

# VIERA EA



FOLIA SCIENTIARUM BIOLOGICARUM CANARIENSIIUM

Volumen 9 (1-2) Santa Cruz de Tenerife, 1979 (Publ. Septiembre 1980)

# VIERAEA

FOLIA SCIENTIARUM BIOLOGICARUM CANARIENSII

*Director:* Prof. Dr. Wolfredo Wildpret de la Torre

*Redactora de Botánica:* Dra. Esperanza Beltrán Tejera

*Redactores de Zoología:* Dr. Marcos Báez Fumero  
D. Antonio Machado Carrillo

VIERAEA aparece a razón de dos números por año, que forman un volumen de aproximadamente unas 200 páginas. En ella se publican trabajos de índole biológica (Botánica, Zoología, Entomología, Ecología (etc.)), que versen sobre Canarias y, en sentido más amplio, sobre la Macaronesia. Suscripción anual:

España . . . . .	700 Ptas. .
Extranjero . . . . .	1.000 Ptas.

Los pagos se pueden efectuar directamente en la Redacción, o contra reembolso (sólo España) o transferencia bancaria al Banco de Bilbao de La Laguna, Cuenta núm. 7.132. (Tenerife, Islas Canarias).

La correspondencia para suscripciones, autores o intercambios, dirigirla a:

Redacción de VIERAEA.  
Departamento de Botánica.  
Facultad de Biología.  
Universidad de La Laguna, Tenerife, Islas Canarias.

La publicación de este volumen ha podido realizarse gracias a la generosa subvención del Aula de Cultura del Excmo. Cabildo Insular de Tenerife.

## TAXONOMICAL AND NOMENCLATURAL NOTES ON SOME CANARIAN COLEOPTERA

by

GUNNAR ISRAELSON

### Resumen

Homalota canariensis Wollaston se compara con Atheta peyerimhoffi Scheerpeltz y se transfiere a Atheta. Tarphius erosus Wollaston es considerado como una especie válida.

Enicmus opacipennis Wollaston, Liparthrum degener Har. Lindberg, Coleobothrus jandiacus Enderlein and Aphanartum gonioma Enderlein han resultado ser sinónimos de Enicmus testaceus Stephens, Liparthrum nigrescens Wollaston, Coleobothrus alluaudi (Peyerimhoff) and Aphanarthrum mairei Peyerimhoff, respectivamente.

Se designa lectotipo para la especie Liparthrum nigrescens.

Se describen los siguientes nuevos taxa: Peltinus intermedius n. sp., Xenoscelis lauricola n. sp., Cis sagittiferus n. sp., Sphaericus rotundicollis n. sp., Nesotes sabulicola n. sp., Calomicrus bispiniger longicornis n. ssp., Psylliodes angusticeps n. sp., Sitona brachypterus n. sp., Pselactus folwacznyi n. sp. y Hesperorhynchus dentipes n. sp.

### Abstract

Homalota canariensis Wollaston is compared with Atheta peyerimhoffi Scheerpeltz and is transferred to Atheta. Tarphius erosus Wollaston is shown to be a proper species.

Enicmus opacipennis Wollaston, Liparthrum degener Har. Lindberg., Coleobothrus jandiacus Enderlein and Aphanarthrum goniomma Enderlein are proved to be synonyms of Enicmus testaceus Stephens, Liparthrum nigrescens Wollaston, Coleobothrus alluaudi (Peyerimhoff) and Aphanarthrum mairei Peyerimhoff, respectively.

A lectotype is designated for Liparthrum nigrescens.

The following new taxa are described: Peltinus intermedius n. sp., Xenoscelis lauricola n. sp., Cis sagittiferus n. sp., Sphaericus rotundicollis n. sp., Nesotes sabulicola n. sp., Calomicrus bispiniger longicornis n. ssp., Psylliodes angusticeps n. sp., Sitona brachypterus n. sp., Pselactus folwacznyi n. sp. and Hesperorhynchus dentipes n. sp.

Fam. Orthoperidae

Peltinus intermedius n. sp. (Figs 1-3)

Type area: Canary Is., Fuerteventura.

Type material: Holotype male, with label: 'Ins. Can. Fuerteventura. Jandia Gran Valle 19-23.2.1974 5321 G. Israelson' and with my holotype and determination label: in my collection.- Paratypes (labelled as such, collected by me and in my collection): 21 specimens, same collecting data as holotype; 4 specimens, Mte. Muda, 1.7.1971.

Description. Body 0.75-0.95 x 0.6-0.7 mm, slightly ovate, more narrowly rounded in front than behind (fig. 1), strongly convex above, less so beneath; dark brown or black, shining; appendages yellow; upperside very finely and sparsely punctate, head excepted, not microreticulated; with insignificant pubescence of very fine and short hairs; underside microreticulated except for central and posterior part of metasternum. Antennae (fig 3)  $1\frac{1}{2}$  x as long as breadth of head: segment V  $1\frac{1}{2}$  x as long as IV and segment VI  $1\frac{1}{2}$  x as long as VII.

Prothorax 1.3 x as broad as long (dorsal view, fore and hind margin on a level with each other); hind corner only very slightly obtuse-angled (profile). Alae missing.

Penis with apical portion strongly curved and pointed, with a marked subapical constriction both dorsally and ventrally (fig 2).

Discussion. In respect of penial form intermedius is about intermediate between matthewsii Teitler and peyerimhoffi Paulian (see PAULIAN, 1950), figs 9 l and 9 j), perhaps also in respect of prothorax. From both species the new one differs by slightly larger size, by absence of hind wings and by antennal segment V being less than twice as long as IV; segment VI is much larger than VII.

Ecology. Found by sifting small heaps of dry goat-droppings and by brushing Euphorbia regis-jubae.

Fam. Staphylinidae

Atheta (Microdota) canariensis (Wollaston) n. comb. (Figs 7-11)

-Homalota canariensis Wollaston 1862: 184, pl. 7 fig. 8

In Fauvel's Staphylinid Catalogue all the old Canarian Homalota are referred to other genera, with one exception: H. canariensis. About that species he states: "J'ai vérifié les tarses de cette espèce qui ont 4,4,5 articles" (FAUVEL, 1897: 350). Ever since the species has been interpreted as a Homalota.

In fact the tarsal formula is always distinctly 4,5,5, and consequently the species must be transferred to Callicerini, more particularly to Atheta in the sense of LOHSE (1971: 75). The closest relative of canariensis is no doubt the Moroccan peyerimhoffi Scheerpeltz (repentina Peyerimhoff) which regarding ecology appears to be an exact analogue, both species being restricted to putrid stems of succulent Euphorbia.

Morphological characters in common to canariensis and peyerimhoffi are: body parallel-side; colour variegated, head brown to black, antennae reddish brown with yellow base, abdomen yellow with at least subterminal segments infuscated; upper side with microreticulation and inconspicuous punctuation; clypeus not excised; temple carinated; antennae short and strong with segment IV transverse and segments V-X about twice as wide as long; pronotal pubescence consisting of not very dense, rigid hairs directed forward at midline and outwards at sides and protruding at lateral margins; punctuation of abdominal tergites III-VII uniformly very scattered; tergite II with one pair of macrochaetae and tergites III-VI with anterior row of macrochaetae; male tergite VIII barely visible emarginate and finely and irregularly crenulated behind (figs 7 and 12, respectively); female tergite VIII behind with a shallow excision at middle; male sternite VI rounded.

The species can be separate as follows:

canariensis: Averagely longer, 2-2.5 mm, and broader. Forebody, head excepted, brownish yellow, elytral sides sometimes infuscated. Only subapical ab



dominal segments infuscated. Head with depression between eyes. Lateral prothotacic sides slightly concave behind. Elytral suture (from scutellar apex) as long as prothorax. Elytra more strongly punctuate than pronotum. Elytral pubescence strictly transverse. Female sternite VI with a deep triangular Penis as in figs 8 y 9. Parameres as in Fig 10; apical setae of terminal segment short Spermatheca as in fig. 11.

peyerimhoffi: Averagely shorter 1.5-2 mm, narrower. Pronotal disc and scutellar elytral region (scutellum included) infuscated. Abdomen extensively dark but segments II-IV usually light frons slightly convex. Lateral prothoracic sides about uniformly slightly convex. Elytral suture slightly shorter than prothorax. Elytra as strongly punctuate as pronotum. Elytral pubescence obliquely transverse. Female sternite VI broadly rounded with no excision behind penis as in figs 13 and 14. Parameres as in fig. 15; apical setae of terminal segment longer. Spermatheca as infig. 16.

PEYERIMHOFF (1923) assigned his new species to subgenus Hilara: Hilara in the sense of Mulsant and Rey, recently substituted by LOHNSE (1971) for Neohilara, is out of the question however. SCHEERPELTZ (1934) listed peyerimhoffi as a Microdota. In fact, both species fit LOHSE's concept of the latter subgenus.

Using the keys of YOSII & SAWADA (1976) one is brought to their "Notothecta group" (which does not include Microdota) because of the chaetotaxy.

#### Fam. Erotylidae

##### Xenoscelis lauricola n. sp. (Fig. 17)

Type area: Canary Is., La Palma.

Type material: Holotype male, labelled "Ins. Canr. La Palma Roque del Faro, 11-17.6.1966 935 G. Israelson" and with my holotype and determination label. In my collection. Paratype male (labelled as such and in my collection): same collecting data.

Description. Body 3.4 x 1.1 mm. Very similar to X. deplanata Wollaston but differing in the following respects. Slightly smaller on average, somewhat

darker, reddish brown. Prothorax more transverse 1.2 x as broad as long; anterior corners more broadly and distinctly rounded off. Elytra shorter, hardly twice as long as broad; their striae more conspicuously punctured. Male with no serrations along inner edge of metatibiae. Aedeagal struts relatively longer, 1.9 x as long as penis. Penial profile obliquely flattened apically; sclerites missing (fig. 17). (In deplanata penis with a narrow internal sclerite and with apical profile somewhat convex, as in fig 18). Female unknown.

Discussion. Some differences from the second Canarian species were pointed out above. It can be added that lauricola is certainly distinguished from the Continental representative of the genus: X. costipennis Fairmaire. I have not examined the last-named species but according to GANGLBAUER's (1899: 650) description the males of costipennis have both pro- and metatibiae distinctly crenulated at the inside.

#### Fam. Lathridiidae

##### Enicmus testaceus Stephens (Figs. 27, 28)

-Lathridius testaceus Stephens, 1830

-Lathridius opacipennis Wollaston 1864: 151, nov. syn.

The type specimen of L. opacipennis (type locality: Tenerife. Agua García) was recently examined by T. Palm who found it to be an Enicmus (pers. comm.).

I have compared the Canarian opacipennis with the North European testaceus and found no differences. The species is very characteristic and easily identified by the aid of the usual determinative works. A description is therefore unnecessary here. The hind margin of the male tergite VII and the penial apex are however illustrated (figs 28 and 27, respectively) because FRANZ's figures of testaceus (1974, figs 1a, 1b) are rather different and were probably made from some other species. On the other hand his

fig. 5b of the mentioned tergite in opacipennis with the median portion of the posterior margin being slightly protruding is typical of testaceus. FRANZ's fig. 5a of the apical portion of the penis of the same species however was no doubt drawn from a destroyed organ and is inrecognizable. In reality it is nearly rectilinearly pointed.

Fam. Colyiidae

Tarphius erosus Wollaston (Figs. 23, 26)

- Tarphius erosus Wollaston, 1862: 384, pl. 19 fig. 4; 1864: 125.
- Tarphius canariensis Wollaston ab. erosus, Wollaston 1865: 136; Uyttenboogaart 1937: 228.
- Tarphius canariensis Wollaston var. erosus, ?Franz 1967: 81, fig. 23; nec Uyttenboogaart 1930: 228.

Though very closely related to T. canariensis, T. erosus should be regarded as a proper species because it occurs together with the former species. This conclusion was drawn in the original description already. The trouble was that erosus was soon found to be connected with the "ordinary" type by intermediate gradations. It was finally suppressed as a species by the author himself and reduced to a simple aberration (WOLLASTON, 1865). A similar attitude was taken up by all later authors.

T. canariensis is believed to be a very variable species, an opinion reflecting the fact that it consists of various local races more or less easily separated. The intraracial variation is probably not remarkably large. In the Teno area (Western Tenerife) the species is represented by c. postcostatus Uyttenboogaart. My material from the Anaga area (Eastern Tenerife) is modest but differs from the Teno population; its relation to another species, simplex Wollaston seem to be somewhat unclear however (see also Uyttenboogaart 1937: 87).

T. erosus differs from canariensis generally by its elytral vestiture which typically consists of relatively pale, broad and apically broadly rounded setae surrounded basally by extremely short hairs which are hardly



visible at 40 diameters (fig. 26). The populations of canariensis have darker (Gran Canaria forms excepted), narrower and acuminate setae and the basal hairs though very fine are sufficiently long to be clearly visible in the binocular at the magnification mentioned (fig. 25).

The elitral nodules are well marked but rather short in erosus and the posterior nodule of interstria III is not or hardly as long as the anterior one. In c. postcostatus the posterior nodule is conspicuously longer (hence the subspecific name). On average the pronotum is narrower and the elytra are shorter in erosus. Besides the prothoracic sides are more strongly and more abruptly excised posteriorly.

From the *Anaga canariensis erosus* is easily distinguished by its broader prothorax (1.6-1.7 x as broad as long) with much deeper excision. The distinguishing characters of the aedeagus are fairly subtle. The inner subterminal margin of the parameres is more distinctly concave in erosus (fig. 23) than in c. postcostatus (fig. 24). The basal piece is narrower in the former and the flagellum (omitted in the figures) seems to be relatively somewhat shorter than in the latter.

T. erosus was found together with *canariensis* both in Teno and *Anaga* without any tendency to racial diversification but it is unknown outside Tenerife.

#### Fam. Ciidae

##### Cis (Orthocis) sagittiferus n. sp. (Figs. 4-6)

Type area: Canary Is., La Palma.

Type material: Holotype male labelled: "Ins. Canar. La Palma, Bco. del Agua 19.6.1966 1030 G. Israelson" and with my holotype and determination label, in my collection. Paratypes with my paratype and determination label: 7 ♂♂, 6 ♀♀, same collecting data, in my collection; 1 specimen, Bcol de la Galga, 27.4.1972, Th. Palm leg. et. coll.; 1 ♂, same locality, 27.10.1977, G. Israelson leg. et coll.

Description. Body 2.0-2.5 x 0.7-0.8 mm. not very convex, upper side yellow with brown fasciae (fig. 5) of varying extension, sometimes more or less dissolved into patches; vertex brown, pronotum typically with three longitudinal stripes; elytral sides with an elongate patch being connected via an intermediate subquadrangular patch with a subtriangular sutural one behind middle; sterna usually more or less extensively brown; appendages yellow, antennal club brown. Punctuation of upper side dense, uniform and distinct on fore body, less dense and slightly coarser on elytra. Microreticulation indistinct on upper side but distinct beneath. Setae yellowish, about 15  $\mu$ m in length, broadest at pronotum.

Head and pronotum in both sexes without tubercles and horns. Vertex flat. Antennae 10 segmented; segment III 1.4 x as long as IV. Pronotum (fig 4) about 1.15 x as wide as long, widest at middle, not much produced anteriorly; lateral borders weakly rounded with a short fringe of setae, narrowly margined; border visible from above also in front. Pattern of vestiture characteristic. Elytra 1.65-1.8 x as long as broad, 1.8-1.95 x as long as prothorax, and 1.45-1.55 x as broad as greatest body depth; sides slightly convex; punctuation single and confused. Alae well developed. Juxtasutural elytral margin not distinctly inflexed near apex.

Outer apical angle of protibia narrowly rounded. Intercoxal process of prosternum 0.3 x as wide as procoxal cavity, slightly shorter than prosternum in front of coxa.

Male. Abdominal sternite III with a median, oval, non margined, pubescent fovea being about one fourth as long as sternite (process included) and located about equally closely to apex of process as to posterior suture. Aedeagus as in fig. 6.

Discussion. The new species is strangely reminiscent at a cursory glance of an Aphanarthrum (Scolytidae). This and the Madeiran C. wollastoni Mellie are unique among the palearctic Ciidae in being conspicuously bicolourous: the colour patterns are rather similar. The Madeiran species is however larger and has its vestiture extremely short.

Ecology. A couple of specimens was found on Auricularia auricula-judae

(kindly determined by J.A. Nannfeldt) which was growing on a decaying trunk in the laurel forest. Since the fruitbodies showed signs of being attacked, they were brought home and after some weeks several adults emerged. Scattered specimens have been found on dead branches or among leaf-litter on the ground.

Fam. Ptinidae

Sphaericus rotundicollis n. sp. (Figs. 29, 30)

Type area: Canary Is., Lanzarote.

Type material: Holotype male, labelled "Ins. Canar. Bco. de la Pocela, 24-26.12.1971 3517 G. Israelson" and with my holotype and determination label; in my collection. Paratypes (so labelled and in my collection); 3 specimens same collecting data; 2 specimens, Risco de Famara, 4.1.1972; 2 specimens, ibid., 23.2.1973.

Description. Body 1.05-1.6 x 0.65-1.0 mm. Head, mouthparts excepted, and pronotum reddish brown; mouthparts and elytra blackish. Pronotum densely covered by suboval, whitish scales and sparsely with suberected, yellowish setae. Elytral interstriae with scattered white setae somewhat more densely near base, and behind middle forming a very fragmentary transverse fascia. Antennae and legs uniformly yellowish red.

Eyes subtriangular, protruding. Antennae not very robust, about as long as elytral breadth, slightly longer in male; segment II about 1,3 x as long as broad.

Pronotum nearly circular, with no distinct median furrow and no constriction before base.

Elytra subcircular, 1.2-1.25 x as long as broad. Disc flattened with sutural area very slightly depressed. Each elytron with 10 distinctly punctate but hardly depressed striae. Interstriae appearing slightly broader than diameter of striae punctures.

Aedeagus as in figs. 29 and 30. Penis reaching about as far as parame-

res, about 2.4 x as long as antennal segment III. Parameres weakly sclerotified in outer half.

Discussion. Among Sphaericus with distinctly striate elytra this can be separated from all other Canarian species by its fairly evenly rounded prothoracical sides with no marked constriction before base and with no median parting of its vestiture. So far it should be similar to the Madeiran dawsoni Wollaston but the latter species is stated to have the greatest width of its elytra before the middle, the postmedial fascia well developed and its antennae very robust.

Ecology. All specimens were captured among dead leaves and twigs under shrubs of Euphorbia balsamifera and E.regis-jubae.

Fam. Tenebrionidae

Nesotes sabulicola n. sp. (Fig. 22)

Type area: Canary Is., Lanzarote.

Type material: Holotype male labelled "Ins. Canar. Lanzarote. La Caleta 27-28.12.1971 3659 G. Israelson" and with my holotype and determination label, in my collection. Paratypes, so labelled, collected by me and in my collection: 4 ♂♂, 7 ♀♀, same collecting data.

Description. Body (fig. 22) 6.0-9.5 x 2.5-4.2 mm. slightly ovate, convex, uniformly brownish yellow, delicately microreticulate, not very shining, practically glabrous but prothoracic and elytral margins with a thin fringe of very fine and fugitive hairs at most equalling antennal segment II in length.

Head, except anteriorly, coarsely and densely but not rugosely punctate. Antennae 2.75-3.0 (males) or 1.75-1.90 (females) x as long as breadth of head, very slender; all segments, except segment II, distinctly longer than broad in both sexes.

Pronotum 1.25-1.40 x as broad as long; anterior margin nearly straight; lateral sides typically uniformly convex, sometimes straightened toward ends, occasionally faintly concave near corners; not explanate corners - -



slightly obtuse-angled; all sides very finely rebordered. Punctuation like that on head but mostly finer and appearing more scattered.

Elytra about 1.2 (males) or 1.3 (females) x as broad as prothorax, suboval, indistinctly rebordered; margin not explanate. Striae practically only indicated by series of very lightly impressed punctures tending to be obsolete posteriorly; interstriae flat, very finely punctured. Epipleura not very broad anteriorly, somewhat indistinctly limited outwards.

Legs long and slender. Mesotibiae with rather long and dense pubescence. Metatibiae conspicuously curved inward.

Apical part of aedeagus about 0.3 x as long as aedeagus itself.

Discussion. Distinguished from the other Canarian members of the genus by the pale colour of its body, reminiscent of that of Xanthomus. This interesting species shows some similarity to N. picescens Wollaston and might have been derived from that by adaptation to its particular environment. Still the two species are amply different. Characters by which sabulicola can be separated are: pale and dull colour, weaker punctuation, in places more developed vestiture, more elongate and averagely larger body, relatively longer and broader elytra with no distinctly impressed striae, slenderer and longer antennae and legs, relatively long apical portion of the aedeagus, etc.

Ecology. All specimens of sabulicola were captured in a dune area under stones or, more frequently, buried among roots in the sand. In the vicinity picescens was abundant but the dune area was strictly avoided.

Fam. Chrysomelidae

Calomicrus bispiniger Israelson longicornis n. ssp. (Figs. 19, 20)

Type area: Canary Is., Gomera.

Type material: Holotype male labelled: "Ins. Canar. Gomera W San Sebastián 30.3.1978 6760 G. Israelson" and with my holotype and determination label, in my collection. Paratypes, so labelled, collected by me and in my collection: 1♂ same locality, 3.7.1970; 138 specimens, same collecting data as holotype.

Description. Body 4.4-5.9 x 1.7-2.75 mm. Differing from the nominate form, Luperus (Calomicrus) bispiniger Israelson (1969), by significantly longer antennae: in the male 0.90-0.95, in the female 0.83-0.86 x as long as the body. The corresponding figures for the nominate form were found to be 0.80-0.83 (males) and 0.72-0.77 (females).

The outline of the penis (fig. 19) shows no essential differences in the two races but in the terminal part of the internal penial sac four or five of the spines are conspicuously enlarged in b. longicornis (fig. 20). In b. bispiniger there are only two enlarged spines (fig. 21).

Ecology. The short original series of b. bispiniger was swept from the vegetation without further specification. A more extensive series was later found living on the foliage of Rumex lunaria L.

The present series of b. longicornis was captured from the same host plant.

Psylliodes angusticeps n. sp. (Figs. 39, 41, 42)

Type area: Canary Is.

Type material: Holotype female, labelled "Canary Is. Gomera. Chorros de Epina 27.3.1979 6820 G. Israelson" and with my holotype and determination label. Paratypes, so labelled, collected by me and in my collection: 1 ♀, same collecting data; 1 ♀, Tenerife, Las Mercedes, 15.7.1972.

Description. Body 2.7-3.15 x 1.45-1.75 mm, elliptic, yellow, (after desiccation often brownish yellow); sutural elytral region, vertex, hind pronotal margin, sterna, abdominal sternites more or less extensively brown; appendages yellow excepting antennal segments III-X and distal portion of metafemora being infuscated. Very finely punctuate and delicately microreticulated.

Head narrow, about 0.55 x as broad as prothorax. Frontal lines indistinct; nodules flat, inconspicuous, not separate by a cavity, not interrupting eye furrow. Antennae not very long, 2.15 x as long as prothoracic width in the male, somewhat shorter in the female. Prothorax leaving head visible from above, 1½ x as broad as long.

Elytra obovate, largest breadth at about  $2/7$  from base; humeral callus poorly developed. Striae finely punctured: discal interstriae much broader than diameter of strial punctures. Brachypterous, alae about  $0.1 \times$  as long as elytra.

Metatibiae slender, not very strongly curved; tarsus inserted at slightly less than  $3/4$  from base. Segment I of pro- and mesotarsi slightly enlarged in the male. Penis as in figs. 41 and 42, with no distinct internal sclerite. Spermatheca as in fig. 39; enlarged portion of sperm duct simple with no extra loop.

Discussion. Most of the Canarian species of the genus are more or less pronouncedly metallic. The only Psylliodes which might be confounded with the new species therefore seems to be vehemens normandi Heikertinger. But the latter differs in several characters: Colour normally about uniformly pale; exceptionally elytral suture more or less extensively dark but in that case pronotum usually with a brown central spot. Punctuation much more deeply impressed; elytral interstriae little broader than the diameter of strial punctures. Head broader with longer antennae. Prothorax less strongly transverse. Humeral callus well developed. Penial apex slightly more drawn out and internal sac with a rather conspicuous aggregation of fine spines, in repose visible between apex and middle (Figs. 43, 44). Enlarged portion of sperm duct with an extra loop as in fig. 40.

Possibly angustifrons is related to the Mediterranean circumdata Redtenbacher but it is certainly not identical with that species. Ecology unknown. The types were swept or brushed from the vegetation in degraded laurel forests.

Fam. Curculionidae

Sitona brachypterus n. sp. (Figs. 31-37)

Type area: Canary Is., Lanzarote.

Type material. Holotype male labelled "Ins. Canar. Lanzarote pr Haria 25.2. 1973 4903 G. Israelson" and with ny holotype and determination label in my



collection: 3 specimens, same collecting data; 8 specimens, Cumbre de Famara, 29.12.1971; 1 specimen, Bco. de la Pocela, 26.12.1971; 3 specimens, below Risco de Famara, 23.2.1973.

Description. Body 3.6-4.7 x 1.4-1.95 mm. Upper side densely covered by iridescent, greenish, golden or coppery, oval, closely striate scales (fig. 36) and, mostly more sparsely, by equally coloured, fusiform, only slightly longer, depressed setae (fig. 35) hardly visible in profile except at declivity. Prothorax with a whitish median strip and often with a yellow or brown lateral strip prolonged on head and along elytral margin and subapically dilated toward suture. Interstriae, mainly uneven ones, with more or less conspicuous dark patches. Interstria V terminated by a light patch passing into a dark one marking the ends of interstriae IV and VI. All interstriae normally with two, occasionally with three, series of setae. Antennae and legs reddish. Underside covered by light scales being more elongate than those of elytra and except for hind part of head and prosternum intermingled with fine hairs.

Head (see fig. 31) hardly as wide as anterior prothoracic margin. Temples slightly diverging. Rostrum parallel-side, nearly flat also in profile in front with a small median keel and behind that with a narrow furrow reaching vertex. Surface with dense punctures of varying size, largely confluent longitudinally. Eye oval, moderately protruding, with two or three long hairs along upper margin; facets not very small. Antennae distinctly longer than pronotal width. Scape somewhat abruptly expanded and in maximum reaching more than three times the breadth near insetion. Second funicular segment twice as long as wide; sixth segment hardly transverse.

Prothorax (see fig. 31) 1.1-1.2 x as broad as long, broadest at middle, somewhat constricted behind anterior margin, laterally ablut uniformly convex. Puntures shallow, very dense, angular, of somewhat varying size, largest ones about as large as those of anterior part of elytral striae. Procoxae inserted at about equal distance from the two prothoracic ends, their anterior margin some distance from prosternal line. Procoxal cavities about



half as long as prosternum. Scutellum small, clothed with light scales pointing backwards.

Elytra firmly united with concave base, rounded shoulders and very poorly developed humeral callus; sides convex; largest width a little behind middle; apex broadly rounded. Striae fine, densely punctured. Interstriae flat. Declivity simple with no callus and no tuft. Alae strongly reduced: little more than half as long as elytra and little broader than antennal scape.

All femora about equally broad.

Penis as in figs. 32 and 33. Anteriormost part (in repose) of internal armature as in fig. 34. Spermatheca as in fig. 37.

Discussion. Some features indicate that brachypterus is to be placed in the Ciliati group, perhaps in the vicinity of maroccanus Stierlin, unknown to me, but it is certainly distinguished specifically from that species.

From the other Canarian species of the genus brachypterus differs by its strong brachyptery a feature being reflected in rounded shoulders with no humeral callus and in its firmly united elytra. Two other Canarian species are also brachypterous: laticollis Wollaston and palmensis Har. Lindberg but not so pronouncedly: the alae are much broader, the elytra not firmly united, and a humeral callus is discernible though reduced. The two last-named species are also much larger the body length being 6-8 mm.

Ecology. One specimen excepted, which was found under a stone, all the material was obtained in sifting debris under various plants: Euphorbia balsamifera Ait., Aeonium sp., Lotus sp. at altitudes of 100-650 m.

Pselactus folwacznyi n. sp. (Fig. 38)

Type area: Canary Is., Gomera.

Type material: Holotype male labelled "Ins. Canar. Gomera. Bosque del Cedro, 1000 m, 2.7.1970 2626 G. Israelson" and with my holotype and determination label, in my collection. Paratypes, so labelled, collected by me and

in my collection: 15♂♂, 15♀♀, same data as holotype; 2♂♂, 1♀, between Los Acebiños and Meriga, 8.7.1970.

Description. Body 3-3.7 x 1.25-1.6 mm, brown to black; femora and tibiae reddish brown; tarsi and antenna yellowish brown. Vestiture insignificant, of scattered very short hairs.

Head finely punctured, microreticulate. Rostrum of the female much shorter than pronotum, with fine punctures largely arranged into longitudinal rows, that of the male still shorter, a little broader, with coarser punctures tending to be confluent longitudinally.

Pronotum hardly broader than long, slightly broader behind than in front, laterally about uniformly convex; hind corners completely rounded off; punctuation rather coarse, near front margin finer. Interstices usually strongly and uniformly microreticulate.

Scutellum very small but distinct.

Elytra oval; striae deeply impressed and coarsely and densely punctured; interstriae convex, narrow with an irregular row of very small punctures, frequently with transversely slightly impressed lines causing a slightly wrinkled appearance. Apterous.

Tarsal segment III enlarged and about twice as broad as II, bilobate.

Penis as in fig. 38 (struts omitted), strongly asymmetric; apical portion moderately drawn out, slightly S-shaped, and with a rather broad apex. Inner sclerites protruding and visible.

Discussion. P. folwacznyi is evidently the Gomera form of Wollaston's Phloeophagus laurineus. This form was not refound in the museums by Folwaczny (1971:158) but was predicted by him to be a particular species or race. The prediction is now confirmed.

Compared with the related Canarian forms with a distinct scutellum and with the tarsal segment III bilobate folwacznyi is slightly larger on average. From laurineus (Wollaston) it is separated by finer punctuation, microreticulate pronotum, and more asymmetric, more elongate, and slightly S-shaped apical portion of penis with more distinctly protruding sclerites. From affinis Wollaston, capitulatus Wollaston, and proximus Wollaston it differs

on the contrary, by the apical penial portion being less prolonged and less slender, from affinis moreover by coarser and more coarsely punctured elytral striae, from capitulatus and proximus by less narrowly oval and more coarsely sculptured elytra.

Ecology. Found in decaying wood of laurel stumps, in hollow trunks and under bark.

Hesperorhynchus dentipes n. sp.

Type area: Canary Is., La Palma.

Type specimen. Holotype female labelled "Ins. Canr. La Palma. Cueva de la Zarza 22.6.1965 604 G. Israelson" and with my holotype and determination label.

Description. Body 3.7 x 2.0 mm. Head and pronotum black; anterior pronotal margin and elytra brown. Scutellum and appendages yellowish-brown. Vestiture only partly obscuring tegument, on upper side consisting of white or yellow, subtriangular, depressed scales and of yellowish or brown linear setae likewise depressed, laterally and posteriorly less so. Uneven raised elytral interstriae III and V, to a lesser extent VII and IX with alternate tufts of brown setae and patches of whitish scales. Posterior vertical side of apical callus densely covered by white scales. Also even interstriae with a few whitish patches.

Frons slightly depressed, very densely punctured; interstices reduced to narrow ridges. Rostrum somewhat shorter than head and prothorax combined, moderately curved, more markedly so at level of antennal insertions, slightly broader towards apex, coarsely punctured; interstices partly confluent and, proximal of antennal insertion, forming narrow ridges, at sides finely microreticulate, distal of antennal insertion somewhat more brilliant. Antennae very slender, twice as long as prothorax; funicular segments I and II prolonged and of about equal length, segment III half as long, VI and VII about as broad as long; club somewhat more than  $2\frac{1}{2}$  x as long as broad.

Pronotum subtrapezoidal, 1.4 x as broad as long, with a constriction behind anterior margin, behind constriction very slightly convex, with a median fovea being deepest and broadest before posterior margin, and on each side armed with a marked tubercle. Punctuation like that on frons.

Scutellum linear, more than three times as long as broad.

Elytra hardly broader than long, laterally slightly convex and markedly narrowing backward to about 2/3 of maximum breadth; posteriorly about truncate; humeral and apical calluses well developed. Striae narrow, hardly as broad as interstria I, inconspicuously and not very densely punctate and with a series of very small scales. Uneven interstriae III-IX elevated, III and V also considerably broader than the neighbouring interstriae. Alae with folded tips.

Femora with a strong tooth more than half as long as femoral breadth and terminated by a tuft of erect setae.

Male unknown.

Discussion. From the other Canarian Hesperorhynchus so far known dentipes is easily separated by its considerably larger bulk already. In a series of 15 specimens of the former the body length did not exceed 2.75 mm. Furthermore the new species is distinguished by the very long scutellum and by the much more strongly developed apical callus of its elytra.

The Madeiran lineatotesselatus (Wollaston) is also a large species according to the description (WOLLASTON, 1854: 327). I have not had the opportunity of examining that species but it should be easily separated from dentipes by the absence of teeth on its femora.

Ecology. Sifted from a damp Marchantia-carpet in a small cave. Certainly living on some small Crassulaceae like the other known species.

#### Fam. Scolytidae

##### Liparthrum nigrescens Wollaston

-Liparthrum nigrescens Wollaston, 1865: 246 and Appendix: 44; nec Schedl Lindberg & Lindberg 1959: 16; nec Schedl 1959: 38.



-Liparthrum degener Har. Lindberg, 1953: 18; Schedl, Lindberg & Lindberg 1959: 38; Schedl 1959: 38; n. syn.

Type areas. Liparthrum nigrescens Wollaston: Canary Is.. Tenerife.-

Liparthrum degener Har.Lindberg: Canary Is.

Type material. Liparthrum nigrescens Wollaston: lectotype, here designated, labelled "Type" (in red circle): "Liparthrum nigrescens, Wollaston, type"; on the underside of the rectangle a handwritten "Cx": with my lectotype and determination label; in the British Museum (NH). London.

-Liparthrum degener Har. Lindberg: holotype n° 2624 in the Zoological Museum of the University,Helsinki.

The nigrescens lectotype is of somewhat unclear provenance. It might belong to the series obtained by the Messrs. Crotch (WOLLASTON, 1865) but it is perhaps more likely that it is the specimen collected by the author on the Cumbre and interpreted by him as bituberculatum but specially mentioned because it differed from the remainder of his collection of that species (WOLLASTON, 1864).

Liparthrum bituberculatum was described from Madeira but was later recorded from Tenerife without indication of any difference from the Madeiran population (one specimen possibly excepted). It was considered to be very similar to curtum Wollaston: "I am far from satisfied that the bituberculatum is in reality more than a rather large and dark state of the latter" (curtum) (WOLLASTON, 1865).

After examination of additional material from Tenerife however the author suddenly changed his opinion: the Tenerife form was now found to be "extremely distinct from L. curtum" (l.c.) and was described as a new species: nigrescens. The description of the latter fits Lindberg's degener excellently.

I have examined the above mentioned types of both species and they are clearly conspecific. Obviously degener is a synonym of nigrescens.

That specimens, perhaps excepting a single one, behind Wollaston's record of 1864 represented the real bituberculatum as a matter of fact. There

is a possibility that, when preparing his record of 1865, Wollaston had already disposed of the material just mentioned and was therefore unable to compare it with the new material obtained from the Crotch brothers and doubtless belonging to nigrescens. This would explain the confusion.

Coleobothrus alluaudi (Peyerimhoff)

-Aphanarthrum alluaudi Peyerimhoff, 1923: 52

-Coleobothrus jandiacus Enderlein, 1929: 144, n. syn.

-Coleobothrus alluaudi Menier 1973: 205

Type areas. Aphanarthrum alluaudi Peyerimhoff : SW Marocco.- Coleobothrus jandiacus Enderlein: Canary Is., Fuerteventura.

Type material: Aphanarthrum alluaudi Peyerimhoff: not examined.- Coleobothrus jandiacus Enderlein: paratype, female, pinned specimen with left anterior leg and both middle legs missing, labelled: "Fuerteventura, Jandia Geb. Gran Valle Euph. handiense 28.4.1928 G. Enderlein", "cotype". "Coleobothrus jandiacus cotype Ender. ♀ " "det. Dr. Enderlein 29", in the Instituto Español de Entomología. Madrid.

The Peyerimhoff types were not available to me. Enderlein's collection is reported to have been destroyed during World War II. It is unknown if more types are retained in addition to the Madrid one.

C. alluaudi is well known to me from excursions in Marocco. I have compared vast series with the Madrid specimen of jandiacus and found no reason to doubt the identity of the two species.

Aphanarthrum mairei Peyerimhoff

-Aphanarthrum mairei Peyerimhoff, 1923: 53

-Aphanarthrum goniomma Enderlein, 1929: 142. n. syn.

Type areas: Aphanarthrum mairei Peyerimhoff: SW Marocco.- Aphanarthrum goniomma Enderlein: Canary Is., Fuerteventura.

Type material: Aphanarthrum mairei Peyerimhoff, not examined.- Aphanarthrum

goniomma Enderlein: paratype, female, pinned specimen, labelled "Fuerteventura S. Jandía Geb. S Gran Valle aus Euphorbia handiensis 214 G. Enderlein 28.4.1928". "Co-Type", "Aphanarthrum goniomma Enderl cotype", "Dr. Enderlein det. 1929", in the Instituto Español de Entomología, Madrid.

What is stated above about the availability of the types also applies to this species which like the foregoing is well known to me from Marocco.

In this case, however, I have found refound the Fuerteventura population at the type locality. Another series was kindly placed at my disposal by A. Machado. The material, Enderlein's cotype included, made it possible to compare both external and aedeagal characters of mairei with those of goniomma and to establish fully the identity. Therefore goniomma is a synonym of mairei.

Coleobothrus alluaudi and Aphanarthrum maireri are both restricted to putrid stems of succulent species of Euphorbia for their development.

It is somewhat curious that while botanists separate the Marroccan E. beaumeriana, E. echinus and E. resinifera from the Canarian E. handiensis the two scolytids are apparently represented by identical populations in the areas mentioned. This may indicate that these scolytids are genetically more stable, or that they were by their mode of living less exposed to external factors of selection or that they happened to colonize the Canaries later than the ancestors of E. handiensis.

The Canaries possess one more and much more widely spread Euphorbia, the well-known E. canariensis, which, seemingly offers similar conditions of living as the just mentioned species. The question may be raised if this also is attacked by the scolytids under discussion. True as it is that I have got a few specimens of A. goniomma from E. canariensis, though only at the type locality of the former. I have not been able to establish that it can perform its life cycle in that host.

#### ACKNOWLEDGEMENT

I wish to thank the following gentlemen and institutions for providing me with specimens: A. Compte, Instituto Español de Entomología, Madrid; A.

Machado, La Laguna; H. Silfverberg, Zoological Museum, Helsinki; E. Taylor, University Museum, Oxford; R.T. Thompson, British Museum (N.H.), London.

I also would like to thank J.A. Nannfeldt, Uppsala, for his determination of a fungus, and J.F. Lawrence, Cambridge, Mass. and T. Palm, Uppsala, for information.

(Recibido el 3 de Julio de 1979)

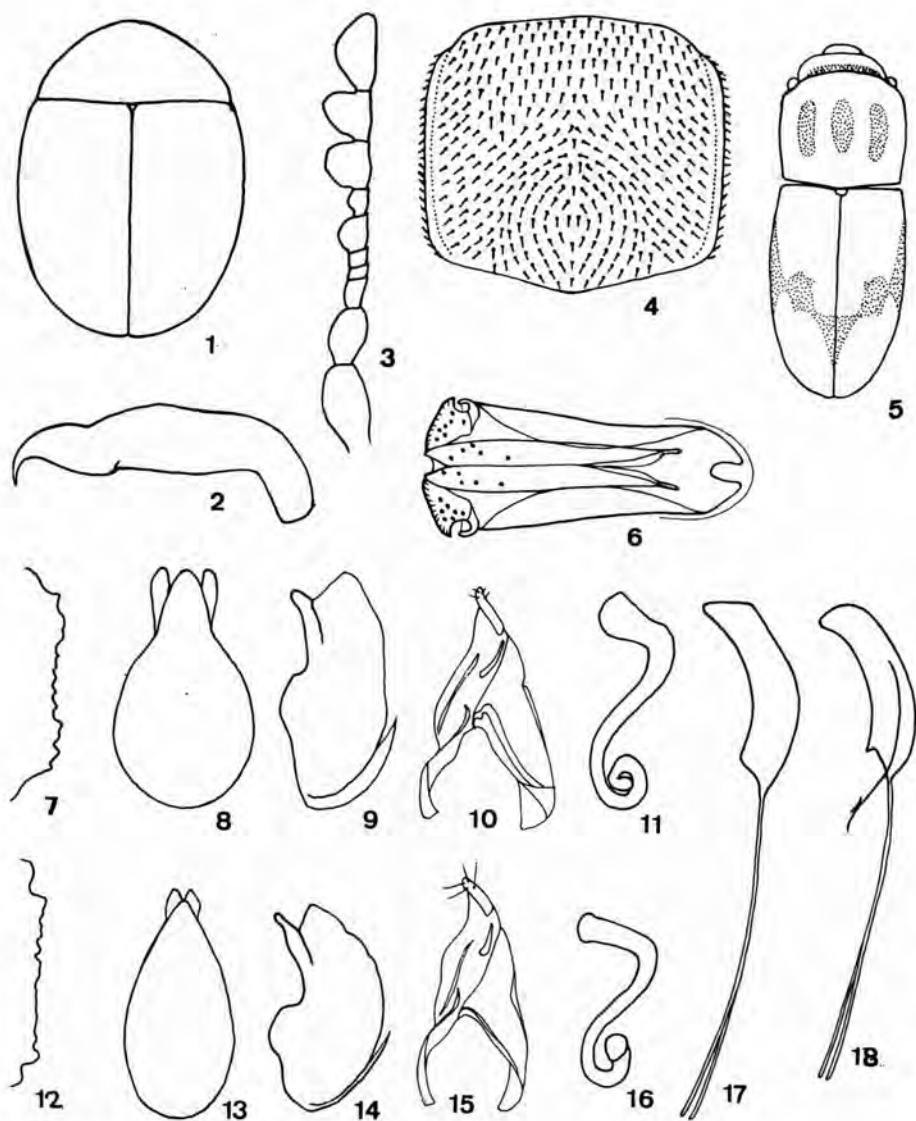
Bredgatan 9 F  
S-22221 Lund  
Sweden



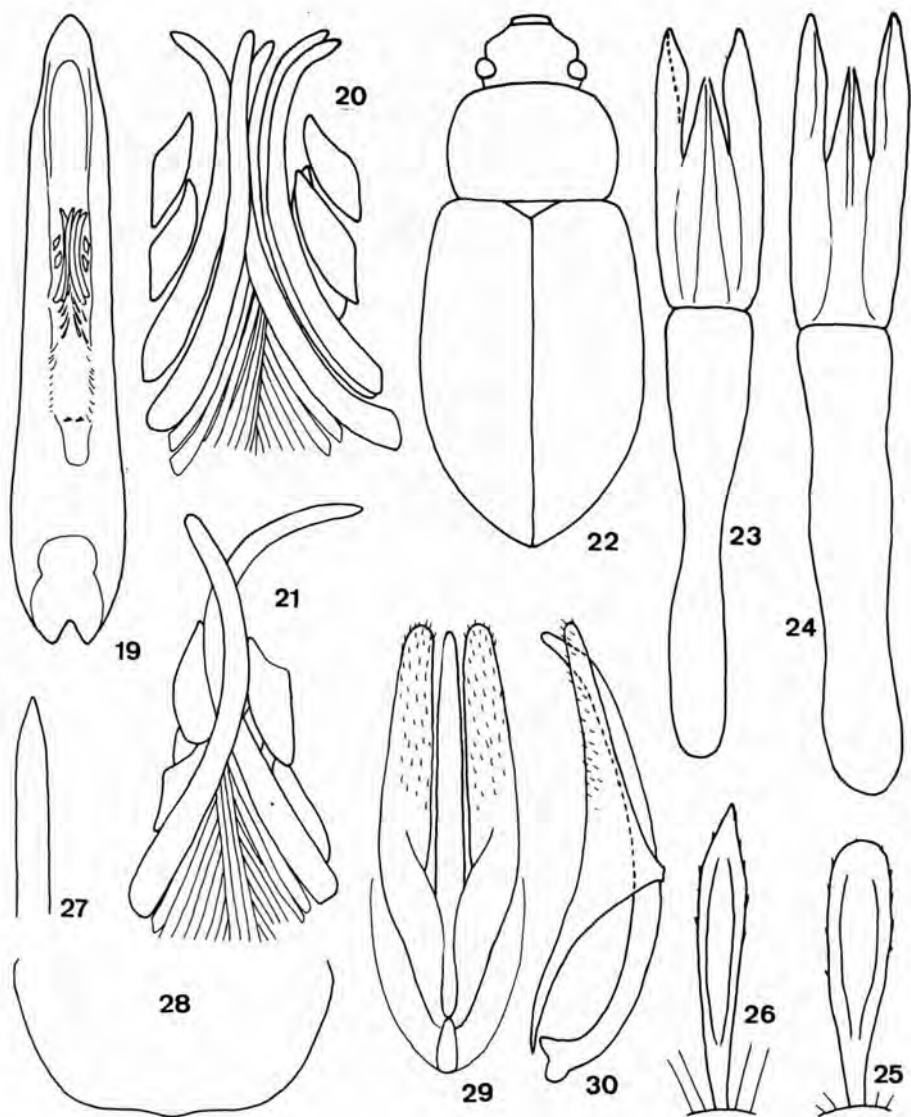
# BIBLIOGRAPHY

- ENDERLEIN, G., 1929. Entomologica Canaria I. Zool. Anzeiger 81: 141-150.
- FAUVEL, A., 1897. Catalogue des Staphylinides de Barbarie et des Iles Açores, Madères, Salvages et Canaries (4. ed.). Rev. Ent. franc., 5: 237-371.
- FOLWACZNY, B., 1971. Betrachtungen zu den Arten der Gattung Pselactus Broun. (Coleoptera, Curculionidae). Ent. Blätter, 67: 157-187.
- FRANZ, H., 1967. Revision der Tarphius-Arten Europas, Nordwestafrikas und der Kanarischen Inseln (Coleopt., Colydiidae). Eos, 43: 61-91.
- - 1974. Zur Kenntnis der Gattung Enicmus Thoms. Neue und ungenügend bekannte Arten von den Kanaren und der Iberischen Halbinsel (Col. Lathridiidae). Eos, 48:109-114.
- GANGLBAUER, L., 1899. Die Käfer von Mitteleuropa III, II. Wien. 1046 pp.
- ISRAELSON, G., 1969. A new species of Luperus from the Canary Islands. Eos, 44: 159-164.
- LINDBERG, H., 1953. Zweiter Beitrag zur Kenntnis der Käterfauna der Kanarischen Inseln. Comm. Biol. Soc. Sci. Fenn., 13,12: 1-18.
- LOHSE, G.A., 1971. Ueber gattungsfremde Arten und Artenkreise innerhalb der "Grossgattung" Atheta. Verh. Ver. naturw. Heimatforsch. Hamburg, 38: 67-83.
- - 1973. Staphylinidae II. In Die Käfer Mitteleuropas 5. Krefeld, 381 pp.
- MENIER, J.J., 1973. Réhabilitation du genre Coleobothrus Enderlein et description d'une espèce nouvelle de l'est africain: C. germeauxi Col., Scolytidae). Bull. soc. ent. Fr., 78: 205-209.
- PAULIAN, R., 1950. Les Corylophidae d'Afrique (Coleoptera). Mem. Inst. Frac. Afr. Noire, 12: 1-126.
- SCHEDL, K.E., 1959. Bestimmungstabellen palaearktischer Borekenkäfer IX. Comm. Biol. Soc. Sci. Fenn., 20, 2: 35-53.
- SCHEDL, K.E., & LINDBERG, HAR. & LINDBERG, HAK., 1959. Coleoptera insularum Canariensium. II. Scolytidae. Comm. Biol. Soc. Sci. Fenn, 20, 2: 1-28.
- SCHEERPELTZ, O., 1934. Staphylinidae. VIII. In Coleopterorum Catalogus 129.
- STEPHENS, J.F., 1830. Illustration of British entomology. III. London (not seen).

- UYTTENBOOGAART, D., 1930. Contributions to the knowledge of the fauna of the Canary Islands. Synopsis of the results of the collecting-excursions 1925 and 1927. Coleoptera. Tijdschr. Ent., 73: 211-235.
- - 1937. Contributions to the knowledge of the fauna of the Canary Islands XIX. Tijdschr. Ent., 80: 75-118.
- WOLLASTON, T.V., 1854. Insecta Maderensia. London, 634 pp.
- - 1862a. Notes on Tarphii, with the description of an allied genus. Journ. ent., 1: 371-387.
- - 1862b. On the Euphorbia-infesting Coleoptera of the Canary Islands. Trans. Ent. Soc. London, 3 ser., 1: 136-189.
- - 1864. Catalogue of the coleopterous insects of the Canaries. London, 648 pp.
- - 1865. Coleoptera Atlantidum. London. 526 pp. Appendix, 140 pp.
- YOSHII, R., & SAWADA, K., 1976. Studies on the genus Atheta Thomson and its allies (Coleoptera, Staphylinidae). II. Contr. Biol. Lab. Kyoto Univ. 25: 11-140.

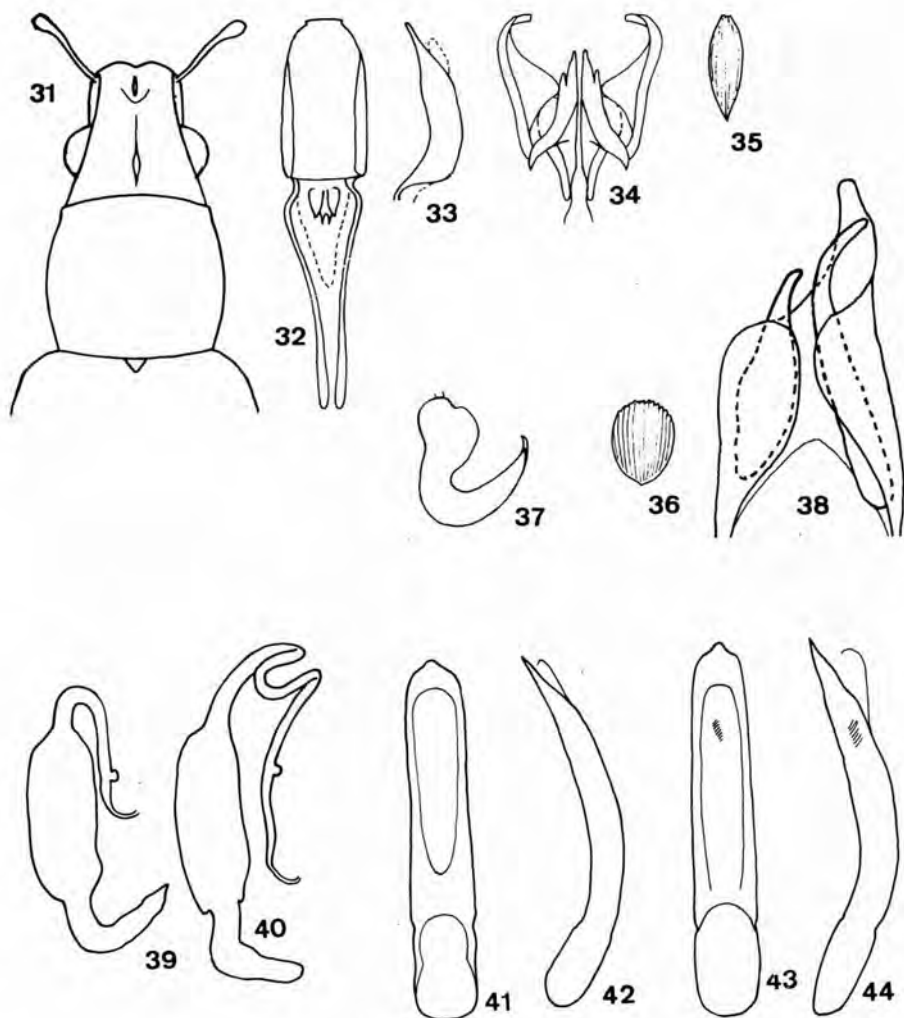


Figs. 1-18.- 1-3: Peltinus intermedius n. sp. (Fuerteventura). 4-6: Cis sagittiferus n. sp. (La Palma). 7-11: Atheta canariensis (Wollaston) Tenerife). 12-16: A. peyerimhoffi Scheerpeltz (Marocco). 17: Xenoscelis lauricola n. sp. 18: X. deplanata Wollaston (Tenerife). 1-5: Body. 2, 8, 9, 13, 14, 17, 18: Penis. 3: Antenna. 4: Pronotum (diagrammatic). 6: Aedeagus. 7, 12: Hind margin of male tergite VIII. 10, 15: Paramere. 11, 16: Spermatheca.



Figs 19-30.- 19, 20: Calomicrus b. longicornis n. ssp. (Gomera). 21: C. b. bispiniger Israelson. 22: Nesotes sabulicola n. sp. (Lanzarote). 23, 26: Tarphius erosus Wollaston (Tenerife, Teno). 24, 25: T. canariensis postcostatus Uyttenboogaart (Tenerife, Teno). 27, 28: Enicmus testaceus Stephens (Gomera). 29, 30: Sphaericus rotundicollis n. sp. (Lanzarote).





Figs. 31-44.- 31-37: *Sitona brachypterus* n. sp. (Lanzarote). 38. *Pselactus folwacznyi* n. sp. (Gomera). 39, 41, 42: *Psylliodes angusticeps* n.sp. (Gomera). 40, 43, 44: *P. vehemens normandi* Heikertinger (Gomera). 31: Forebody. 32, 33, 38, 41-44: Penis. 34: Pennial inner armature. 35: scale. 37, 39, 40: Spermatheca.



## INDICE

<b>Baez, M.</b>	
Dípteros de Canarias V: Sciomyzidae	3
<b>Hernández Padrón, C. y Pedro L. Pérez de Paz</b>	
Estudio preliminar de los líquenes epífitos del Sabinar de la Dehesa en el Hierro (Islas Canarias)	15
<b>Beltrán Tejera, E.</b>	
Algunos hongos nuevos para Lanzarote	33
<b>Rodríguez Cabrera, M. y M.<sup>a</sup> Eugenia Ron Álvarez.</b>	
Contribución al conocimiento briológico del Barranco del Agua (Güímar), Tenerife	49
<b>Gregor, Hans-Joachim</b>	
Funde von Pinus canariensis Ch. Smith Fossilis aus den Neogen von La Palma (Kanarische Inseln)	57
<b>Wolf, H.</b>	
Zur Kenntnis der Aculeaten-Fauna (Hymenoptera) von Gran Canaria und Teneriffa	65
<b>Franz, H.</b>	
Nachweis eines holozänen Meerestandes an der Ostküste der Insel Hierro (Kanarische Inseln)	79
<b>Talavera, J. A., J. J. Bacallado y J. Alvarez</b>	
Catálogo provisional de los Oligoquetos terrícolas (familias): Megascolecidae y Lumbricidae del Archipiélago Canario	83
<b>Klimesch, J.</b>	
Beiträge zur Kenntnis der Microlepidopteren-Fauna des Kanarischen Archipels 3. Beitrag: Tineidae, Hieroxestidae	91
<b>Gil Rodríguez, M. C.</b>	
Revisión taxonómica-ecológica del género Cystoseira C. Ag. en el Archipiélago Canario	115
<b>Borgen, L. and Reidar Eleven</b>	
Brassica bourgeau (Cruciferae) rediscovered in the Canary Islands	149
<b>Champion C. L. y E. Beltrán Tejera</b>	
Catálogo preliminar de los Myxomycetes de Canarias	153
<b>Israelson, G.</b>	
Taxonomical and nomenclatural notes on some Canarian coleoptera	183
Instrucciones para los autores	211
Indice general Vol. 9 (1-2) 1979	215