

IV. *Descriptions of some new or imperfectly known Species of Bolboceras, Kirby.*

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HAVING in two previous communications described a number of new species of *Athyreus*, chiefly from South America, and given a synopsis of the Australian species of *Bolboceras*, I shall on the present occasion continue the descriptions of the species of the latter genus, especially such as are natives of the East Indies.

With the view of showing the generic as well as sexual distinctions existing between the *Bolbocerata* and *Odontæi*, I have given figures of the head and front of the prothorax of both sexes of *Odontæus mobilicornis* and *Bolboceras Aeneas*, Pz. (*quadridens*, Dftschm.) from Austria, together with the side of the head (showing the eyes), maxillæ and fore femora of both these insects. (TAB. IV. fig. 1 & 2, with the details.)

1. BOLBOCERAS CYCLOPS, Fabr. Ent. Syst. i. p. 15; Oliv. Ent. i. 3. t. 15. f. 140; ferrugineus, clypeo anticè carinâ transversâ tuberculisque duobus acutis instructo, vertice lineâ tenui parùm elevatâ inter oculos, pronoto utrinque excavatione profundâ subrotundâ anticè cornu acuto alteroque minori versus medium armato; spatio inter cornua intermedia plano punctato; anticè lineâ semicirculari parùm elevatâ cincto canali vix distincto longitudinali ante scutellum terminato, elytris punctato-striatis striis tenuibus, tibiis anticis 8-dentatis. (Mas.)—Long. corp. lin. 9. (TAB. III. fig. 15.)

Variat mas magnitudine cornuum capitis et pronoti necnon profunditate excavationum hujus lateralium.

Hab. in Javâ, Assam, et Indiâ centrali. Muss. *Hope* (olim *Lee*) et nostr. (*Hearsey*).

Fig. 15, insectum magnitudine paullò auctum; 15 u, caput et prothorax lateraliter visa.

Obs. The figure and description are made from the original specimen described from Lee's Collection by Fabricius, now in the Cabinet of the Rev. F. W. Hope.

2. BOLBOCERAS GRANDIS, Hope MSS.; rufo-castaneus, capite dentibusque tibiarum anticarum nigricantibus, clypeo carinâ tenui semicirculari, vertice carinâ transversâ inter oculorum partem anticam, pronoto convexo carinâ semicirculari tuberculisque duobus versus marginem anticum lineâque tenui longitudinali impressâ mediâ in parte posticâ. (Fœm.)—Long. corp. lin. 9. (TAB. IV. fig. 3, caput et prothorax suprâ visa.)

Hab. in Indiâ orientali? In Mus. D. *Hope*.

Caput suprâ sub lente granulosum, mandibula dextra extûs ante apicem incisa, pronotum anticè punctatum, posticè læve nitidum, versus angulos posticos utrinque parùm impressum. Elytra tenuissimè punctato-striata, striis ad apicem elytrorum extensis. Tibiæ anticæ 7-dentatæ. Corpus subtùs concolor, pilis fulvis hirtum.

Individuum e Calcutta vidi (pro fœminâ sp. præcedentis, *B. Cyclops*, e Parisiis, a Domino Chevrolatio mihi transmissum) in quo carina antica clypei magis recta et transversa evadit, lineaque impressa

pone carinam verticalem; prominentiis in parte anticâ pronoti minùs distinctis, lineâque longitudinali posticâ oblitteratâ; capiteque corpori concolori.—Long. corp. lin. $7\frac{1}{2}$.

Obs. Captain Parry possesses a rather smaller specimen, with the central impressed longitudinal line of the prothorax less distinct, the lateral tubercles near its anterior angles not so large, but covered with minute punctures, as is also the front of the prothorax, and the front of the head has the angles more emarginate.

3. *BOLBOCERAS SUBGLOBOSUS* *, Westw.; ferè globosus castaneo-rufus, capite et pronoto punctatissimis, margine capitis elevato, clypei margine antico recto carinâque transversâ inter oculos, pronoto carinâ curvatâ prope marginem anticum. (Fœm.)—Long. corp. lin. $8\frac{1}{2}$. (TAB. IV. fig. 4, caput et prothorax suprâ visa.)

Hab. in Indiâ orientali. *D. Boys*, in *Mus. Westw.*

B. grandi valdè affinis at magis globosus, capite et pronoto magis granulato-punctatis. Caput latum, carinâ rectâ transversâ ad basin clypei alterâque abbreviatâ rectâ inter partem anticam oculorum. Mandibulæ latæ, dextra ante apicem profundè incisa, lateribus tenuibus, recurvis, nigris. Pronotum versus marginem posticum parùm lævius, carinâ curvatâ medianâ prope marginem anticum, tuberculisque duobus elevatis et sublævibus inter carinam et angulos anticos, et impressione circulari parùm profundâ et sublævi in medio lateris utriusque. Elytra lævia, gracillimè striato-punctata. Tibiæ anticæ latæ, dentibus 7 nigris obtusis.

The insect which has served for the above description appears to be a female, and is closely allied to the preceding. I am unable, however, to surmise whether the male is one of those described in the subsequent portion of this memoir, or is still unknown.

4. *BOLBOCERAS FURCICOLLIS*, De Laporte, An. Art. Coleopt. vol. ii. p. 104. No. 3; castaneo-rufus sub lente granulatus, clypeo maris quadrato plano anticè bisinuato angulis lateralibus anticis in cornua duo porrectis, pronoto posticè elevato; disco in medio cornubus duobus erectis distantibus recurvis alterisque duobus intùs concavis versus angulos posticos; canali lævi mediano versus marginem posticum, elytris punctato-striatis, tibiis anticis extùs 6-dentatis.—Long. corp. lin. 10. (TAB. III. fig. 16, 17.)

B. Lecontei, Dej. Catal. Coleopt. p. 149.

Differt mas longitudine et magnitudine cornuum clypei et pronoti.

Hab. in Americâ boreali (test. *De Laporte* et *Muss. Hope* et *Gory*) an recte?

Obs. Mr. Melly possesses a specimen exactly agreeing with the male in Mr. Hope's Collection, figured above, which he received from Comercolly, in the East Indies. He also possesses a second specimen, from Thibet, very slightly smaller, having the cornuted processes on the prothorax very slightly smaller, the space between the two porrected points of the clypeus nearly straight, and not sinuated, agreeing in its colour with Mr. Hope's Assamese specimen of *B. Cyclops*, except that of the tips of the spines of the fore-legs and of the pronotum and clypeus, which are black. A third specimen is also in Mr. Melly's Collection, from Thibet, of an intermediate colour, exactly agreeing with them in general character and punctation, but having the anterior angles of the clypeus very slightly por-

* This species, as well as Nos. 9, 22, 24, 25, 26 and 27, have been added subsequently to the reading of the paper.

rected, the two horns of the pronotum much smaller, and the conical tubercle on each side scarcely evident, appearing as a slight carina.

Fig. 16, insectum suprà visum; 16 *a*, caput et prothorax a latere visa; 17 *a*, caput et prothorax individui alteri masculi suprà visa; 17 *b*, eadem a latere; 17 *c*, labrum cum mandibulis.

5. *BOLBOCERAS FERRUGINEUS*, De Laporte, Hist. Nat. An. Art. Col. vol. ii. p. 104. No. 4; castaneo-fulvus sub lente granulosus, capite anticè carinà sinuatà anticà tuberculoque subbifido transverso inter oculos, pronoto ante medium spatii duobus parùm elevatis lævibus lineà tenui impressà punctatà (ferè ad marginem posticum extensà) divisus utrinque etiam versus angulos posticos impressione obliquà suprà carinà lævi marginatà, elytris punctato-striatis, tibiis anticis 6-dentatis.—Long. corp. lin. $9\frac{1}{2}$. (TAB. III. fig. 18, caput et prothorax suprà visa; 18 *a*, mandibulæ.)

Hab. in Indiâ orientali? In Mus. Gory (nunc Hope).

Obs. M. Gory's specimen, from which Count De Laporte drew his description, is now in Mr. Hope's Collection before me, bearing a label, "*Bolboceras ferrugineus*, Fabr., Ind. or." Fabricius, however, described no *Scarabæus* under such a name, whilst the *Scarabæus ferrugineus* of Olivier (Ins. 1. Gen. 3. p. 148. pl. 23. fig. 202) does not belong even to the present genus, and is from Senegal. It is possible that it may prove to be the other sex of *B. furcicollis*, De Lap.

6. *BOLBOCERAS CARINICOLLIS*, De Laporte, Hist. Nat. An. Art. Coleopt. vol. ii. p. 104. No. 2; *B. ferrugineo* affinis sed magis castaneus, sub lente granulosus, capite carinà tenui marginali curvatà verticeque tuberculis duobus parvis conicis inter oculos carinà connexis, pronoto obscuro in medio carinà transversà abbreviatà instructo maculâque nigrâ utrinque versus angulos posticos, elytris striatis striis punctis minutis, tibiis anticis 5-dentatis.—Long. corp. lin. 10. (TAB. IV. fig. 5, caput et prothorax suprà visa.)

Hab. in Indiâ orientali? In Mus. Gory (nunc Hope).

7. *BOLBOCERAS CALANUS*, Hope MSS.; fulvus vel rufo-castaneus, clypeo posticè bicornuto, prothorace cornubus 4 versus marginem anticum duobus intermediis contiguus et a reliquis cavitate rotundatà utrinque separatis.—Long. corp. lin. $7-8\frac{1}{2}$. (TAB. III. fig. 19; IV. fig. 6, 7.)

Hab. in Indiâ orientali, Bombay. In Muss. Melly et Hope.

Variat colore, interdum luteo-fulvus, interdum rufo-castaneus; vertice concavo, parte anticà tuberculis duobus elevatis armatà, posticè lineà vix elevatà et in medio interruptà instructà. Prothorax dorso vix punctato, lateribus punctulatis, versus marginem anticum cornubus 4 armatus; duo contigua elevata subobtusata, alterisque duobus lateralibus majoribus, e prioribus utrinque excavatione plùs minùsve profundà separatis; canali tenui longitudinali mediano. Elytra tenuissimè punctato-striata. Tibiæ anticæ 7-dentatæ; dentibus plùs minùsve acutis.

Fœmina? Rufo-fulva nitida; capite et lateribus pronoti punctatissimis, hujus disco et parte posticà ferè impunctatis. Clypeus margine postico acutè elevato et parùm curvato, carinâque parùm arcuatà inter oculos instructus. Pronotum anticè vix retusum carinà curvatà parùm distinctà versus marginem anticum, utrinque tuberculo parvo lineâque impressà medianâ ad marginem posticum extensâ.

Tibiæ anticæ subangustæ 7-dentatæ, dentibus externis acutis, elongatis, curvatis, denticulisque pedum posticorum apice nigris.—Long. corp. lin. 7.

Hab. in Indiâ orientali. *D. Boys*, in Mus. *Westw.*

Fœminæ var.? (*B. tumidulus*, Westw.) Obscurè castaneo-rufa, carinis transversis ut in præcedenti nigris; parte capitis posticâ tumidulâ. Pronotum anticè vix retusum, glabrum, lateribus lineâque longitudinali impressâ punctatis; spatio parvo medio antico lævissimo, utrinque impressione parùm profundâ e lateribus pronoti separato; tibiis anticis spinis 7 robustis armatis.—Long. corp. lin. 6.

Hab. in Indiâ orientali, Borhendshukur. *D. Bacon*, in Mus. *Laferte*.

TAB. III. fig. 19, mas magnitudine paullò auctus; 19 *a*, caput et prothorax a latere visa; 19 *b*, clypeus, labrum et mandibulæ maris. TAB. IV. fig. 6, caput et prothorax fœminæ suprâ descriptæ; 7 *a*, caput et prothorax fœminæ varietatis suprâ descriptæ; 7 *b*, eadem a latere visa.

8. *BOLBOCERAS LÆVICOLLIS*, Westw.; fulvo-castaneus, vertice ante medium bidentato, prothorace glabro tuberculis 4 versus marginem anticum æquidistantibus duobus intermediis carinâ tenui curvatâ conjunctis.—Long. corp. lin. 9½. (TAB. IV. fig. 8, caput et prothorax.)

Hab. in Indiâ orientali. In Mus. *Hope*.

Corpus suprâ fulvo-castaneum, capite obscuriori; clypeo lineâ tenuissimâ elevatâ omninò circumcincto; vertice concavo, ante medium tuberculis duobus acutis erectis armato. Prothorax convexus, lævis, nitidus, ante medium tuberculis 4 acutis armatus, æquidistantibus, intermediis duobus lineâ tenui (versus caput curvatâ) elevatâ conjunctis, spatio inter hæc et lateralia utrinque parùm concavo; canali tenui longitudinali in parte posticâ politâ. Elytra tenuissimè punctato-striata. Tibiæ anticæ dentibus 8, duobus anticis multò majoribus.

9. *BOLBOCERAS PUNCTATISSIMUS*, Westw.; fulvus punctatissimus, capite tuberculis duobus transversis inter antennarum basin, pronoto vertice parum retuso, parte anticâ lunulâ subelevatâ medianâ transversâ e posticâ separatâ.—Long. corp. lin. 4. (TAB. IV. fig. 9.)

Hab. in Indiâ orientali, Moradabad, vespere ad lumen volans. *D. Bacon*, in Mus. *D. Laferte*.

D. lævicollis affinis, omnino flavescenti-fulvus, margine tenuissimo capitis et pronoti et apicibus tuberculorum capitis castaneis. Caput et pronotum punctatissima. Vertex tuberculis duobus parvis rotundatis transversis inter antennarum basin; lateribus capitis inter antennis et oculos rotundatis. Pronotum anticè subretusum, punctatissimum; parte retusâ e posticâ lunulâ curvatâ separatâ lineâque parùm profundè impressâ pone lunulam versus marginem posticum ductâ impressionibusque duabus parvis lateralibus; scutellum et elytra punctis minutis notata, his striato-punctatis; striæ secundæ e suturâ parte quartâ posticâ oblitteratâ, lateribus elytrorum magis rugosis striisque lateralibus minùs distinctis. Subtùs pallidior, pilis longis flavis obsitus. Tibiæ anticæ dentibus 7 acutis armatæ.

Fig. 9, caput et prothorax suprâ visa; 9 *a*, eadem a latere.

10. *BOLBOCERAS LATERALIS*, Westw.; castaneus, capite pedibusque nigricantibus, capite inermi, prothorace ferè lævi; excavationibus duabus lateralibus rotundatis singulâ suprâ tuberculo acuto armatâ.—Long. corp. lin. 6. (TAB. IV. fig. 10, caput et prothorax.)

Hab. in Indiâ orientali, Gogo. In Mus. *Hope*.

Caput nigrum, sub lente punctatum, suprâ inerme, angulis clypei anticis tuberculo rudimentali instructis, verticeque inter oculos lineâ vix elevatâ transversâ. Prothorax convexus, ferè lævis, lateribus prope angulos posticos excavatione rotundâ tuberculoque conico suprâ armatis, lineâque tenuissimâ canaliculatâ in medio instructus. Elytra tenuissimè punctato-striata. Tibiæ anticæ 9-dentatæ, dentibus obtusis.

11. *BOLBOCERAS NIGRICANS*, Westw.; piceo-niger nitidus, clypeo tuberculo conico anticè armato, verticis marginibus lateralibus utrinque bituberculatis discoque carinâ elevatâ inter oculos instructo, prothorace glabro nitido anticè retuso 4-dentato dentibus subæquidistantibus.—Long. corp. lin. 6. (TAB. IV. fig. 11, caput et prothorax.)

Hab. in Bengaliâ. In Mus. *Hope*.

Affinis *B. 4-dentato* e quo differt armaturâ capitis. Corpus suprâ nigricans vel nigro-piceum, nitidum, parùm punctatum. Capitis vertex inter oculos carinâ elevatâ, suprâ parùm sinuatâ; margineque antico 5-tuberculato, tuberculo medio antico majori acuto. Prothorax paullò ante medium disci 4-dentatus, dentibus brevibus subæquidistantibus, utrinque etiam versus angulos posticos impressione parvâ instructus. Tibiæ anticæ extûs 5-dentatæ.

12. *BOLBOCERAS POLITUS*, Westw.; nitidus fulvus, capite et pronoto magis castaneis, capite anticè tricorni cornu antico majori erecto, prothorace excavatione maximâ dorsali posticè trisinuatâ, elytris punctato-striatis, tibiis anticis 5-dentatis dentibus anticis magnis acutis.—Long. corp. lin. 6½. (TAB. IV. fig. 12.)

Hab. in Senegaliâ. In Mus. *Hope* (olim *Gory* nomine '*Athyreus porcatus*, Lap., *Senegalensis*, Dej.,' haud rectè inscriptus).

Corpus suprâ nitidum, caput vertice subconcavo, clypeo tricorni, cornu antico suberecto et majori, lateribus ante oculos rotundatis. Mandibulæ difformes; dextra apice obtuso intûs dente duplici armato; sinistra pone medium marginis externi angulata, apice obliquè truncato. Antennæ luteo-fulvæ. Prothorax nitidissimus, remotè punctatus, excavatione magnâ e margine antico ferè ad scutellum extensâ: margine ejus postico trisinuato; excavatione parvâ utrinque versus angulos laterales prothoracis. Elytra brevia, luteo-fulva, punctato-striata; striis 7 inter humeros et scutellum aliisque lateralibus. Tibiæ anticæ acutè 5-dentatæ.

Individuum parvum (lin. 5½ long.) e Prom. Bonæ Spei in Mus. *Chevrolat* Parisiis vidi.

Fig. 12, insectum magnitudine paullò auctum; 12 a, caput et prothorax a latere visa.

13. *BOLBOCERAS CORYPHÆUS*, Fabr. Ent. Syst. i. p. 9; Oliv. Ent. i. 3. tab. 16. f. 150; rufo-fulvus, capite suprâ plano, clypeo anticè bicorni cornubus recurvis apice nigris posticè-que mucrone elevato brevissimo nigro, pronoto anticè retuso cornubus duobus brevibus approximatis anticè porrectis apice nigris in medio disco positis posticè gibbere obtuso in excavatione parùm profundâ instructo, elytris punctato-striatis, tibiis anticis 5-dentatis.—Long. corp. lin. 8. (TAB. IV. fig. 13.)

Hab. ad Cap. Bonæ Spei (teste Fabricio). In Mus. *Hope* (olim *Lee*).

Fig. 13, insectum magnitudine vix auctum; 13 a, caput et prothorax a latere visa.

Obs. My figure and description are derived from Lee's typical specimen described by Fabricius, now in Mr. Hope's Cabinet.

14. *BOLBOCERAS SCABRICOLLIS*, Chevrol. MS.; ferrugineus, capite et pronoto magis piceis, his punctis minutis plus minusve confluentibus scabriusculis, capite in medio carinâ brevi transversâ sub-3-lobatâ, pronoto impressionibus tribus longitudinalibus ferè oblitteratis.—Long. corp. lin. 8.

Hab. apud Caput Bonæ Spei. In Mus. *Dom. Chevrolat*.

B. Capensi, Klug, multò major magisque punctatus. Caput undique margine tenui elevato, disco punctato, verticeque in medio carinâ brevi transversâ quasi e tuberculis tribus conjunctis, armato; mandibulæ extûs regulariter rotundatæ. Antennæ rufæ. Pronotum piceo-ferrugineum, punctatum,

impressione ferè indistinctâ utrinque ad marginem anticum (pone oculos), alterâque longiori mediâ, quæ in lineam tenuissimam longitudinalem elevatam extendit. Elytra ferruginea, punctato-striata. Pedes ferruginei; tibiis anticis dentibus 5 obtusis nigris.

15. *BOLBOCERAS CAPITATUS*, Westw.; obscurè castaneus subnitidus, capite et pronoto minutissimè punctatis: hoc utrinque excavatione maximâ cornubus duobus compositis magnis separatâ, tibiis anticis obtusè 6-dentatis.—Long. corp. lin. $10\frac{1}{2}$. (TAB. III. fig. 20, 21.)

Hab. in Assam, Indiæ orientalis. *Muss. Melly et Saunders.*

Species magna et pronoto valdè armato distincta. Caput nigricans obscurum vix punctatum, utrinque ad marginem internum oculorum carinâ tenui (quæ ad clypeum extendit) instructum, lateribusque inter antennis et basin clypei elevatis; inter antennis etiam carina parùm curvata transversa exstat. Prothorax maximus suprâ posticè valdè elevatus; lateribus excavatione maximâ profundâ notatis quæ ad angulum anticum extendit, ubi dente infero armata. Pars media pronoti magis punctata, in cornua duo crassa et obtusè dentata divergentia, plùs minùsve elevata et elongata extendit, spatio intermedio inter cornua etiam excavata est, parteque posticâ lævior. Elytra magis castanea, tenuissimè punctato-striata. Femora castanea, fulvo-hirta. Tibiæ et tarsi picei; tibiæ anticæ extùs obtusè 6-dentatæ. Antennarum clava et setæ fulvæ.

Variat mas cornubus intermediis pronoti brevioribus et anticè parùm obliquè porrectis. (*Mus. Westwood.* India; *D. Boys.*)

Fœmina rufo-castanea, mandibulis apice nigris; dextra extùs magis rotundata et ante apicem incisa. Clypeus margine antico recto parùm elevato. Vertex inter oculos carinâ elevatâ transversâ abbreviatâ. Prothorax anticè valdè retusus et ferè lævis, in medio carinâ transversâ paullò curvatâ, utrinque tuberculo elongato curvato carinâque curvatâ ad angulos anticos extensis; cum impressione rotundatâ versus angulos posticos. Aliter mari similis. *Mus. Westwood.* India; *D. Boys.*

TAB. III. fig. 20, mas magnitudine vix auctus; 20 a, caput et prothorax a latere visa; fig. 21, fœmina paullò aucta; 21 a, caput et prothorax a latere visa.

16. *BOLBOCERAS INÆQUALIS*, Westw.; rufo-castaneus, antennarum clavâ fulvâ, capite suprâ concavo carinâ transversâ in parte posticâ, pronoto anticè valdè retuso suprâ quadridentato fossulâque mediâ profundâ, elytris striato-punctatis, tibiis anticis 6-dentatis.—Long. corp. lin. $6\frac{1}{4}$. (TAB. IV. fig. 14.)

Hab. in Indiâ orientali. *Dom. J. B. Hearsey.* In *Mus. Westw.*

Caput nitidum, supra concavum, sub lente punctis minutissimis, carinâ verticem e clypeo separante elevatâ et valdè angulatâ, carinâ etiam transversâ inter partem posticam oculorum instructum; lobi laterales ante oculos rotundati, margine antico reflexo. Antennarum clava et setæ fulvæ. Prothorax glaber, valdè elevatus, parte anticâ valdè excavatâ dentibusque 4 erectis armatus, duobus intermediis approximatis spatioque medio (pone dentes intermedios) excavato*; lateribus etiam impressione ovali versus angulos posticos. Elytra concolora, glabra, striato-punctata; striis gracillimis. Tibiæ anticæ 6-dentatæ.

TAB. IV. fig. 14, mas magnitudine auctus; 14 a, caput et prothorax a latere visa.

17. *BOLBOCERAS BICARINATUS*, Westw.; castaneo-fulvus, capite inter oculos et ad basin clypei carinis duabus transversis nigris, pronoto tuberculis duobus parvis parùm elevatis ante medium, tibiis anticis 7-dentatis.—Long. corp. lin. $8\frac{1}{2}$. (TAB. IV. fig. 15.)

* The excavation of the front of the pronotum may perhaps be better described as having its hind margin 6-sinuated, with two elevated horns in the middle.

Hab. in Indiâ orientali. Mus. *Melly.*

Castaneo-fulvus. Caput et pronotum disco lateribusque punctatis; inter oculos carinâ elevatâ transversâ alterâque ad basin clypei quæ ad marginem externum oculorum extendit, nigris. Prothorax punctatus, parte posticâ lævi; utrinque pone oculos impressione parùm profundâ instructus, tuberculisque duobus transversè positis vix elevatis ante medium pronoti lineâque tenui longitudinali ferè ad basin scutelli extensâ. Elytra ut in *B. Lecontei* punctato-striata: striis quinque mediis ad basin elytrorum magis impressis. Tibiæ anticæ 7-dentatæ. Femora subtùs pallidè fulva.

TAB. IV. fig. 15, insectum magnitudine paullò auctum; 15 a, caput et prothorax a latere visa.

18. *BOLBOCERAS DORSALIS*, Westw.; rufo-castaneus, capitis vertice et medio pronoti nigris punctatis, capite in medio verticis tuberculis tribus conjunctis instructo, pronoto punctatissimo fere regulari, tibiis anticis 8-dentatis.—Long. corp. lin. $7\frac{1}{2}$. (TAB. IV. fig. 16, caput et prothorax.)

Hab. in Indiâ orientali. Mus. *W. W. Saunders.*

Forsitan fœmina speciei cujusdam haud ritè determinatæ. Caput punctatum, margine tenui elevato ad marginem internum oculorum extenso; vertice in medio tuberculis tribus transversè positis et conjunctis. Pronotum irregulariter punctatum, medio nigrum, lateribus rufo-castaneis: dorso ferè regulari, lineâ impressâ vix distinguendâ e margine antico versus medium extensâ alterisque duabus obliquis anticis cum impressionibus duabus ordinariis versus angulos posticos ferè inconspicuis. Elytra rufo-castanea, tenuissimè punctato-striata. Tibiæ anticæ 8-dentatæ.

19. *BOLBOCERAS NIGRICEPS*, Westw.; obscurè castaneus punctatus, capite nigricanti carinâ arcuatâ ad basin clypei tuberculisque tribus verticalibus, pronoto lineâ longitudinali impressâ et utrinque cum tuberculo parùm elevato, tibiis anticis 7-dentatis.—Long. corp. lin. $7\frac{1}{2}$. (TAB. IV. fig. 17, caput et prothorax suprâ visa; 17 a, eadem a latere; 17 b, tibia antica.)

Affinis præcedenti et forsitan fœmina speciei diversæ. Caput lineâ tenui elevatâ marginatum, ad basin clypei curvatâ, et ad marginem internum oculorum extensâ; vertice tuberculis tribus conjunctis parùm elevatis et transversè positis instructo. Pronotum lineâ parùm impressâ centrali longitudinali et utrinque tuberculo parvo parùm elevato instructo, disco minutè punctato. Femora subtùs fulva. Tibiæ anticæ 7-dentatæ.

20. *BOLBOCERAS TRANSVERSALIS*, Westw.; fulvo-castaneus, capite lato carinâ rectâ transversâ elevatâ inter oculos, pronoto lineâ longitudinali anticè dilatatâ impresso.—Long. corp. lin. $4\frac{1}{2}$. (TAB. IV. fig. 18, caput et prothorax.)

Hab. in Indiâ orientali. Mus. *Melly.*

Obscurè fulvo-castaneus. Caput latum irregulariter et valdè punctatum, margine tenui elevato ad marginem internum oculorum extenso, vertice carinâ rectâ transversâ elevatâ instructo. Pronotum minùs punctatum, lineâ mediâ longitudinali impressâ lævi anticè dilatatâ notatum. Elytra striato-punctata; antennarum clava pallidè lutea.

21. *BOLBOCERAS INDICUS*, Hope, MS.; fulvo-rufus, capite anticè tuberculis duobus conicis erectis armato, pronoto lævissimo anticè excavatione semicirculari parùm profundâ notato, calcari pedum anticorum elongato obtuso, tibiis anticis 9-dentatis.—Long. corp. lin. 4. (TAB. IV. fig. 19, caput et prothorax.)

Hab. in Indiâ orientali centrali. In Muss. *Saunders et Hope.*

Nitidissimus et, nisi sub lente visus, lævis. Caput tamen magis evidenter punctatum, ante medium tuber-

culis duobus conicis elevatis armatum; lineâque tenui elevatâ marginali ad basin clypei rectâ, et ad latera interna oculorum extensâ. Pronotum anticè impressione parùm profundâ, semicirculari, disco omninò regulari. Elytra punctato-striata. Tibiæ anticæ 9-dentatæ.

Hoc insectum pro fœminâ haberi possit, attamen dentes duo verticales sexum masculinum forsitan indicant. Individuum alterum (masculinum?) etiam possidet *Dom. Saunders* huic magnitudine, colore, formâ et patriâ simillimum; differt vero capitis carinâ tenui transversâ ad basin clypei breviori, tuberculis verticalibus nullis, carinâ autem transversâ inter oculos; pronoto etiam anticè parùm excavato tuberculisque duobus rotundatis vix elevatis armato. (An species diversa?)

22. *BOLBOCERAS TRIANGULUM*, Westw.; rufo-fulvus nitidus parcè punctatus, clypeo carinâ curvatâ (in medio angulatâ), verticeque tuberculis tribus, pronoto anticè retuso: parte retusâ e posticâ lunulâ semicirculari separatâ.—Long. corp. lin. $4\frac{1}{2}$. (TAB. IV. fig. 20.)

Hab. in Indiâ orientali, Mussooree, in stercore bovino. *D. Bacon*, in Mus. *Laferte*.

Rufo-fulvus, punctis magnitudine variis impressus; elytris sub lente punctis paucis minutissimis, serieque ordinariâ striarum punctatarum; scutello punctato. Antennæ fulvæ. Mandibulæ castaneo-nigræ. Clypeus margine antico elevato, in medio angulato, lineâ tenui elevatâ ad verticem ductâ; tuberculis duobus inter basin antennarum alteroque posteriori triangulum formantibus; angulis lateralibus ante oculos obtusis. Pronotum anticè retusum, medio marginis antici parùm angulato; parte retusâ ferè circulari subconcavâ, et e posticâ lunulâ parvâ separatâ; canali tenui mediâ longitudinali e lunulâ versus marginem posticum extensâ. Tibiæ anticæ 8-dentatæ; dentibus apice castaneo-nigris.

TAB. IV. fig. 20, caput et prothorax suprâ visa; 20 a, eadem a latere.

23. *BOLBOCERAS LINEATUS*, Melly, MSS.; fulvus nitidus, capite nigro punctato inter oculos tuberculo apice subbifido armato, pronoto simplici maculâ discoidali nigrâ, elytris convexis suturâ spatiisque intermediis longitudinalibus elevatis nigris, tibiis anticis 8-dentatis.—Long. corp. lin. $3\frac{3}{4}$. (TAB. IV. fig. 21.)

Hab. in insulâ Ceylon. In Muss. *Melly* et *Templeton*.

Species quoad colores insignis. Caput nigrum, punctatum; vertice inter oculos tuberculo parvo conico apice subbifido instructo. Pronotum convexum, integrum, anticè vix retusum, nitidum, punctis minutis distantibus, disco in medio plagâ parvâ nigrâ. Scutellum nigrum. Elytra fulva, valde gibbosa, singulo suturâ et spatiis tribus intermediis longitudinalibus convexis nitidis nigris, apicibus fulvis; singulo spatio convexo utrinque serie punctorum marginato, spatiisque intermediis depressis serie longitudinali punctorum; margine laterali elytrorum nigro, parùm marginato, serieque punctorum intra marginem lateralem instructo.

Corpus subtûs cum femoribus obscurè fulvis, pilis longis pallidioribus. Tibiæ anticæ extûs 8-dentatæ.

Obs. This and the four following species present a peculiar facies, owing to the longitudinal alternately raised spaces on the elytra, and the narrow curved club of the antennæ; but I have not thought it necessary to form them into a separate subgenus.

24. *BOLBOCERAS NIGERRIMUS*, Westw.; niger nitidus, capite punctato, vertice cornu brevi erecto armato, prothorace anticè retuso excavatione transversâ ovali; disco sparsim punctato, elytris striato-punctatis: spatiis intermediis convexis.—Long. corp. lin. 4. (TAB. IV. fig. 22.)

Hab. in Indiâ orientali, Landour. *D. Bacon*, in Mus. *Laferte*.

Caput latum punctatum, angulis ante oculos rotundatis; vertice inter oculos tuberculo conico glabro instructo. Oculi septo, nisi in spatio minuto postico, in duas partes divisi. Mandibulæ piceæ; partes reliquæ oris castaneo-rufæ. Antennæ fulvo-rufæ, clavâ oblongâ curvatâ pallidè fuscâ setosâ.

Prothorax niger, nitidus, punctis perpaucis in discum irregulariter dispositis, anticè retusus, parte retusâ brevi transversâ, subovali, et parùm impressâ. Elytra valdè convexa, singulo striis 13 punctorum; spatio inter suturam et striam 1am convexo nec non spatio latiori inter strias 3m et 4m et inter 6m et 7m; punctis striæ 7mæ ad basin elytrorum extensis, 8væ et 9næ sub humero evanescentibus, 10mæ et 11mæ extûs ad humerum conjunctis, 12mæ et 13mæ intus marginem lateralem ad basin elytrorum extensis. Corpus subtûs nigrum, setis griseo-fuscis vestitum; jugulum pallidè luteum. Tibiæ anticæ extûs 8-dentatæ.

TAB. IV. fig. 22, insectum multò auctum; 22 a, caput et prothorax a latere visa; 22 b, antenna.

25. *BOLBOCERAS PLAGIATUS*, Westw.; niger nitidus, vertice punctato tuberculoque parvo conico postico, prothorace in medio longitudinaliter impresso sparsim punctato utrinque maculis duabus magnis fulvis rotundatis conjunctis, elytris basi latè fulvis striato-punctatis: spatiis intermediis convexis.—Long. corp. lin. 3. (TAB. IV. fig. 23.)

Hab. in Indiâ orientali, Landour. *D. Bacon*, in Mus. *D. Laferte*.

Caput nigrum, latum, punctatum, angulis ante oculos rotundatis; vertice inter partem posticam oculorum tuberculo parvo conico instructo. Antennæ fulvo-castaneæ, clavâ ut in specie præcedenti. Prothorax niger, nitidissimus, sparsim punctatus, disco in medio longitudinaliter impresso, impressione punctatâ, ad marginem posticum vix extensâ, utrinque maculis duabus magnis rotundatis fulvis conjunctis. Elytra valdè convexa basi latè fulva colore lateraliter magis extenso, striis 13 punctatis notato; spatio inter suturam et striam 1am polito convexo, striâ 2ndâ punctorum vix ad basin extensâ, 3tiâ ad basin, inter 3m et 4m spatio latiori convexo nitido; 5â ad basin haud extensâ, 6â ad basin productâ spatio inter hanc et 4m eodem ac spatium inter 3m et 4m; 7â ad basin, 8vâ ante humerum evanescenti, 9nâ extus humerum at basin elytri non attingenti, 10mâ propiùs ad basin accedente, 11mâ valdè abbreviatâ, 12mâ ad angulum basalem extensâ, versus basin subcurvatâ, 13mâ intramarginali. Tibiæ anticæ 9-denticulatæ.

TAB. IV. fig. 23, insectum multò auctum; 23 a, caput et prothorax a latere visa.

26. *BOLBOCERAS POSTICALIS*, Westw.; niger nitidus, capite tuberculo inter oculos, prothorace integro fulvo guttâ parvâ discoidali nigrâ, nitido sparsim punctato; elytris fulvis plagâ maximâ posticâ communi et suturâ nigris striato-punctatis: spatiis intermediis convexis.—Long. corp. lin. 3. (TAB. IV. fig. 24.)

Hab. in Indiâ orientali. *D. Boys*, in Mus. *Westwood*.

Caput latum, nigrum, nitidum, punctatum; clypeo anticè rotundato, angulisque ante oculos rotundatis, vertice inter oculos tuberculo conico nigro nitido instructo. Mandibulæ et labrum piceæ. Antennæ luteæ. Prothorax nitidus, sparsim (præsertim ad latera) punctatus, anticè vix retusus, dorso haud canaliculatus, fulvus, guttâ parvâ dorsali nigrâ. Scutellum nigrum. Elytra convexa, fulva, suturâ latè nigricanti plagâque maximâ posticâ communi piceo-nigrâ, margineque laterali a medio ad apicem piceo, spatiis inter suturam et striam 1m, 2m et 3m, 4m et 5m latioribus et convexis striis 1, 2, 3, 4, 5 ad basin elytri extensis, striis 2â cum 5â, et 3tiâ cum 4tâ posticè conjunctis, striâ 6tâ in medio tantùm apparente, striâ 7mâ pone humerum evanescente, 8vâ et 9nâ anticè et posticè conjunctis serie brevi punctorum (circiter 6) in spatio intermedio inclusâ, 10mâ valdè abbreviatâ, 11mâ pone humerum evanescenti, versus basin parùm curvatâ intramarginali. Tibiæ anticæ extûs 7-denticulatæ. Corpus subtûs cum femoribus castaneum; tibiis obscurioribus.

TAB. IV. fig. 24, insectum multò auctum; 24 a, caput et prothorax a latere visa.

27. *BOLBOCERAS LÆTUS*, Westw.; niger nitidus, capite cornu brevi inter antennis armato, prothorace rufo-fulvo anticè retuso posticè canali tenui impresso, elytris fulvis, scutelli

lateribus suturâ margine tenui externo plagâque laterali nigris.—Long. corp. lin. 5.

(TAB. IV. fig. 25.)

Hab. in Ins. Ceylon. *Capt. Champion.*

Caput nigrum, irregulariter rugoso-punctatum; clypeo rotundato, medio marginis antici et lateribus parùm elevatis; vertice tuberculo conico inter basin antennarum armato. Antennæ castaneæ, clavâ oblongâ curvatâ. Labrum et mandibulæ nigræ. Prothorax nitidus, vix punctatus, fulvus, lunulâ minimâ utrinque supra pedes anticos nigrâ, anticè retusus, parte retusâ tuberculis 4 e parte posticâ separatâ, tuberculis 2 intermediis transversim confluentibus, spatio inter hæc et tubercula lateralia undato; disco lineâ tenuissimâ mediâ longitudinali impresso. Scutellum nigrum, læve, medio fulvum. Elytra fulvo-rufa, margine omni tenui suturâque angustè nigris, plagâque oblongâ ejusdem coloris versus marginem lateralem: singulo striis 13 punctorum, spatiis inter strias ferè æqualibus et convexis, striâ 2dâ, 5tâ, 8vâ et 11mâ anticè et posticè abbreviatis. Pedes nigri, tibiis anticis extûs 9-denticulatis.

TAB. IV. fig. 25, insectum multò auctum; 25 a, caput et prothorax a latere visa.

Subgenus EUCANTHUS, Westw.

Corpus minùs depressum quam in præcedentibus; pronoto anticè haud retuso. *Tibiæ* anticæ dentibus duobus apicalibus magnis aliisque minutis externis versus basin armatæ. *Elytra* punctato-striata; singulo striis 5 tantùm inter humeros et suturam, punctis profundis.

28. BOLBOCERAS (EUCANTHUS) MELIBŒUS, Fabr. Ent. Syst. i. p. 20; rufo-vel piceo-niger, clypeo carinâ transversâ plus minusve elevatâ (quasi e tuberculis duobus conjunctis formatâ) verticeque cornu brevissimo truncato (parùm emarginato) instructis, pronoto subdepresso inæquali, canali punctatâ longitudinali in medio (marginem anticum haud attingente) impressionibusque lateralibus curvatis punctatis tuberculoque utrinque instructis, elytris glaberrimis punctato-striatis, mandibulâ dextrâ extûs ante apicem profundè incisâ; sinistrâ integrâ.—Long. corp. lin. 4—5½. (TAB. IV. fig. 26.)

Bolboceras concinnus, Dejean, Cat. Coleopt.

Hab. in Americâ boreali. In Mus. D. Hope.

TAB. IV. fig. 26, insectum multò auctum; 26 a, caput et prothorax a latere visa; 26 b, mandibulæ.

Obs. The figure and description are made from the typical specimen formerly in Lee's Cabinet, described by Fabricius, now in the Cabinet of the Rev. F. W. Hope. Count De Laporte and Dr. Klug appear to have described this species under the name of *B. Lazarus*.

29. BOLBOCERAS LAZARUS, Fabr. Syst. Ent. p. 11; Ent. Syst. i. p. 14; Oliv. Ent. i. Gen. 3. pl. 16. f. 146.

This species was originally described by Fabricius as a native of North America, from the Collection of Mr. Yeats. His description is too concise of itself to allow of identification. "Sc. scutellatus, thorace trituberculato, capitis cornu brevi emarginato. Statura parva *Scar. mobilicornis*, capitis clypeus emarginatus utrinque sinuatus. Thorax fuscus canaliculatus tuberculis tribus, medio transverso. Elytra striata rufa." The figure of the species given by Olivier is also equally insufficient; it however shows the elytra to have but few striæ. His description is, however, more precise, the species being stated to be in the Collection of Mr. Lee. He describes the clypeus as terminated by two "dentelures très-

petites;" and on the crown is a "corne courte, large, obtuse ou échancrée," and the prothorax with four "petites élévations obtuses à la partie antérieure et une ligne longitudinale enfoncée à la partie supérieure." From these characters it appears to me that the species is very closely allied to, if not identical with, *Scar. Melibæus*, Fabr.; indeed, since the above remarks were written, M. Chevrolat of Paris has sent me a specimen labelled "*Lazarus*, Fabr. ♂," which differs only from the typical specimens of *Scar. Melibæus*, Fabr., in being rather larger and apparently rather broader. I can, however, detect no specific distinctions between them.

DESCRIPTION OF THE FIGURES.

TAB. III.

- Fig. 15. *Bolboceras Cyclops*, Fabr.
- Fig. 16. *Bolboceras furcicollis*, De Lap., mas.
- Fig. 17. *Bolboceras furcicollis*, var.
- Fig. 18. *Bolboceras ferrugineus*, De Lap.
- Fig. 19. *Bolboceras Calanus*, Hope, MS.
- Fig. 20. *Bolboceras capitatus*, Westw., mas.
- Fig. 21. *Bolboceras capitatus*, Westw., fœm.

TAB. IV.

- Fig. 1. Details of *Odontæus mobilicornis*.
- Fig. 2. Details of *Bolboceras Æneas*.
- Fig. 3. *Bolboceras grandis*, Hope, MS.
- Fig. 4. *Bolboceras subglobosus*, Westw.
- Fig. 5. *Bolboceras carinicollis*, De Lap.
- Fig. 6. *Bolboceras Calanus*, Hope, MS., fœm.?
- Fig. 7. *Bolboceras Calanus*, Hope, fœm. var.?
- Fig. 8. *Bolboceras lævicollis*, Westw.
- Fig. 9. *Bolboceras punctatissimus*, Westw.
- Fig. 10. *Bolboceras lateralis*, Westw.
- Fig. 11. *Bolboceras nigricans*, Westw.
- Fig. 12. *Bolboceras politus*, Westw.
- Fig. 13. *Bolboceras Coryphæus*, Fabr.
- Fig. 14. *Bolboceras inæqualis*, Westw.
- Fig. 15. *Bolboceras bicarinatus*, Westw.
- Fig. 16. *Bolboceras dorsalis*, Westw.
- Fig. 17. *Bolboceras nigriceps*, Westw.
- Fig. 18. *Bolboceras transversalis*, Westw.
- Fig. 19. *Bolboceras Indicus*, Hope, MS.

Fig. 20. *Bolboceras triangulum*, Westw.

Fig. 21. *Bolboceras lineatus*, Melly, MS.

Fig. 22. *Bolboceras nigerrimus*, Westw.

Fig. 23. *Bolboceras plagiatus*, Westw.

Fig. 24. *Bolboceras posticalis*, Westw.

Fig. 25. *Bolboceras letus*, Westw.

Fig. 26. *Bolboceras (Eucanthus) Melibæus*, Fabr.

DESCRIPTION OF THE FIGURES.

TAB. III.

- Fig. 15. *Bolboceras (Eucanthus) Melibæus*, Fabr.
Fig. 16. *Bolboceras (Eucanthus) Melibæus*, Fabr.
Fig. 17. *Bolboceras (Eucanthus) Melibæus*, Fabr.
Fig. 18. *Bolboceras (Eucanthus) Melibæus*, Fabr.
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TAB. IV.

- Fig. 22. *Bolboceras (Eucanthus) Melibæus*, Fabr.
Fig. 23. *Bolboceras (Eucanthus) Melibæus*, Fabr.
Fig. 24. *Bolboceras (Eucanthus) Melibæus*, Fabr.
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Fig. 28. *Bolboceras (Eucanthus) Melibæus*, Fabr.
Fig. 29. *Bolboceras (Eucanthus) Melibæus*, Fabr.
Fig. 30. *Bolboceras (Eucanthus) Melibæus*, Fabr.
Fig. 31. *Bolboceras (Eucanthus) Melibæus*, Fabr.
Fig. 32. *Bolboceras (Eucanthus) Melibæus*, Fabr.
Fig. 33. *Bolboceras (Eucanthus) Melibæus*, Fabr.
Fig. 34. *Bolboceras (Eucanthus) Melibæus*, Fabr.
Fig. 35. *Bolboceras (Eucanthus) Melibæus*, Fabr.
Fig. 36. *Bolboceras (Eucanthus) Melibæus*, Fabr.
Fig. 37. *Bolboceras (Eucanthus) Melibæus*, Fabr.
Fig. 38. *Bolboceras (Eucanthus) Melibæus*, Fabr.
Fig. 39. *Bolboceras (Eucanthus) Melibæus*, Fabr.
Fig. 40. *Bolboceras (Eucanthus) Melibæus*, Fabr.



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