose ; thorax remotely punctured ; elytra deeply punctate, the interstices at the sides rugose and wrinkled.

Length  $2\frac{1}{2}$  lines.

Head with a longitudinal groove on the vertex, closely punctured and slightly rugose at the vertex ; clypeus finely punctured, its anterior margin nearly straight ; labrum fulvous. Antennæ two thirds the length of the body, very slender, pale fulvous, the terminal joint fuscous at its apex ; thorax nearly three times broader than long, narrowed in front, the sides evenly but not strongly rounded, the surface impressed with some fine punctures which disappear entirely at the sides and near the base ; scutellum impunctate. Elytra with a scarcely visible depression below the shoulders, the latter prominent, smooth ; the disk impressed with rather deep and closely arranged punctures, which form very irregular rows, the interstices at the sides and at the apex rather strongly transversely wrinkled and rugose ; legs entirely fulvous or flavous. Underside nearly black.

Many specimens, allied to *C. martini*, Lefev., and differing in the colour of the underside, the differently coloured thorax, and the want of the tooth at the femora ; *C. femoralis*, Lefev., has a strongly punctured thorax and differently coloured antennæ and tibiæ.

*COLASPOIDES OPACA*, n. sp.

Piceous ; the labrum and the five lower joints of the antennæ fulvous ; head and thorax metallic green or cupreous ; elytra blackish, opaque, the suture and lateral margin narrowly metallic.

Length  $2\frac{1}{2}$  lines.

Head with a longitudinal groove at the middle, finely and rather closely punctured, metallic cupreous or green, the clypeus not separated from the face ; labrum fulvous ; palpi testaceous. Antennæ two thirds the length of the body, black, the basal five joints testaceous. Thorax transverse, the sides rounded, narrowed in front, the anterior angles thickened and acute, the posterior margin oblique at the sides and slightly sinuate, the surface very finely and closely punctured, and covered throughout with fine longitudinal strigæ ; scutellum obscure cupreous. Elytra finely and closely semiregularly punctate-striate, the shoulders acute, the base without any depressions, nearly black with a very slight metallic tint, the margins very narrowly metallic green and cupreous. Underside and legs black, the breast tinged with metallic green.

*C. opaca* may be at once known from any other species of *Colaspoides* by the finely strigose surface of the thorax and the nearly black and opaque colour of the elytra.

*COLASPOIDES SPINIPES*, n. sp.

Black ; the basal joints of the antennæ, the labrum, and the femora



and tibiæ fulvous; thorax and elytra metallic greenish cupreous or blue; thorax very finely punctured, elytra closely and more strongly punctate.

♂. The anterior tarsi dilated; the posterior femora with a long and strong spine.

Length 3 lines.

Head with a longitudinal depression at the middle, finely and closely punctured; eyes slightly sinuate, the epistome separated from the face by a transverse groove; labrum fulvous; antennæ filiform, two thirds the length of the body, the first five joints fulvous, the rest black. Thorax rather long, less than twice as broad as long, narrowed in front, the sides rounded, the anterior angles acute, the lateral margin narrowly reflexed, the surface finely and not very closely punctured, the punctures scarcely stronger at the sides than at the middle. Elytra narrowed towards the apex, without basal depression; the shoulders narrowly raised and smooth; the disk much more strongly punctured than the thorax, the punctures here and there arranged in lines; the interstices slightly rugose at the sides near the base. Underside black; the sides of the breast metallic green; femora rather thickened, fulvous, the posterior ones triangularly dilated at the middle and ending in a long spine; posterior tibiæ curved at the middle; tarsi black, the anterior and intermediate ones widened and elongate.

Of this very distinct species, greatly distinguished by the long femoral spine, there are two male specimens before me, which do not differ from each other except in the greenish cupreous or metallic dark blue colour of the upperside; a smaller specimen, evidently a female, has a more transverse thorax and nearly black and simple legs, but does not seem to differ in any other way.

*NODOSTOMA LEECHI*, n. sp.

Black; above metallic dark violaceous blue; head and thorax strongly punctured, sides of the latter angulate at the middle; elytra with the basal portion strongly swollen, moderately strongly punctate-striate.

Length 2 lines.

Head deeply punctured, strigose on the vertex, the epistome not separated from the face; labrum and palpi piceous; jaws black. Antennæ two thirds the length of the body, the three lower joints obscure fulvous, the others black. Thorax twice as broad as long, the sides angulate at the middle, the surface transversely convex, impressed with deep but not very closely arranged punctures, the interstices somewhat raised; in front of the anterior margin is a narrow transverse groove; scutellum subpentagonal, impunctate. Elytra subquadrate, the base very strongly swollen, bounded by a semicircular depression, the shoulders also strongly raised and deeply longitudinally depressed within, the punctures rather deep within these depressions, fine and arranged in striæ on the lower portion of the surface; legs black, the posterior femora with a small tooth.

Foochan, also Kiukiang.



Very closely allied to *N. modestum*, Jac., from Japan, but differing in the more deeply punctured thorax, the narrow transverse groove near the anterior margin, in the less distinctly angulate sides of the thorax, and in the much more strongly raised base of the elytra, which forms a rounded tubercle, distinctly visible to the naked eye; there is also a distinct lateral depression visible at the disk of the thorax in *N. modestum* which in *N. leechi* is absent. About a dozen specimens were obtained.

**HETERASPIS NITIDISSIMA, n. sp.**

Metallic green or cupreous, clothed with whitish pubescence and black erect hairs; antennæ black, the base fulvous; head and thorax strongly and closely punctured.

Length 3-4½ lines.

Head closely punctured at the vertex, the latter convex, the epistome more remotely and strongly punctate, its separation from the face indicated by a small more or less distinct tubercle, its anterior margin deeply emarginate at the middle and at the sides; labrum smooth, impunctate, cupreous; jaws black. Antennæ slender, half the length of the body, the lower three joints fulvous, the rest black. Thorax subcylindrical, the sides strongly deflexed, the anterior angles with a smooth tubercle; the posterior margin straight at the sides, rounded and produced at the middle, the surface impressed with deep and closely placed punctures, clothed like the head with white and black erect hairs; scutellum finely rugose. Elytra with a faint transverse depression below the base, the shoulders acute and prominent, the surface very closely punctured, the punctures smaller than those at the thorax, but intermixed with larger ones, the apex very finely punctate. Below closely punctured and pubescent.

*H. nitidissima* is very closely allied to *H. vestita*, Baly, but differs in the bright metallic green or cupreous general colour; the latter in *H. vestita* is obscure æneous; there are besides this some other differences to be found, the present species having a tubercle placed at the middle of the face. There seem to be only females in the present collection amongst more than 12 specimens, and I am not able to say anything in regard to the two teeth to be found on the epistome in the male of *H. vestita*; it is, however, possible that the insect described here is a variety of the last-named species.

**HETERASPIS IMPERIALIS, Baly.**

All the specimens obtained at Kiukiang, which I must refer to Mr. Baly's species, differ from the type in the more strongly punctured elytra, which have the interstices more finely punctured, so that the punctuation consists of larger and smaller punctures crowded together.

**CHRYSOMELA JAPANA, Baly.**

Of this species Mr. Leech obtained a great many specimens, which prove great variability in regard to the sculpture and also shape of the thorax; the latter has the sides sometimes greatly widened before the middle, much less so in other specimens, and the punctuation of



the disk is often close, at other times remote and very irregular. Most of the specimens in the present collection were obtained at Hakodate and are with few exceptions females, which may be recognized at once by the very curious appendage of the last abdominal segment, unique amongst the numerous species of this genus with which I am acquainted; this structure consists in a triangular acutely pointed kind of sheath, hollowed at its base and placed upon the middle of the last abdominal segment; the pygidium ends in a blunt protuberance and seems capable of closing the posterior opening of the sheath; I find no reference to any similar structure in this or any other species. The males are much smaller, and the penis is a slender curved tube, narrowed and blunt at its apex. The colour of the thorax and elytra varies from purplish to blue or green, and the latter have two or three more or less distinct longitudinal smooth spaces; wings are absent.

*CHRYSOMELA VIRGATA*, Motsch.

Obtained in numerous specimens at Gensan in Corea.

*CHRYSOMELA OBSCUROFASCIATA*, Jac.

This species, described by myself in the Proc. Zool. Soc. 1885, seems to be only a variety of the preceding species, with which it entirely agrees in size, shape, and sculpture; the entire insect is, however, dark purplish-blue in colour with an elytral still darker band, the latter in *C. virgata* is reddish cupreous.

*MELASOMA OCTODECIMPUNCTATA*, n. sp.

Metallic greenish, the six basal joints of the antennæ, the sides of the thorax, and the legs fulvous; elytra very closely punctured, fulvous or testaceous, each elytron with nine rounded black spots (1, 3, 2, 2, 1).

Length 2-3½ lines.

Head finely and closely punctured, greenish æneous; antennæ scarcely extending to the base of the thorax, black, the basal six joints fulvous. Thorax three times broader than long, the sides broadly flattened, fulvous, the disk metallic green, very finely punctured, bounded at the sides by a deep longitudinal groove, which is impressed with deep punctures; scutellum metallic green. Elytra very closely punctured, with traces of longitudinal striæ, fulvous or flavous; the suture, a spot at the shoulder, three, placed triangularly at the base, two slightly larger ones placed transversely at the middle, two below the latter, and another transversely shaped spot near the apex, blackish; legs entirely fulvous. Underside metallic greenish.

At first sight this species seems identical with the well-known *M. 20-punctata*, but the insect is quite distinct from the last-named; the sides of the thorax in *M. 18-punctata* are much more broadly fulvous, and the green colour does not encroach on it except by a small spot at each side (as in *M. 20-punctata*): but the principal difference is to be found in the number, shape, and position of the elytral spots; these latter are not elongate but rounded; the six



anterior spots are placed exactly as in *M. 20-punctata*, but of those placed below the middle the intermediate spot is wanting, so that only two remain, and the last or apical spot is transverse, not elongate as in the allied form; the elytra are also more closely punctured in the present species, and the legs are entirely fulvous. There are more than twenty specimens before me, which all show the same differences, as pointed out, and can be separated easily from *M. 20-punctata*.

PHYTODECTA FLAVIPENNIS, n. sp.

Broadly ovate, pale fulvous; the terminal joints of the antennæ and the legs black; thorax very minutely punctured on the disk, strongly on the sides; elytra finely punctate-striate, the interstices scarcely visibly punctured.

Length  $2\frac{1}{2}$  lines.

Head distinctly but irregularly punctured; antennæ extending to the base of the thorax, the terminal joints transversely shaped, black, the lower four joints fulvous; thorax three times wider than long, narrowed in front, very minutely punctured, the sides deeply punctate; scutellum fulvous; elytra broad, subquadrate, the punctures moderately deep, the interstices extremely finely punctured.

The present species seems to differ from any other described *Phytodecta* in several particulars: from most of them *P. flavipennis* differs in the fulvous upper and underside; *P. rufa*, Kraatz, which also has the underside red, is larger and the legs are described as red with the exception of the knees. There are two specimens before me, which show no difference, except that the colour in one is paler, and that the upper and lower margins of the breast are black, the latter is deeply rugose-punctate.

PHYTODECTA TREDECIMMACULATA, n. sp.

Broadly subquadrate, fulvous; thorax with three black spots; scutellum black; elytra strongly and closely punctured, the punctuation irregular, each elytron with six black spots; breast piceous.

Length 3 lines.

Head rather closely punctured on the vertex and on the clypeus. Antennæ entirely fulvous, extending to the base of the elytra. Thorax three times broader than long, the sides evenly rounded, the anterior margin broadly concave; the disk finely and remotely, the sides strongly and closely, punctured; a large black spot is placed at the middle, but does not extend to the base, a smaller one is situated at each side; scutellum black, very broad. Elytra subquadrate, convex and short, very closely and distinctly punctured, the punctuation not arranged in lines; of the black spots, which are large, one of oblique shape occupies the middle of the base, two, placed transversely at, and two others, of which the inner one is sutural, below the middle; another sutural spot is placed at the extreme apex. Below and the legs strongly punctured, the breast more or less piceous.

Foohan.



In this species the elytral punctuation, instead of being arranged as in most of the allied forms, is irregular and the pattern differs from any with which I am acquainted; of the elytral spots, two are common to both and placed across the suture below the middle.

*PAROPSIDES NIGROFASCIATUS*, n. sp.

Fulvous; head and thorax with two black markings; elytra finely and irregularly punctured, each with two large subsutural spots, placed longitudinally, and a sublateral band, abbreviated behind, black.

Var. *a*. The posterior subsutural spot wanting.

Var. *b*. This spot present only.

Var. *c*. Entirely fulvous, the thorax with some small piceous spots; elytra with a small black humeral spot.

Length 5-6 lines.

Head finely punctured, with a central impressed groove, fulvous, the base with two large black spots, the anterior margin of the clypeus and the apex of the jaws also black. Antennæ short, entirely fulvous, the apical joint thickened. Thorax three times broader than long, the anterior margin deeply emarginate at the middle, the anterior angles strongly produced in front, the sides rounded, narrowed towards the apex, the surface minutely and not very closely punctured on the disk, more strongly at the sides; the disk fulvous, with two large subquadrate black spots touching the base and leaving a narrow line of the ground-colour between them; scutellum fulvous. Elytra convex, widened towards the middle, impressed with rather small punctures, partly arranged in lines, the interspaces also very finely punctured, the lateral margin accompanied by several rows of deeper punctures, each elytron with two large elongate spots, placed longitudinally near the suture and a longitudinal band (often narrowed or interrupted at the middle) extending from the shoulder to below the middle near the lateral margin. Underside and legs fulvous, the abdomen often spotted with black; claws appendiculate, the inner division very long.

*PAROPSIDES HIEROGLYPHICA*, Gebl.

*PAROPSIDES 12-MACULATA*, Gebl.

Both these species were obtained at Foochow, and I am very much inclined to believe that one is only a variety of the other, since I cannot find any differences except that of colour; in *P. hieroglyphica* the elytra have three rows of black spots, if these are connected in a certain way the pattern peculiar to *P. 12-maculata* is produced, in the same way as in many species of *Cryptocephali*; the underside in one species (*P. hieroglyphica*) is fulvous, in the other black.

*EUSTETHA THORACICA*, n. sp.

Fulvous; the antennæ (the three basal joints excepted), the breast, and legs black; head with one, thorax with four, black spots; elytra dark violaceous blue, closely and strongly punctured.



*Var.* Elytra obscure fulvous.

Length  $3\frac{1}{2}$  lines.

Head impunctate, fulvous, the vertex with a black spot; labrum black; palpi fulvous, the penultimate joint incrassate. Antennæ only extending to the base of the elytra, black, the lower three joints fulvous, piceous above, shining, the others opaque, pubescent, the second and third joints short, equal. Thorax three times broader than long, the sides slightly rounded at the middle, narrowly margined, the anterior angles thickened, the surface impunctate, fulvous, with four black spots placed transversely; scutellum black. Elytra ovate-oblong, metallic dark blue or violaceous, covered throughout with distinct punctures of variable size, arranged here and there in indistinct lines, of which a short one more deeply impressed is placed within the shoulders, and another row accompanies the sutural margin; legs and breast black, the tibiæ closely pubescent; abdomen fulvous; mesosternum swollen and tuberculate.

*E. thoracica* may be distinguished from *E. flaviventris*, Baly, by the want of the thoracic impressions and the colour and markings of the same part.

PHYLLOBROTICA (?) ORNATA, n. sp.

Fulvous; antennæ, the upper edge of the femora, tibiæ and tarsi, black; thorax bifoveolate; elytra finely punctured, black, an ovate patch at the side and another near the apex, flavous; epipleuræ extremely small.

*Var.* Head black at the vertex, elytra entirely fulvous.

Length 3 lines.

Head dark fulvous, impunctate, the frontal tubercles transverse; clypeus in shape of a triangular ridge. Antennæ slender, filiform, the second joint short, the third and following joints nearly equal, the three lower ones more or less fulvous below, the rest black. Thorax about one half broader than long, the sides straight, slightly concave, the posterior angles acute, obliquely cut, the surface with a few minute punctures near the base, the latter depressed, with a deep fovea at each side; scutellum broad, its apex broadly rounded, flavous. Elytra finely and closely punctured, somewhat depressed anteriorly along the suture, the black portion interrupted at the sides by a large ovate flavous spot which, commencing a little below the base, extends to the middle, but not to the sutural or lateral margin; a somewhat similar-shaped spot is placed near the apex, which it does not quite reach, being surrounded by a narrow margin of the ground-colour. The underside and the legs fulvous, the femora above and the outer edge of the tibiæ with a black streak; tibiæ unarmed; the first joint of the posterior tarsi as long as the three following joints together; claws appendiculate.

*Hab.* Foochan.

Although this species has the general appearance of *Phyllobrotica* and its structural characters, it differs somewhat in having extremely small elytral epipleuræ and a longer metatarsus of the posterior legs. In the absence of other similarly constructed species I have placed



the present insect in *Phyllobrotica*; it will not be difficult to recognize by the elytral pattern. A single specimen of the variety was obtained, which differs only in colour.

*CNEORANE FEMORALIS*, n. sp.

Metallic blue; the head, thorax, and the anterior legs fulvous; antennæ fuscous; elytra greenish blue, closely semirugose-punctate; below pubescent; posterior femora obscure blackish blue.

Length 4-4½ lines.

This species, obtained by Mr. Leech at Foochan, although very closely allied to *C. fulvicollis*, Baly, seems to differ sufficiently to be considered distinct from that species: the present insect is less widened posteriorly, the antennæ are entirely black, the basal joints only are fulvous below; the thorax is rather less transverse and longer, and has often three small foveæ placed triangularly on the disk, the latter being entirely impunctate; the punctuation of the elytra is close and distinct, the interspaces being somewhat rugose with traces of longitudinal ridges; the colour of the upper part of the breast as well as of the four anterior femora is fulvous; the posterior femora and the tibiæ are obscure dark blue; the rest of the underside is metallic lighter blue, clothed with long yellowish pubescence. There seems to be no difference in regard to the structure of the antennæ in both sexes, but the anterior tibiæ in the male are curved at the apex and their first tarsal joint is dilated and flattened. Mr. Baly gives the colour of the underside in *C. fulvicollis* as piceous; in a specimen kindly given to me, the abdomen is dark metallic blue, as in the present species, but this colour does not extend to the breast as in *C. femoralis*; the posterior femora in *C. fulvicollis* are fulvous instead of dark blue. All the specimens agree in the above details: *C. elegans* from Japan is much smaller, bright metallic green, and the punctuation of the elytra is much finer; the latter in *C. femoralis* are of a rather dull bluish colour.

*LUPERODES NIGRIPENNIS*, Motsch.

Two specimens obtained at Gensan I refer to Motschulsky's species, with the description of which they agree perfectly; the head in the specimens I have for examination is fulvous with the space immediately behind the eyes black (of this the author's description says nothing); the labrum and the antennæ are also black, with the exception of the first two joints of the latter, which are fulvous; they are nearly two thirds the length of the body; the thorax is twice as broad as long, fulvous, the surface impunctate without depressions; the elytra are black and very finely and closely punctured, with their epipleuræ extending below the middle; the abdomen is flavous; the legs are black, the apex of the femora and the base of the anterior tibiæ are stained with fulvous. The structural characters of *Lupe-  
rodes* are all present. In the almost useless figure given by Motschulsky the abdomen is made to protrude largely beyond the elytra; whether this is characteristic of all the females of this species I am unable to say.



## LAPHRIS EMARGINATA, Baly.

Of this species there are a few examples contained in the present collection, amongst which is a male, which differs considerably in the shape of the antennæ from the female sex ; these organs are longer and their intermediate joints are strongly flattened and triangularly dilated, although of the same elongate shape ; the broad, black or piceous band of the elytra is occasionally of nearly equal width instead of being deeply emarginate at its middle as in the type.

## NOTES.

In my catalogue of Japanese Phytophaga (Proc. Zool. Soc. 1885, p. 752) several mistakes and omissions have been made, which I will here rectify, thus :—

*Lema melanopa* is left out, the species is, I believe, found in Japan.

*Adimonia multicostata*, Jac. (p. 755), is identical with *Galerucella punctatostriata*, Motsch. ; the species belongs, however, to *Adimonia*.

*Monolepta flaviventris*, Motsch. (p. 755), should have been placed in *Malacosoma*.

According to M. Fairmaire the following species described by him from China (1876) are synonyms :—

*Paralina impressiuscula*, Fairm., = *P. fallaciosa*, Stål.

*Lina ignitincta*, Fairm., = *Galeruca fulminans*, Mén.

*Anthraxantha davidis*, F., = *Mimastra cyanura*, Hope.

## 3. On the Scaling of the Reproduced Tail in Lizards.

By G. A. BOULENGER.

[Received June 5, 1888.]

It is a well-known fact that in such Reptiles as have the power of reproducing the tail, the scaling of the renewed portion often differs considerably from that of the normal organ. It is generally held that the difference consists merely in the irregularity of the scaling, or in the absence of certain tubercles or enlarged scutes which are characteristic of the species. Such a view is erroneous. I have convinced myself that, in some cases, the aberrant scaling of the reproduced tail is a reversion to an ancestral form.

That a tail with heterogeneous lepidosis may be reproduced as such, is shown by *Hatteria* ; the dorsal series of compressed tubercles, so strikingly similar to that of *Chelydra*, is present on the reproduced portion, which differs only in the scales not being verticillate.

That a tail with uniform scaling may be reproduced with diversified scales is exemplified by a large number of Scincoids and some Geckoids, which, having a tail covered with subequal scales, develop on the new portion a ventral, or both a ventral and a dorsal, series of large transverse scutes, such as exist normally in other species of the same or of allied genera.

All Lacertidæ, Gerrhosauridæ, and Scink-like Anguidæ, so far as I am aware, reproduce a caudal scaling true to their type.





Jacoby, Martin. 1888. "Descriptions of new Species of Phytophagous Coleoptera from Kiukiang (China)." *Proceedings of the Zoological Society of London* 1888, 339–351. <https://doi.org/10.1111/j.1469-7998.1888.tb06712.x>.

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