

the very few teeth in most species and their total absence in some, in the inferior character of the teeth and the growth of but one set—in all of which characteristics, as well as their bulky bodies, there is a close parallelism with the *Mutilates*, the lowest of the *Megasthenes*.

XXIV.—*Diagnostic Notices of New Canarian Coleoptera.*

By T. VERNON WOLLASTON, M.A., F.L.S.

HAVING been occupied for some time past in preparing a Catalogue of the Coleoptera of the Canarian Archipelago, and being unavoidably delayed in the completion of it, the following diagnoses of a few of the new forms which have long been described at considerable length in my manuscript, and many of which are now widely distributed in European collections, may serve to secure the priority of the names which I have imposed upon them.

Fam. Carabidæ.

Genus *METABLETUS*, Gochl.

1. *Metabletus inæqualis*.

M. æneus, distincte alutaceus, sat nitidus; prothorace cordato; elytris plus minus inæqualibus, distincte striatis, utroque foveis 2 magnis notato; antennis femoribusque nigro-piceis, illis ad basin, tibiis tarsisque plus minus piceo-fuscis.

Long. corp. lin. $1\frac{1}{3}$ — $1\frac{2}{3}$.

Habitat in Canaria, Teneriffa, Gomera et Palma, præsertim in sylvaticis degens.

Genus *TARUS*, Clairv.

2. *Tarus zargoides*.

T. subnitidus, fusco-piceus, pilis mollibus erectis brevissimis sat dense vestitus; capite prothoraceque dense et profunde scabro-punctatis, hoc cordato angulis ipsis posticis paulo exstantibus; elytris ovalibus, subconvexis et undulato-inæqualibus, profunde (sed subirregulariter) punctato-striatis, interstitiis minute punctulatis, limbo vix rufescentiore; antennis palpisque testaceis, pedibus pallido-testaceis.

Long. corp. lin. $2\frac{1}{3}$ — $2\frac{2}{3}$.

Habitat in sylvaticis montosis Teneriffæ, sub lapidibus rarissimus.

Genus *MASOREUS*, Dej.

3. *Masoreus arenicola*.

M. nigro-piceus, distincte (oculo armato) alutaceus; prothorace transverso, subconvexo, postice in medio plus minus conspicue transversim impresso sed vix rugato, canalicula centrali haud pro-

funda necnon antice et postice plus minus sub-obsolata; elytris leviter subcrenato-striatis, ad basin plus minus distincte rufescentioribus; antennis, palpis pedibusque piceo-testaceis; unguiculis leviter denticulatis.

Long. corp. lin. 2-2 $\frac{1}{3}$.

Habitat in arenosis maritimis (plus minus salinis) Lanzarotæ et Fuerteventuræ, tempore hiberno et vernali, hinc inde vulgaris.

Genus AMARA, Bon.

(Subgenus LEIOCNEMIS, Zimm.)

4. *Amara versuta*.

A. breviter ovata, nigro-picea, æneo-micans, convexa; prothorace brevi, transverso, ad latera marginato et æqualiter rotundato, basi vix punctato (interdum impunctato) sed utrinque foveis 2 (interna sc. majore longiore, sed externa parva, minus profunda, subrotundata) notato, postice in medio transversim impresso; elytris paulo dilutioribus (fusco-piceis), crenato-striatis; antennis, palpis pedibusque testaceis.

Long. corp. lin. 2-2 $\frac{1}{3}$.

Habitat Lanzarotam et Fuerteventuram, sub lapidibus, passim.

Genus CRATOGNATHUS, Dej.

5. *Cratognathus solitarius*.

C. ater, subcylindrico-oblongus; capite magno; prothorace subquadrato, postice vix angustiore, basi utrinque fovea sat profunda punctata impresso; elytris oblongis, profunde crenato-striatis, interstitio septimo ad apicem ipsissimum punctulis circa 2-4 (interdum indistinctis confusis) notato; antennis, palpis tarsisque rufoferrugineis, femoribus tibiisque piceis.

Long. corp. lin. 4 $\frac{1}{2}$ -5.

Habitat Lanzarotam et Fuerteventuram, sub lapidibus in locis intermediis et editioribus sat vulgaris.

6. *Cratognathus fortunatus*.

C. piceus, oblongus; capite magno; prothorace subquadrato, postice subrecte angustiore, basi utrinque vix punctulato vix impresso; elytris subovato-oblongis, striatis, interstitio septimo ad apicem punctis circa 2-4 notato; labro rufo-piceo; antennis, palpis pedibusque rufo-ferrugineis.

Long. corp. lin. 5-5 $\frac{2}{3}$.

Habitat montes Canariæ Grandis, in pineto quodam regionis "Tarajana" dictæ mense Aprilis A.D. 1858 sat copiose repertus.

7. *Cratognathus micans*.

C. præcedenti similis, sed paulo minor, in utroque sexu fere æqualiter nitidus; prothorace ad latera paulo magis sinuato; elytris antice

paulo magis truncatis (ergo vix brevioribus), interstitiis septimi punctis obsoletis; pedibus paulo pallidioribus.

Long. corp. lin. $4\frac{1}{2}$ –5.

Habitat in Teneriffa et Gomera, hinc inde haud infrequens.

Genus TRECHUS, Clairv.

8. *Trechus flavolimbatus*.

T. niger, nitidus; prothorace transverso-subquadrato, postice paulo angustiore, angulis ipsissimis posticis minutissime prominulis, basi utrinque leviter foveolato; elytris oblongo-ovalibus, subdepressis, limbo plus minus flavo-testaceo, striatis (striis vix subcrenatis, exterioribus obsoletis); antennis nigro-fuscescentibus, ad basin rufo-testaceis; pedibus pallido-testaceis, tibiis plus minus obscurioribus.

Long. corp. lin. $1\frac{1}{3}$ – $1\frac{1}{2}$.

Trechus flavolimbatus, Schaum, in litt.

Habitat in Canaria, Teneriffa, Gomera, Palma, et Hierro, vulgaris.

Genus PERILEPTUS, Schaum.

9. *Perileptus nigrifulus*.

P. omnino P. areolato similis, sed vix major minusque nitidus (oculo fortissime armato grossius, praesertim in elytris, alutaceus), paulo magis pubescens; capite postice dilute rufescentiore; elytris (limbo postico pallido excepto) totis nigris, paulo magis parallelis, interstitiis vix minus convexis; antennis paulo longioribus, robustioribus.

Long. corp. lin. 1– $1\frac{1}{4}$.

Habitat Teneriffam, inter lapillos per marginem paludis cujusdam parvae prope urbem Sanctae Crucis sitae copiose deprehensus.

Fam. Dytiscidæ.

Genus HALIPLUS, Lat.

10. *Haliplus suffusus*.

H. oblongus; capite nigro-piceo, latiusculo, punctato; prothorace testaceo, antice, postice in medio, necnon in disco nigrescente, basi lato (elytrorum basin paulo superante), ad latera oblique subrecto, in medio profunde punctato, postice utrinque linea curvata abbreviata notato; elytris testaceis (praesertim pone discum), nigro suffusis, antice subparallelis, punctato-striatis, interstitiis parce punctatis; antennis pedibusque testaceis.

Long. corp. lin. $1\frac{1}{4}$ – $1\frac{1}{2}$.

Habitat in aquis Canariæ et Gomeræ, hinc inde parum vulgaris.

Fam. Anisotomidæ.

Genus ANISOTOMA, Ill.

11. *Anisotoma canariensis*.

A. ovalis, convexa, nitida, nigro-vel fusco-picea; capite prothoraceque

sat distincte punctatis; elytris versus basin paulo rufescentioribus, sat profunde punctato-striatis, interstitiis punctulatis; antennis ad basin pedibusque piceo-ferrugineis, femoribus muticis. *Mas* tibiis posterioribus distinctius arcuatis.

Long. corp. lin. 1.

Habitat in Canaria et Hierro, rarissima.

Fam. Nitidulidæ.

Genus BRACHYPTERUS, Kugel.

12. *Brachypterus velatus*.

B. oblongo-ovatus, subconvexus, viridescenti-niger, nitidus, grosse flavescenti-cinereo pubescens, dense punctatus; prothorace ad latera subæqualiter rotundato, angulis posticis obtusis; scutello obtuse triangulari; antennis pedibusque rufo-testaceis, illarum clava tarsorumque apicibus ipsissimis nigrescentibus.

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

Habitat in Lanzarota, Canaria, Teneriffa et Hierro, super folia *Urticæ urentis*, L., parum vulgaris.

Fam. Cucujidæ.

Genus SYLVANUS, Lat.

(Subgenus *ÆRAPHILUS*, Redt.)

13. *Silvanus nubigena*.

S. angusto-elongatus, subconvexus, fusco-niger, dense flavescenti-cinereo pubescens; capite prothoraceque rugose punctatis, hoc æquali, angusto, subcylindrico, postice vix angustiore, ad latera subrecto ac distincte crenulato, angulis ipsis posticis obtusis sed argute determinatis, penicillatis; elytris rugose et dense seriatim punctatis, versus humeros interdum paulo fuscrescentioribus; femoribus piceis; antennis, tibiis tarsisque piceo-ferrugineis.

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

Habitat in aridis excelsis Teneriffæ, inter lapillos ramulosque emortuos sub arbusculis *Spartii nubigenæ* humi jacentibus, velocissime currens, necnon fere ad 9000' s. m. ascendens.

Fam. Cryptophagidæ.

Genus CRYPTOPHAGUS, Herbst.

14. *Cryptophagus hesperius*.

C. fusiformi-oblongus, rufo-ferrugineus, pube brevi albida parce vestitus; prothorace profunde et dense punctato, postice angustato, angulis anticis ampliatis, ad latera denticulis acutis circa 4-5 armato; elytris subfusiformibus, sat dense punctatis; antennis pedibusque longiusculis, graciuseculis, vix pallidioribus.

Long. corp. lin. $\frac{2}{3}$ - $\frac{3}{4}$.

Habitat in sylvaticis subsylvaticisque Canariæ, Teneriffæ, Gomeræ, Palmæ, et Hierro, vulgaris.

Ann. & Mag. N. Hist. Ser. 3. Vol. xi.

Fam. Dermestidæ.

Genus *TELOPES*, Redt.15. *Telopes multifasciatus*.

T. ovalis, niger, nigrescente pubescens; prothorace utrinque et in maculis 2 posticis elytris in fasciis 3, necnon ad apicem, pallido pilosis; antennis nigris, ad basin picescentibus, articulo ultimo (in utroque sexu) parvo; pedibus piceis, tarsis vix pallidioribus.

Mas. Antennarum clava paulo longiore, articulis penultimo et antepenultimo leviter elongatis.

Fæm. Antennarum clava paulo brevior, articulis penultimo et antepenultimo terminali vix (singulatim) majoribus.

Long. corp. lin. $1\frac{1}{8}$ – $1\frac{2}{3}$.

Habitat Canariam Grandem, ad flores varios tempore vernali frequens.

16. *Telopes fasciatus*.

T. breviter ovalis, niger, nigrescente pubescens; prothorace utrinque et in maculis 2 posticis elytris in fasciis 2 (postica subevanescente), necnon mox ante apicem, pallido pilosis; antennis nigris, ad basin picescentibus; pedibus piceis, tarsis vix pallidioribus.

Mas. Antennarum clava paulo longiore, articulo ultimo leviter elongato.

Fæm. Antennarum clava paulo brevior, articulis tribus inter se subæqualibus.

Long. corp. lin. $1\frac{1}{4}$ –vix $1\frac{1}{2}$.

Habitat in floribus Teneriffæ, Gomeræ et Palmæ, tempore vernali frequens.

Fam. Elateridæ.

Genus *COPTOSTETHUS*, Woll.17. *Coptostellus brunneipennis*.

C. elongatus, niger vel fusco-niger, elytris plus minus brunneis, fulvo pubescens; prothorace elongato, basi paulo angustato; elytris pube suberecta tenui vestitis, sat profunde crenato-striatis, interstitiis subconvexis; antennis pedibusque elongatis, testaceis.

Long. corp. lin. $2\frac{2}{3}$ – $3\frac{1}{2}$.

Habitat in Teneriffa, Palma et Hierro, sub lapidibus, passim.

Fam. Curculionidæ.

Genus *NANOPHYES*, Schön.18. *Nanophyes lunulatus*.

N. ovatus, pallido-testaceus, flavescenti-albido pubescens; elytris profunde subpunctato-striatis, fascia media parva subluniformi utrinque valde abbreviata (interdum per suturam fracta), necnon in interstitio quinto sæpe maculis (una vel duabus) parvis, nigro ornatis.

Long. corp. lin. $\frac{2}{3}$ – $\frac{3}{4}$.

Habitat Canariam Grandem, in foliis arbuscularum *Tamaricis gallicæ* per margines rivuli ad Mogan crescentium deprehensus.

Genus ACALLES, Schön.

19. *Acalles verrucosus*.

A. lateraliter compressus, supra valde arcuatus, squamis nigrescentibus densissime tectus et dilutioribus irroratus; prothorace postice paulo angustato, ad latera late albido squamoso, ante medium setoso 4-tuberculato; elytris postice paulo coarctatis sed ibidem decurvis, nodulis plurimis setosis instructis, argute striato-punctatis, mox pone medium macula parva obluniformi utrinque valde abbreviata albido ornatis: pedibus tarsorumque articulo 1^{mo} elongatis, tibiaram squamis erectis elongatis.

Long. corp. lin. $2\frac{1}{2}$ -3.

Habitat in elevatis sylvaticis Teneriffæ et Palmæ, rarissimus.

Genus ECHINODERA, Woll.

20. *Echinodera crenata*.

E. squamis fuscis nigrescentibusque dense variegata et cinereis plus minus maculata, setis longiusculis suberectis obsita; prothorace profunde et dense punctato, setis apicalibus vix longioribus; elytris elongato-ovatis, ad humeros vix oblique truncatis, sat profunde crenato-striatis, pone medium macula magna obluniformi (antice et postice plus minus nigro terminata), necnon nebula (plus minus magna, suffusa) versus humeros, cinereo ornatis.

Long. corp. lin. $1\frac{1}{2}$ -2.

Habitat in montibus editioribus Teneriffæ, sub lapidibus inter 6000' et 9000' s. m., ultra regiones sylvaticas, occurrens.

Genus ATLANTIS, Woll.

21. *Atlantis angustula*.

A. angustulo-subcylindrica, atra, subnitida, subtiliter pubescens pilisque elongatis erectis in elytris obsita; rostro crassiusculo, punctato, oculis rotundatis, prominentibus; prothorace convexo, per basin ipsissimam subsinuato et distincte marginato, sat profunde subruguloso-punctato punctulisque minutis intermediis valde distinctis parum crebre irrorato; elytris subcylindricis, profunde punctato-striatis; antennis tarsisque piceis; femoribus tibiisque nigris.

Long. corp. lin. $3-4\frac{1}{2}$.

Habitat Canariam Grandem, sub lapidibus in inferioribus et intermediis late diffusa.

Genus LAPAROCERUS, Schön.

22. *Laparocerus excavatus*.

L. niger, nitidus, fere calvus; prothorace convexo, minutissime, dense et levissime punctulato punctisque majoribus sed vix profundis parce notato, fere simplici; elytris basi subbisinuato-truncatis, callo humerali valde incrassato, profunde punctato-striatis, interstitiis minutissime transversim substriguloso-rugatis et punctis remote obsitis; antennis rufo-ferrugineis, pedibus rufo-piceis.

Mas sæpius nitidior, tibiis anticis intus versus apicem profunde excavatis, posticis fortiter sed parce serratis.

Long. corp. lin. 4-5 $\frac{1}{2}$.

Habitat in montibus sylvaticis Teneriffæ, præsertim inter muscos et lichenes ad truncos arborum crescentes.

23. *Laparocerus crassifrons*.

L. niger vel piceo-niger, parum nitidus, plus minus dense et grosse submetallico-squamoso tessellatus; capite convexo, crasso, rostro crasso subtriangulari grosse denseque punctato et profunde canaliculato; prothorace convexo, punctato punctulisque minutis intermediis dense irrorato; elytris oblongo-subovalibus, punctato-striatis, interstitiis vix punctulatis et pilis brevibus suberectis remotis præsertim postice obsitis; antennis rufo-ferrugineis; pedibus rufo-piceis.

Long. corp. lin. 3 $\frac{1}{2}$ -5.

Habitat sub lapidibus scoriisque in regionibus Teneriffæ valde elevatis, usque ad 8000' s. m. ascendens.

24. *Laparocerus inæqualis*.

L. ænescenti-niger, nitidus, parce submetallico-squamoso tessellatus pilisque plus minus elongatis erectis fulvescentibus præsertim in elytris parce obsitis; prothorace parvo, angusto, subcylindrico-conico, sat grosse punctato punctulisque minutissimis intermediis dense irrorato; elytris latiusculis, subquadrato-oblongis, punctato-striatis, interstitiis alternis valde tuberculato-inæqualibus, tuberculis paulo fulvescenti-squamoso fasciculatis; antennis, tibiis tarsisque ferrugineis, femoribus ferrugineo-piceis.

Long. corp. lin. 3-4.

Habitat Teneriffam sylvaticam, in lauretis editioribus supra Taganam captus.

25. *Laparocerus ellipticus*.

L. ferrugineus, subnitidus, dense sericeo-metallico-squamoso tessellatus pilisque elongatis suberectis postice obsitis; rostro crasso, oculis magnis; prothorace parvo, angusto, ruguloso-subalutaceo, parce et leviter punctato, basi subemarginato; elytris ovato-ellipticis, basi conjunctim trisinuatis, leviter punctato-striatis, interstitiis alternis plus minus læte tessellatis.

Long. corp. lin. 4-5.

Habitat in sylvaticis excelsis Teneriffæ et Palmæ, vel inter muscos lichenesque ad truncos arborum crescentes, vel sub cortice laxo latitans.

Genus SITONES, Germ.

26. *Sitones punctiger*.

S. oblongus, squamis griseis cinereisque variegatus et setis piliformibus demissis obsitis; capite prothoraceque profunde rugoso-punctatis, illo postice punctis duobus cinereis ornato, oculis oblongis rotundatis valde prominentibus, hoc ad latera pallidiore

rotundato, linea media et punctis 2 vel 3 utrinque annexis pallidioribus ornato; elytris cylindricis, per suturam obscure albidis, interstitiis alternis læte fulvo nigroque tessellatis; antennis ad basin pedibusque (squamosis) clarioribus.

Long. corp. lin. $2\frac{1}{2}$ -3.

Habitat Lanzarotam et Fuerteventuram, sub lapidibus in aridis arenosis et calcariis degens.

27. *Sitones setiger*.

S. oblongus, squamis griseis inæqualiter vestitus; capite prothoraceque densissime et profunde rugoso-punctatis, illo oculis oblongo-rotundatis prominentibus, hoc subcylindrico, intra apicem (sub-elevatum) constricto, ad utrumque latus linea paulo albidiore ornato; elytris profunde punctato-striatis, vel obscure variegatis (interstitiis alternis obsolete tessellatis) vel dense fusco aut ochraceo-fusco squamosis, sæpius versus latera squamis albidioribus obscure plagiatis, interstitiis setosis (setis nigrescentibus sed in interstitiis alternis setis albidioribus distantibus commixtis); antennis brevibus pedibusque rufo-ferrugineis, capitulo femoribusque obscurioribus.

Long. corp. lin. $1\frac{1}{2}$ -2.

Habitat in aridis insularum Canariensium, in Palma sola hætenus haud detectus.

BIBLIOGRAPHICAL NOTICE.

Outlines of Botany, designed for Schools and Colleges. By J. H. BALFOUR, M.D. &c., Prof. of Botany in the University of Edinburgh. 12mo, pp. 712. Black, Edinburgh, 1862.

THE title of this book shows the intention of its author in the present republication of the article "Botany" from the 'Encyclopædia Britannica.' We are sorry to add that we look upon it as a mistake to think that the book is well fitted for schools and colleges; for we presume that here "colleges" is simply a synonym of "schools." It does not differ sufficiently from the same author's valuable books entitled 'Manual' and 'Class Book' to be suited to the inferior class of teaching usually, and perhaps necessarily, given in those places. It seems to us far too hard, much too long, and not sufficiently authoritative for young scholars. In short, it is too good for its purpose. If Dr. Balfour had allowed this treatise to continue in the position for which it was written, and to which it is well fitted, and had prepared a small—very much smaller—book containing the elements of botany in simple language, he would have done more service to science. Such simple elements should be written as by a master stating his determinations, and usually omitting all notice of the opinions of others (which are to be found properly in the larger *Class-books* and *Introductions*), leaving out most of the chemistry as unintelligible to the young student, and omitting the greater part of the technicalities relating to the Natural Orders, but inserting in