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AN OLISTHOPUS FROM THE AZORES, WITH A KEY TO THE MACARONESIAN SPECIES

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With 8 figures

ABSTRACT. *Olisthopus inclavatus* n. sp. from the Azores is described. The Macaronesian species are keyed and their similarities discussed.

SUMÁRIO. *Olisthopus inclavatus* n. sp. dos Açores é descrito. Apresenta-se uma chave das espécies Macaronésicas e discute-se a sua afinidade.

Olisthopus inclavatus n. sp.

Figs. 5 and 6.

Holotype, ♂: Azores, Santa Maria, Aeroporto. 10.VII.1982, G. Israelson (in author's collection).

Measurements (mm). Length of body 5.5, prothorax 1.2, elytra (from shoulder) 3.5, antennae 2.5, aedeagus 1.1. Width of head 1.1, prothorax 1.5, elytra 2.1, aedeagus 0.3.

Body more or less strongly arched. Head black, pronotum brownish black with lateral margins narrowly brownish yellow. Elytra brown, faintly iridescent, with basal and lateral margins broadly yellow, antennae brownish yellow with segment 1 yellow, palpi yellowish brown with basal parts of segments more or less infuscate.

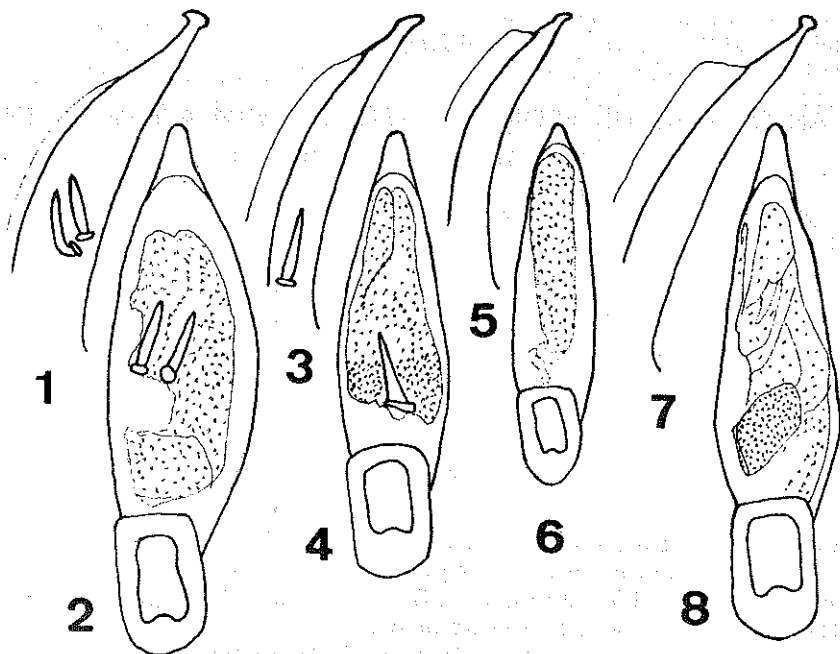
Upper side of head very finely and remotely punctulate and with delicate, very weakly impressed microsculpture of about isodiametric meshes.

Pronotum transverse with greatest width very slightly before middle and with strongly convex lateral sides; posterior corners faintly marked on level of hind setiferous puncture; sides broadly flattened

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and distinctly reflexed about posterior corners, successively more narrowly so apicad and at base; flattened parts with rather strong and coarse, partly confluent punctation.

Lateral sides of elytra distinctly somewhat convex and with very slight subapical concavity. Microsculpture of very fine transverse lines frequently joined into elongate meshes. Interstriae with three distinctly somewhat foveolate punctures. Macropterous; wings about 1.5 times as long as and as broad as one elytron.



Figs. 1-8. — Penes of various Macaronesian *Olisthopus* species. — 1, 2. *palmensis* Wollaston. — 3, 4. *elongatus* Wollaston. — 5, 6. *inclavatus* n. sp. — 7, 8. *maderensis* Wollaston.

1, 3, 5, 7. Distal part in profile (finer armature omitted). — 2, 4, 6, 8. Ventral view (armature indicated).

Penis (Figs. 5 and 6) broadest somewhat basad of middle, from there gently narrowing apicad until shortly before apex, finally shortly pointed. Internal sac with the usual dense and fine denticulation but without larger sclerites.

Female unknown.

The Azorean form is similar to *O. elongatus* Wollaston but differs by the absence of a conspicuous nail-shaped sclerite in the internal sac of the penis (hence the Latin name of *inclavatus*); for further details see the key.

KEY TO THE MACARONESIAN SPECIES OF THE GENUS *OLISTHOPUS* DEJEAN

- 1/4 Pronotum about uniformly convex; sides not distinctly flattened posteriorly and poorly punctate there and at base. Macropterous. Apical portion of penis straight in profile but with a smaller, uniformly rounded ventral dilation and a larger, slightly hooked dorsal dilation (Fig. 1). Inner sac of penis armed with two (occasionally a single) strong, nail-shaped sclerites.
- 2/3 Smaller species with distinctly yellow side margins of pronotum and elytra. Elytra without microsculpture, very shiny but noniridescent. 5.3-6.0 mm. Central and western Canaries, except La Palma (specimens from Gran Canaria not examined) *glabratus* Erullé
- 2/2 Larger species with obscurely paler side margins of pronotum and elytra. Elytra with dense microsculpture of fine, transverse lines united into elongate meshes, not very shiny but faintly iridescent. 6.7-7.2 mm. Canaries: La Palma *palmensis* Wollaston
- 4/1 Pronotal sides more or less widely flattened and reflexed posteriorly; flattened parts rugosely punctured. Macropterous or apterous. Apical portion of penis slightly curved in profile (Fig. 3 and 5) or, if straight, with dorsal dilation about uniformly rounded (Fig. 7). Inner sac with one strong, nail-shaped sclerite or without such sclerites.
- 5/8 Palpal segments more or less infusate at base. Elytra narrower: less than $1\frac{1}{2}$ times broader than pronotum and about $1\frac{2}{3}$ as long as broad. Elytra microsculpture of dense transverse lines united into elongate meshes; surface faintly iridescent. Macropterous. Apical portion of penis slightly curved and with a low dorsal dilation but without ventral dilation.
- 6/7 Elytra subparallel. Penis as long as pronotum; internal sac with a strong, nail-shaped sclerite (Figs. 3 and 4). 5.2-6.2 mm. Madeiras: Madeira and Porto Santo; Canaries: Lanzarote and Fuerteventura; Westmediterranean area (no specimens from the Continents examined) *elongatus* Wollaston
- 7/6 Elytral sides convex. Penis shorter than prothorax; internal sac without strong sclerites. 5.3 mm. Azores: Santa Maria *inclavatus* n. sp.
- 8/5 Palpi uniformly yellow. Elytra broader: about $1\frac{1}{2}$ times as broad as pronotum or broader and about $1\frac{1}{2}$ times as long as broad; surface with isodiametric microreticulation. Apical portion of penis straight but with a smaller ventral and a larger dorsal dilation; inner sac without strong sclerites.
- 9/10 Body broader, more convex, averagely larger. Pronotum less constricted behind, with greatest width near middle, less widely flattened and less coarsely punctate. Elytra with setiferous punctures of interstriae 3 not foveolate. 4.9-6.3 mm. Madeiras: Madeira. Desertas Is. (specimens from Desertas not examined) *maderensis* Wollaston
- 10/9 Body narrower, flattened, averagely smaller. Pronotum markedly constricted behind, with greatest width far before middle; sides widely flattened posteriorly and very coarsely punctate. Elytra with setiferous punctures of interstriae 3 more or less strongly foveolate. 4.5-5.6 mm. Madeiras: Madeira *ericae* Wollaston

Note. *O. acutangulus* Wollaston from Madeira and *humerosus* Wollaston from the Desertas usually regarded as a synonym and a variety, respectively, of *maderensis* have not been examined.

DISCUSSION

It appears from the key that the endemics of the Madeiras are well distinguished from those of the Canaries by several characters: elytral microsculpture, absence of wings and inner armature of penial sac. The only non-endemic species *elongatus* seems to be more closely related to the Canarian endemics (microsculpture, presence of wings and presence of a large sclerite in the penial sac). The Azorean species is reminiscent of *elongatus* but differs in the body form and the inner armature of the penis.

Typical specimens of *maderensis* and *ericae* are easily separated and usually (but not always) occupy different habitats. The former is mostly found on the ground, among leaf litter or under stones, for instance. The latter prefers the loosely attached outer fibre of old tree heaths: the flat body form is an evident adaptation to life in this environment.

The distinguishing characters are variable however and more or less distinctly intermediate specimens have been noticed. Probably *maderensis* and *ericae* evolved from a common ancestor in selecting different types of habitats.