

Synopsis of the genus *Ochtheosus* PERKINS (Coleoptera: Hydraenidae)

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Abstract

The genus *Ochtheosus* PERKINS (Coleoptera: Hydraenidae) is reviewed. A new species, *Ochtheosus franzi* sp.n. is described from southern Chile.

Key words: Coleoptera, Hydraenidae, *Ochtheosus*, new species, taxonomy, Chile, South America.

Introduction

Exactly thirty years ago, in 1968, two female hydraenid specimens with a remarkable "dasyceroid" appearance were collected by Prof. H. Franz in a terrestrial habitat in southern Chile. These females were representing an unknown primitive ochthebiine genus which remained undescribed for decades due to the absence of males. Sixteen years later two males of the same genus were collected by S. and J. Peck in 1984, but it took another 13 years until the new genus was described by PERKINS (1997) under the name *Ochtheosus*.

Very recently, additional males were collected by A.F. Newton and M.K. Thayer (in 1996) and by T. Cekalovic (in 1997) which led to the discovery of a second species.

Thanks are due to A.F. Newton and T. Cekalovic for sending their material. The former is also thanked for reading the manuscript.

Acronyms

NMW Naturhistorisches Museum, Wien

FMC Field Museum of Natural History, Chicago



Fig. 1: Habitus of *Ochtheosus* sp., female, Rio Simpson National Park, leg. Franz.

Ochtheosus PERKINS

TYPE SPECIES (by monotypy): *Ochtheosus fungicolus* PERKINS

DIAGNOSIS: Habitus (Fig. 1). *Ochtheosus* is characterised by a number of deviating features: 1) antennae (Fig. 4) 11-segmented, 2) head, pronotum and elytral ridges covered with small tubercles, 3) penultimate segment of maxillary palps inflated, only very slightly longer than ultimate one, 4) labrum sexually dimorphic, 5) frons widely explanate and projecting laterally in front of eyes, 6) ocelli approximate and conspicuously projecting, 7) pronotal lateral margin

denticulate, 8) hypomeral antennal groove wide and shallow, 9) mesosternum with tooth-like projection, 10) metasternum with a transverse glabrous torus which is comprehensively impressed medially, 11) elytra transversely impressed and with longitudinal, setose, tuberculate ridges, 12) abdominal hydrofuge pubescence confined to first ventrite and to anterior margin of second ventrite, 13) anterior margins of ventrites punctate.

Secondary sexual dimorphism: Male labrum with short, tooth-like process, projecting at right angle behind anterior margin.

Aedeagus (Figs. 2, 3): Phallobase large, forming a closed ring. Main piece simple, peg-like. Endophallus with indistinct sclerotizations (not illustrated in Figs. 2, 3). Distal lobe tubuliform, weakly sclerotized and inconspicuous. Parameres inserting ventro-laterally near phallobase, robust, more or less symmetrical, apically slightly widened and setose.

INTRASPECIFIC VARIABILITY: Elytra can be more or less strongly hump-backed along suture in posterior third (before apical declivity). The elytral carinae, especially those on fifth and seventh interval can be complete or variably interrupted; length and position of the interruption may vary even between the left and right elytron of a single individual, providing them with a peculiarly asymmetrical appearance (see Fig. 1).

DIFFERENTIAL DIAGNOSIS: The antennae of the Ochthebiinae are usually 9-segmented, rarely 8-segmented. *Ochtheosus* is characterized by its 11-segmented antennae, by its peculiar habitus, by the presence of tubercles on head, pronotum and elytral ridges, by the sexually dimorphic labrum, by the conspicuously projecting ocelli, by the conspicuously denticulate pronotal lateral margin, by the tooth-like projection on the mesosternum, by the transverse glabrous torus on the metasternum, and by the abdominal hydrofuge pubescence being confined to the first ventrite and to the anterior margin of the second ventrite.

DISTRIBUTION: The genus is so far known only from southern Chile.

ECOLOGY: Although only 11 specimens of *Ochtheosus* are known until now, it seems evident, that this genus is terrestrial.

The specimens collected by T. Cekalovic were taken from the floor of primary forests by sifting and by using a Berlese Funnel: "In humus under ferns, mosses, and *Chusquea quila*" (T. Cekalovic, letter of 12.VI.1997). The specimens collected by A.F. Newton and M.K. Thayer were taken in "primary forest with *Saxegothea conspicua* (Podocarpaceae) overstory and dense bamboo understory, and involved pyrethrin-fogging a couple of 1 m diameter old logs near the road at the base of a large *Saxegothea* tree" (A.F. Newton, e-mail of 8.IV.1998).

Ochtheosus fungicolus PERKINS

Ochtheosus fungicolus PERKINS 1997: 125.

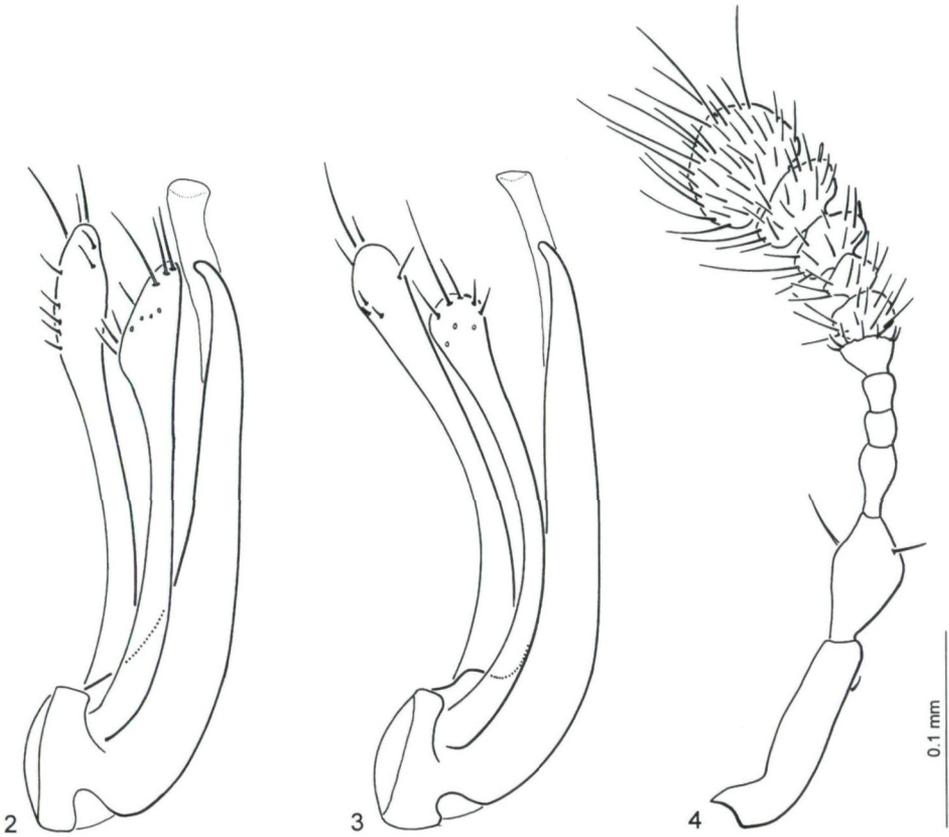
TYPE LOCALITY: Anticura, Puyehue National Park, 500 m a.s.l., Osorno Province, Chile.

TYPE MATERIAL (not examined): Holotype ♂ and 2 paratypes (♂ + ♀) deposited in FMC.

MATERIAL EXAMINED:

CHILE: 1 ♂ (NMW): Chiloe, Estero Llicaldad, 22.II.1997, leg. Cekalovic (TC-534); 2 ♂♂ (FMC, NMW): Osorno Prov., Puyehue NP, Antillanca road, 4.8 km above Aguas Calientes, 600 m a.s.l., 40°45.06'S, 72°19.03'W, 29.XII.1996, leg. Newton & Thayer; 2 ♀♀ (NMW): Aisen Province, Rio Simpson NP, leg. Franz, X.1968.

DIAGNOSIS: 1.60 - 1.85 mm long, 0.85 - 0.90 mm wide. Anterior margin of labrum emarginate, with a fringe of moderately long setae; a narrow band behind anterior margin not tuberculate, shining. Lateral margin of pronotum crenulate with two projecting denticles; pronotal disc with three large, circular impressions, separated by a Y-shaped ridge. Elytra rather short (length/width: 1.25 - 1.29); suture and intervals 3, 5, 7, 9 at least partly carinate; interval 5 conspicuously sinuate. Metasternal torus distinctly tapering laterally; toral impression distinctly transverse (length/width: 0.6). Brachypterous.



Figs 2 - 3: Aedeagus, lateral view, 2) *Ochtheosus fungicolus*, 3) *O. franzi* sp.n., distal lobe reconstructed. Fig. 4: *Ochtheosus fungicolus*, right antenna.

Aedeagus (Fig. 2): Main piece in lateral aspect wide subbasally, gradually tapering toward apex, slightly curved ventrad apically; in ventral aspect slightly attenuate subbasally. Parameres irregularly widened apically.

DISCUSSION: The two females from Aisen Province (Rio Simpson NP) agree with the three males in the shape of the metasternal torus and in the brachyptery. However, they differ from these males by the slightly longer elytra (length/width: ca. 1.3). Since they were not collected together with males the identification must be regarded as provisional.

DISTRIBUTION: Chile (Osorno, Chiloe, ? Aisen).

Ochtheosus franzi sp.n.

TYPE LOCALITY: Chonchi, Chiloe, Chile.

TYPE MATERIAL: **Holotype** ♂ (NMW): "CHILE: Chiloe 5km SW Chonchi 20.2.1997 leg. Cekalovic (TC-529)". **Paratype** ♀ (NMW) with same label data as holotype. Note: Distal lobe of aedeagus of holotype broken after dissection.

DIFFERENTIAL DIAGNOSIS: 1.6 - 1.8 mm long, 0.75 - 0.80 mm wide. *Ochtheosus franzi* can be distinguished from *O. fungicolus* by the slightly more elongate elytra (length/width: 1.31 -

1.37), by the larger metasternal torus (not tapering laterally, toral impression not distinctly transverse (length/width: 0.7 - 0.8)), by the presence of long hind wings, and by the aedeagus.

Aedeagus (Fig. 3): Ventral margin of main piece (in lateral aspect) abruptly constricted behind phallobase; lateral margins (in ventral aspect) evenly converging from base to apex. Parameres (in lateral view) more evenly widened than in the type species.

DISTRIBUTION: So far known only from the type locality.

ETYMOLOGY: Named in commemoration of the 90th birthday of Prof. DI DDr. h.c. Herbert Franz.

References

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Artikel/Article: [Synopsis of the genus Ochtheosus Perkins \(Hydraenidae\). 171-174](#)