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## PLATE XX.

## MONOGRAPH OF THE HYMENOPTEROUS GROUP, DORYLIDES.

THE group Dorylides, composed of the four genera *Dorylus*, *Rhogmus*, *Labidus*, and *Ænictus*, presents to us a series of insects, now of considerable extent, of which we still remain in entire ignorance of the females, as well as of the natural habits of the group; our knowledge being at present confined to the characters of the male sex, and to the facts that the males are often captured flying by night, and are so rare that out of a dozen species of *Labidus* collected in Brazil, by W. Burchell, Esq., single individuals were only found of nearly every species. Mr. Shuckard, in his Monograph upon this family, has suggested that my genus *Typhlopone* is composed of the females of *Labidus*, and has consequently removed *Typhlopone* from the family of the ants, in which, as I have endeavoured to prove in a memoir subsequently published in the *Annals of Natural History*, he appears to me to have violated nature, *Typhlopone* possessing a far greater majority of the characters of the *Formicidæ* than of any other family. Latreille considered the Dorylides as aberrant *Mutillidæ*, deeming them to be solitary insects; whilst St.-Fargeau and Haliday place them in the family of the social ants; Shuckard however considers them as an oscillant family between the *Mutillidæ* and *Formicidæ*, on account of their possessing—firstly, only a single recurrent vein to the fore wings; secondly, a single calcar to all the tibiæ (characters of the *Formicidæ*); thirdly, a labrum closely shutting the mouth (a character of both families); fourthly, the curtailed structure of the palpi (which is stated to “separate them peculiarly from both tribes”); and fifthly, the enormous size of the male genital organ, in which Mr. Shuckard states they exclusively resemble several of the solitary *Heterogyna*. The curtailed structure of the palpi and the large size of the male genital organ are, however, characters of some of the *Formicidæ*, as particularised in my observations on *Typhlopone*, and thus in every one of these characters the Dorylides are seen to resemble the *Formicidæ*, with which they also agree in

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the distinct basal segment of the abdomen \*. Considering, therefore, the Dorylides as a section of the Formicidæ, and having shown that Typhlopone also belongs to the same family, it may be urged that there are good grounds for considering with Mr. Shuckard that Typhlopone is composed of female Labidi. I do not think that this is the case, for the reasons which I have given in my observations on that genus above referred to, but I am far from willing to assert that such may not ultimately prove to be the case.

#### LABIDUS, *Jur.*

Of this genus, composed, as it was supposed to be until last year, of only a single species, Mr. Shuckard gave an excellent Monograph, including descriptions of ten species (exclusive of *L. mediatius*). By the kindness of W. Burchell and J. Miers, Esqrs., I am, however, enabled to double the number of species; several of my new species possessing curious characters not hitherto noticed. I may likewise add, that, with the exception of Perty's wretched figure of the species he named *Labidus Latreillii*, no illustration has yet been published of the genus, nor do we find in the latest works the internal organs of the mouth correctly described. These I have figured under the letters A and B, and they will be found to resemble the corresponding parts in *Typhlopone*, as figured by me in my "Introduction to the Modern Classification of Insects," vol. ii. p. 226, fig. 86, 19, 20.

SECTION A.—Peduncle subtriangular, with the sides elevated.

SPECIES I.—*Labidus Fargeavii*, Shk. (Mon. Dor. p. 11.) Rufo-fusco-hirtus; capite, antennis, thorace femoribusque nigris, cætera rufo-fuscus, abdomine supra rufo-sericeo, pedunculo supra canaliculato, venis alarum fulvo-rufis. Long. Corp. environ 14 lig. = 17 lin. angl. mens. fere.

SYN.—*Labidus Latreillii*, Saint-Farg. II. N. Hym. 1. 229. nec Jurine.  
Inhabits the province of St. Catherine, Brazil, on the sea-coast.

SPECIES II.—*Labidus Burchellii*, W. (Plate 20, fig. 1.) Piceo-niger, pubescens et pilosus, abdomine fulvo-brunneo, pedunculi lateribus valde elevatis mandibulis subrectis, tibiis tarsisque posticis gracilibus. Long. Corp. lin. 9½. Expans. alar. lin. 18½.

Taken at Santos, Brazil, by W. Burchell, Esq., on the 30th October, 1826, at 9 o'clock P.M.

This very distinct species has the head and thorax of a dirty brown colour and pubescent, and the abdomen fulvous-brown and not shining, the body beneath and at the sides clothed with long slender reddish hairs. The head is large, and the ocelli minute. The mandibles are long, nearly straight, the tips only being bent round, (Fig. 1 *a*). The thorax is clothed with a dirty luteous pubescence, it is scarcely broader than the head, and not gibbous in front; the abdominal peduncle is subtriangular, the sides very much elevated, the hind angles acute and produced; the extremity of the abdomen is deflexed; the antennæ and legs are long and slender; the femora blackish; the tibiæ pitchy, but on the upper side reddish; the tarsi testaceous, the posterior tibiæ and tarsi slender, the tarsi having a minute tubercle at the base; within (fig. 1 *b*; 1 *c*, unguis); the wings are very slightly stained with brown, and almost hyaline, the veins brown; the marginal cell is angulated behind, and the cubital vein is not thickened behind the second submarginal cell.

\* Other characters which these insects possess in common with the Formicidæ are detailed by St.-Fargeau and Haliday.

**SPECIES III.**—*Labidus Jurinii*, Shk. (Mon. Dor. p. 11.) “Rufo-testaceus, pubescens; capite (mandibulis antennisque exceptis) nigro; pedunculo abdominis subtrigono, supra valde concavo; pedibus longissimis,” tibiis posticis articuloque basali tarsorum posticorum compressis; alis subfulvis. Long. Corp. lin. 10½. Expans. alar. lin. 20.

Supposed by Mr. Shuckard to be an inhabitant of Demerara. Mr. Miers has brought it from Brazil.

**SPECIES IV.**—*Labidus Latreillii*, Jurine, (Latr. Shk.). Rufo-testaceus pubescens, pedunculo abdominis subtrigono, supra in medio plano, ad latera elevato; alis læte fulvis venis fuscis Long. Corp. lig. 8 9½ mens. angl.

Inhabits Cayenne.

**SPECIES V.**—*Labidus Servillei*, W. (Plate 20, fig. 2.) Testaceo-fulvus breviter pilosus, capite nigro, pedunculo subtrigono, lateribus valde elevatis, tibiis basi que tarsorum posticorum latis compressis, alis infuscatis, venis fulvo-fuscis. Long. Corp. lin. 8¼. Expans. alar. lin. 14.

Taken at Para, in Brazil, by W. Burchell, Esq., on the 1st February, 1830, at 11 o'clock P.M.

The head small and black, the ocelli large, and placed in a triangle; the space between each of the hind ones and the eyes equal to the space between these two ocelli; facial carinæ strong, terminating beneath the front ocelli; mandibles large, curved, a large space being left between them and the clypeus; antennæ long, slender, and fulvous; basal joint thicker than the terminal part. Thorax not very convex in front; peduncle of the abdomen much narrower than the next joint, subtriangular, truncated in front, with the fore angles rounded; hinder angles prominent and acute; sides very much elevated, shining; remainder of abdomen pubescent, deflexed at the extremity; anal plate not deeply notched, the two angles acute; legs long, fulvous; hind tibiæ flat, attenuated along the basal half; basal joint of tarsi dilated and emarginate within near the base to receive the spur of the tibiæ; wings dusky, the veins dark fulvous brown; fore wings shorter, and more truncate at the tip than usual.

**SECTION B.**—Peduncle with the sides parallel and not elevated.

†.—Peduncle shorter than broad.

‡.—Legs moderately long.

**SPECIES VI.**—*Labidus Hartigii*, W. (Plate 20, fig. 3.) Rufo-brunneus, abdomine fasciculato, pilosissimo, pilis longis fulvis, pedunculo angusto. Long. corp. lin. 8. Expans. alar. lin. 19.

Inhabits Brazil, Rio Janeiro, J. Miers, Esq.; also taken at Sapé, in Brazil, by W. Burchell, Esq., on the 14th of October, 1828, at 10 o'clock P.M.

Entirely of a brown-red colour and not shining, except at the junction of the abdominal segments; front of the body with very short hairs; metathorax and abdomen clothed at the sides above with very long fulvous hairs, and forming a thick brush at the extremity of the body. The antennæ are moderately long and slender, the basal joint rather thicker; mandibles long and much curved; facial carinæ but little elevated, but with a deep fossula between them, extending to the front ocellus. Thorax very gibbous in front, metathorax narrower than the mesothorax, its hind angles rounded off. Peduncle narrow, with the hind angles acute. Extremity of abdomen deflexed; fore legs short, hind legs rather long, with the tibiæ and tarsi simple; wings stained light honey-colour, with the stigma and veins fulvous, the submarginal cell lanceolate, not acuminate from the apex of the second submarginal cell, nearly as large as the first two submarginal cells united; the first of these is somewhat larger than the second, and is divided from it by a curved vein, the second receives the recurrent vein rather before the middle of its length, beyond which the cubital vein is not thickened.

**SPECIES VII.**—*Labidus Escenbeckii*, W. (Plate 20, fig. 4.) Rufo-brunneus, abdomine lineis duabus dorsalibus pilorum rufo-brunneorum, pedunculo thoracis latitudine. Long. corp. lin. 7½. Expans. alar. lin. 19.

Taken at Rio Vendinha, in Brazil, by W. Burchell, Esq., on the 10th of September, 1828, in the evening.

Entirely of a brown-red, not shining; mandibles very long and curved; facial carinæ scarcely extending above the base of the antennæ; the front of the thorax very gibbous, metathorax as broad behind as the front of the thorax, acutely truncate; peduncle as broad as the metathorax, its hind angles acute; the other abdominal segments with two rows of red-brown hairs, few in number on the anterior segments, but forming two thick pencils at the extremity, which

is deflexed; hind legs longer than in the preceding, tibiae and tarsi simple; wings almost hyaline, very slightly stained with fulvous, which is the colour of the veins; stigma darker, marginal cell large, acutely angled behind, the second transverso-cubital vein being very short; the recurrent vein is inserted near the base of the second submarginal cell, the cubital nervure beyond it not being dilated.

‡‡ Legs very short.

**SPECIES VIII.**—*Labidus Illigeri*, Shk. (Mon. Dor. App. p. 43.) Fuscus, subpubescens; vertice, prothorace, extremitate mesothoracis, scutello, metathorace et pedunculi disco nigris; abdomine rufo-testaceo subnitido. Long. corp. lin. 7. Expans. alar. lin. 15½. Inhabits Brazil. In Mus. Shk.

**SPECIES IX.**—*Labidus Halidaii*, Shk. (Mon. Dor. p. 13.) Rufo-testaceus, pubescens, capite (clypeo, mandibulis antennisque exceptis) nigro, stigmatibus alarum brunneo et abdominis pedunculo transverso-quadrato, supra in medio convexo. Long. corp. lin. 7. Expans. alar. lin. 14½.

**SYN.**—*Lab. Latreillii*, Hal. Linn. Trans. 17, p. 328. Inhabits Brazil, St. Paul. In Mus. D. D. Curtis et King.

**SPECIES X.**—*Labidus Fonscolombii*, W. Totus brunneo-testaceus, pubescens, abdomine subnitido, stigmatibus alarum rufo-testaceo, pedibus brevissimis. Long. corp. lin. 7. Expans. alar. lin. 16½.

Inhabits Brazil. D. Miers.

Entirely of a brownish-red, finely pubescent, the abdomen brighter coloured and rather shining. Head small; mandibles short and slightly curved, very hairy; face with a central channel extending to the front ocellus; ocelli placed in a curved line. Thorax very gibbous in front and at the scutellum. Abdomen with the peduncle nearly as broad as the following segment, its posterior angles rounded off, its upper surface entire and slightly convex, the ventral portion slightly angulated; abdomen with the intermediate segments slightly constructed at the base; anal plate with a very deep notch, the lateral processes very acute. Wings very slightly tinged with cinereous, more fulvous towards the costa. Stigma fulvous brown; marginal cell evidently acuminate beyond the apex of the second submarginal cell, the first transverso-cubital vein curved, and the second cubital cell receiving the recurrent vein nearer the base than the middle of its length, beyond which the cubital vein is strongly thickened. The legs are exceedingly short.

**Obs.**—Most of the characters given above will distinguish this species from *L. Halidaii*, whilst the colour of the head, thorax, and peduncle, the shorter scape to the antennæ, and the more villose and more robust thorax, distinguish it from *L. Illigeri*, and its considerably larger size from *L. Swainsonii*.

**SPECIES XI.**—*Labidus Swainsonii*, Shk. (Mon. Dor. p. 14.) Rufo-testaceus, pubescens, capite (mandibulis antennisque exceptis) castaneo; pedunculo abdominis transverso-quadrato, supra subconvexo, pedibus brevibus.

Long. corp. lin. 6½. Expans. alar. lin. 13.

Habitat in Brasilia. (Mus. D. Shuckard.) Para in Brasilia, D. Burchell (capt. 17 Decemb. 1829, ad 11 hor. p.m.) Etiam in Mexico. Mus. Westwood.

**SPECIES XII.**—*Labidus Hopei*, Shk. (Mon. Dor. p. 15.) Rufo-testaceus, pubescens; capite (mandibulis antennisque exceptis) atro; thorace fusco, scutello in medio sulcato, et pedunculo abdominis transverso-quadrato, supra subconvexo. Long. corp. lin. 6. Expans. alar. lin. 12.

Habitat in Brasilia. In Mus. Hope, Shuckard et nostr. Comm. D. Melly.

**SPECIES XIII.**—*Labidus Gravenhorstii*, W. Testaceo-fulvus, capite (antennis mandibulisque exceptis) atro, thoracis dorso fusco, abdomine longo cylindrico. Long. corp. lin. 7. Expans. alar. lin. 12½.

Taken at Rio Vendinha in Brazil on the 10th of September, 1828, in the evening, by W. Burchell, Esq.

The head is rather small and black, the ocelli large and wide apart, the clypeus castaneous, the mandibles rather short and curved, the antennæ slender; the thorax brown, above pubescent, beneath more testaceous, not very gibbous in front; scutellum entire, not sulcated; peduncle as broad as the abdomen, and shortly transverse-quadrate, flat above, with the posterior angles produced backwards and acute; the sides obliquely truncate towards the hind angles, beneath scarcely angulated; the remainder of the abdomen almost cylindrical, the legs short and testaceous, red, the hind tibiae and tarsi simple, tibial spur straight and not

dilated at the base; wings slightly dusky, with a fulvous tint towards the base, apex, and costa; wings and stigma fulvous; marginal cell conical at the tip, second submarginal cell larger than the first, and separated from it by a nearly straight vein, the recurrent vein received in the middle of the second submarginal cell, beyond which the cubital vein is slightly thickened; abdomen with the last joint compressed above at the tip; anal plate deeply emarginate, the lateral processes acute.

*Obs.*—This species approaches nearest to *L. Hopei*, but is distinguished from it by many of the characters given above.

*Obs.*—Mr. Burchell also captured a specimen at Guardamôr, in Brazil, on the 8th of September, 1828, at midnight, which differs from the above in having the wings rather more dusky, with the stigma darker and brown at the base, the vein separating the first and second submarginal cells, straight, and the anal plate not exposed.

**SPECIES XIV.**—*Labidus Spinolæ*, W. Fuscus, cylindricus, capite atro, abdomine fulvo-fusco, pedunculo transverso, lateribus subrotundatis, alis infumatis, venis stigmatæque subfuscis. Long. corp. lin. 6½. Expans. alar. lin. 11½.

Taken at Meia Ponte, in Brazil, on the 16th of October, 1827, by W. Burchell, Esq. Very similar to *L. Gravenhorstii*, from which it differs in its darker-coloured wings and stigma; the two basal submarginal cells are not so long, the vein separating them being less oblique, the legs darker coloured, the peduncle broader and not so square, the sides being rather rounded, the central surface scarcely angulated.

Mr. Burchell also captured another specimen at Caisara, in Brazil, on the 23d of October, 1827, which although greatly mutilated appears to belong to this species.

**SPECIES XV.**—*Labidus Guerinii*, Shk. (Mon. Dor. App. p. 44). Fuscus, subpubescens; capite atro, scapo antennarum incrassato, clypeo tuberculis binis acutis, recurvis, instructo; mesothorace antice valde convexo, abdomine pedibusque magis rufescentibus. Long. corp. lin. 5½. Expans. alar. lin. 12.

Habitat in Brasilia. In Mus. D. Shuckard.

**SPECIES XVI.**—*Labidus D'Orbignii*, W. (Shk. Mon. Dor. p. 15.) Niger, brunneo-holosericeus, pedunculo abdominis semicirculari, supra subconvexo, nervis alarum brunneo-testaceis, ocellis parvis, cellula marginali brevi postice acute angulata. Long. corp. lin. 6½. Expans. alar. lin. 12.

Habitat in America Meridionali, D. D'Orbigny. In Mus. nostr., e Mus. Reg. Paris. communic.

**SPECIES XVII.**—*Labidus Walkerii*, W. Castaneo-fuscus, marginibus segmentorum abdominis lucidioribus, alis infumatis, venis fuscis, pedunculo transverso-quadrato, subtus haud angulato. Long. corp. lin. 5. Expans. alar. lin. 9½.

Taken at Meia Ponte, in Brazil, on the 16th of October, 1827, by W. Burchell, Esq. Body long, cylindrical, and of a dark brown colour, with the head darker and the margins of the abdominal segments brighter coloured, pubescent; jaws rather short and curved, facial carinae extended along the outside of the front ocellus; ocelli large, lateral ones placed close to the eyes. Thorax gibbous before and behind. Peduncle transverse-quadrato, the sides slightly elevated, posterior angles not acute, ventral surface not angulated. Legs short and very slender; wings dusky, with brown veins and a dark brown stigma; marginal cell lanceolate, two first submarginal cells larger, separated by a curved vein, the vein separating the second and third submarginal cells straight and much longer than in *L. D'Orbignii*, the cubital vein closing the second submarginal cell behind not thickened; the legs are very short and of a brick-brown colour.

Most like *L. D'Orbignii*, but smaller and of a browner colour; the marginal cell differently shaped; the legs not black, the wings darker coloured, with the second submarginal cell of equal breadth throughout.

**SPECIES XVIII.**—*Labidus Klugii*, Shk. (Mon. Dor. p. 16). Rufo-castaneus, pubescens, vertice, thoracis dorso, et stigmatæ alarum badiis; clypeo tuberculis binis, acutis, instructo, et pedunculo transverso-quadrato, subconvexo. Long. corp. lin. 4½. Expans. alar. lin. 8½.

Habitat in insula St. Vincentii, D. L. Guilding. In Mus. D. Shuckard.

**SPECIES XIX.**—*Labidus Erichsonii*, W. Longus, cylindricus, rufo-testaceus, capite badio; clypeo integro; pedunculo subtransverso, angulis acutis; stigmatæ magno nigricanti. Long. corp. lin. 5. Expans. alar. lin. 9.

Habitat in Brasilia, D. Miers.

Entirely of a fulvous red colour (except the head, which is dark chesnut) and shining, being but slightly pubescent; the jaws of moderate size, the clypeus entire, the ocelli very large, the facial carinæ very strong, and extending on each side of the front ocellus, forming a strong angle beneath it; the antennæ are long and slender, the basal joint longer than in *L. Klugii*; the thorax is not very gibbous in front, the peduncle is narrower than the thorax or abdomen, and of a squarer form than in any of the preceding, with the angles acute; the abdomen is very long and cylindric, not thickened towards the tip as in *L. Klugii*. The wings are broad and almost colourless, with thin brown veins; the stigma large and blackish; the marginal cell is slightly attenuated towards the tip; the first and second submarginal cells are large, separated by a slightly curved vein; the recurrent vein is received at the middle of the second submarginal cell, beyond which the cubital vein is thickened; the anal plate is deeply and widely emarginate; the lateral processes very acute.

†† *Peduncle as long as broad.*

SPECIES XX.—*Labidus Romandi*, Shk. (Mon. Dor. p. 17). Rufo-testaceus; vertice badio, stigmatum alarum brunneo-fusco, et pedunculo abdominis quadrato-convexo; mandibulis brevibus, tenuibus; abdominis segmentis posticis, subcompressis. Long. corp. lin. 4½. Expans. alar. lin. 7¾.

Inhabits Brazil (Mus. D. Shuckard). Also taken at Canga, in Brazil, on the 4th of November, 1838, during the night, by W. Burchell, Esq. Mr. Burchell possesses a specimen 4 lines long, and with the wings expanding only 7 lines, which I refer to this species, although the anal plate is not exposed, and the wing-veins exhibit the following distinctions, which are, I apprehend, to be regarded as irregularities:—The right fore-wing has four submarginal cells, a small supplemental one (forming a third) being interposed between the ordinary second and terminal cells. This little cell is very narrow in front, but broader behind. The left fore-wing has also four submarginal cells, but here the small supplemental cell is interposed between the ordinary first and second; it is of a triangular form, and does not extend upwards to the marginal cell, the second transverse-cubital vein being in fact furcate at a little distance from the marginal cell.

#### UNKNOWN SPECIES.

SPECIES XXI.—*Labidus Pertii*, Shk. (Mon. Dor. p. 18).

*Syn.—Lab. Latreillii*, Perty, Del. An. Art. Br. p. 138, t. 27, f. 11.

*Obs.—Dorylus mediatu*s, Fabr. Syst. Prez., p. 428. (*Labidus?* *mediatus*, Shk. Mon. Dor. p. 18.) preserved in the Royal Museum of Copenhagen, has been examined by Dr. Erichson, who informs me that it is a male *Mutilla*, having the third joint of the antennæ (instead of the base of the second, as described by Fabricius) ferruginous.

#### ÆNICTUS, *Shk.*

This genus differs from *Labidus* in the venation of the wings, and geographical situation; and from *Dorylus* in the small size of the body, the long curved mandibles, and the slender cylindrical thighs; whilst it is at once separated from *Rhogmus* by possessing only one recurrent vein.

Mr. Shuckard founded the genus in his Monograph on the Dorylidæ upon two specimens of a single species brought from Poonah, in Bombay, by Col. Sykes. I have, however, long had a note of a second species in the Cabinet of the Linnæan Society, and now possess, by the kindness of W. W. Saunders, Esq., President of the Entomological Society, F.L.S., &c., a specimen of the species described by Mr. Shuckard, taken in Northern India, by Lieut. Campbell.

**SPECIES I.**—*Enictus ambiguus*, Shk. (Mon. Dor. p. 24). Rufo-testaceus, pubescens, capite (antennis mandibulisque exceptis) et thorace nigro, mandibulis longissimis; facie carina media subtus furcata, alarum venis stigmatæque fuscis, pedunculo profunde canaliculato. Long. corp. fere lin. 4. Expans. alar. lin.  $7\frac{1}{2}$ . (Pl. 20, fig. C., head.)

Habitat India Orientali, Poonah. In Mus. Sykes, Saunders, et Westw.

**SPECIES II.**—*Enictus certus*, W. Rufo-fulvescens, pubescens, capite brunneo-nigro, mandibulis sub-brevibus, stigmatæ alarum fusco, venis fulvo-fuscis, pedunculo antice angustiori, disco subplano. Long. corp. (abdom. incurv.) lin.  $3\frac{1}{2}$ . Expans. alar. lin.  $7\frac{1}{2}$ .

Habitat? In Mus. Soc. Linn. Lond.

Head pitchy or brunnaceous black, the face redder brown; the antennæ fulvous, with long slender hairs; mandibles short, falcate, and fulvous. The thorax is fulvous, finely setose. The abdominal peduncle is somewhat triangular; the sides rather rounded, and the posterior angles not acute; the sides are slightly elevated, and the disk is nearly flat and not channelled in the middle; the second, third, and fourth segments of the abdomen are of nearly equal size, the fifth is much longer than either of these segments, the sixth is much shorter, and the seventh is about as long as the sixth. The male organs are concealed. The wings are throughout more stained with a light fulvous tint than in *Æn. ambiguus*. The stigma is fulvous, and the veins are fulvous-brown. There is considerable difference in the position of these veins in the two known species. The cubital vein arises very near the postcostal in *Æn. certus*, but at a distance from it in *Æn. ambiguus*, in consequence of which the first cubital cell is smaller than the second discoidal cell in the former, whereas they are of equal size in the latter; this is further increased by the vein which separates the first and second discoidal cells being deflexed at its extremity in *Æn. certus*, whereas it is straight in *Æn. ambiguus*, terminating at a greater distance from the extremity of the anal vein; moreover the transverse veins which close the extremity of the cubital and discoidal cells are much more angulated in *Æn. ambiguus* than they are in *Æn. certus*.

### DORYLUS, Fabr.

The species of this genus are confined to Africa and Asia. They are distinguished by possessing very short feet, with compressed femora, two submarginal cells, and only one recurrent vein in the fore wings.

A.—Peduncle cup-shaped, nearly as large as the following segment.

**SPECIES I.**—*Dorylus nigricans*, Illiger (Fabr. Shk. Mon. Dor. p. 28). Nigricans, brunneo-holosericus, capite magno, abdominis petiolo acetabuliformi, segmento 2do paulo minori, oculis minutis. Long. corp. lin. 13. Expans. alar. lin.  $21\frac{1}{2}$ .

Inhabits Sierra Leone.

B.—Peduncle cup-shaped, much smaller than the second segment.

**SPECIES II.**—*Dorylus helvolus*, Linnæus, &c. (Shk. Mon. Dor. p. 29). Helvolus pilosus; capite rufo, facie opalina convexa, petiolo acetabuliformi, 2do segmento multo minori. Long. corp. lin.  $12\frac{1}{2}$ . Expans. alar. lin.  $21\frac{1}{2}$ .

Inhabits the Cape of Good Hope.

**SPECIES III.**—*Dorylus affinis*, Shk. (Mon. Dor. p. 30). Helvolus pilosus; capite rufo-castaneo; facie plana, petiolo acetabuliformi, 2do segmento multo minori. Long. corp. lin.  $10\frac{1}{2}$ . Expans. alar. lin. 19.

Inhabits the vicinity of the river Gambia. Differs from the preceding in its smaller size, in the cubital nervure being slightly undulated (instead of straight), as far as the separation of the two submarginal cells and the recurrent nervure, inserted at *fully one-half* of the length of the first of the latter.

C.—Peduncle quadrate, mandibles slender and much acuminate.

**SPECIES IV.**—*Dorylus glabratus*, Shk. (Mon. Dor. p. 31). Rufo-brunneus, glaber, subrobustus, venis alarum nigris, vertice valde prominente, facie in medio sulcata, mandibulis attenuatis, labro tuberculis binis obtusis instructo et pedunculo abdominis transverso-quadrato. Long. corp. lin.  $14\frac{1}{2}$ . Expans. alar. lin.  $23\frac{1}{2}$ .

Inhabits the vicinity of the river Gambia.

**SPECIES V.**—*Dorylus juvenculus*, Shk. (Mon. Dor. p. 32). Rufo-fuscus, glaber, subattenuatus; capite (antennis mandibulisque castaneis exceptis), et venis alarum nigris, vertice valde prominente, facie in medio sulcata, labro tuberculis binis instructo et pedunculo abdominis quadrato-convexo. Long. corp. lin.  $15\frac{1}{2}$ . Expans. alar. lin. 24.

Inhabits Barbary.

**SPECIES VI.**—*Dorylus labiatus*, Shk. (Mon. Dor. p. 33). Pallide brunneus, seu rufo-testaceus glaber, facie pilosa, subtuberculata, prominula, in medio profunde sulcata, mandibulis attenuatis, labro tuberculis binis magnis instructo et pedunculo abdominis quadrato vel potius subgloboso. Long. corp. lin.  $14\frac{1}{4}$ . Expans. alar. lin. 23.

Inhabits Poonah and Assam.

D.—Peduncle quadrate, mandibles broad and nearly triangular.

**SPECIES VII.**—*Dorylus orientalis*, Westwood. (Proc. Z. Soc. 1835, p. 72, Shk. Mon. Dor. p. 34). Helvolus pilosus, abdomine glabro, capite rufo, facie in medio sulcata, mandibulis subtrigonis, vena cubitali valde sinuosa, pleuris sericeis et pedunculo abdominis quadrato gibboso; venis binis internis alarum posticarum venis duabus transversis convexis. Long. corp. lin.  $12\frac{1}{4}$ . Expans. alar. lin. 19.

Inhabits Bengal.

**SPECIES VIII.**—*Dorylus longicornis*, Shk. (Mon. Dor. p. 35). Helvolus subpubescens, capite nigro convexo, facie in medio sulcata, mandibulis subtrigonis, pleuris obscuris, vena cubitali subrecta, petiolo abdominis quadrato gibboso. Long. corp. lin.  $11\frac{1}{2}$ . Expans. alar. lin. 18.

Inhabits Bengal.

**SPECIES IX.**—*Dorylus attenuatus*, Shk. (Mon. Dor. p. 36). Helvolus vel testaceus subpubescens, capite nigro vel rufo, facie in medio sulcata, mandibulis subtrigonis, venis alarum brunneis vel testaceis, pedunculo quadrato gibboso. Long. corp. lin.  $10\frac{1}{4}$ . Expans. alar. lin. 15.

Supposed to inhabit the vicinity of the river Gambia.

**SPECIES X.**—*Dorylus atriceps*, Shk. (Mon. Dor. pl. 37.) Sordide helvolus, glaber, capite (antennis mandibulisque badiis exceptis) atro, facie valde prominente in medio subsulcata, pedunculo abdominis quadrato-gibboso. Long. corp. lin.  $9\frac{1}{2}$ . Expans. alar. lin.  $15\frac{1}{2}$ .

From the vicinity of the river Gambia. The mandibles are very broad, with a large obtuse triangular projection at the base within, leaving no space between them when closed, their inner edge acute.

### RHOGMUS, Shk.

This group has been proposed as a genus by Mr. Shuckard, for the reception of a species which differs from the other Doryli, by possessing two recurrent veins in the fore wings, which have only two submarginal cells; the mandibles are triangular, the feet very short with the thighs broad and compressed, and the abdomen very long and clavate. From the irregularities which so frequently occur in the position of the veins of the wings of the other Doryli, I consider that the first of these characters, which Mr. Shuckard considers as of primary importance and employs in his synoptic table, of too trivial a nature to warrant the generic separation of Rhogmus from Dorylus, whilst its other characters appear to me but specific distinctions.

**SPECIES I.**—*Rhogmus fimbriatus*, Shk. (Mon. Dor. p. 39.) Helvolus pilosus; abdomine glabro, segmento ultimo supra et duobus ultimis subtus fimbriatis; capite (clypeo antennis mandibulisque castaneis exceptis) nigro, venis alarum brunneis et pedunculo abdominis transverso-quadrato, convexo. Long. corp. lin.  $17\frac{1}{4}$ . Expans. alar. lin. 22.

Inhabits the Gold coast and the vicinity of the river Gambia.

The splendid Orchidaceous plant figured is the *Cattleya Aclandiae* of Lindley, Bot. Reg. v. 26, pl. 48, a recently discovered species inhabiting Brazil.