quite certain of the direction of the hair on the forehead, though

it appears to be directed forwards, nor of the sex.

Besides the nine species here described, there have been described two which do not exactly agree with any specimens I have seen, viz. M. chrysurus, I. Geoff., Guérin, Mag. Zool. 1832, and M. flavicaudatus, Humboldt.

XXIII.—Notes, &c. on the genera of Insects Oxystoma and Magdalis. By John Walton, Esq., F.L.S.

Fam. CURCULIONIDÆ.

Genus Oxystoma, Steph., Westw., Spry and Shuckard.

Mr. Stephens has created this genus for the reception of the following three species, separated by him from that of Apion, which he refers to Duméril; but the latter author has taken his characters from Attelabus Pomonæ of Fabricius*, and it is very remarkable, that Duméril appears not to have been aware that Kirby had previously characterized the genus Apion as a tribe of insects which includes that species, consequently the name Oxystoma of Duméril is cited by Kirby and Schönherr as a synonym to that of Apion. I have always entertained considerable doubt, from the characters selected by Mr. Stephens, whether Apion fuscirostris, Ulicis and Genistæ ought to be separated generically; Kirby and Curtis have located them in a separate section in the genus Apion, because the rostrum is bent downwards or nutant (a character common to many species), and this appears to be the chief character upon which the new genus Oxystoma is founded. It is generally understood that the female of Oxys. Ulicis, with its remarkable elongate deflexed rostrum, is the type of the genus as figured and referred to in the 'British Coleoptera' by Spry and Shuckard, and is also referred to Ap. Ulicis of Kirby by Westwood in his 'Generic Synopsis'; but Stephens describes the second and third joints of the antennæ as "subglobose," whereas they are elongate, neither does the form of the rostrum nor the structure of the antennæ in the male agree with the characters given by him; therefore I think he has drawn them from Oxys. fuscirostris, as it stands first in the genus. The three insects in question approximate rather closely in general habit and affinity to some of those species of the genus Apion which are placed by Germar and Schönherr in the section that have their antennæ seated near to the base of the rostrum, and likewise have the rostrum (when in its natural position) deflexed; for example, the small males of Ap.

^{*} Dumér. Consid. sur les Ins. tab. 16. f. 6, 1823.

Ulicis to the large females of Ap. atomarium, and the female of Ap. Hookeri to that of Ap. Genistæ: in the construction of the rostrum Ap. fuscirostris resembles Ap. Ervi, Vicia, vicinum and vorax, whilst others are more curved and deflexed, as Ap. varipes, Ononides of Gyll., &c. Many species both foreign and British are clothed more or less with hairs or bristles, and some with elongate scales of various forms, as Ap. Malva, vernale, fuscirostris, Ulicis and Genista, but these characters are only regarded as specific, not generic. All the species of the genus Apion have the rostrum with two oblique fossulets or oblong foveæ more or less deep, terminating outwardly at the sides and inwardly beneath the rostrum; their external edges or margins are more or less incrassated or dilated, and are placed at a greater or less distance from the base; the antennæ are inserted within the fossulets at the under sides, and always in the same relative situation; the form of the rostrum, the structure of the antennæ, together with the sexual dissimilarities in those organs are so extremely anomalous and discrepant in this natural group of insects, that it is very difficult to find good or fixed characters for the foundation of genera; the species are held together by general habit, and especially by a peculiarity in the form of the trochanters first described by Kirby*.

The three species comprised in the genus Oxystoma are furnished with a remarkable process at the base of the rostrum beneath, which I shall endeavour to describe under their respective names, and which, as far as I know, has not been noticed before; but these appendages or processes are not confined to those species, for Apion Carduorum participates, and others in the genus Apion have modifications of the same, but not so fully developed; Oxys. fuscirostris, Ulicis and Genista differ however from all the species of the genus Apion that I have examined in not having antennal grooves at the base of the rostrum beneath, or under the head, as in Apion Cracca, Pomona and subulatum; these characters may be considered of sufficient importance to constitute a new genus, and I therefore leave Oxystoma as it is.

O. fuscirostris, Fab., Steph.
 Apion melanopum, Marsh., Kirb.
 fuscirostris, Germ., Schönh.

This insect is sparingly clothed with whitish and cinnamon-coloured elongate scales, which are distinct and well-defined when magnified. The rostrum is thickened at the base above, and dilated on both sides at the points of insertion of the antennæ, and has two deep oblong foveæ very near the base beneath,

diverging outwardly and terminating on each side in a deep sinus for the reception of the antennæ when extended forward; the decurved edges behind each sinus are much produced in the middle, curved inwardly, and form the posterior edges of the foveæ; the latter have between them a narrowlongitudinal ridge; the rostrum, when viewed at the sides, has the appearance of being bidentate at the base; the antennæ are inserted at the under sides of the rostrum near the base and within the foveæ.

Apion difficile of Herbst, of which I have specimens from Germar, is a distinct species, but closely allied to O. fuscirostris, and having the rostrum at the base, as described by Germar, bi-

dentate.

I have taken many specimens of this insect in the Charlton sand-pits, and at Shirley Common near Croydon, from the broom (Spartium Scoparium) in October.

2. O. Ulicis, Foster, Steph.

Apion Ulicis, Marsh., Kirb., Germ., Curt., Schönh.

This insect is densely covered with silvery gray elongate scales. The female differs from the male in having the rostrum remarkably longer, the antennæ distinctly longer and more slender, and as a consequence the length of the articulations is extremely disproportionate in the sexes. The rostrum at the base above and beneath and its appendages are very similar to the preceding species, but it differs in having the foveæ strictly at the base, with their external decurved edges considerably more dilated in the middle, and when viewed laterally it appears to be acutely bidentate; the antennæ are inserted at the under sides of the rostrum near the base and within the foveæ.

Very abundant in Yorkshire and in the south of England on the common furze (*Ulex europæus*) from February to November. Mr. George Luxford, by gathering (on the 1st of August) a number of the unopened pods of the common furze, found several perfect insects of this species inclosed in nearly every one that

he examined.

3. O. Genistæ, Steph.

Apion Genistæ, Kirb., Germ., Curt., Schönh.

Densely clothed with silvery white and fawn-coloured elongate scales; the rostrum at the base is constructed like that of fuscirostris, and with a similar process, but the decurved edges of the foveæ in the middle are less produced, and consequently when viewed in profile it appears indistinctly bidentate.

I found this insect abundant on the north side of the Lake House, Wanstead Flats, on *Genista tinctoria* in September, and it is the only locality for it near London that I am acquainted with; it appears to be very local and not frequently met with.

Genus Magdalis, Germ., Steph., Curt. Magdalinus, Schönh. vii. p. 135.

Thamnophilus Schönh. olim, Rhinodes Schönh. olim, Steph., Panus Schönh. olim, Steph., Westw.

The few indigenous species of this genus have been described by British and foreign authors under so many different names, which have been so often transposed, that the nomenclature and synonymy of several species are in the greatest confusion; the sexual dissimilarities in the form of the rostrum and the clava of the antennæ in many species, and the great variation in magnitude in nearly the whole, have added to the difficulty of determining the species correctly.

A. Femora dentate.

1. M. phlegmatica, Herbst, Gyll., Germ., Schönh.

Linear-elongate, blue-black and subglabrous. Head narrow, oblong, subconical, depressed between the eyes, very closely and minutely punctured; eyes rather large, prominent, and obscure brown; rostrum subcylindrical, nearly as long as the head and thorax, porrect, a little bent, slender, black and shining, delicately punctulated throughout. Antennæ rather longer than the rostrum, the basal joint piceous, the club robust, pubescent and fuscous, inserted just behind the middle of the rostrum. Thorax longer than broad, constricted and deeply impressed in front, the anterior margin elevated, the base bisinuated, with the posterior angles produced and reflexed, almost flat above, very thickly punctured and dull blue-black. Elytra punctate-striate, the interstices very distinctly punctulated and shining, and greenish blue. Legs blue-black, with all the femora acutely dentate. (Length $2\frac{1}{4}$ — $2\frac{5}{4}$ lines.)

I possess specimens of *M. frontalis* of Gyll. from Germar, which are identical with *Curc. Alliaria* and *C. violaceus* of the Linnæan cabinet, and I also possess Swedish specimens that agree with the

description of Rhynch. violaceus of Gyllenhal.

A specimen of this fine insect, which is new to our fauna, was first found by the Rev. Wm. Little four or five years ago, on the 25th of May, by sweeping in marshy ground in Dalmeny Park, Scotland; subsequently Mr. R. N. Greville captured two others in the same locality, one of which he kindly presented to me: these are all that are known.

2. M. carbonaria, Linn. (Mus. Linn.), Gyll. ♀, Curtis ♂♀.

Rhynch. atratus, Gyll. ♂, vol. iii.

M. atramentaria, Germ. (not Marsh.), Gyll. ♂♀, Schönh.

This insect differs from the following in having the thorax nar-

rowed in front, dilated and rounded at the sides, and the latter crenulated before the middle; the elytra very shining, profoundly punctate-sulcate, the intervals between the punctures narrow and distinctly elevated, the interstices of the sulci narrow, convex, nearly smooth or very finely rugose transversely. (Length 2— $3\frac{1}{a}$ lines.) Gyllenhal justly observes, that it varies greatly in magnitude; it also varies in having the sides of the thorax more or less dilated and rounded in the middle. Mr. Waterhouse has a fine male specimen $(3\frac{1}{3} \text{ lines})$ that has the thorax subglobose, with the sides remarkably dilated and rounded. I have a very small female specimen that only measures two lines in length, and has the thorax less rounded at the sides in proportion. The insect preserved in the Linnar museum, which is pinned to the name carbonarius, agrees so well with the short description of Linnæus, that I have no doubt of its authenticity; it is a large female $(3\frac{1}{2})$ lines), and the insect placed near to the label, but not upon it, is certainly a small male (2 lines) of the same species; these insects agree so very closely in every character with Gyllenhal's descriptions of Rhynch. carbonarius (φ) which he refers to Linnæus, and R. atratus (3), that there can be no doubt of their identity. Mr. Curtis has figured with his usual accuracy the female, and the head and rostrum of the male; I have frequently inspected the two insects in his cabinet, and I am now satisfied they are correctly referred by him to Curc. carbonarius of Linnaus, although at one period, from the variable form of the sides of the thorax and their small sides, I was a little dubious. Germar has incorrectly referred this insect to Curc. atramentarius of Marsham*; Gyllenhal in his 4th volume, in accordance with the opinions of Schönherr and Germar, has adopted that name, and cited carbonarius of Linnæus as synonymous; Schönherr in his Supplement (vii. p. 140) still adheres to the Marshamian name, and there refers it to Germar!, notwithstanding he had previously received specimens from me (as will be seen below) of the true Curc. atramentarius of Marsham and Kirby. Curc. carbonarius of Fab. (Mus. Fab.) is referred with doubt by Germar to Linnæus; it is elaborately and well described by Professor C. H. Boheman in the work of Schönherr under the name of Magdalinus carbonarius of Fabr., a name that must necessarily be changed. I possess an insect given to me by Mr. Bracey Clark (which he found upon the fir, Pinus sylvestris, at the sides of the Jura mountains in Switzerland) that agrees exactly with the description by Boheman of Curc. carbonarius of Fab.

Only seven specimens of this insect have come under my observation: two in the collection of Mr. Curtis, taken by him from a hazel-tree near Ambleside the 19th of June; one in each of the

^{*} Ins. Spec. p. 193.

cabinets of Mr. Dale and Mr. Waterhouse; the fifth in that of the Rev. Wm. Little, captured at Raehills in Dumfries-shire; the sixth received by Mr. S. Stevens from Newcastle, and the seventh kindly presented to me by Mr. Heysham of Carlisle; it appears to be rare and only found in the north.

3. M. aterrima, Fab. 1781 (Mus. Fab., Mus. Banks), Germ., Steph.

Curc. atramentarius, Marsh. 1802 (Mus. Steph., Mus. Kirb.),

— stygius, Marsh. var., Gyll., Schönh., Curt.

M. asphaltina, Steph. 3.

This insect differs from the preceding in having the thorax subquadrate, the sides slightly rounded, sometimes nearly straight, and armed on each side adjacent to the anterior margin with a large tooth, behind which are several smaller ones; the elytra less deeply punctate-striate, the interstices flat, broader than the striæ, and very finely strigated transversely or coriaceous. I forwarded many specimens of this insect to Schönherr and Germar, with the name Curc. atramentarius of Marsham and Kirby, citing Curc. stygius as synonymous, with a note of interrogation to the latter name; all my specimens were referred by them to Magd. stygia of Gyll., aterrima of Fab.; subsequently I have had an opportunity of examining a typical example of Curc. stygius of Marsham, and I have now no doubt whatever it is but a small narrow variety of his Curc. atramentarius. According to the museums of Fabricius and Banks, the first examined by Germar and the last by myself, this species is doubtless the true Curc. aterrimus of Fabricius; but he refers it to Linnæus; yet the Linnæan Curc. aterrimus, according to the insect in his cabinet, is the Apion marchicum of Herbst, and as it does not entirely agree with the description of Linnæus, the name is sunk into a synonym (see notes on Apion marchicum); under these circumstances I consider there will be less risk of confusion by following Germar and Stephens in adopting the oldest name.

This is rather a common insect in the south of England, but apparently very scarce in the north; I have found it in Yorkshire, and plentifully near Gravesend, always upon the common elm-

tree (Ulmus campestris), in July.

B. Femora unarmed.

4. M. Cerasi, Linn., Marsh., Germ., Gyll., Schönh. Rhynch. Rhini, Gyll. 9, vol. iii. Rhinodes Cerasi, Steph. 2. Panus barbicornis, Steph. &, Mus. Steph. Curc. Cerasi, Mus. Kirb.

The males of my foreign specimens of Magd. barbicornis from

Germar and Chevrolat differ from the males of this insect in having the basal joints of the antennæ rufous; the club of a very different form, being narrower, considerably longer, and densely clothed with erect rigid hairs; the thorax very finely punctured; the elytra glossy, deeply sulcate, the sulci faintly punctured, and the interstices convex and finely coriaceous: although I have examined many collections of this family of insects, I have never seen a British example of *Magd. barbicornis*.

Occasionally found upon the black-thorn (Prunus spinosa) in

hedges in July.

5. M. Pruni, Linn., Mus. Linn., Marsh., Gyll., Germ., Curt., Schönh.

Curc. ruficorne, Linn., Mus. Linn.

Rhinodes Pruni, Steph. Curc. Pruni, Mus. Kirb.

Mr. Stephens has separated this and the preceding species from *Magdalis* under the name of *Rhinodes*, but they are closely linked in general habit and in affinity to *M. carbonaria* and *M. aterrima*, especially in the sexual disparities in the form of the rostrum; and as no other writer that I am aware of, excepting Mr. Westwood in his 'Generic Synopsis,' has concurred in this subdivision, I have no hesitation in following those authors who have retained them in the genus *Magdalis*.

I have always found this insect (but not plentifully) upon the

same plant as the foregoing in July.

The following observations on genera, on which I have nothing further to remark, may be as well introduced here.

Phloëobius griseus, Steph., is, according to Schönherr, Arace-

rus Coffea, Fab., a native of the East Indies, &c.

Rhinobatus planus, Steph.: British specimens sent to Schönherr were named Larinus Carlina, Oliv.

Lixus productus, Marsh., Steph., is, according to the Linnæan

museum, Lixus paraplecticus of Linn.

Bothynoderes, Schönh. olim, albidus, Fab.; now Cleonus, Schönh., albidus, Fab.

XXIV.—Descriptions of some apparently new species of Birds from Malacca. By T. C. Eyton, Esq., F.L.S.

THE collection of birds from which the following have been selected was brought to this country by Capt. Andrew Charlton of the East India Service, the discoverer of the tea-plant in Assam, and collected by him on the Malay Peninsula.

Astur barbatus. A. brunneus, gula alba linea atra longitudinali



Walton, John. 1845. "XXIII.—Notes, &c. on the genera of insects Oxystoma and Magdalis." *The Annals and magazine of natural history; zoology, botany, and geology* 16, 221–227. https://doi.org/10.1080/037454809495942.

View This Item Online: https://www.biodiversitylibrary.org/item/71834

DOI: https://doi.org/10.1080/037454809495942

Permalink: https://www.biodiversitylibrary.org/partpdf/60359

Holding Institution

University of Toronto - Gerstein Science Information Centre

Sponsored by

University of Toronto

Copyright & Reuse

Copyright Status: NOT_IN_COPYRIGHT

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.