

XI. *Descriptions of new genera and species of Geodephagous Coleoptera, from China.* By H. W. BATES, F.L.S.

[Read 17th March, 1873.]

THE following descriptions, founded in great part on the collections made by Mr. George Lewis in China, are intended as a contribution to our knowledge of the Geodephagous Fauna of that country, and as facilitating the comparison between the faunas of China and Japan in this department. It will have been observed that all species common to the two countries have been indicated in the foregoing memoir on the *Geodephaga* of Japan.

*Cicindela Kaleea*, Bates, Proc. Zool. Soc. 1866, p. 340.

This species, described originally from the Island of Formosa, is found also in China. I have specimens from Shanghai, and Mr. Lewis has found it at Foochow. It varies considerably in size, in the relative length of the elytra, in colour and markings. Sometimes it is tinged above with a silky, tender green colour. The central oblique white band is dissolved in some examples into two spots, one discal and the other marginal, but there is almost always a trace of a slender line uniting the two. The species by its cylindric thorax and slender figure belongs to the same group as *C. germanica*, *gracilis*, &c.

PRISTOMACHÆRUS, nov. gen.

Maxillæ maxime elongatæ, rectæ, angustæ, apice hamatæ, basi intus setosæ, apicem versus spinis corneis armatæ; lobis exterioribus æque elongatæ, apice curvatæ. Mentum sinu fundo quadrato, edentato; lobis triangularibus, extus rectilinearibus. Ligula porrecta, apice dilatata, truncata; paraglossis ea longioribus, latis. Mandibulæ rectæ, apice acutissimæ. Palpi graciles, articulis ultimis acuminatis. Labrum breve, medio late emarginatum. Antennæ lineares; articulis 1—3 sparsim, reliquis dense pubescentibus. Thorax suborbicularis, convexus, basi utrinque profundissime emarginatus, margine extus dente valido formanti. Elytra ut in *Chlæniis* brevioribus, apice haud sinuatis. Episterna

metasterni brevia, epimera transversa, recta, brevissima. Pedes *Chlæniorum*. Tarsi antici ♂ articulis tribus oblongis, angulis rotundatis.

The extraordinary little insect on which this genus is founded is unlike any other described species; although having the facies, colours and punctuation of the *Chlænii*. The maxillæ are very remarkable; projecting as very slender, straight shafts far beyond the tip of the long, straight, acute mandibles, and having a slender short hook at the end; the inner side towards the apex armed with a few horny teeth, and the basal part setose as in other *Carabidæ*. I am not sure that the palpiform exterior lobes of the maxillæ are jointed; they appear simple as in *Callistus*, and are a little longer than the blade of the maxilla, the tip of which they cover as a hood.

*Pristomachærus Messii*, n. sp.

Breviter oblongo-ovatus, convexus, breviter nigro-pubescent, nigro-æneus, subopacus, capite viridi-æneo, nitido; partibus oris, antennarum articulis 3 basalibus, pedibus, maculis utrinque duabus elytrorum (unâ marginali juxta humerum, alterâ discoidali dentatâ ante apicem) fulvo-testaceis; fronte thoraceque grosse discrete punctatis, hoc lateribus æqualiter rotundatis, postice dente magno acuto retrorsum spectanti formantibus; elytris acute punctulato-striatis, interstitiis subplanis crebre discrete punctulatis; sternis omnino punctatis.

Long.  $3\frac{1}{2}$  lin. ♂.

Hong Kong; two examples, kindly given me by Herr Mess, of Munich.

The head is shining brassy-green, the thorax darker green, cupreous on the disk, the margins extremely fine. The eyes are very salient. The thorax is rounded off to the anterior angles, which are close to the sides of the neck; behind it is less narrowed to the remarkable tooth-like lobe which forms the hind angle, and within which the base is very deeply notched. The fulvous spot near the shoulder occupies the deflexed margin and three marginal interstices; the posterior spot lies on interstices 4—8, very short on 4, 5.

*Chlænius (Vertagus) spathulifer*, n. sp.

Elongatus, gracilis, niger, subopaca, capite cupreo-nitido, thorace marginibus anguste viridi-æneis; antennarum articulis 2 basalibus, femoribus (apice nigro excepto), tibiis

intermediis et posticis medio, elytrorumque maculâ utrinque transversâ dentatâ ante apicem, fulvo-testaceis; palpis nigris, articulis ultimis maxime dilatatis, suprâ excavatis; capite fere lævi; thorace elongato-ovato, angusto, lateribus reflexis, angulis valde obtusis, suprâ discrete punctato; elytris profunde punctulato-striatis, interstitiis punctulatis.

Long. 5 lin. ♂.

China.

In slenderness of form intermediate between *Chl. (Ver-tagus) Buquetii* and *Chl. lynx*; the thorax being elongate-ovate, with obtuse angles, and sides very regularly arcuated, the widest part being exactly in the middle. The palpi have the terminal joints of very extraordinary form (in the ♂); they are not triangular as in the allied species, but broadly rhomboidal, with the greater part of one surface (the upper?) excavated. The tooth of the mentum is broad and simple. The fulvous spot of the elytra is similar to that of *Chl. lynx* and allied species, occupying interstices 4—8, and much broader on the fifth.

*Chl. cyaniceps*, n. sp.

*C. deliciolo* proxime affinis, at differt thorace vittâ latâ medianâ nigrâ. Niger, opacus, capite cæruleo, creberrime subtiliter punctulato; partibus oris, antennarum basi, pedibusque flavo-testaceis; thoracis lateribus, elytrorumque vittâ marginali utrinque abbreviatâ, maculâque parvâ bihamatâ suturali, ante apicem, fulvis.

Long.  $5\frac{1}{4}$  lin. ♂.

Hong Kong.

Very near *Chl. deliciolus*. The thorax is larger, with sides very regularly arcuated from base to apex, the broadest part in the middle, the hind angles rounded off, the surface minutely punctate-rugulose, the middle part occupied by a broad uneven black vitta, the sides broadly fulvous. The lateral pale vitta of the elytra occupies only the middle of the sides, the posterior sutural spot is small and hooked on each side.

*Chl. prostenus*, n. sp.

*Chl. inops* affinis; magis elongatus et parallelus. Viridi-æneus, capite thoraceque nitidis, subcupreo-tinctis; palpis, antennis, pedibus, margineque laterali thoracis et elytrorum flavo-testaceis; mandibulis, labro, corporeque

subtus rufo-piceis; thorace quadrato lateribus parum rotundato, antice magis quam postice angustato, toto alutaceo et strigoso, disperse punctato.

Long.  $5\frac{1}{2}$  lin. ♂ ♀.

Kiu-Kiang, on the Yang-tsze-Kiang.

Similar to *Chl. inops*, but at once distinguished by its longer thorax, which is pretty regularly and not strongly rounded from the base to the apex, the hind angles being obtuse, the widest part at the middle, and the anterior part much narrower than the base; the yellow margin is narrow and uniform; the surface differs from that of *Chl. inops* and *vestitus*, in being finely roughened throughout, and covered besides with short, transverse strigæ, the ordinary punctuation being similar in all three species. The head is finely punctured, and more or less strigose over its whole surface. The elytra are more elongate and parallel-sided, less oval, than in the two species cited; densely pubescent, finely but sharply punctulate-striated, the interstices plane and minutely punctulate; the pale border occupies two interstices near the base, is narrowed in the middle, and widened again towards the apex; it does not, however, form a broad apical patch, and is there strongly denticulated. The underside is reddish-piceous, paler on sides of abdomen, punctulate and pubescent throughout.

*Chl. postscriptus*, n. sp.

*C. sinensi* (Chaud.) affinis. Caput et thorax viridiænea, cupreo-tincta; illo pone oculos transversim grosse punctato, hoc anguste quadrato, ante medium paulo rotundato-dilatato, suprâ grossissime sed sparsim punctato, foveis basalibus elongatis, profundis; elytris basi quàm thorace plusquam duplo latioribus, sparsim erecte pubescentibus, obscure cupreis, lateribus viridibus, margine apicali anguste flavo, striis acutis vix punctulatis, interstitiis convexis lævibus; corpore subtus nigro-piceo, nitido; palpis, antennis (articulo tertio nigro) pedibusque flavo-testaceis.

Long. 7 lin. ♀.

Hong Kong.

Distinguished from *Chl. sinensis* by the narrow pale apical margin of elytra, instead of an apical spot, and also by the convex interstices.

*Dichirotrichus amplipennis*, n. sp.

Oblongus, elytris latis, elongatis; suprâ omnino punctulatus, erecte-pubescent; suprâ fulvo-testaceus, capite et

thorace piceo-fusco variegatis; elytris interdum postice utrinque cyaneo-nigro-vittatis; antennis et pedibus fulvo-testaceis; thorace parvo, transverso, quadrato-cordato, angulis posticis obtusissimis sed distinctis; elytris magnis, oblongis, parallelis, planatis, acute subtiliter striatis, striolâ basali nullâ, striâ 7<sup>ta</sup> obsoletâ, 8<sup>va</sup> a margine valde remotâ.

Long.  $2\frac{1}{2}$  lin. ♂ ♀.

Shanghai; given me by M. De Rivas.

Distinguished from all the other species by the great relative magnitude of the elytra, which gives the insect a facies unlike that of a Harpalide. The punctuation is very fine and scattered; the pubescence covers the whole body, legs, antennæ and palpi; the last-mentioned have the terminal joint fusiform, and very attenuated towards the apex; the base of this joint in the maxillaries is black, the rest of the palpi being yellowish-tawny.

*Stenolophus connotatus*, n. sp.

*St. discophoro* similis. Elongatus, parallelus, testaceo-ferrugineus, capite, thoracis medio, vittâque abbreviatâ communi elytrorum (basi attingenti) nigris; thorace transverso, postice angustato, basi utrinque punctato; elytris fortiter striatis.

Long. 3— $3\frac{1}{2}$  lin. ♂ ♀.

Kiu-Kiang.

More elongate and parallel-sided than *St. discophorus*; body beneath always rusty-red; the middle of the thorax black, and the elytral vitta reaching the base, where it occupies two interstices, spreading over five in the middle. The head is distinctly larger and broader.

*Amblystomus (Megaristerus) guttatus*, n. sp.

Elongatus, angustus, convexiusculus, nigro-piceus, sericeo-nitens; antennarum scapo, palpis, pedibus, elytrisque guttis utrinque 2 rotundatis, parvis, flavo-testaceis; capite magno, lato; thorace transverso, brevi, subluniforâ, angulis posticis vix conspicuis; elytris thorace paulo latioribus, elongatis, postice paulo dilatatis, apice obtusis; striis dorso fortiter, lateribus minus, impressis, maculâ primâ versus humeros interstitiis 5—6, 2<sup>nda</sup> versus apicem 3—4 occupantibus.

Long.  $1\frac{3}{4}$  lin.

Foochow.

The elytra have a slight blueish-brassy gloss. Differs from *Megaristerus stenolophoides*, Nietn., in the con-

colourous suture and apex of the elytra. The anterior angles of the thorax are distant from the sides of the neck, and the sides are gradually and not very much narrowed and rounded to the base. The third elytral interstice has one puncture, much after the middle, and near the second stria.

*Bradycellus sinicus*, n. sp.

Robustus, postice paulo dilatatus, nitidus, capite et elytris nigris; antennarum basi, thorace et pedibus obscure ferrugineis, palpis et abdomine flavo-testaceis, pectore piceo; capite lato, antice obtuso; thorace transverso, post medium modice angustato, angulis posticis rotundatis, foveâ basali utrinque unicâ, magnâ, rotundatâ, sparsim grosse punctatâ; elytris fortiter striatis, striolâ basali modice elongatâ.

Long.  $2\frac{1}{2}$  lin. ♂ ♀.

Kiu-Kiang.

Similar in form to *Br. harpalinus* (Dej.), except that the head is much broader and more obtuse (like *Tachycellus grandiceps*), and the thorax much broader in proportion to the length, and more narrowed from the middle to the base. The terminal joint of the palpi is thicker, but the apex is attenuated to a point. The first ventral segment in the ♂ has no fovea. The thorax is always very dark blood-red; the legs rather lighter and more piceous.

*Trigonotoma chaldeola*, n. sp.

Oblonga, convexa, nigro-polita, elytris æneis, palpis testaceo-rufis; labro angusto, medio fortiter rotundato-emarginato; thorace transverso, rotundato, postice magis angustato, angulis posticis rotundatis, basi toto et sulco intra marginem lateralem grosse punctatis; elytris breviter oblongis, striis fortiter impressis et punctatis; episternis et abdominis lateribus pauciter grosse punctatis; segmentis ventralibus transversim unisulcatis.

Long.  $5\frac{1}{4}$  lin. ♂ ♀.

Hong Kong. (From Herr Mess).

The smallest described species of the genus; distinguished further by its colour—glossy black, with dark æneous elytra. The labial palpi are securiform, broader in the ♂; the maxillary palpi have in both sexes the inner side of the terminal joint dilated and rounded, and the apex truncated.

## ONYCHOLABIS, nov. gen.

Facies *Anchomeni*. Caput breve, antice et postice subito angustatum. Mandibulæ valde elongatæ, acutæ, curvatæ. Maxillæ elongatissimæ, curvatæ, versus apicem intus nudæ, prope medium unispinosæ. Palpi elongati, graciles, articulo ultimo præcedenti æquali, leviter fusiformi, truncato. Mentum dente mediano emarginato. Antennæ elongatæ, graciles, articulo tertio quàm quarto multo longiori, et longe pubescenti. Thorax cordatus, basi fortiter constrictus. Pedes graciles, tarsorum quatuor anticorum articulum 4<sup>tum</sup> valde emarginatum, fere bilobatum; ungues simplices. Corpus glabrum.

Closely related to *Cardiomeræ*,—the antennæ, as in that genus, being clothed with woolly pubescence from the third to eleventh joints. The tarsi are also very similar; but the form of the head and thorax is totally different, and the singular claw-like and elongated shape of the mandibles and maxillæ is quite peculiar. I only know the ♀.

*Onycholabis sinensis*, n. sp.

Nigro-piceus, nitidus, partibus oris, antennis et pedibus flavo-testaceis; capite et thorace angustis sublævibus, hoc fere cyathiformi, postice fortiter angustato, lateribus ante basin rectis, angulis posticis acutis, disco transversim strigoso, marginibus punctato-rugosis; elytris amplis, versus apicem gradatim angustatis, punctato-striatis, striis versus apicem fortissime impressis.

Long.  $4\frac{1}{2}$  lin. ♀.

Banks of Yang-tsze-Kiang, in Sze-Chuen (Mr. Consul Swinhoe).

*Anchomenus (Agonum) irideus*, n. sp.

Elongato-ovatus, nigro-piceus, sericeo-micans, elytris iridescentibus; palpis, pedibus antennisque testaceo-rufis, his articulis 2—4 nigro-plagiatis; capite ovato, oculis modice prominulis; thorace quadrato-ovato, lateribus regulariter arcuatis, angulis posticis rotundatis, suprâ lævi, marginibus rufescentibus; elytris oblongo-ovatis, amplis, fortiter striatis, interstitio 3<sup>io</sup> tripunctato, margine deflexo fulvo-piceo; tarsis omnibus utrinque sulcatis.

Long.  $4\frac{1}{2}$  lin. ♀.

Hong Kong. Apparently allied to *A. Chinensis* (Bohem.).

*A. (Agonum) æneotinctus*, n. sp.

*A. scintillanti* (Boh.) simillimus, at minor, elytris punctato-striatis, etc. Suprà fuscus, æneo-nitens, elytris iridescentibus; subtus, palpis, pedibus, thoracis et elytrorum marginibus angustis, antennisque flavo-testaceis; thorace ut in *A. scintillanti* quadrato-ovato, sed postice minus angustato; elytris fortiter striatis, striis punctatis; interstitio 3<sup>io</sup> quadripunctato.

Long.  $3\frac{1}{4}$ — $3\frac{1}{2}$ .

Foo-chow.

*Pristodactyla Cathaica*, n. sp.

Elongata, piceo-nigra, nitida, subtus rufo-picea; antennis, palpis, pedibusque testaceo-rufis; capite brevi, mox pone oculos oblique angustato; thorace oblongo-ovato, antice et postice æque angustato sed ante medium latiori, angulis posticis rectis, prominulis, foveis basalibus magnis, profundis; elytris elongato-subparallelis, striis simplicibus, omnibus æqualiter fortiter impressis, 5—6 longe ante apicem conjunctis, interstitio tertio bipunctato; palpis apice cylindricis, truncatis; prosterno antice haud marginato; tarsis 4 posticis bisulcatis.

Long. 6 lin. ♂ ♀.

Foo-chow.

The head is more rapidly narrowed behind the eyes than in any other species known to me. The thorax also differs in having rectangular hind angles, with their apices slightly prominent. In other respects the thorax resembles that of *Pr. impunctata*, *dulcigrada*, &c., but it is not narrower at the base than at the apex, and the broadest part is a little before the middle.

*Colpodes Olivius*, n. sp.

*C. amæno* et *anachoretæ* affinis; suprà olivaceo-æneus, nitidus; oculis exstantibus, thorace breviter quadrato, transverso, antice modice, postice magis angustato, angulis posticis obtusis, vix prominulis, reflexis, margine laterali anguste explanato et reflexo, rufescenti; elytris amplis, elongato-oblongo-ovatis, postice utrinque fortissime sinuatis, versus suturam productis truncatis, angulo suturali spinoso; suprà disco antice late depresso, subtiliter sed acute striatis, interstitio 3<sup>io</sup> tripunctato; corpore subtus olivaceo-nigro; antennis, partibus oris, et pedibus piceo-rufis. Tarsi omnes suprà fortiter sulcati; articulo 4<sup>to</sup> acute emarginato.

Long.  $5\frac{1}{2}$  lin. ♂.

Hong Kong.

*Tachys gradatus*, n. sp.

*T. Lucasii* affinis. Ovatus, nigro-æneus, elytris utrinque maculis duabus fulvis, antennarum basi, partibus oris, pedibusque flavo-testaceis; thorace transversim quadrato-subcordato; elytris utrinque striis tribus a suturâ gradatim brevioribus, 3<sup>ia</sup> bipunctatâ; striâ 8<sup>va</sup> fortissime impressâ et flexuosâ.

Long.  $1\frac{1}{4}$  lin.

Foo-chow.

The tawny-yellow spots of the elytra are very indistinctly limited, though in the same position as in *T. lætificus*, etc. The three sharply impressed, simple, elytral striæ are successively shorter from the sutural one, being abbreviated both towards base and apex; the first puncture is exactly at the commencement of the third stria, the second lies a little beyond its termination.

*T. pæcilopterus*, n. sp.

*T. scydmænoïdi* (Neitn.) proxime affinis, at paulo major, thorace postice magis angustato, elytris fusco-nigro maculatis; rufo-testaceus, convexus, politus; antennis palpisque fuscis, basi et pedibus pallido-testaceis, elytris utrinque maculis duabus transversis fulvo-testaceis, apice et medio nigro-plagiatis; striis tantum duabus, exteriori abbreviatâ.

Long.  $1\frac{1}{8}$  lin.

Foochow.

The elytra have only two striæ, as in *T. scydmænoïdes*; the eighth is very strongly impressed and entire. The colour of the elytra is glossy chestnut-red, but becoming black in the middle of the spaces between the pale spots; these spots are more transverse than in the numerous allied species, the posterior one being almost a fascia interrupted at the suture. The thorax is rather longer than in *T. scydmænoïdes*; although transverse, and broadly rounded anteriorly, it is rather strongly narrowed towards the base. The frontal grooves are very wide apart, forming very short striæ.

*T. vixstriatus*, n. sp.

*T. fulvicolli* proxime affinis; oblongus, vix convexus, fulvo-testaceus; capitis vertice, elytrisque medio transversim leviter infuscatis; thorace transversim quadrato, antice

modice rotundato, postice perparum sinuatim angustato, angulis posticis fere rectis; elytris striis 2 parum impressis, reliquis obsoletis, 8<sup>va</sup> prope apicem solum impressâ.

Long.  $1\frac{1}{3}$  lin.

Kiu-Kiang, on the Yang-tsze.

Extremely near the European *T. fulvicollis*. The head and thorax are precisely similar to those of that species; but the elytra have no trace of striæ beyond the third or fourth, and those are so faint as to be only visible in certain lights; the sutural and second striæ too are very faintly impressed. The brown belt across the middle of the elytra is sometimes dark and better defined, extending a little along the suture; in such specimens the head, thorax and extreme apex of the elytra are also dark.

*Bembidium (Peryphus) chloreum*, n. sp.

Oblongum, olivaceo-æneum, nitidum, antennarum basi, pedibusque piceo-rufis; thorace latiusculo minime cordato, post medium sinuatim paululum angustato, angulis posticis acutis, basi toto grosse haud profunde rugato, foveis latis extus carinula juxta angulum marginatis; elytris punctato-striatis, striis haud profunde impressis, exterioribus versus apicem evanescentibus, interstitio 3<sup>io</sup> bipunctato.

Long.  $2\frac{1}{2}$ — $2\frac{3}{4}$  lin. ♂ ♀.

Kiu-Kiang, on the Yang-tsze.

Broader and shorter than *B. lunatum*; thorax much less narrowed towards the base; elytral interstices flatter. The colour is olivaceous-brassy or coppery, the elytra becoming indistinctly pallid (although still metallic) towards the apex. The antennæ are black, with the scape and base of the second and third joints dark red. The palpi are black, with the bases red.

*Bemb. (Peryphus) collutum*, n. sp.

Ellipticum, viridi-æneum, politum, elytris utrinque versus apicem vittulâ obliquâ testaceo-rufâ; antennis, partibus oris, et pedibus flavo-testaceis; thorace magno, quadrato, elytris basi vix angustiori, paulo ante medium vix dilatato subangulato, deinde ad basin paululum angustato, angulis posticis rectis, suprâ basi toto rugosulo, carinulâ juxta angulum elevatâ; elytris humeris obliquis, deinde parallelis,

longe ante apicem gradatim attenuatis, striato-punctatis, striis versus apicem evanescentibus.

Long.  $2\frac{1}{3}$  lin. ♂ ♀.

Kiu-Kiang and Foochow.

Differs from all other species known to me by its elliptical form. The thorax is large and nearly square, rather more narrowed anteriorly than behind, with the broadest part a little before the middle, where the dilatation is very slight and subangular. The elytra are of same width as the thorax at the base, and are very obliquely or gradually enlarged from that point. The pale stripe near the apex is sometimes almost blended behind with the pale apex itself.

*Drypta Formosana*, n. sp.

Magna, lata, robusta, nigro-picea, antennis, palpis, pedibusque testaceo-rufis; capite pone oculos tumido, suprâ grosse confluentur punctato, epistomate plagâ medianâ frontali colloque lævibus; thoracis parte anticâ dilatâtâ, margine laterali acuto, denticulato, antice vix angustato, ante basin fortiter angustato, suprâ grosse confluentur rugoso-punctato, medio longitudinaliter elevato, lateribus utrinque depressis; elytris amplis, striis latis, transversim grosse punctatis, interstitiis latis, medio lævibus.

Long.  $6\frac{1}{2}$  lin.

I. Formosa (Mr. Swinhoe).

One of the largest known species of *Drypta*, allied to *D. mandibularis* (Java) and *crassiuscula* (India).

*Singilis hirsutus*, n. sp.

Ferrugineo-piceus, labro, palpis, femoribusque pallidioribus, densissime hirsutus; capite collo constricto; thorace transversim quadrato, medio fortiter rotundato, postice utrinque modice sed valde sinuatim angustato, marginibus lateralibus late explanatis reflexis, angulis posticis productis rectis, basi medio late sed haud longe lobato, utrinque usque ad angulum recte truncato; elytris convexiusculis ut in *S. bicolore* punctato-striatis, interstitiis subconvexis.

Long.  $3\frac{3}{4}$  lin.

Hong Kong.

The pubescence is so dense and woolly that the sculpture of the integuments is not readily visible; the middle of the head and thorax are, however, smooth. The

insect agrees with *Singilis* in palpi, tarsi, &c., but differs in the narrower neck, more explanated margins of the thorax, and rather more convex elytra. The tarsi are hairy above; the fourth joint strongly bilobed; the claws pectinated. The metathoracic epimera are extremely short and inconspicuous, as in *Singilis*, *Endynomena*, and allied genera; the labial palpi have the terminal joint very much thickened, but not securiform, and obtusely truncated. The interstices of the elytra are impunctate, as in *S. bicolor*, but I do not perceive the two setiform punctures on the third.



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