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The species of *Othius* Stephens, 1832 of the Canary Islands (Coleoptera, Staphylinidae, Xantholininae)

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ABSTRACT: Of the 6 known species of *Othius* Stephens in the Canary Islands either types or specimens from the type localities and additional material were examined. The first *Othius* from La Palma, *O. palmaensis* sp. n., the second species from Tenerife, *O. zerchei* sp. n., and the hitherto unknown male of *O. philonthoides* Woll. are described. Apart from *O. coiffaiti* Lohse, which is for the first time reported for La Gomera, all the Canarian species of the genus appear to be endemic to the island of their discovery. A diagnostic key is supplemented by illustrations of the genitalia and secondary sexual characters of the males, by comments on the distribution and ecology of the species and a discussion of phylogenetic relationships.
Key words: Coleoptera, Staphylinidae, Xantholininae, *Othius*, taxonomy, new species, Palaearctic, Canary Islands

RESUMEN: Se revisan los tipos y especímenes de las localidades típicas, así como otro material adicional, de las 6 especies de *Othius* Stephens conocidas de las islas Canarias. Se describe la primera especie de *Othius* de La Palma, *O. palmaensis* sp. n., la segunda de Tenerife, *O. zerchei* sp. n., y el macho de *O. philonthoides* Woll., hasta ahora desconocido. Todas las especies canarias del género parecen ser endémicas de la isla donde se descubrieron, a excepción de *O. coiffaiti* Lohse, que es citada por primera vez para La Gomera. La clave de identificación se complementa con ilustraciones de la genitalia y de los caracteres sexuales secundarios de los machos, aportándose además comentarios sobre la distribución y ecología de las especies, y una discusión de las relaciones filogenéticas.
Palabras clave: Coleoptera, Staphylinidae, Xantholininae, *Othius*, taxonomía, nueva especie, Paleártico, Canarias.

INTRODUCTION

In his first comprehensive account of Canarian Coleoptera WOLLASTON (1864) described two species of *Othius* Stephens: *O. brachypterus* from La Gomera and *O. philonthoides* from Gran Canaria. It was not until almost 100 years later that three

further species were described: *O. microphtalmus* from La Gomera by COIFFAIT (1954), *O. intermedius* from Tenerife by KORGE (1962) and *O. coiffaiti* from El Hierro by LOHSE (1963). PALM (1976) gives a synopsis of the Canarian species of *Othius*, including a diagnostic key and the description of a sixth species, *O. neglectus* from Gran Canaria.

Two species have been recorded from localities other than the island of their first discovery. WOLLASTON (1865) reports the occurrence of *O. philonthoides* in Tenerife, and FAUVEL (1897) and COIFFAIT (1972), both of whom treat *O. philonthoides* as a synonym of *O. brachypterus*, indicate the presence of the latter in Tenerife and Gran Canaria. According to PALM (1976), however, each of the species is endemic to one island only: La Gomera (2 species), Gran Canaria (2), Tenerife (1) and El Hierro (1). Apart from Madeira with five species of *Othius* (ASSING & WUNDERLE, 1995), there has been no record of this genus in the remaining Macaronesian islands.

The present paper was initiated by the study of types of four of the taxa, of specimens of the remaining two species from their type localities and of further material from various collections, including two new species from La Palma and Tenerife.

The Canarian species of *Othius* Stephens

In order to avoid repeating descriptions presented by PALM (1976), detailed diagnoses of external morphology will be refrained from below. Relevant diagnostic characters are provided in the key.

Further external characters are only referred to when not mentioned, inadequately described or insufficiently emphasized in PALM (1976). Drawings of the aedeagi and the] abdominal sternite IX of all Canarian species of *Othius* are given, since the illustrations available in the literature are partly inadequate or incomplete, particularly with regard to sternite IX and the structures of the internal sac.

It should be noted that the species treated here may show considerable morphological variability, not only of external characters such as size, body proportions, punctation etc., but also of the genitalia. Owing to the bulbous construction and often relatively weak sclerotization of the median lobe, its shape strongly depends on the state of the specimen at the time of death, the degree of sclerotization and on the mode of preparation (e.g. the osmotic properties of the medium).

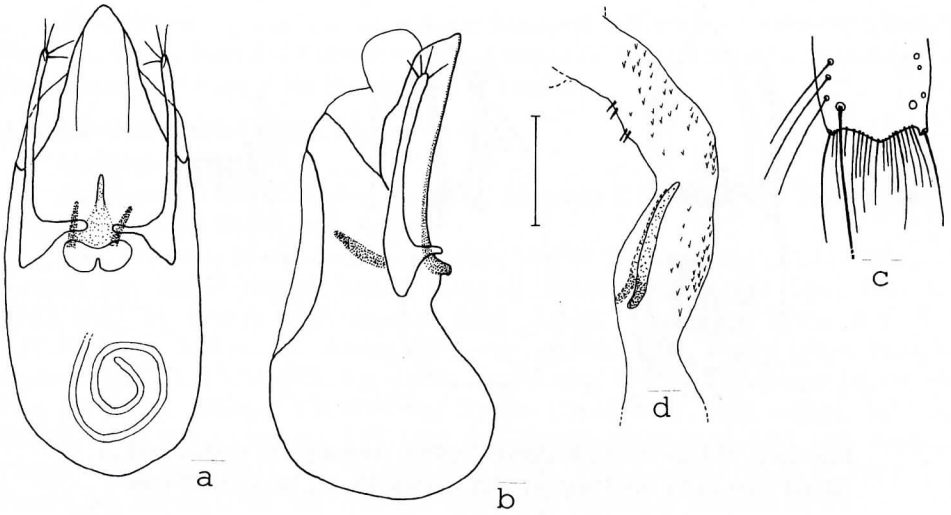
The museum collections are abbreviated as follows: The Natural History Museum London (BMNH), Deutsches Entomologisches Institut Eberswalde (DEI), Muséum d'Histoire naturelle Genève (MHNG).

1. *Othius brachypterus* Wollaston, 1864 (Figs 1a-d)

Material examined:

Holotype ♂, 'Type [curator label] / *brachypterus* Woll. / Holotype' (BMNH). (Since WOLLASTON explicitly bases his original description on a single specimen, the sole specimen in his collection at the BMNH must be considered the holotype.)

3♂♂, 2♀♀, E. La Gomera, 1300m, La Laguna Alta, 30.X.1990, Wunderle (coll. Wunderle, coll. Assing); 2♂♂, La Gomera, El Cedro, leg. H. Franz (coll. Franz); 3♂♂, 1♀, La Gomera, Bosque del Cedro, Weg NE der Ermita, 900m, 17.VII.1995, leg. Zerche



Figs 1a-d. *Othius brachypterus* Wollaston: Aedeagus in ventral and in lateral view (a,b), hind margin of ♂ sternite IX (c) and internal sac (d). Scale: 0.25 mm.

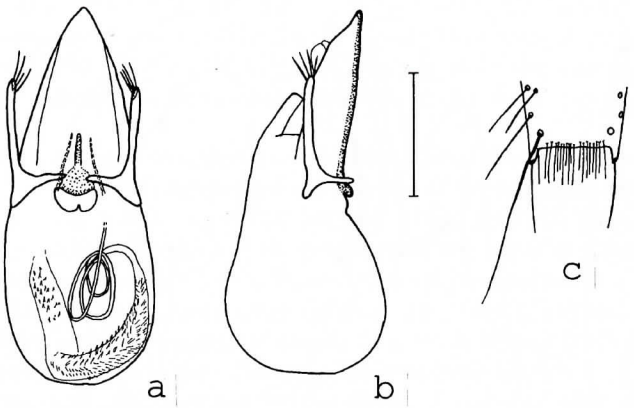
(DEI, coll. Assing); 1♀, El Cedro, 7.VIII.1978, leg. Oromí (coll. Oromí); 1♂, La Gomera, Mora Gaspar, 29.XII.1984, leg. P. Oromí (coll. Oromí); 1♂, La Gomera, El Jardin, 12.VIII.1977, leg. Oromí (coll. Assing); 1♂, 1♀, La Gomera, El Jardin, 10.VIII.1978, leg. Oromí (coll. Oromí); 1♀, La Gomera, El Jardin, 28.VIII.1985, leg. Oromí (coll. Oromí); 1♂, La Gomera, Agua de los Llanos, 16.IX.1977, leg. Oromí (coll. Assing).

O. brachypterus, the largest of all Canarian *Othius* and readily distinguished from the other species (see key), is apparently endemic to La Gomera. The records for Tenerife and Gran Canaria (COIFFAIT, 1972; FAUVEL, 1897; HERNÁNDEZ, J.J. et al., 1994) are based on the erroneous belief that *O. philonthoides* is a synonym of *O. brachypterus*. Adults have been collected in spring and summer "in the laurel-districts above Hermigua" (WOLLASTON, 1864, 1865), in April (El Cedro, 1000m), in June (Barr. del Cedro, 1100m) (PALM, 1976), from July through October and in December (records indicated above).

2. *Othius microphtalmus* Coiffait, 1954. (Figs 2a-c)

Material examined: 2♂♂, 2♀♀, La Gomera, El Cedro, leg. H. Franz (coll. Franz, coll. Assing); 2♂♂, 2♀♀, La Gomera, El Cedro, 900m, Cedrobach/Streu, 2.XI.1990, leg. Wunderle (coll. Wunderle, coll. Assing); 1♂, La Gomera, Barranco N La Laguna Grande, 1050m, laurisilva, 15.VII.1995, leg. Zerche (DEI).

Externally, *O. microphtalmus* is easily distinguished from the other Canarian members of the genus by the following combination of characters: distinct microreticulation on the elytra, small size and minute eyes. Furthermore, the aedeagus is unique in its shape and internal structures (Figs 2a-b), and the hind margin of the ♂ sternite IX is straight in the middle and clearly pointed laterally (Fig. 2c).



Figs 2a-c. *Othius microphtalmus* Coiffait: Aedeagus in ventral and in lateral view (a,b), hind margin of ♂ sternite IX (c). Scale: 0.25 mm.

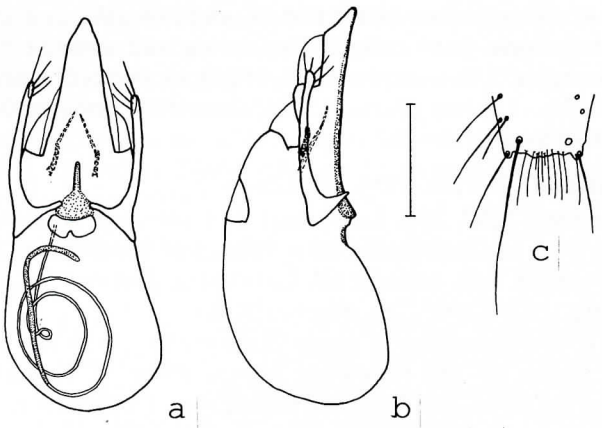
O. microphtalmus is endemic to La Gomera, where it is apparently rare. It has only been found at El Cedro at 900-1000m in the vicinity of streams in April, August (PALM, 1976) and in July and November (see records above).

3. *Othius neglectus* Palm, 1976. (Figs 3a-c)

Material examined:

Paratype ♂, Gran Canaria, Teror, 500m, 2.-7.XII.1968, leg. Palm (coll. Franz). 1♂, Gran Canaria, Bco. de la Virgen, leg. H. Franz (coll. Assing).

This species is most similar to *O. microphtalmus*, from which it differs in the larger eyes and the shape and internal structures of the aedeagus (Figs 3a-b). In addition, the ♂ sternite IX is less strongly pointed apico-laterally (Fig. 3c).



Figs 3a-c. *Othius neglectus* Palm: Aedeagus in ventral and in lateral view (a,b), hind margin of ♂ sternite IX (c). Scale: 0.25 mm.

O. neglectus is endemic to Gran Canaria and was collected at Teror (450-500m) in February, April, June and December, at Lagunetas (1200m), Barranco de la Mina, in June (PALM, 1976) and at the Barranco de la Virgen.

4. *Othius intermedius* Korge, 1962 (Figs 4a-d)

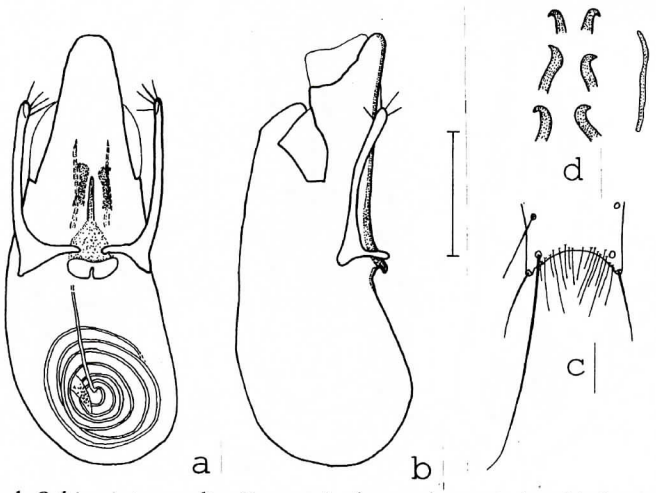
Material examined:

Holotype ♀, Ins. Canariae, Tenerife, Montaña Cagancho, ca. 1600m, 16. u. 28.II.1960, leg. W. Heinz (coll. Korge).

2♀♀, Tenerife, Monte de La Esperanza, 1200m, W. Heinz leg., 21.II.1964 (coll. Korge); 1♂, 2♀♀, Cañadas, Tenerife, leg. H. Franz (coll. Franz); 2♀♀, Bajamar, 27.IX.1965, G. Benick (coll. Assing); 4♂♂, Anaga., Chamorga, 750m, laurisilva, 5.IV.1992, leg. Zerche, leg. Assing (DEI, coll. Assing) 7♂♂, 10♀♀, Anaga, Pico del Inglés, 960m, 13.-15.IV.1992, leg. Zerche, leg. Assing (DEI, coll. Assing); 1♀, Anaga, Pico del Inglés, 900m, 5.VII.1995, leg. Zerche (DEI); 6♂♂, 4♀♀, Anaga, Taborno, 1020m, under *Erica scoparia*, 5.IV.1992, leg. Zerche, leg. Assing (DEI, coll. Assing); 15♂♂, 15♀♀, Esperanza, Las Lagunetas, 1250m, *Pinus* wood, 12.-13.IV.1992, leg. Zerche, leg. Assing (DEI, coll. Assing); 5♂♂, 4♀♀, Esperanza, Mirador de las Cumbres, 1800m, *Pinus* wood, 12..IV.1992, leg. Zerche, leg. Assing (DEI, coll. Assing); 1♀, Esperanza, 1200m, 6.VII.1995, leg. Zerche (DEI); 1♂, El Portillo, 2050m, *Pinus* wood, 11.IV.1992, leg. Zerche (DEI); 3♂♂, 3♀♀, Orotava, Aguamansa, 1150-1150m, 2. & 12.IV.1992, leg. Zerche, leg. Assing (DEI, coll. Assing).

O. intermedius is very closely related to the four following species, from which it differs particularly in the internal structures of the aedeagus and, except for *O. zerchei* sp. n., in the dense punctation of the abdominal tergites.

O. intermedius is distributed in the central region and the northeast (Anaga) of Tenerife, where it inhabits a wide range of woodland biotopes at altitudes of 500-2050m. Adults have been collected from January through April and from



Figs 4a-d. *Othius intermedius* Korge: Aedeagus in ventral and in lateral view (a,b), hind margin of ♂ sternite IX (c) and structures of internal sac (3 pairs of hooks and 1 rod-like structure) of 3 further ♂♂ (d). Scale: 0.25 mm.

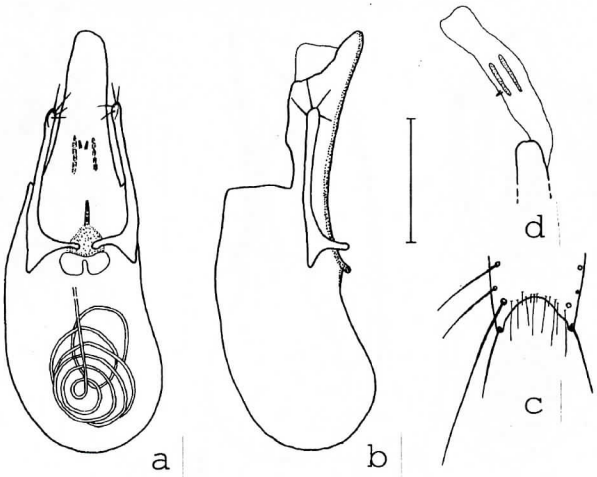
July through September (see data above and PALM, 1976). Larvae were observed in April (leg. & coll. Assing).

It should be noted that the material examined in the course of this study contained 2 ♂♂ and 1♀ (Pico del Inglés, 27.III.1972, Meybohm & Fülscher) which were clearly smaller than the average. Measurements of the three specimens (for comparison with values of typical *O. intermedius* see key): BL: 4.6-5.1; HW: 0.57-0.60; PW: 0.62-0.65; PL: 0.83-0.85; EL: 0.47-0.51; these measurements were not pooled with those indicated in the key. Remarkably, the reduction also includes the size of the aedeagus. Although the possibility that these specimens in fact represent a yet undescribed species cannot be ruled out, they are here treated as extreme forms of *O. intermedius* Korge for the following reasons. Firstly, no further constant differential characters in external morphology were observed. Considering the pronounced external variability of *O. intermedius* (see ranges of measurements in key), the significance of size as a differential character remains doubtful. Secondly, the rod-like structures in the internal sac are of the same length; the hooks appear to be somewhat slenderer, but whether or not this is a constant character is difficult to decide with only 2♂♂ available. Thirdly, typical specimens of *O. intermedius* were collected in relatively large numbers at the same locality at approximately the same time of the year. Finally, further records of similar specimens have not become known, although the Pico del Inglés has been revisited several times. In conclusion, whether the differences observed are an expression of intraspecific variability or whether they represent constant differential characters will remain uncertain until further material is available.

5. *Othius zerchei* spec. nov. (Figs 5a-d)

Holotype ♂, Tenerife, Teno, Erjos, 900m, 12.III.1996, leg. Meybohm (coll. Assing).

Paratypes: 1♂, 1♀, Tenerife, Teno, Großer Gala SO Erjos, 1340m, *Erica*-Wald, 1.VII.1995, leg. Zerche (DEI); 2♂♂, Tenerife, Teno, Großer Gala SO Erjos, 1300m, 10.VII.1995, leg. Zerche (DEI, coll. Assing); 2♀♀, Tenerife, Teno, Monte del Agua, S



Figs 5a-d. *Othius zerchei* sp. n.: Aedeagus in ventral and in lateral view (a,b), hind margin ♂ sternite IX (c) and apex of median lobe with protruding internal sac of a further ♂ (d). Scale: 0.25 mm.

Los Silos, 900m, 1.VII.1995, leg. Zerche (DEI); 1♂, 2♀♀, Tenerife, Teno, 900m, 10.IV.1992, leg. & coll. Assing; 1♀, Tenerife, Mte. del Agua, 22.XII.1987, leg. P. Oromí (coll. Oromí); 1♀, Tenerife, Teno, Erjos, 1000m, 14.III.1996, leg. Meybohm (coll. Assing).

Description (see also measurements in key):

In external morphology *O. zerchei* sp. n. is highly similar and closely related to *O. intermedius* Korge and *O. palmaensis* sp. n.

Colour of body variable, but often darker than in *O. intermedius*; rarely ± unicolorous reddish brown, usually dark brown to blackish brown with the elytra somewhat lighter; body appendages reddish yellow to yellowish brown, the tibiae sometimes partly darkened.

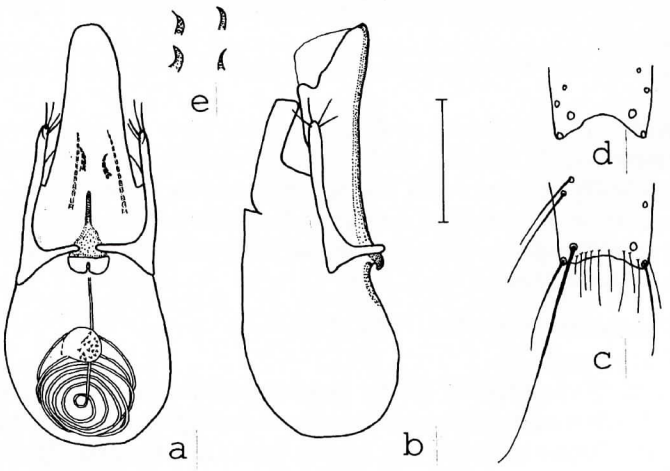
Head ca. 0.9x narrower than pronotum, its shape as in *O. intermedius*, subparallel behind eyes; microsculpture distinct, in the central area of the dorsal surface composed of transverse striae or transverse meshes (unlike *O. intermedius*, where the microsculpture is ± isodiametric in most specimens).

Shape and proportions of pronotum and elytra as in *O. intermedius*; alae reduced.

Abdomen with punctation as dense as in *O. intermedius*, tergite VII without palisade fringe.

♂: Protarsi more strongly developed than in ♀♀, 4th tarsomere clearly bilobed; hind margin of sternite IX with deep concavity as in *O. intermedius* (Fig. 5c); median lobe in ventral view slightly slenderer than in *O. intermedius*; internal sac with a pair of rod-like structures, which are distinctly shorter than in *O. intermedius*, and a pair of minute spines (Figs 5a,d).

The distribution of *O. zerchei* sp. n. is apparently restricted to the Teno mountains in the northwest of Tenerife. I dedicate the species to my dear friend and colleague Dr.



Figs 6a-e. *Othius palmaensis* sp. n.: Aedeagus in ventral and in lateral view (a,b), hind margins of 2 ♂ sternites IX (c,d) and structures of internal sac (only hooks) of 2 further ♂♂ (e). Scale: 0.25 mm.

Lothar Zerche (DEI), together with whom I had the opportunity to collect Staphylinidae on Tenerife in 1992 and whose recently collected material contributed to the discovery of this species.

6. *Othius palmaensis* spec. nov. (Figs 6a-e)

Holotype ♂, Isl. Can. La Palma, Cumbre Nueva, O-Seite, Fayal-Brezal, 1320m, 9.III.1992, leg. Zerche (DEI).

Paratypes: 6♂♂, 10♀♀, same data as holotype (DEI, coll. Assing); 2♂♂, 3♀♀, La Palma, Cumbre Nueva, Ref. El Pilar, 1500m, *Pinus canariensis*-Wald mit Lorbeer, 10.IX.1993, leg. M. Schülke & B. Grünberg (coll. Schülke, coll. Assing); 1♂, Isla de La Palma, Barranco Franceses, Sp 1236, leg. & coll. H. Franz.

Description (see also measurements in key):

In external morphology *O. palmaensis* sp. n. is highly similar to *O. intermedius* Korge, *O. zerchei* sp. n. and the two following species. From the former two, with which it shares the reduction of the hind wings and the lack of a palisade fringe of the abdominal tergite VII, it differs in the less densely punctate and therefore more shiny abdomen, in that the head is on the average wider and in the internal structures of the aedeagus. In the following two species the hind wings and the palisade fringe of the abdominal tergite VII are present, the eyes are larger and the structures in the internal sac are different. In addition, the hind margin of sternite IX is usually more shallowly concave in *O. palmaensis* than in the other species (Figs 6cd).

Colour of body similar to *O. zerchei* sp. n., variable, but usually dark brown to blackish brown with the elytra, especially their margins, lighter; body appendages reddish yellow to yellowish brown, the tibiae sometimes partly darkened.

Head in most specimens slightly narrower, in large ♂♂ as wide as or a little wider than pronotum in the middle; behind eyes, which are of about the same size as in *O. intermedius*, subparallel or slightly widened; microsculpture distinct and similar to *O. zerchei* sp. n., in the central area of the dorsal surface composed of transverse striae or transverse meshes.

Abdomen with fine and sparse punctation, much more so than in the two preceding species.

♂: As in all Canarian species of *Othius* protarsi more strongly developed than in ♀♀, 4th tarsomere clearly bilobed; hind margin of sternite IX with relatively shallow concavity (Figs 6c-d); aedeagus with internal structures as in Figs 6a-b,e.

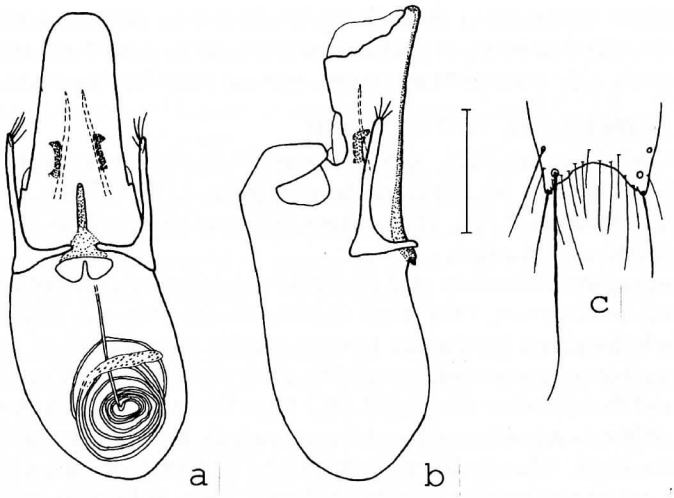
O. palmaensis sp. n. is the first species of the genus to be recorded from La Palma, where it is apparently endemic (name!). 2 larvae were collected together with part of the type series on 9 March (Zerche leg.).

7. *Othius philonthoides* Wollaston, 1864. (Figs 7a-c)

Material examined:

Holotype ♀, 'Type [curator label], *Othius philonthoides* Woll. type, Holotype' (BMNH). (WOLLASTON explicitly bases his original description on a single specimen and never published a further record of this species from Gran Canaria. Therefore, the sole specimen in his collection at the BMNH is considered the holotype.) 1♂, 1♀, Pinar de Tamadaba, Gran Canaria, leg. Franz (coll. Franz, coll. Assing).

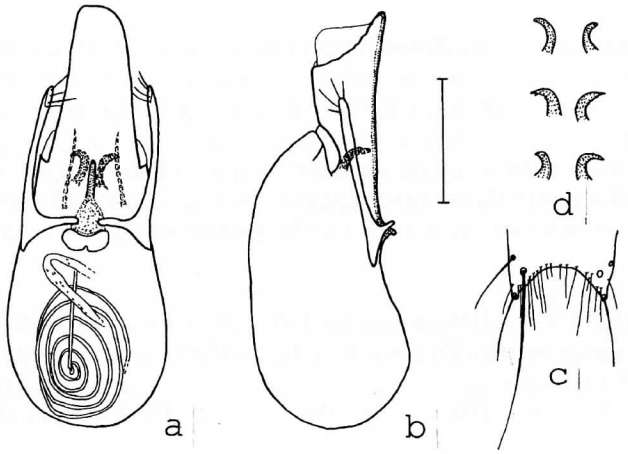
Before this study only the type specimen of this species was known. The record from Tenerife in WOLLASTON (1965) almost certainly refers to *O. intermedius* Korge, a



Figs 7a-c. *Othius philonthoides* Wollaston: Aedeagus in ventral and in lateral view (a,b), hind margin of ♂ sternite IX (c). Scale: 0.25 mm.

conclusion also stated by PALM (1976). In contrast to *O. intermedius*, *O. zerchei* sp. n. and *O. palmaensis* sp. n., *O. philonthoides* (like the following species) possesses a palisade fringe on the hind margin of tergite VII and has distinctly larger eyes. Note that according to PALM (1976) *O. philonthoides* is brachypterous and lacks the palisade fringe, and that when using his key for identification one would run to *O. coiffaiti*.

I have been unable to find any external characters clearly distinguishing *O. philonthoides* from *O. coiffaiti*. Only the shape of the pair of hook-like structures in the internal sac was somewhat different (Fig. 7a). Whether or not this character is constant



Figs 8a-c. *Othius coiffaiti* Lohse: Aedeagus in ventral and in lateral view (a,b), hind margin of ♂ sternite IX (c). Scale: 0.25 mm.

and *O. coiffaiti* represents a distinct species cannot be decided until further ♂♂ are available. For the time being *O. philonthoides* should be considered an endemic of Gran Canaria known only from El Monte (type) and the Pinar de Tamadaba.

8. *Othius coiffaiti* Lohse, 1963 (Figs 8a-d)

Material examined: 2♂♂, 3♀♀, El Hierro, El Golfo, Lorbeerwald, leg. Franz (coll. Franz, coll. Assing); 1♂, 1♀, El Hierro, Amoco, 900m, 7.III.1983, leg. Besuchet (MHNG); 4♂♂, 2♀♀, La Gomera, Arure, 900m, Moos, offenes Gelände, 5.XI.1990, leg. Wunderle (coll. Wunderle, coll. Assing).

Regarding the distinction of *O. coiffaiti* (= *O. lapidicola* sensu COIFFAIT, 1956; = *O. pseudolapidicola* COIFFAIT, 1964) from *O. philonthoides*, the only other species of *Othius* with palisade fringe on the Canary Islands, see the remarks above. In *O. coiffaiti* the elytra are subject to remarkable variability, their absolute length ranging from 0.60 to 0.86 mm and their relative length (EL/PL) from 0.64 to 0.78. Whether or not this is a reflection of hindwing poly- or dimorphism can only be decided when more material is available for study. The specimens collected by P. Wunderle on La Gomera represent the first record of this species outside El Hierro. Thus, as far as is presently known, *O. coiffaiti* is the only Canarian *Othius* inhabiting more than one island. One ♂ taken on 7.III.1983 was teneral.

Key to the species of *Othius* Stephens of the Canary Islands

The internal structures of the aedeagus, which are only weakly sclerotized, sometimes minute and often difficult to see, should be examined under a compound microscope at magnifications of at least 200x. The measurements indicate the range (in mm); when larger series of specimens were available (*O. intermedius*, *O. palmaensis*) the arithmetic means are indicated. Abbreviations: BL = body length from labrum to tip of abdomen; HW = maximal head width; PW = width of pronotum in the middle; PL = pronotal length; EL = length of elytral suture from tip of scutellum to hind margin of elytra.

1. Elytra with distinct microreticulation; abdominal tergites with dense punctation. ♂: Hind margin of sternite IX truncate or concave; apex of median lobe pointed in ventral view; tube in internal sac with few (less than 6) coils; pair of internal structures not hook-like. 2
- Elytra without distinct microsculpture; abdominal tergites often with sparser punctation. ♂: Hind margin of sternite IX concave; apex of median lobe rounded or truncate in ventral view; tube in internal sac with 7-9 coils; pair of internal structures ± bent or minute. 4

2. Large species; BL: 6.9-8.9, HW: 0.92-1.06, PW: 1.01-1.19, PL: 1.21-1.41, EL: 0.69-0.74. ♂: Hind margin of sternite IX convex in the middle (Fig.1c); aedeagus as in Figs 1a-b. Endemic to La Gomera. ..... *O. brachypterus* Woll.
- Smaller species; BL < 6.3, HW < 0.85, PW < 0.9. ♂: Hind margin of sternite IX truncate in the middle. 3

3. Slightly smaller species; BL: 5.2-5.6, HW: 0.64-0.69, PW: 0.65-0.75, PL: 0.90-0.95, EL: 0.51-0.53; eyes smaller, their horizontal diameter subequal to length of 4th antennomere; abdominal tergites with more distinct microsculpture, denser punctation and therefore less shine. ♂: Hind margin of sternite IX more strongly pointed apico-laterally (Fig. 2c); aedeagus as in Figs 2a-b. Endemic to La Gomera ..... *O. microphtalmus* Coiffait
- Slightly larger species; BL: 5.8-6.3, HW: 0.70-0.78, PW: 0.76-0.84, PL: 0.95-1.10, EL: 0.53-0.57; eyes larger, their horizontal diameter longer than 4th antennomere; abdominal tergites with the microsculpture less distinct, the punctation less dense and therefore more shine. ♂: Hind margin of sternite IX weakly pointed apico-laterally (Fig. 3c); aedeagus as in Figs 3a-b. Endemic to Gran Canaria ..... *O. neglectus* Palm

4. Hind wings reduced, hind margin of abdominal tergite VII without palisade fringe; elytra relatively shorter (EL/PL: 0.54-0.61); eyes smaller, their horizontal diameter shorter than the 3rd antennomere. 5
- Hind wings and palisade fringe on hind margin of abdominal tergite VII present; elytra relatively longer (EL/PL: 0.64-0.80); eyes larger, their horizontal diameter at least as long as the 3rd antennomere. 7

5. Abdominal tergites more densely punctate; head usually narrower (HW/PW: 0.88-0.95). Endemic to Tenerife. 6
- Abdominal tergites less densely punctate; head relatively larger, usually almost as wide as, in large ♂♂ sometimes even wider than pronotum (HW/PW: 0.93-1.02, mean: 0.97); microsculpture of central dorsal area of head composed of transverse striae and transverse meshes; BL: 4.3-6.7, mean: 5.47; HW: 0.66-0.88, mean: 0.75; PW: 0.69-0.87, mean: 0.77; PL: 0.86-1.07, mean: 0.99; EL: 0.51-0.63, mean: 0.57. ♂: Hind margin of sternite IX and aedeagus as in Figs 6a-e. Endemic to La Palma ..... *O. palmaensis* sp. n.

6. Central dorsal area of head in most specimens with microsculpture composed of ± isodiametric or short transverse meshes, which are rarely obsolete. BL: 5.3-7.0, mean: 6.35; HW: 0.60-0.77, mean: 0.68; PW: 0.67-0.86, mean: 0.75; PL: 0.87-1.11, mean: 0.99; EL: 0.52-0.64, mean: 0.58. ♂: Internal sac with a pair of long rod-like structures and a pair of hooks; hind margin of sternite IX and aedeagus as in Figs 4a-d. Northeastern and central Tenerife. ..... *O. intermedius* Korge
- Microsculpture of central dorsal area of head composed of transverse striae and/or transverse meshes. BL: 4,9-6,4; HW: 0.61-0.72; PW: 0.69-0.79; PL: 0.88-1.10; EL: 0.48-0.60. ♂: Internal sac with a pair of minute spines; rod-like structures roughly half as long as in the preceding species; hind margin of sternite IX and aedeagus as in Figs 5a-d. Northwest of Tenerife (Teno). ..... *O. zerchei* sp. n.

7. BL: 5.4-6.4, HW: 0.75-0.86, PW: 0.80-0.86, PL: 1.03-1.10, EL: 0.68-0.80. ♂: Hind margin of sternite IX and aedeagus as in Figs 7a-c. Endemic to Gran Canaria. ... *O. philonthoides* Woll.
- BL: 5.0-7.0, HW: 0.69-0.85, PW: 0.74-0.88, PL: 0.94-1.10, EL: 0.60-0.86. ♂: Hind margin of sternite IX and aedeagus as in Figs 8a-d. El Hierro, La Gomera. ..... *O. coiffaiti* Lohse

DISCUSSION

Regarding their external morphology and ♂ sexual characters the 8 species of the Canary Islands fall into two groups (see key), both of them apparently monophyletic. In the first one containing *O. brachypterus* Woll., *O. microphtalmus* Coiff. and *O. neglectus* Palm a comparatively long period of evolutionary time appears to have promoted character divergence and, therefore, well-defined differential characters. Judging from their remarkable similarity the species of the second group, which comprises *O. philonthoides* Woll., *O. coiffaiti* Lohse, *O. intermedius* Korge, *O. zerchei* sp. n. and *O. palmaensis* sp. n., are phylogenetically younger, a conclusion also supported by the fact that two of the species are still macropterous or submacropterous and possess a palisade fringe on the hind margin of the abdominal tergite VII, a structure used during the wing-folding procedure. In the absence of any records of actual flight activity and since it was impossible to study the flight muscles, it remains uncertain whether or not *O. philonthoides* and *O. coiffaiti* are still capable of flight. In the continental *O. melanocephalus* (Grav.), for instance, it has been shown that the beetles only occasionally possess functional flight muscles and are often submacropterous in spite of the presence of a palisade fringe (ASSING, 1993). Nevertheless, the evidence available suggests that the common ancestor of the species of the second group was capable of flight and that the islands inhabited by these species today were colonized by flying specimens.

In the absence of a recent phylogenetic study of continental *Othius* the question whether or not the two groups represent a monophylum and, consequently, whether the Canary Islands were colonized by a continental ancestor once or twice, remains to be answered.

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