

Linzer biol. Beitr.	52/2	967-972	Februar 2021
---------------------	------	---------	--------------

***Cryptophagus chthonius* nov.sp. from Crete with remarks on further *Cryptophagus* HERBST, 1792 (Coleoptera, Cryptophagidae)**

Jens ESSER

A b s t r a c t : A new species of the genus *Cryptophagus* HERBST, 1792 is described from Crete (Greece): *Cryptophagus chthonius* nov.sp.

K e y w o r d s : Coleoptera, Cryptophagidae, Cryptophaginae, *Cryptophagus*, new species, Greece, Crete.

Introduction

So far, no endemic *Cryptophagus* HERBST, 1792 is known from the Greek Island Crete. The Cryptophagidae of the island in general were poorly studied. The present paper deals with data from Crete – including a new species resembling *Cryptophagus turcicus* GILLERFORS & OTERO, 1993 from southern parts of Turkey and *C. jemeniticus* ESSER, 2020, recently described from Yemen and Saudi Arabia (ESSER, in this volume).

The Cryptophagidae of Greece are relatively well known, a few paper offer distribution data (JOHNSON et al. 2007, OTERO 2013, OTERO & ANGELINI 2009), but the first two papers don't separate Crete from the remaining parts of Greece, OTERO & ANGELINI (2009) mentioned no Cretan records of *Cryptophagus* sp. The records of nine *Cryptophagus* species listed below were made by a few colleagues since 1973 till this day and were donated to the writer. Except for *C. chthonius* nov.sp. all species recorded from Crete are widely distributed in larger parts of Europe. *C. fasciatus* KRAATZ, 1852 and *C. insulicola* ROUBAL, 1919 are restricted to the Mediterranean area: *C. fasciatus* KR. was found typically along the shores of the Mediterranean Sea. The identity of *C. insulicola* ROUB. and its concordance with *C. acuminatus* COOMBS & WOODROFFE, 1955 needs further discussion. Without doubt, there are more *Cryptophagus* species to expect from Crete. The present checklist is not exhaustive, a lot of common and widespread European species are lacking.

Material and methods

The material examined is deposited in the following collections:

cES.....author's private collection, Berlin, Germany

cSCcollection Jürgen Schmidl, Nuremberg

The morphological studies were conducted using a Euromex DZ 1605 and Euromex BB.1153.PLI. Photographs were created with a TouPCam 16MP (ToupTek).

Body length was measured from the head to the apex of the elytra, length of pronotum in the middle, broadness on the broadest part.

Description of new species

Cryptophagus chthonius nov.sp. (figs. 1, 4, 7)

Type material: Holotypus ♂: "(Nordwest-) Kreta, Umg. Georgioupoli, Ali Kampos, leg. A. Elbert, 25.4.1989 / Eiche geklopft" [cES]. Paratypus: 1 ♂ "26.3.73, Kreta, Lassithi-Hochebene, Dr. Fülischer, Meybohm" [cES].

Etymology: Named after Chthonia (*Χθονία*), an ancient name for Crete, what means "with rich and gentle grounds".

Description: Male, 2.4 mm, membranous wings fully developed. Uniformly reddish-brown, covered with pale pubescence (fig. 1).

Head without any features, eyes moderately large, puncture strong and dense.

Pronotum (fig. 4) transverse (1.6 x wider than long) with anterior callosities large and prominent, extended over the anterior quarter of the sides. Callosities forming a hook and are well separated from the remaining part of sides. Lateral teeth in the middle of the sides and well developed. Sides straight behind the lateral teeth, concave between lateral teeth and anterior callosities. Anterior margin nearly straight, posterior margin convex. Pronotum broadest between the tips of the callosities. Surface of the pronotum rather convex with a deep rim between disc and anterior callosities. Puncture strong and dense (as on head).

Elytra moderately elongated, sides nearly straight. Puncture somewhat finer than on pronotum, less dense. Hairs moderately long, with slightly outstanding hairs along the sides of elytra

Legs moderately slender, tarsi 5-segmented, posterior tarsi 4-segmented (the female is unknown and should have posterior tarsi also 5-segmented as common in *Cryptophagus*). Tarsi strong and anterior tarsi feebly widened (probably not in female).

Antennae 11-segmented including a 3-segmented club. Segment 1 short and rounded, segment 2 somewhat longer, but smaller (elongated). Segment 3 more elongated, segments 4 to 8 more (segment 4) or less (segment 8) long as broad. Segments 9 and 10 transverse, segment 11 pear-shaped but asymmetrical.

Aedoeagus shown in fig. 7.

Comment: Resembles *Cryptophagus turcicus* GILLERFORS & OTERO, 1993 by the most features (fig. 2). But *C. turcicus* GILLERFORS & OTERO, 1993 differs by antennae more thick and a stronger but sparser puncture on pronotum and elytra (figs. 2, 5). Further there are characteristic features in parameres of both, *C. chthonius* nov.sp. (fig. 7) and *C. turcicus* GILLF. & OTERO (fig. 8). The new species further also resembles to *C. jemeniticus* ESSER, 2020 (figs. 3, 6, 9) from the Arabian Peninsula with more fine and dense punctuation on elytra and slender antennae with segment IX and X less transverse, pubescens longer and denser, less decumbent.

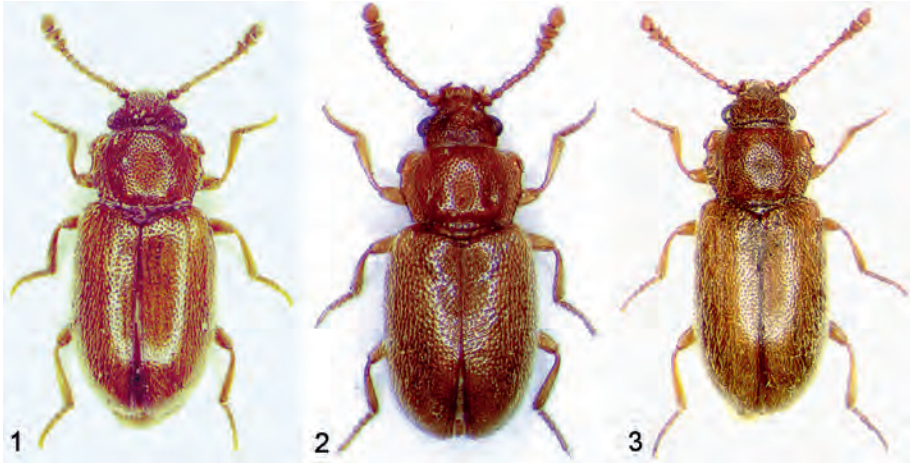


Fig. 1-3: Habitus of (1) *Cryptophagus chthonius* nov.sp., holotype, Crete; (2) *C. turcicus* GILLERFORS & OTERO, 1993, south Turkey; (3) *C. jemeniticus* ESSER, 2020, Yemen.

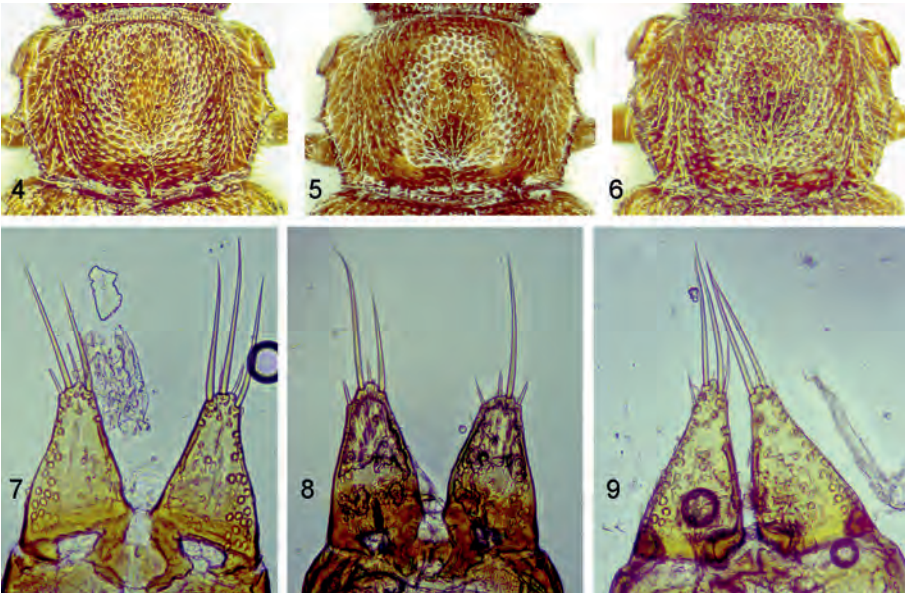


Fig. 4-6: Pronotum of (4) *Cryptophagus chthonius* nov.sp., holotype, Crete; (5) *C. turcicus* GILLERFORS & OTERO, 1993, south Turkey; (6) *C. jemeniticus* ESSER, 2020, Yemen.

Fig. 7-9: Parameres of (7) *Cryptophagus chthonius* nov.sp., holotype, Crete; (8) *C. turcicus* GILLERFORS & OTERO, 1993, south Turkey; (9) *C. jemeniticus* ESSER, 2020, Yemen.

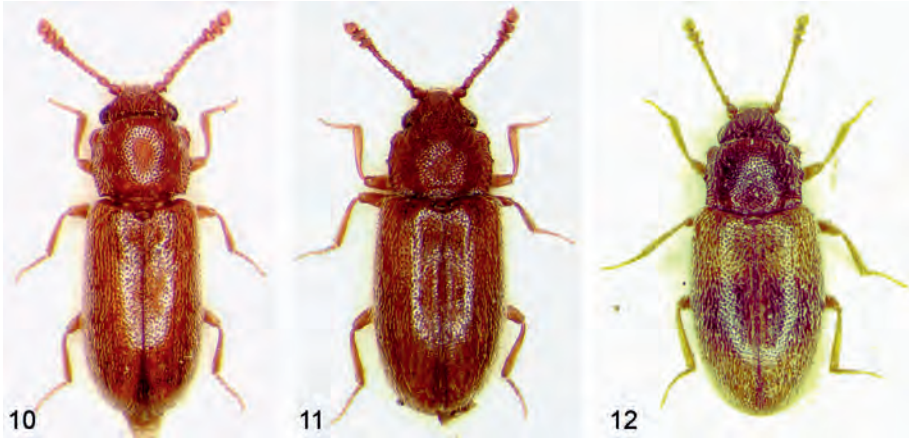


Fig. 10-12: Habitus of *Cryptophagus* sp.: (10) *C. cylindrus* KIESENWETTER, 1858); (11) *C. dentatus* (HERBST, 1793); (12) *C. fasciatus* KRAATZ, 1852.



Fig. 13-15: Habitus of *Cryptophagus* sp.: (13) *C. insulicola* ROUBAL, 1919; (14) *C. laticollis* LUCAS, 1846; (15) *C. lycoperdi* (SCOPOLI, 1763).



Fig. 16-18: Habitus of *Cryptophagus* sp.: (16) *C. pallidus* STURM, 1845; (17) *C. reflexus* REY, 1889; (18) *C. scanicus* (LINNÉ, 1758).

Distribution data of several *Cryptophagus* HERBST, 1792

Cryptophagus cylindrus KIESENWETTER, 1858 (fig. 10): "N35°04'32, E25°50'26, GR Ostkreta (13), Thripti, 630m, 14.3.2018, Brachat & Meybohm" [cES].

Cryptophagus dentatus (HERBST, 1793) (fig. 11): "GR – Crete [28] SE Malia, Selena Oros, 35°14'40"N, 25°31'03", 880m, sifted, 2.I.2018, V. Assing" [cES].

Cryptophagus fasciatus KRAATZ, 1852 (fig. 12): "Kreta, Malia, V.71, Benick"; "Plakias Kreta, 3.83, Dr. Romfeld"; Sitia Kreta, 4.83, Dr. Romfeld" [cES].

Cryptophagus insulicola ROUBAL, 1919 (fig. 13): "N35°08'45 E25°38'30, GR Lassithi Kritsa s 390m, 16.3.2019, Brachat & Meybohm (4)" [cES].

Cryptophagus laticollis LUCAS, 1846 (fig. 14): "2.8.73, Ost-Kreta, Zakros, Tal der Toten, Dr. Fülischer, Meybohm" [cES]; "21.3.76, Ost-Kreta, Vai Palmenstrand, Dr. Fülischer, Meybohm" [cES]; Kreta, Agios Nikolaos, Kalamafka, 17.4.00, leg. Meybohm" [cES]; "GR – Crete [18a], SW Sitia, NW Makrigialos, 35°03'31"N, 25°56'49"E, 70m, moist leaves, 30.XII.2017, V. Assing" [cES].

Cryptophagus lycoperdi (SCOPOLI, 1763) (fig. 15): "GR – Crete [46], SW Chania, N Nteres, 35°27'40"N, 23°50'19"E, 170m, soil washing, 24.III.2018, V. Assing" [cES].

Cryptophagus pallidus STURM, 1845 (fig. 16): "26.3.73, Kreta, Lassithi-Hochebene, Dr. Fülischer, Meybohm"; "27.3.86, Ida-Gbg., Umg. Anogia, Leg. H. Meybohm [cES]"; Rethimno/Kreta, Armeni, 24.4.00 leg. Meybohm [cES]"; "N35°07'03 E25°38'10, GR Lassithi (6), Kroustas sw, 770m, 11.3.2018, Brachat & Meybohm [cES]"; "N35°22'26 E23°49'54, GR Westkreta (25), Prases W 490m, 20.3.2018, Brachat & Meybohm [cES]"; "GR – Crete [28] SE Malia, Selena Oros, 35°14'40"N, 25°31'03", 880m, sifted, 2.I.2018, V. Assing" [cES]; "GR – Crete [12a], SW Chania, Mavros stream valley, 35°23'48"N, 23°53'40"E, 410m, 18.III.2018, V. Assing [cES]"; "GR – Crete [13], SW Chania, S Alikianos, 35°25'29", 23°55'18"E, 90m, stream bank, sift., 18.III.2018, V. Assing [cES]"; "GR – Crete [46], SW Chania, N Nteres, 35°27'40"N, 23°50'19"E, 170m, soil washing, 24.III.2018, V. Assing [cES]"; "GR – Crete [48], WSW Chania, SW Voukolies, 35°27'01"N, 23°46'39"E, 300m, soil washing, 25.III.2018, V. Assing [cES]"; "N35°08'45 E25°38'30, GR Lassithi Kritsa s 390m, 16.3.2019, Brachat & Meybohm (4) [cES]"; "N35°21'42 E24°11'46, GR Westkreta, 130m, Vrisses S, 22.3.2019, Brachat & Meybohm (15) [cES]"; "N35°19'07 E23°54'46, GR Kreta, 1080m, Omalos E, 23.3.2019, Brachat & Meybohm (17)" [cES].

***Cryptophagus reflexus* REY, 1889** (fig. 17): "26.3.73, Kreta, Lassithi-Hochebene, Dr. Fölscher, Meybohm" [cEs]; "21.-22.3.73, Kreta, Samaria-Tal, Dr. Fölscher, Meybohm" [cEs]; "25.3.86, Westkreta, Umg. Elos, leg. Meybohm" [cEs]; "Ostkreta, Umg. Agios Nikolaos, Kalamafka, Meybohm, 17.4.2000" [cSC]; "N35°08'45 E25°38'30, GR Lassithi Kritsa s 390m, 16.3.2019, Brachat & Meybohm (4)" [cEs]; "N35°23'54 E23°54'38, GR Westkreta, 440m, Karanos W 21.3.2019, Brachat & Meybhm (14)" [cEs]; "N35°21'42 E24°11'46, GR Westkreta, 130m, Vrisses S, 22.3.2019, Brachat & Meybohm (15)" [cEs].

***Cryptophagus scanicus* (LINNÉ, 1758)** (fig. 18): "17.3.76, West-Kreta: Omalos-Hochebene, Dr. Fölscher, Meybohm [cES]"; "25.3.86, Westkreta, Umg. Elos, leg. Meybohm [cES]"; "N35°07'03 E25°38'10, GR Lassithi (7), Kroustas sw 770m, 12.3.2018, Brachat & Meybohm [cES]"; "GR – Crete [15a], S Kissamos, NE Sirikari, 35°24'48"N, 23°39'04"E, 400m, dead chestnut, 19.III.2018, V. Assing" [cES].

Acknowledgement

I wish to thank Volker Assig (Hannover), Volker Brachat (Geretsried), Heinrich Meybohm (Stelle) and Jürgen Schmidl (Nuremberg) for donating specimens from Crete.

Zusammenfassung

Eine neue Art der Gattung *Cryptophagus* HERBST, 1792, *Cryptophagus chthonius* nov.sp., von Kreta wird beschrieben. Weiterhin werden Funddaten weiterer *Cryptophagus*-Arten von der Insel mitgeteilt.

References

- JOHNSON C., OTERO J.C. & R.A.B. LESCHEN (2007): Cryptophagidae. In: LÖBL I. & A. SMETANA: Catalogue of Palearctic Coleoptera Vol. 4. — Apollo Books, Stentrup: 513-531.
- OTERO J.C. (2013): Cryptophaginae (Coleoptera) de la region paleártica occidental. — Coleopterological Monographs 4: 1-295.
- OTERO J.C. & F. ANGELINI (2009): Contribution to the knowledge of Cryptophagids (Coleoptera: Cryptophagidae) from Greece. — Elytron 22-23: 63-70.

Author's address: Jens ESSER
Fagottstraße 6
D-13127 Berlin, Germany
E-mail: jens_esser@yahoo.de

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Linzer biologische Beiträge](#)

Jahr/Year: 2021

Band/Volume: [0052_2](#)

Autor(en)/Author(s): Esser Jens

Artikel/Article: [Cryptophagus chthonius nov.sp. from Crete with remarks on further Cryptophagus HERBST, 1792 \(Coleoptera, Cryptophagidae\) 967-972](#)