

XVI.—On the *Aphanarthra* of the Canary Islands.

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THE little genus *Aphanarthrum* was established by myself in 1854 (*vide* Ins. Mad. 292, tab. vi. f. 2) to contain a minute and curiously-coloured Coleopterous wood-borer which I detected, in the summer of 1850, at a very lofty elevation in the mountains of Madeira. This insect was attached exclusively to the gigantic *Euphorbia mellifera*, Linn. fil.; and I described it under the name of *Aphanarthrum Euphorbiæ*. Two separate sojourns, however, subsequently, in the Canaries, which may be called the region of Euphorbias, gave me an opportunity of examining carefully the rotten stems of the various members of that singular genus of plants, so largely represented in those islands; and I consequently soon perceived that there were many species of *Aphanarthrum*,—all of them remarkably well defined and never merging into each other, but more or less moulded on the same pattern, ornamented by modifications of the same anomalous tints, and deriving their entire subsistence from the branches of the decaying Euphorbias which abound on the mountain-slopes of intermediate altitudes throughout the whole seven islands of the Canarian archipelago. Whilst some of the *Aphanarthra* would appear to infest, almost equally, several kinds of Euphorbias, and to live in company (often in the utmost profusion), others seem to be confined to particular ones; and what I propose in the following paper is, to describe the nine species which have been hitherto discovered in the Canaries, and to point out the exact Euphorbias on which they, each of them, subsist. I may, however, first state that, having thus obtained an insight into their modes of life, I commenced a search at Madeira also, during the spring of last year, in the stems of the *E. piscatoria* of lower altitudes; and, in conjunction with my friends Mr. Bewicke and Señor Moniz, obtained two additions to the fauna of that island, both of them identical with the Canarian ones,—the *E. piscatoria* being alike distributed over the Madeiran and Canarian groups. Hence, up to the present date of our researches, we have, in all, ten species of *Aphanarthrum* (if indeed the first and last of the nine here enumerated have not eventually to be treated as generically separate),—two of which are common to Madeira and the Canaries, whilst one (the *A. Euphorbiæ*) is peculiarly Madeiran, and seven are peculiarly Canarian.

Fam. Tomicidæ.

Genus APHANARTHURUM.

Woll., Ins. Mad. p. 292, tab. vi. f. 2 (1854).

1. *Aphanarthrum luridum*, n. sp.*A. lurido-testaceum*, pilis longiusculis suberectis sparse vestitum;

prothorace sublævi punctulato, antice minus producto nigrescente, linea dorsali et stigmatibus utrinque posito plus minus nigrescentibus; elytris leviter seriatim punctulatis et transversim rugulosis, postice leviter truncatis, plaga discali nigrescente (in singulo posita) ornatis.—Long. corp. lin. 1.

Habitat in ramis emortuis *Euphorbiæ canariensis* in ins. Teneriffa et Gomera, hinc inde frequens.

In their somewhat larger size, the present species and the following one differ from the other *Aphanarthra* here described. The *A. luridum* may be known by the pale lurid-testaceous hue of its entire upper surface, with the exception of a longitudinal dash on each of its elytra, and the dorsal line of its prothorax (together with a spot on either side of the latter, and a suffused portion in front), which are alone more or less dark. Its prothorax is very much less produced over the head than in the other species, its punctation is extremely fine and minute, and its elytra are perceptibly shortened, or obliquely truncated, at their apex. It appears to be peculiar to the *Euphorbia canariensis*, in the rotten stems of which I have taken it plentifully on the mountains above Sta Cruz in Teneriffe, and on a hill-summit to the north-west of San Sebastian in Gomera.

2. *Aphanarthrum Jubæ*, n. sp.

A. fusco-nigrum, pilis longis subdepressis mollibus dense vestitum; prothorace subrugoso punctato, antice producto sublurido necnon ad apicem ipsum tuberculis duobus prominulis instructo; elytris subseriatim punctatis et transversim rugulosis, testaceis, fasciis duabus profunde dentatis nigris (una sc. magna in medio duplici et altera angustiore subpostica) ornatis.—Long. corp. lin. 1-1½.

Habitat in ins. Lanzarota, in ramis desiccatis *Euph. Regis Jubæ* prope oppidum Haria a meipso A. D. 1859 copiose repertum.

The extremely pubescent surface of this large species, in conjunction with the small but distinct tubercles in the middle of the anterior edge of its prothorax (the two central ones of which are very evident), will, apart from its colouring as defined above, at once characterize it. It was detected by myself, during March of 1859, in great abundance, amongst a pile of dried stems of the *Euph. Regis Jubæ*, at Haria, in the north of Lanzarote.

3. *Aphanarthrum canariense*, n. sp.

A. latiusculum, fusco-nigrum, pilis brevissimis parce vestitum; prothorace subconvexo alutaceo granulato, antice producto lurido necnon ad apicem ipsum acuminato incrassato (fere subrecurvo); elytris dense seriatim punctatis et transversim rugulosis, brunneo-testaceis, fascia dentata magna media nigra (plus minus suffusa) ornatis.—Long. corp. lin. $\frac{3}{4}$ - $\frac{7}{8}$.

Habitat in ramis putridis *Euph. canariensis* in ins. Canaria, Teneriffa, Gomera, Palma et Hierro, vulgare.

The just perceptibly broader and shorter outline of this species

(in proportion to its size), together with its extremely short pubescence, its dense (but not very coarse) elytral sculpture, and the much acuminate apex of its prothorax, which is very perceptibly thickened (with a slight tendency to be recurved) at its extreme point, will serve to characterize it. The testaceous portions of its elytra are browner than in the other *Aphanarthra* (except the *A. bicinctum*) here described; the hinder elytral fascia is obsolete, and the anterior one is broad and more or less suffused, and with its central loop continuous and well defined—not being broken up into two separate portions. It seems principally, if not indeed entirely, attached to the decayed stems of the *Euph. canariensis*, under which circumstances I have captured it in Grand Canary, Teneriffe, Gomera, Palma, and Hierro.

4. *Aphanarthrum bicinctum*, n. sp.

A. fusco-nigrum, pilis sat brevibus vestitum; prothorace alutaceo dense granulato, antice producto vix pallidiore; elytris seriatim punctatis et transversim rugulosis, brunneo-testaceis, fasciis duabus dentatis nigris (una sc. magna et altera angustiore subpostica) ornatis.—Long. corp. lin. $\frac{2}{3}$ – $\frac{3}{4}$.

Habitat in ramis emortuis *Euph. balsamiferae* in ins. Lanzarota et Fuerteventura, vulgare.

In the *brownish* testaceous hue of the lighter portions of this insect, and the unbroken form of its front elytral fascia, it agrees with the *A. canariense*. It is, however, much smaller than that species, its pubescence is not quite so short, its hinder elytral fascia is developed, and the apex of its prothorax is usually darker and much less acuminate. Its habits also are different; for whilst that insect is apparently confined (or, at any rate, nearly so) to the *Euph. canariensis*, the *A. bicinctum* is attached principally to the *E. balsamifera* (and, I believe, also, though more sparingly, to the *E. Regis Jubae*), in the stems of which I have taken it abundantly both in the north of Lanzarote and near the town of Sta Maria Betancuria in Fuerteventura.

5. *Aphanarthrum bicolor*, n. sp.

A. pallido-testaceum, subdiaphanum, pilis paucis erectis remote vestitum; prothorace subtilissime alutaceo sparse et minute punctulato, antice producto necnon ad apicem ipsum acuminato incrassato, linea dorsali, macula transversa subpostica et linea transversa subantica (plus minus confluentibus suffusis) nigris; elytris remote seriatim punctulatis (punctulis minutis), fasciis duabus profunde dentatis nigris (una sc magna in medio duplici et altera angustiore subpostica) ornatis.

Variat lineis maculisque plus minus fractis, disjunctis, rarius subobsoletis.—Long. corp. lin. $\frac{3}{4}$ –1.

Habitat in ins. Teneriffa, Gomera et Hierro in ramis Euphorbiarum emortuarum (precipue *E. piscatoriae*), sat frequens.

A most distinct and beautiful *Aphanarthrum*, readily known

by its pale whitish-testaceous hue, diaphanous (or subhyaline), slightly shining, almost unpubescent, and most lightly punctured surface, and by the quantity of dark patches and broken fasciæ with which it is ornamented. It occurs in the dead branches of (I believe principally) the *Euph. piscatoria*, under which circumstances it was taken by myself in Teneriffe and Palma, and by Mr. Gray and myself in Hierro. I have likewise captured it, from out of the stems of the same plant, in Madeira,—where, however, the specimens have their elytra a trifle more distinctly punctured, and the interstices somewhat more roughly alutaceous, or shagreened.

6. *Aphanarthrum affine*.

A. angustulum, fusco-nigrum, pilis suberectis sat dense vestitum; prothorace alutaceo punctato granulato, antice producto lurido nec non ad apicem ipsum leviter acuminato incrassato; elytris seriatim punctatis, testaceis, fasciis duabus profunde dentatis nigris (una sc. magna in medio duplici et altera angustiore subpostica) ornatis.—Long. corp. lin. $\frac{2}{3}$ —vix $\frac{7}{8}$.

Habitat in ramis emortuis Euphorbiarum in ins. Lanzarota, Fuerteventura et Canaria, hinc inde frequens.

This species and the following one are a good deal allied; the *A. affine*, however, is rather larger and a little less densely pubescent, and its elytra are somewhat more parallel and less closely sculptured, the punctures being more evidently arranged in rows than is the case with the *A. piscatorium*. Its elytral fasciæ, also, are much more distinct; and the anterior one is more decidedly double in its central region, like that of the *A. Jubæ*, *bicolor*, and *glabrum*. It was taken abundantly by Mr. Gray and myself, out of the *Euph. balsamifera*, in the north of Lanzarote, and by myself at Betancuria in Fuerteventura, as well as (out of the *E. piscatoria*) at El Monte in Grand Canary. It is a good deal allied, in general facies, to the Madeiran *A. Euphorbiæ*; nevertheless it is slightly smaller than that insect, its pubescence is longer, its prothorax less acuminated in front, and its elytral punctures are much larger, fewer, and more evidently disposed in rows.

7. *Aphanarthrum piscatorium*, n. sp.

A. fusco-nigrum, pilis suberectis dense vestitum; prothorace alutaceo dense punctato, antice producto leviter acuminato sublurido; elytris dense subseriatim punctatis et transversim rugulosis, dilute testaceis, fasciis duabus profunde dentatis nigris (una sc. magna et altera angustiore suffusa postica) ornatis.—Long. corp. lin. $\frac{2}{3}$ — $\frac{3}{4}$.

Habitat in ins. Teneriffa, Palma et Hierro, in ramis *E. piscatoriæ* emortuis, ubique vulgare.

A rather insignificant little species, closely allied to the last one. It may be known from it, however, by its smaller size and

somewhat more pubescent surface, by its elytra being just perceptibly less parallel, more densely sculptured, and with their punctures much less evidently disposed in rows, and by its elytral fasciæ (the front one of which is simple, or at any rate less clearly disjointed in the centre) being (especially the hinder one, which is usually continued to the very apex) less distinct. I found it tolerably common, in the decayed stems of *Euph. piscatoria*, in Teneriffe, Palma, and Hierro,—in the last of which islands it was also captured by Mr. Gray. It likewise occurs, attached to the same plant, in the lower elevations of Madeira.

8. *Aphanarthrum glabrum*, n. sp.

A. fusco-nigrum, fere pilis carens; prothorace dense alutaceo punctato, antice producto leviter acuminato subincrassato (fere bituberculato) sublurido; elytris leviter subseriatim punctatis, testaceis, fasciis duabus profunde dentatis nigris (una sc. magna in medio duplici et altera angustiore subpostica) ornatis.—Long. corp. lin. $\frac{2}{3}$ —vix $\frac{3}{4}$. *Habitat* in ramis truncisque Euphorbiarum in ins. Hierro, rarius.

The almost total freedom from pile (except under a high magnifying power) of this little *Aphanarthrum*, in conjunction with its very lightly sculptured elytra (the punctures of which are but indistinctly disposed in rows), will, *inter alia*, readily separate it from any of the preceding species. It appears to be rare, the only specimens which I have yet seen having been captured by myself in the island of Hierro.

9. *Aphanarthrum pusillum*, n. sp.

A. minutum, nigro-fuscum, pilis cinereis vestitum; capite leviter elongato subporrecto; prothorace angustulo subelliptico punctato, antice leviter producto et subito contracto acuminato; elytris dense subseriatim punctatis, concoloribus, ad humeros in tuberculum indistincte elevatis; antennis pedibusque pallidioribus.—Long. corp. lin. $\frac{1}{2}$ —vix $\frac{2}{3}$.

Habitat in ramis *Euph. canariensis* putridis, in ins. Canaria, Teneriffa et Gomera, a meipso repertum.

The excessively minute size and uniformly dark-brown hue of this little *Aphanarthrum*, in conjunction with its rather elongated subporrected head and its somewhat elliptic, anteriorly contracted prothorax, will at once distinguish it from any of the preceding species. It is possible, indeed, that it may eventually form the type of an allied genus; but, as I have not yet attempted to dissect it, or to examine its antennæ microscopically, this is a question I must decide hereafter. It appears to be peculiar to the *Euph. canariensis*, in the rotten stems of which I have captured it in Grand Canary (in the great crater of the Bandama), Teneriffe (on the mountains above Sta Cruz) and Gomera (on a hill-summit to the northwest of San Sebastian).



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