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## REDESCRIPTION OF *DEROPRIA ELONGATA* (EGGERS), WITH NOTES ON SOME SPECIES OF *APHANARTHURUM* WOLLASTON (COLEOPTERA, SCOLYTIDAE)

by

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With nine text-figures

### ABSTRACT

It is proved that Enderlein's establishing of a separate genus (*Deropria*) for *Aphanarthrum elongatum* Eggers was most well-founded. *Aphanarthrum canariense longipes* Israelson is a younger synonym of *A. neglectum* Schedl which is considered to be a subspecies of *canariense* Wollaston. The identity of *A. armatum* Wollaston has been confirmed by genital examination. The Morocco population of the polymorphous *A. bicinctum* Wollaston s. lat. belongs to the nominate race, i.e. that of the nearest islands of the Canarian Archipelago.

Eggers (1927) described his *Aphanarthrum elongatum* on a single specimen captured by Mrs. Uyttenboogaart in Grand Canary. He remarked that the frontal and pronotal sculpture as well as the tibial shape indicated that the species did not actually belong in *Aphanarthrum*.

Enderlein (1929), presumably solely basing himself upon Egger's description, established the new genus *Deropria* for the species on account of its pronotal margin being provided with numerous teeth in front and its tibiae being dilated distally and having their outer margin nearly straight. *Deropria* was accepted by Schedl (1932) in Winkler's Catalogus.

Later (Schedl, Lindberg & Lindberg, 1959), however, the species reappears as an *Aphanarthrum*, as it seems for no particularly stated reason except for the information by Schedl that he had examined the monotype without being able to find any aberrant protibial structure.

Among some Scolytids from Tenerife, amiably handed over to me for examination by Dr. T. Palm, Uppsala, some years ago, there was a second example of *Deropria elongata*, and more recently this eminent collector brought a series of the same species, likewise from Tenerife. Finally the

holotype was kindly put at my disposal by Dr. J. Krikken of the Rijksmuseum van Natuurlijke Historie, Leiden, where the Uyttenboogaart collection is now preserved. The material has made it possible to make the following redescription of the species.

I take the opportunity here to add brief notices on a few species of *Aphanarthrum*.

***Deropria elongata* (Eggers) (figs. 1-6)**

*Aphanarthrum elongatum* Eggers, 1927: 39. — Schedl, Lindberg & Lindberg, 1959: 21, 76.

*Deropria elongata* Enderlein, 1929: 143. — Schedl, 1932: 1638.

Body parallel-sided, length 1.5 - 1.95 mm, width 0.6 - 0.75 mm; head and pronotum black, in the holotype brown (possibly not fully coloured); elytra varying from uniformly dirty yellow, through yellowish with all margins distinctly brownish, to uniformly brown; under side dark; appendages reddish yellow, sometimes with a brownish tinge; vestiture of not very dense and partly bristling hairs.

Front in the male with a somewhat longitudinally prolonged, glabrous and shining depression, in the female nearly flat, more evenly pubescent and mat. Eyes not or hardly emarginate (fig. 5). Antennal scape about as long as the club; funicle two-segmented; club sub-ovoid with the maximum width in the distal half, solid, with no indication of sutures (fig. 6).

Prothorax about 1.1 times as long as wide, sub-ovoid with rather distinct hind corners. Anterior border with 8-10 small protruding teeth; surface of upper side coarsely asperate in the anterior half, backward successively smoother and more distinctly punctured, finely and faintly microreticulate, somewhat shining. Pubescence not very distinctly dual, of more insignificant, depressed and short hairs and much longer and more upright ones. Front coxae contiguous.

Scutellum small but distinct, triangular.

Elytra about 1.7 times as long as wide, simply rounded apically but with the sutural region of the declivity slightly flattened. Striae fairly distinct but not impressed; punctures at least as wide as the interstriae. Strial hairs usually well reaching the base of the following, more decumbent; interstitial hairs twice as long and half-erect to suberect. A scattered micropunctuation (intervals usually 10-25  $\mu\text{m}$ ) may be discernible in reflected light at 40  $\times$  but is always distinct in transmittent light. A very fine and dense microreticulation likewise appears in transmittent light but at higher magnification (300  $\times$ ). The meshes are roughly square and about 1.5  $\mu\text{m}$  in length.

Tibiae dilated towards the apex; outer edge nearly straight; outer apical corner about rectangular. Protibiae (fig. 4) with about 7 teeth on the outer edge and 3 on the apical edge; spine of the inner apical corner not very strong. Mesotibiae with 10, metatibiae with 6 teeth, 4 and 3 of which, respectively, on the apical edge. Tarsi somewhat short; segments 1-4 combined not as long as 5; 1-3 dilated but not emarginate, beneath in addition to the normal bristles with long and dense hairs.

Aedeagus (figs. 2 and 3) about 0.4 times as long as the prothorax. Tube with a subapical constriction; apophyses of moderate length; tegmen with a distinct anterior process in the middle. Internal sclerite apparatus inconspicuous. Spiculum gastrale (fig. 1) with a not very strong subapical tooth.

Material examined. Grand Canary: with no specified locality, 3.iv.1927, Uyttenboogaart leg., 1 ♂ (holotype), in the Rijksmuseum van Natuurlijke Historie, Leiden.

Tenerife: Santa Cruz, 13.iv.1967, 1 ♂; Bajamar, 26, 27.ii.1973, 11 ex.; Pico del Ingles, 1.iii.1973, 1 ♀. All Palm leg. et coll.

Palm shook down his specimens from various shrubs (*Rubus*, *Tamarix*, *Kleinia*) (pers. comm.).

The holotype is smaller than any of the other examples and also paler. Its pubescence is a trifle shorter and the tooth of the spiculum gastrale is located a little more close to the apical end but the aedeagus is quite similar and on the whole I find nothing to give cause for a specific separation of the Grand Canary form from the Tenerife one.

It will appear from the above description that *Deropria* is amply different from *Aphanarthrum*. A compilation of differences noticed between the two genera is given below (table 1).

Table 1. A comparison between *Deropria* and *Aphanarthrum*

<i>Deropria</i>	<i>Aphanarthrum</i>
Front with a distinct impression in the male sex.	Front with no impression.
Eyes at most very shallowly emarginate (fig. 5).	Eyes deeply emarginate (fig. 8).
Antennal club solid, not microreticulate (fig. 6).	Antennal club annulate, partly distinctly microreticulate (fig. 9).
Prothorax with 8-10 apical teeth.	Prothorax with no or at most 4 apical teeth.
Pronotal surface coarsely asperate in the anterior half.	Pronotal surface not asperate, at most very finely granulate.

*Deropria*

Elytral striae distinct.  
 Elytra with regularly scattered micropunctures.  
 Outer tibial border about straight; protibiae with about 10 teeth on the outer and apical borders combined (fig. 4).  
 Tarsal segments 1-4 combined shorter than 5; 1-3 dilated, with long dense hairs beneath (fig. 4).  
 Spiculum gastrale with a subapical tooth.

*Aphanarthrum*

Elytral striae not very distinct.  
 Elytra only with solitary micropunctures, if any.  
 Outer tibial border convex; protibiae with 4 or 5 teeth on the outer border (fig. 7).  
 Tarsal segments 1-4 combined longer than 5; 1-3 normal, only with the normal bristles (fig. 7).  
 Spiculum gastrale with a subbasal tooth, if any.

By some of the characters enumerated in the table *Deropria* will also differ from the other Palaearctic genera of Crypturgini, such as regarding pronotal sculpture, tarsal structure, and form of the eye and therefore appears to be a somewhat aberrant element of the tribe. Its tribal position can hardly be questioned, however. An, as it seems, previously not recorded feature in common to *Deropria*, *Aphanarthrum*, *Crypturgus (concolor* Wollaston), *Triotemnus (subretusus* Wollaston), and *Cisurgus (pusillus* Wollaston) is the elytral microreticulation described above and being quite similar in all the forms examined.

*Aphanarthrum canariense neglectum* Schedl

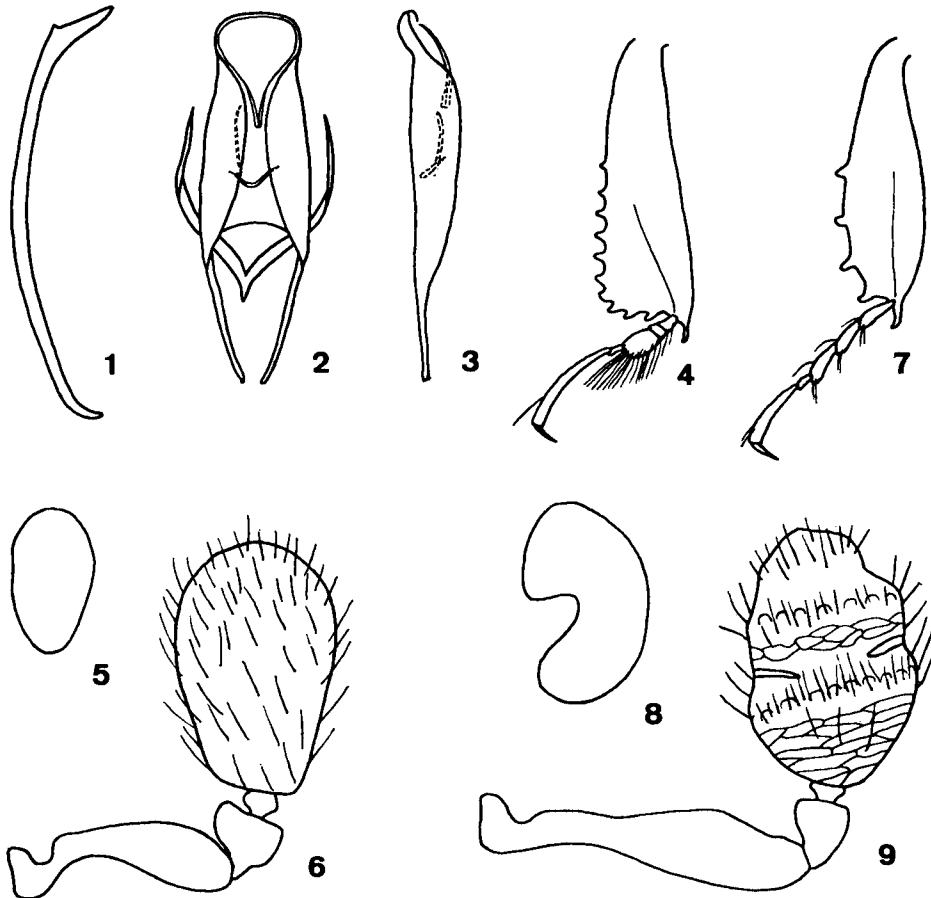
By the courtesy of Dr. H. Silfverberg I have been able to study a series of 17 type specimens of this form, recently described as a new species (Schedl, 1964: 99). The material is in the Zoological Museum of the University, Helsinki. All specimens are very pale and evidently immature which will explain the faded colour markings recorded in the original diagnosis.

In Schedl's opinion *neglectum* comes close to *piscatorium* Wollaston. Except for the body length, however, it is not very easy to find any particular resemblance with the latter species. On the other hand it very much reminds of *canariense* Wollaston, e.g. in respect of surface sculpture, type of pubescence and colour pattern.

In fact *neglectum* has proved to be identical with my *canariense longipes* (Israelson, 1972: 256) (confirmed by examination of the genitalia). The latter name, as being the younger synonym, has to be withdrawn.

The nominate race of *canariense* is common in decaying stems of *Euphorbia canariensis* all over the Canary Islands from Hierro in the west to

Fuerteventura in the east, except in La Palma where it is replaced by *neglectum*. Most probably the latter has evolved in situ from the former. Considering the apparent similarities of the male copulatory organs in both compared with all other *Aphanarthrum* so far examined I think it appropriate to classify *neglectum* as a geographic race or subspecies of *canariense*.



Figs. 1-6. *Deropria elongata* (Eggers). 1, spiculum gastrale; 2, aedeagus with tegmen, dorsal view; 3, aedeagus, lateral view; 4, protibia with protarsus; 5, left eye; 6, antenna. — 1-3, holotype; 4, specimen from Tenerife, Bajamar.

Figs. 7-9. *Aphanarthrum bicinctum* Wollaston. 7, protibia with protarsus; 8, left eye; 9, antenna. — Tenerife, Santa Cruz.

#### *Aphanarthrum armatum* Wollaston

On my request Dr. R. Thompson most obligingly dissected the British Museum (N. H.) type specimen which appeared to be a male. Moreover he

sent me an excellent drawing of the copulatory organ. This drawing shows no significant differences compared to that previously published by me (Israelson, 1972: fig. 22) under the name of "*A. sp. (?armatum)*". The question-mark can therefore safely be removed.

As regards *A. monodi* Paulian & Villiers my efforts to get material for examination have so far been in vain, but since *armatum* has now proved to possess a fairly wide distributional area within which falls the classic locality of the former it is not improbable that *monodi* is a younger synonym of *armatum*.

*Aphanarthrum b. bicinctum* Wollaston (figs. 7-9)

*A. bicinctum* s. lat. is widely distributed in the Canarian Archipelago, missing, as far as known, only in the two westernmost islands, Hierro and La Palma. Several geographic races seem to have evolved (cfr. Israelson, 1972: 255).

Besides, the species has been recorded from the coastal region of southern Morocco (Kocher, 1961: 249; Schedl, 1964: 97). Recently I have examined a very extensive series from the latter area and preserved in the Helsinki Museum. The examination did not reveal any fundamental differences from the East-Canarian nominate race.

REFERENCES

- EGGERS, H., 1927. Zwei neue Borkenkäfer (Ipidae) von den Canarischen Inseln. — Tijdschr. Ent., 70: 37-40.
- ENDERLEIN, G., 1929. Entomologica Canaria I. — Zool. Anz., 81: 141-150.
- ISRAELSON, G., 1972. Male copulatory organs of Macaronesian species of *Aphanarthrum* Wollaston. With designations of lectotypes and descriptions of new taxa (Col. Scolytidae). — Ent. scand., 3: 249-257.
- KOCHER, L., 1961. Catalogue commenté des coléoptères du Maroc. — Trav. Inst. sci. chérif., sér. zool., 24: 1-263.
- SCHEDL, K. E., 1932. Scolytidae in "Catalogus coleopterorum regionis palaearticae, edited by A. Winkler": 1632-1648. — Wien.
- , 1964. Borkenkäfer des nordwestlichen Afrikas. — Not. ent., 44: 94-100.
- SCHEDL, K. E., H. LINDBERG & H. LINDBERG, 1959. Coleoptera Insularum Canariensium. II. Scolytidae. — Comm. Biol. Soc. Sci. Fenn., 20, (2): 1-78.