

**Braconid wasps from Crete Island (Greece) with description of
Chorebus tobiasi sp. n. (Hymenoptera: Braconidae)**

A.I. Lozan

**К познанию браконид острова Крит (Греция) с описанием
Chorebus tobiasi sp. n. (Hymenoptera: Braconidae)**

А.И. Лозан

Institute of Entomology, Academy of Sciences of the Czech Republic, Branišovská 31, CZ–370 05, České Budějovice, Czech Republic; Institute of Zoology, Academy of Sciences of the Republic of Moldova, Academiei str. 1, MD-2028, Kishinau, Moldova. E-mail: lozan@entu.cas.cz, aurellozan@hotmail.com

Abstract. Twenty eight species of braconid wasps are recorded from Crete Island of Greece: *Vipio marshalli* Schmiedeknecht, *V. nominator* (Fabricius), *V. tentator* (Rossi), *Pseudovipio inscriptor* (Nees), *Bracon illyricus* Marshall, *B. intercessor* Nees, *B. variator* Nees, *Agathis montana* Schestakov, *A. nigra* Nees, *A. syngenesiae* Nees, *Macrocentrus thoracicus* (Nees), *Eubazus longicaudis* (Ratzeburg), *Triaspis obscurella* (Nees), *Schizoprymnus obscurus* (Nees), *S. tantalus* Papp, *S. terebralis* Snoflak, *Blacus ruficornis* (Nees), *Ascogaster quadridentata* Wesmael, *Chelonus annulipes* Wesmael, *Ch. asiaticus* Telenga, *Ch. oculator* (Fabricius), *Microchelonus azerbaijdzhanicus* (Abdinbekova), *M. foersteri* Tobias, *M. rimulosus* (Thomson), *M. scabrosus* (Szépligeti), *Apanteles sicarius* Marshall, *Chorebus misellus* (Marshall). A new species, *Chorebus tobiasi* sp. n., is described and illustrated.

Key words. Hymenoptera, Braconidae, faunistic, new species, Crete Island.

Резюме. Двадцать восемь видов наездников-браконид отмечается в фауне о. Крит (Греция): *Vipio marshalli* Schmiedeknecht, *V. nominator* (Fabricius), *V. tentator* (Rossi), *Pseudovipio inscriptor* (Nees), *Bracon illyricus* Marshall, *B. intercessor* Nees, *B. variator* Nees, *Agathis montana* Schestakov, *A. nigra* Nees, *A. syngenesiae* Nees, *Macrocentrus thoracicus* (Nees), *Eubazus longicaudis* (Ratzeburg), *Triaspis obscurella* (Nees), *Schizoprymnus obscurus* (Nees), *S. tantalus* Papp, *S. terebralis* Snoflak, *Blacus ruficornis* (Nees), *Ascogaster quadridentata* Wesmael, *Chelonus annulipes* Wesmael, *Ch. asiaticus* Telenga, *Ch. oculator* (Fabricius), *Microchelonus azerbaijdzhanicus* (Abdinbekova), *M. foersteri* Tobias, *M. rimulosus* (Thomson), *M. scabrosus* (Szépligeti), *Apanteles sicarius* Marshall, *Chorebus misellus* (Marshall). С о. Крит описывается новый для науки вид *Chorebus tobiasi* sp. n.

Ключевые слова. Hymenoptera, Braconidae, фаунистика, новый вид, о. Крит.

Introduction

After studying the material from the collection of the Institute of Entomology (České Budějovice, Czech Republic), a total of 28 species of the braconid wasps are recorded for Crete Island (Greece), mainly from subfamilies Braconinae and Cheloniinae.

A new species *Chorebus tobiasi* sp. n. is described from Crete. This species undoubtedly belongs to *Ch. ovalis* species-group and clearly differs from all species of this group by shortened antennae, peculiar pubescence, and shortened pterostigma and radial cell of forewings. The genus *Chorebus* requires a new revision due to a huge number of species recently described from the Russian Far East (Belokobylskij, Tobias, 1997; Tobias, 1998) and Western Palaearctic (Docavo, Tormos, 1998; Docavo et al., 2001, 2002; Lozan, Tobias, 2002). On the basis of Tobias' key (Tobias, 1986) a new species would provisionally fit near *Ch. ampliator* (Nees).

All material was collected by K. Deneš senior and K. Deneš junior (Czech Republic) from Crete Island (Greece) in June 4–12, 2002. The specimens (including holotype and most part of paratypes of *Chorebus tobiasi* sp. n.) are deposited in the Institute of Entomology (České Budějovice, Czech Republic), one paratype of new species — in the Zoological Institute (St. Petersburg, Russia).

***Chorebus tobiasi* Lozan, sp. n.** (Figs 1–4).

Diagnosis. By its subcubital head the new species reminds one of *Ch. ovalis* species-group [*Chorebus ampliator* (Nees), *Ch. crenulatus* (Thomson), *Ch. ioni* Lozan et Tobias (especially males)] and *Ch. diremtus* species-group [*Chorebus cubocephalus* (Telenga) and *Ch. diremtus* (Nees)]. The shape of mandibles, pubescence of body and sometimes fine punctate sculpture of mesosoma *C. tobiasi* sp. n. is even similar to species of *Ch. lateralis* species-group, although the latter character is present in many other species throughout the genus. The differences of new species from the most similar *Chorebus ampliator* (Nees) are shown in the following key.

- 1(4). Pterostigma short; radial cell along metacarpus about half as long as pterostigma. Antennae short; apical flagellomeres almost as long as broad in ♀ and 1.5–1.7 times as long as broad in ♂. — Head large, subcubical, with more or less widened temples. Body generally dark.
- 2(3). Mesosoma 1.3 times as long as high. First metasomal tergite widened towards apex, 1.6–1.7 times as long as broad. Antennae short, not longer than head and mesosoma combined, 15–17-segmented in ♀, 19–22-segmented in ♂. Body length: ♀ 1.6–1.7 mm, ♂ 1.8–2.0 mm..... *Ch. ampliator* (Nees)
- 3(2). Mesosoma 1.7 times as long as high. First metasomal tergite less widened towards apex, about twice as long as broad. Antennae as long as head, mesosoma, and (rarely) petiole combined, 20–21-segmented in ♀ and 25–26-segmented in ♂. — Part of mesosoma and sometimes median part of metasoma very finely punctate. Body length ♀♂ 2.3–2.6 mm..... *Ch. tobiasi* sp. n.
- 4(1). Pterostigma and radial cell not shortened; if somewhat shortened, then antennal flagellomeres longer and body smaller (1.4–1.8 mm) other species of *Ch. ovalis* species-group

Description. Female. Body length 2.3–2.6 mm. Head subcubical, slightly widened behind eyes, 1.1–1.2 times as wide as mesosoma (dorsal view), 1.5–1.6 times as wide as long. POL twice OOL. Temple 1.5–1.6 times as long as eye. Mandibles comparatively large, distinctly 4-toothed; second teeth sharp and long. Occiput with long setae, vertex and frons almost bare; face very finely sculptured laterally, with sparse pubescence and setae worn in a bun laterally of clypeus. Antennae with 20 (holotype and paratype) or 21 (paratypes) segments, as long as head and mesosoma or (rarely) head, mesosoma and petiole combined. First flagellomere segment 2.5–3.0 times and apical flagellomeres 1.5 times as long as wide.

Mesosoma 1.7 times as long as high. Pronotum with long setae, finely sculptured and with broad and rugose groove. Mesoscutum with deep and elongate medioposterior depression; pubescent and finely punctate anteriorly and towards course of notaulices; notaulices distinct only anteriorly. Scutellum and bare areas of mesoscutum shining. Mesopleura shining and bare, with large punctate area and long setae anteriorly, with a few long setae below. Sternauli long and smooth. Metapleural swelling rugose, with a rosette of long and dense setae around. Pterostigma and radial cell short. Legs largely setose.

Metasoma as long as mesosoma. First tergite weakly widened towards apex, almost twice as long as apical width; with two longitudinal dorsal carinae and striation laterally, its median apical part smooth and shining, pubescent mainly near tergite margins. Second tergite with a few lateral setae basally and line of setae posteriorly. Remaining tergites setose posteriorly. Median part of second and third tergites more or less widely and very finely punctate (holotype and some paratypes), or without sculpture (some paratypes). Ovipositor sheath projecting beyond apex of metasoma by half of petiole, setose; ovipositor in lateral view directed upward.

Colour. Body black. Mandibles brown, darker basally. Palpi brown. Metasoma beyond first tergite (especially second and third ones) dark brown or with dark brown tint. Fore leg brownish yellow, coxae darker. Hind coxae black, trochanter yellowish, femora from dark or blackish to dark yellow, rest part of hind leg darker. Pterostigma and veins pale.

Male. Body length 2.5–2.7 mm. Antennae 25–26-segmented; apical flagellomeres 1.7–1.8 times as long as wide. Punctate sculpture on second and third tergites more or less distinct or disappearing in some specimens. Otherwise similar to female.

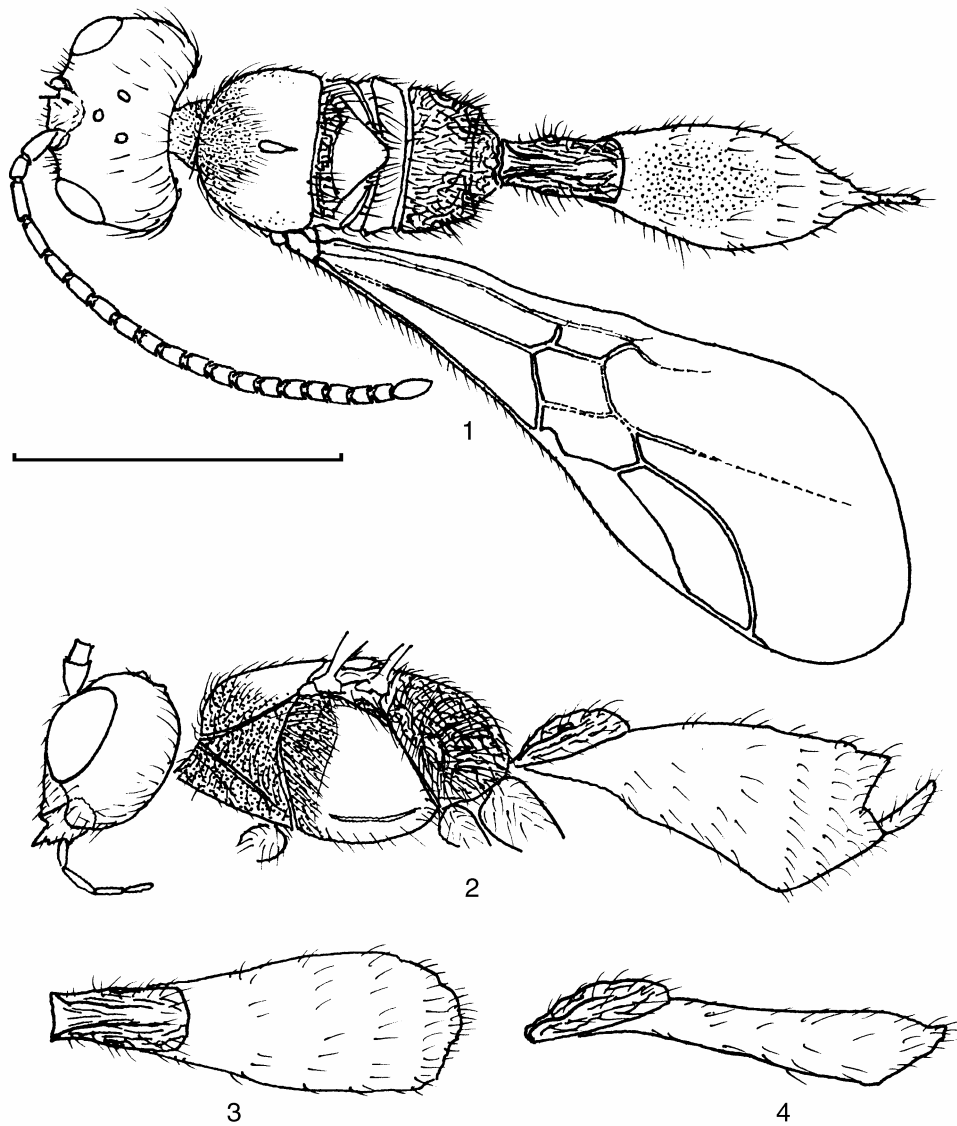
Material. Holotype: ♀, Greece, Crete centr., Ida, 1700 m, 15 km S Anogia, 4–12 VI 2002 (K. Deneš sen., K. Deneš jr). Paratypes: 3 ♀, 4 ♂, with label as holotype.

Etymology. This species is dedicated to Prof. V.I. Tobias, my master-guide in braconidology.

Other species recorded

Vipio marshalli Schmiedeknecht, 1896.

Material. 2 ♀, Crete east, Mt. Dikti, Lassithi, 850 m.



Figs 1–4. *Chorebus tobiasi* sp. n. 1 — body, dorsal view (♀); 2 — body, lateral view (♀); 3 — metasoma, dorsal view (♂); 4 — metasoma, lateral view (♂). Scale 1.0 mm.

***Vipio nominator* (Fabricius, 1787).**

Material. 3 ♀, Crete east, Mt. Dikti, Lassithi, 850 m.

***Vipio tentator* (Rossi, 1790).**

Material. 7 ♂, Crete east, Mt. Dikti, Lassithi, 850 m.

***Pseudovipio inscriptor* (Nees, 1834).**

Material. 3 ♀, Crete east, Mt. Dikti, Lassithi, 850 m.

***Bracon illyricus* Marshall, 1888.**

Material. 1 ♀, Crete west, Armeni/Rethimnol.

***Bracon intercessor* Nees, 1834.**

Material. 1 ♀, 1 ♂, Crete east, Mt. Dikti, Lassithi, 850 m; 2 ♀, Crete centr., Ida, 1700 m, 15 km S Anogia; 2 ♂, Crete west, Armeni/Rethimnol.

***Bracon variator* Nees, 1812.**

Material. 4 ♀, Crete east, Mt. Dikti, Lassithi, 850 m; 2 ♀, 1 ♂, Crete east, Prima env., 7 km S Istro; 1 ♀, Crete west, Armeni/Rethimnol.

***Agathis montana* Schestakov, 1932.**

Material. 1 ♀, Crete east, Mt. Dikti, Lassithi, 850 m; 1 ♀, Crete east, Prima env., 7 km S Istro; 1 ♂, Crete east, Avdou, 6 km S Mohos.

***Agathis nigra* Nees, 1814.**

Material. 1 ♀, 4 ♂, Crete east, Mt. Dikti, Lassithi, 850 m; 4 ♀, Crete west, Armeni/Rethimnol.

***Agathis syngenesiae* Nees, 1814.**

Material. 1 ♀, Crete west, Armeni/Rethimnol; 2 ♂, Crete east, Avdou, 6 km S Mohos.

***Macrocentrus thoracicus* (Nees, 1812).**

Material. 1 ♀, Crete west, Armeni/Rethimnol.

***Eubazus longicaudis* (Ratzeburg, 1844).**

Material. 1 ♀, Crete east, Mt. Dikti, Lassithi, 850 m; 2 ♀, Crete east, Prima env., 7 km S Istro; 1 ♀, Crete west, Armeni/Rethimnol.

***Triaspis obscurella* (Nees, 1816).**

Material. 1 ♀, Crete east, Prima env., 7 km S Istro.

***Schizoprymnus obscurus* (Nees, 1813).**

Material. 1 ♀, Crete east, Anogia env., 800 m; 1 ♂, Crete east, Avdou, 6 km S Mohos.

***Schizoprymnus tantalus* Papp, 1981.**

Material. 6 ♀, Crete west, Armeni/Rethimnol; 1 ♀, Crete east, Mt. Dikti, Lassithi, 850 m; 1 ♀, Crete east, Anogia env., 800 m.

***Schizoprymnus terebralis* Snoflak, 1952.**

Material. 2 ♀, Crete east, Prima env., 7 km S Istro; 2 ♂, Crete west, Armeni/Rethimnol.

***Blacus ruficornis* (Nees, 1812).**

Material. 6 ♂, Crete west, Armeni/Rethimnol.

***Ascogaster quadridentata* Wesmael, 1835.**

Material. 1 ♀, Crete east, Avdou, 6 km S Mohos.

***Chelonus annulipes* Wesmael, 1835.**

Material. 1 ♀, Crete east, Prima env., 7 km S Istro.

***Chelonus asiaticus* Telenga, 1941.**

Material. 1 ♂, Crete east, Prima env., 7 km S Istro.

***Chelonus oculator* (Fabricius, 1775).**

Material. 3 ♀, Crete east, Anogia env., 800 m; 3 ♀, Crete east, Prima env., 7 km S Istro; 1 ♀, Crete east, Mt. Dikti, Lassithi, 850 m.

***Microchelonus azerbaijdzhanicus* (Abdinbekova, 1971).**

Material. 1 ♀, Crete west, Armeni/Rethimnol; 2 ♂, Crete east, Mt. Dikti, Lassithi, 850 m.

***Microchelonus foersteri* Tobias, 1999.**

Material. 1 ♀, 2 ♂, Crete centr., Ida, 1700 m, 15 km S Anogia.

***Microchelonus rimulosus* (Thomson, 1874).**

Material. 4 ♀, 1 ♂, Crete west, Armeni/Rethimnol.

***Microchelonus scabrosus* (Szépligeti, 1896).**

Material. 1 ♂, Crete east, Avdou, 6 km S Mohos.

***Apanteles sicarius* Marshall, 1885.**

Material. 2 ♀, Crete east, Avdou, 6 km S Mohos; 1 ♀, Crete east, Anogia env., 800 m.

***Chorebus misellus* (Marshall, 1895).**

Material. 1 ♂, Crete west, Armeni/Rethimnol.

Acknowledgement

Thanks to K. Deneš senior and K. Deneš junior (Czech Republic) for providing me the braconids from Crete, Institute of Entomology (České Budějovice, Grant S5007015 of the Academy of Science of the Czech Republic) for facilities, Drs V.I. Tobias and S.A. Belokobylskji (Zoological Institute, St. Petersburg) for allowing me access to collection and confirming the new species.

References

- Belokobylskij S.A., Tobias V.I. 1997. On the braconid wasps of the subfamily Alysiinae (Hymenoptera, Braconidae) from Kuril Islands. *Far East. Entomol.* **47**: 1–17.
- Docavo I., Fischer M., Tormos J. 2001. New species of *Chorebus* (Hymenoptera, Braconidae) from the Iberian peninsula from Spain. *Entomol. News*, **112**(4): 232–240.
- Docavo I., Tormos J. 1998. Two new species of *Chorebus* (Hymenoptera, Braconidae) from Spain. *Entomol. News*. **109**(1): 318–324.
- Docavo I., Tormos J., Fischer M. 2002. Three new species of *Chorebus* from Spain (Hymenoptera, Braconidae: Alysiinae). *Florida Entomol.* **85**(1): 208–215.
- Lozan A., Tobias V.I. 2002. A new species of the genus *Chorebus* from Moldova (Hymenoptera: Braconidae, Alysiinae). *Zoosyst. Rossica.* **11**: 172–174.
- Tobias V.I. 1986. Subfam. Alysiinae. In: Medvedev G.S. (ed.) *Key to the insect of European part of USSR. Hymenoptera.* **3**(5): 100–231. Leningrad. (In Russian).
- Tobias V.I. 1998. Tribe Dacnusiini. In: Lehr P.A. (ed.) *Key to the insect of Russian Far East. Neuropteroidea, Mecoptera, Hymenoptera.* **4**(4): 299–411. Vladivostok. (In Russian).