NOTE XXIV.

PRELIMINARY DESCRIPTIONS OF NEW SPECIES OF THE COLEOPTEROUS GENUS HELOTA, MACLEAY.

BY

C. RITSEMA Cz.

Having the intention to publish at some future date full descriptions (perhaps also figures) of all the known species of the genus *Helota* Macleay [the only species which are still unknown to me, are *Helota thibetana* Westw. 1) (= *Mellii* Westw. 2) and *Helota africana* Olliff 3)], I will confine myself for the present time to give the distinctive characteristics of the new species with which I am as yet acquainted.

Before going over, however, to the descriptions of these new species, I feel obliged to state, judging from the specimens in the collections of Mr. E. W. Janson), Mr. R. Oberthür and in the Leyden Museum which are now before me and which are determined by Mr. A. Sidney Olliff, that this author has overlooked the specific distinctness of my present Helota Oberthüri and Fairmairei from Helota Servillei Hope, that of my present Helota Kolbei from his Helota Gorhami, that of Helota fulviventris Kolbe (at that time undescribed) from Helota gemmata Gorh., and that of my present Helota fulvitarsis from Helota semifulva Rits.

2) Cabin. of Orient. Entom. p. 86, pl. 41, fig. 8.

¹⁾ Ann. and Mag. of Nat. Hist. VIII. p. 123.

³⁾ Ann. and Mag. of Nat. Hist. (5). XIII. p. 479, and Waterhouse's Aid. Pl. 153, fig. 3.

⁴⁾ These specimens are now in the possession of Mr. J. R. H. Neervoort van de Poll.

Moreover he considered the three clearly distinct species *Helota Guerinii* Hope, *curvipes* R. Oberth. and *ocellata* Rits. to belong to one and the same species.

Helota Oberthüri, nov. spec. of and Q.

Belongs to the group of Helota Servillei Hope 1) and strongly resembles that species. In the female sex, however, the apices of the elytra are more abruptly narrowed, more acutely pointed and more dehiscent than in Servillei 2), and the apical margin of the last ventral segment is bisinuate, whereas it is regularly rounded in Servillei. In the male sex the second interstice is sharply raised at the end of the elytra and slightly prolonged beyond them, and, as the sutural margin is likewise slightly prolonged, each elytron seems to be faintly bidentate, whereas in the male of Servillei the apices of the elytra are conjointly and very regularly rounded and the sutural margins end in a very distinct spine. Moreover the anterior tibiae of the male do not show the small strongly compressed dilatation on the inner margin of the under surface a little before the apex, which is present in the male of Servillei. Finally the red coloured lateral streak of the pronotum is more densely and very regularly punctured in the new species. - Length of the male 18 mm., that of the female 15 mm.

Hab. India orient.: Darjeeling. — A male and a female in the collection of Mr. René Oberthür to whom this species is dedicated.

Obs. Helota Servillei Hope, the type of which is from Poonah, is represented in the Leyden Museum by a of from India bor., in the Brussels, Museum by a of from Poonah, in the Museum of Budapest by a of from the

¹⁾ Coleopt Manual. III. p. 187; pl. 3, fig. 4.

²⁾ In the above cited figure of this species, representing a female, the shape of these apices is correctly drawn.

Himalaya, and in the collection of Mr. Neervoort van de Poll by a of from Bengal and a Q from India orient.

Helota longipes, nov. spec. o.

Very much like the male of Servillei Hope and agreeing with it in almost every respect, but at once distinguished by its very elongate hindlegs. Moreover the anterior tibiae do not show the small strongly compressed dilatation on the inner margin of the under surface a little before the apex, which is present in the male of Servillei. As to the coloration the black colour at the knees is almost entirely absent and on the thorax it is restricted to the smooth elevation in front of the scutellum. — Length 18—19 mm.

Hab. India bor. and Sikkim. — A male specimen in the collection of Mr. M. Sédillot, and another (that from Sikkim) in the collection of Mr. Neervoort van de Poll. — The female is as yet unknown to me.

Helota Fairmairei, nov. spec. on and Q.

Also resembling Helota Servillei Hope, but the female has the apices of the elytra conjointly rounded, narrowly truncate at the suture; the sutural margins have not the slightest trace of a spine at the end, and the last ventral segment is broadly truncate in a rather straight line and faintly depressed at the apex. In the male the elytra are also conjointly but more broadly rounded, and the sutural margins end in a small spine. In the male of Servillei the apex of the elytra is very regularly rounded and the sutural spine rather strong, but in Fairmairei the apical margin of the elytra is faintly waved and the sutural spines are smaller. Moreover the male of Fairmairei has the compressed dilatation at the end of the anterior tibiae, whereas in Servillei this dilatation is much smaller and situated a little before the apex. — Length 16,5—20,5 mm.

Hab. India orient.: Sikkim (Leyden Museum, Berlin Mu-

seum, coll. Fairmaire, coll. Neervoort van de Poll), Himalaya (Leyden Museum), Darjeeling (coll. Oberthür and Copenhagen Museum), Cherra Ponjee (coll. Sédillot), Bengal (coll. Neervoort van de Poll), India bor. (coll. Sédillot).

I have much pleasure in dedicating this beautiful species to Mr. Léon Fairmaire.

Helota caudata, nov. spec. Q.

Very closely allied to *Helota Gorhami* Olliff 1) and strongly resembling that species in the sculpture of the elytra. It is, however, smaller and proportionately narrower, the apices of the elytra are much more prolonged and more acutely pointed, the elytral epipleurae are strongly punctured on the inner half of the basal portion (entirely impunctate or nearly so in *Gorhami*), the abdomen is bright rufous (dark pitchy brown in *Gorhami*), and the last ventral segment is decidedly shorter and more broadly rounded than in the female of *Gorhami*. — Length 12,5 mm.

Hab. China. — A single female specimen (brought home by Père David) in the collection of Mr. René Oberthür.

Obs. In the Archiv für Naturgeschichte, Vol. LII (1886) p. 181, Mr. H. J. Kolbe has published a very satisfactory description of both sexes of *Helota Gorhami* Olliff. The male is clearly distinct from that of the other species of the *Gemmata*-group by the very conspicuous sutural spine and by the tomentose depression on the middle of the metasternum, which latter character it has in common with the males of the *Vigorsi*- and *Servillei*-group.

Of this species I have seen a type-specimen (Q) from Shantung from the collection of Mr. E. W. Janson which is now in the possession of Mr. Neervoort van de Poll, further a male and a female specimen from Corea received from Mr. Kolbe, a female specimen from North China

¹⁾ Cistula Entomologica. Vol. III, p. 53.

from the Copenhagen Museum, and a male specimen from North China (brought home by Père David) making part of Mr. Oberthür's collection.

Helota Kolbei, nov. spec. σ and Q.

This is another Chinese species of the Gemmata-group, of which several specimens of both sexes have been brought home by Père David together with Gorhami Olliff and caudata Rits. As to the sculpture of the elytra it resembles the Japanese Helota gemmata Gorh. 1) much more than it does Helota Gorhami Olliff with which it is confounded by Mr. Olliff. Usually, however, it is larger, considerably narrower, and more elongate, the bronze colour of the upper surface is brighter, and the colour of the abdomen (in mature specimens) dark chestnut, brighter along the lateral margins, whereas in gemmata the colour of the abdomen is rufous.

The σ is easily distinguished from that of all other known species by the want of the tomentose impression on the last ventral segment, the apical margin of which is faintly trisinuate. Its elytra are conjointly rounded at the apex and do not show the slightest trace of a sutural spine, whereas the small strongly compressed apical dilatation on the inner margin of the under surface of the anterior tibiae, which is present in the male of gemmata, is absent in Kolbei.

In the Q the apices of the elytra are more produced than in gemmata, and, though likewise regularly narrowed in a convex line, more acutely pointed; moreover the last ventral segment, which is very short in gemmata (about equal in length to the 3rd segment), is considerably longer (about as long as the 3rd and 4th segment taken together) and of a more triangular shape in the new species. Finally the apical depression which is present on the last

¹⁾ Trans. Ent. Soc. London. 1874. p. 448.

ventral segment of the female gemmata is absent in Kolbei. — Length 14,5—17 mm.

Hab. China: Kiang si and Shanghai (coll. E. W. Janson, R. Oberthür, M. Sédillot, J. R. H. Neervoort van de Poll, Leyden Museum, Genoa Museum and Berlin Museum).

I have dedicated this interesting species to Mr. H. J. Kolbe of the Berlin Museum.

Obs. Japan has, as far as I know, three species of *Helota*, two of which belong to the *Gemmata*-group. These two bear, up to this day, each the name of *Helota gemmata* Gorh. although they are clearly distinct.

The true *Helota gemmata*, described by Gorham in the Transactions of the Entomological Society of London for the year 1874 (p. 448), has, besides striking differences in the sculpture of the elytra, the anterior tibiae in the male provided with a compressed apical dilatation on the inner margin of the under surface, and in the female acute apices to the elytra and an apical depression on the last ventral segment.

In the second species, which is the one described by Kolbe (after a female specimen from Corea) under the name of *Helota fulviventris* ¹), the male does not possess the compressed dilatation on the apex of the anterior tibiae, and the female has not only the apices of the elytra separately rounded (not produced), but it wants moreover the apical depression on the last ventral segment. — Of this latter species a very badly drawn figure is published on plate 133 of Waterhouse's Aid to the Identification of Insects.

If the larva described and figured by Sidney Olliff (Cist.

¹⁾ Archiv für Naturgesch. Bd. LII (1886) p. 182; taf. XI, fig. 25. — I have examined a female specimen of this species from the Amur, kindly sent to me for comparison by Mr. Kolbe. — The specimens from Shanghai, alluded to by Mr. Lewis (Trans. Ent. Soc. London. 1874, p. 449), will probably prove to belong either to fulviventris Kolbe or to Kolbei Rits., the latter species being already known from that locality.

Ent. III. p. 52; pl. 3, fig. 8) belongs to Helota fulviventris Kolbe, or to the true Helota gemmata Gorh. I can not make out, Mr. Lewis having captured both species.

Helota Guerinii Hope 1), curvipes R. Oberth. 2) and ocellata Rits. 3).

These three species are united by Mr. Sidney Olliff though they are certainly distinct. Of the two latter species I have the type-specimens before me, and Mr. Ch. J. Gahan of the British Museum has been kind enough as to examine at my request the position of the yellow elytral spots in the type-specimen of Helota Guerinii which is in the British Museum. About this he wrote me: »I have examined Hope's type-specimen of Guerini 4) which is a o, in which, unfortunately, the head and prothorax are wanting. The anterior as well as the posterior spot of the elytra is between the 3rd and 7th striae. There are a second male specimen and two females associated with it, which agree with the type in the position of the spots; and, in the of, the anterior tibiae are much curved. These are ticketed E. Indies. - There is also a O specimen, ticketed N. India, in which the spots are, respectively, placed between the 4th and 6th, and 3rd and 6th striae. The spots in this specimen are at once seen to be smaller than in the others."

Of the true Helota Guerinii Hope (the species which has the anterior as well as the posterior elytral yellow spot between the 3rd and 7th striae) I have before me a male and two females from Bombay from the collection of Mr. E. W. Janson, and a third female from the collection of Mr. M.

¹⁾ Coleopt. Manual. III (1840) p. 188. J. — Travancore. 2) Coleopt. Novitates. I (1883) p. 60. J. — Himalaya.

⁸⁾ Notes Leyd. Mus. III (1881) p. 79. Q. — Java.

⁴⁾ From Travancore.

Sédillot ticketed: » coll. Thomson. Thibetana Westw. = Mellyi Westw. Thibet", but this determination certainly is incorrect. The specimens from Mr. Janson's collection have been examined by Mr. Olliff, and one of the females has been figured in the Cistula Entomologica (III. pl. 3, fig 1).

The other species, which has the anterior elytral spot between the 4th and 6th, and the posterior spot between the 3rd and 6th striae, is the species the male of which has been described by Mr. R. Oberthür under the name of *Helota curvipes*. Besides the two type-specimens, which have likewise been examined by Mr. Olliff and one of which comes from the Himalaya, I have before me a third male from North India from the collection of Mr. Sédillot, and a female specimen from Tenasserim (brought home by Mr. Fea) and belonging to the Genoa Museum.

Guerinii Hope and curvipes Oberth, though closely allied, are not only distinct by the different position of the elytral spots: in curvipes the fulvous colour of the anterior angles of the pronotum is indistinctly continued along the lateral margins of the thorax, the punctuation on the pronotum is less dense, and the row of strong punctures which is present on the interstices of the external half of the elytra in Guerinii is absent in curvipes. Moreover the apices of the elytra in the females are much more produced and more acutely pointed in Guerinii than in curvipes.

As to the Javanese Helota ocellata Rits., of which only a female (the type-specimen) is known to me, it has a shorter and broader form, a much brighter colour on the upper surface (bright golden green, with coppery tinges at the sides of the pronotum and around the elytral spots), the elytral spots proportionately large, the anterior one apparently between the 3rd and 7th, but in reality between the 4th and 7th striae, the posterior one hetween the 3rd and 7th striae, and the fulvous colour of the anterior angles of the pronotum indistinctly continued along the lateral margins of the thorax. The apices of the elytra are less produced than in the female of Guerinii, but more acutely pointed than

in that of curvipes, and the interstices on the external half of the elytra are not provided with a row of strong punctures.

Helota fulvitarsis, nov. spec. of and Q.

Very closely allied to and strongly resembling the Javanese *Helota semifulva* Rits. with which it is united by Mr. Sidney Olliff. I feel sure, however, of its specific distinctness, which might be already presumed by the difference of the countries from which they come: Bengal (Darjeeling) and Java.

The new species is proportionately broader, the punctures on the pronotum are distinctly larger, the flattened lateral margins of the elytra are broader, the tarsi are of a pale fulvous colour (dark pitchy brown in semifulva), and the fulvous colour of the basal half of the elytra is continued over the flattened lateral margins much farther than in semifulva. The elytra are conjointly rounded, both in male and female, but the male has the anterior tibiae strongly curved, and its apical ventral segment is inconspicuously depressed in the middle before the apical margin, which depressed portion is very densely and finely punctured and hairy. — Length of the male 8 mm., that of the female 9,5 mm.

Hab. India orient.: Darjeeling. — A male and a female in the collection of Mr. René Oberthür, who possesses also a female specimen of Helota semifulva Rits., the second specimen of this species with which I am as yet acquainted, and which comes, like the type-specimen, from Mt. Ardjoeno (Java orient.).

The specimen from India" in the collection of the British Museum, alluded to by Mr. Sidney Olliff under the name of *Helota semifulva* Rits. (Cist. Ent. III. p. 55), will, no doubt, prove to belong to *Helota fulvitarsis*.

Helota guineensis, nov. spec. Q.

Closely allied to Helota africana Olliff 1) from Angola, and strongly resembling it. The two specimens before me, which come from Accra and Assinie (Guinea coast), show, however, some differences which induce me to believe it a distinct species, but as the type-specimen of africana is unknown to me, I can compare my specimens with the description and figure only. In the new species the thorax is shorter and broader and the sides are decidedly rounded: the punctures are widely and irregularly spread, and those on the sides are as large as those on the middle; the black median streak is laterally emarginate on its anterior half; the base of the thorax as well as that of the elytra is very narrowly edged with black. Of the elytra the smaller apical half is black with a deep triangular notch at the suture, the two elongate black spots on the fulvous basal half are absent, and the apices are more acutely pointed. The legs are black, with the exception of a broad fulvous ring at the basal half of the femora, and a more or less distinct spot on the middle of the under surface of the tibiae, which is of the same colour. The last ventral segment shows an ill-defined impression along the middle, and its apex is indistinctly truncate. - Length 13-14 mm.

Hab. West Africa: Accra and Assinie. — A single female specimen in the collection of Mr. Neervoort van de Poll, and another (that from Assinie) in the collection of the Leyden Museum and presented by Mr. Ch. Alluaud.

Helota costata, nov. spec. 8.

Also allied to Helota africana Olliff from Angola and strongly resembling that species as to coloration, but quite

¹⁾ Ann. & Mag. of Nat. Hist. (5) XIII. p. 479, and Waterhouse's Aid to the Identification of Insects. Pl. 153, fig. 3. — There is every probability that this specimen is the one mentioned by Chapuis in the "Genera des Coléoptères", vol. XII (1876) p. 18: "Nous avons vu, dans la Collection du célèbre voyageur Welwitch, un type de l'Afrique occidentale."

distinct by its costate elytra and by the oblique callosity between the 3rd and 6th striae, just before the black apical half, which characters I think cannot be of sexual value.

As to the coloration it differs from africana (according to the description and figure) in having the black elytral spot between the 3rd and 4th striae more elongate and the line of demarkation between the fulvous and black colour very irregular, while it is nearly straight in the figure of africana. Moreover the legs are black or dark pitchy with a very irregular fulvous ring at the base of the femora.

The head, thorax and scutellum correspond pretty well with the description of africana; the fulvous sides of the thorax, however, are not finely but very coarsely punctured, leaving free an elongate raised spot. The elytra are, as in africana, half as long again as the head and prothorax together but proportionately narrower and slightly tapering towards and conjointly rounded at the apex; they are somewhat dehiscent at the suture, and the apical margin is minutely bisinuate in each elytron. The interstices are alternately costate; the first (sutural) and second costae, however, become flat towards the base, and the second and fifth only join the apical margin; the third costa is somewhat shorter than the fourth, and the fifth does not reach the basal margin; the punctures of the striae become larger the more they approach the lateral margins. Between the 3rd and 6th striae, just before the black apical half, an oblique callosity of a somewhat paler colour is present. The anterior tibiae are curved, without compressed dilatation at the apex; the posterior femora rather slender and slightly curved. The first ventral segment is shallowly impressed along the middle; the fifth broadly truncate and provided with a large but shallow semicircular impression which is neither punctate nor tomentose. - Length 15 mm.

Hab. East Africa: Zanzibar. — Of this very interesting species three specimens have been sent to the Berlin Museum by Mr. C. W. Schmidt, and of these Mr. Kolbe has been good enough to let the Leyden Museum have one.

Finally it will be, I believe, not without interest to give here a copy of the descriptions of *Helota Thibetana* Westw. and *Mellii* Westw., names which, undoubtedly, are given to one and the same species, which, besides africana, is the only one I have not yet seen.

Helota Thibetana Westw. Ann. & Mag. of Nat. Hist. VIII (1841) p. 123:

Aenea, lateribus cupreo-tinctis, valde rugosa et punctata tuberculisque oblongis distincta, elytris guttis 4 elevatis fulvis, antennis piceo-luteis, femoribus fulvis, apicibus aeneis, tibiis fulvo piceoque annulatis. Long. corp. lin. 4. — Habitat Thibet. Mus. Melly.

Helota Mellii Westw. Cabin. of Orient. Entom. (1848) p. 86; pl. 41, fig. 8:

Helota, supra aenea, lateribus cupreis, punctata et rugosa, tuberculisque elevatis elongatis nitidis, strias longitudinales in elytris formantibus, his etiam maculis 4 elevatis fulvis distinctis; antennis piceo-flavis; femoribus fulvis, apice viridibus; tibiis alternatim fulvis et piceis; tarsis piceis, dimidio basali articuli ultimi fulvo; corpore subtus pallide fulvo; capite (nisi in medio collaris) et lateribus thoracis viridibus et punctatis.

Helota, with the upper surface of the body brassy, the sides copper-coloured; punctured and rugose; and with elevated elongated shining tubercles which form longitudinal striae on the elytra; the latter also marked with four raised fulvous round spots; thighs fulvous, with the tips green; tibiae alternately fulvous and pitchy; tarsi pitchy, basal half of the terminal joint of the tarsi fulvous; body beneath pale fulvous; the head, except in the middle of the neck, and the sides of the thorax green and punctured.

Length of the insect, $4^{1}/_{2}$ lines. Inhabits Simlah, in Thibet 1). In the Collection of A. Melly, Esq.

¹⁾ It is certainly by mistake that Prof. Westwood says "Simlah in Thibet". Simlah is situated in the Province Punjab (N.W. Hindostan).

List of the twenty-five hitherto described species of the genus Helota.

Helota Vigorsii, Macleay.

- » scintillans, Olliff.
- » Servillei, Hope.
- » longipes, nov. spec.
- » Oberthüri, nov. spec.
- » Fairmairei, nov. spec.
- » Gorhami, Olliff.
- » caudata, nov. spec.
- » fulviventris, Kolbe.
- » gemmata, Gorh.
- » Kolbei, nov. spec.
- » sinensis, Olliff.
- » thibetana, Westw.
 Mellii, Westw.

Helota Guerinii, Hope.

- » curvipes, Oberth.
 - » ocellata, Rits.
- » cereopunctata, Lewis.
- » laevigata, Oberth.
- » pusilla, Oberth.
- » culta, Olliff.
- » semifulva, Rits.
- » fulvitarsis, nov. spec.
- » africana, Olliff.
- » costata, nov. 'spec.
- » guineensis, nov. spec.