



Two new records of the subfamily Cleonyminae (Hymenoptera: Pteromalidae) from Iran

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ABSTRACT. Two species of Cleonyminae (Hymenoptera: Chalcidoidea, Pteromalidae), *Chalcedectus sinaiticus* (Masi, 1936) and *Notanisus vanharteni* Gibson, 2015 were found for the first time in Iran. These species were collected from south of Iran. *Notanisus vanharteni* was reared on *Dorema ammoniacum* (D. Don.) and *C. sinaiticus* was collected by a Malaise trap.

Key words: Hymenoptera, Chalcidoidea, Pteromalidae, *Chalcedectus*, *Notanisus*.

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Introduction

The subfamily Cleonyminae (Hymenoptera: Chalcidoidea, Pteromalidae) has an almost worldwide distribution, being found in nearly all regions. It contains over 260 nominal species within 39 genera and six tribes that most species are parasitoids of woodboring beetles or other insects nesting or occurring in wood or under bark (Gibson 2003).

Until now, five species belonging to five genera Cleonyminae were reported from Iran: *Heydenia pretiosa* Förster, 1856 (Davatchi and Chodjai 1968), *Chalcedectus balachowskyi* Steffan, 1968 (Steffan, 1968, Sharifi and Javadi 1971, Gibson 2003), *Callocleonymus pulcher* Masi, 1940

(Lotfalizadeh and Khalghani 2008), *Oodera monstrum* Nikol'skaya, 1952 (Nazemi-Rafie et al. 2011) and *Cleonymus laticornis* Walker, 1837 (Damavandian and Feli Kohikheili 2015). These are reported as parasitoid of xylophagous beetles of the families Scolytidae, Cerambycidae and Buprestidae (Lotfalizadeh and Khalghani 2008). The purpose of the present study was report of two cleonymins that were collected from south of Iran.

Material and methods

The material was collected during 2011–2013 from Fars and Hormozgan provinces in the south of Iran, and they are held in

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the Department of Plant Protection, East-Azarbaijan Research & Education Center for Agriculture & Natural Resources, Tabriz, Iran. The individuals were collected using an entomological net and rearing on host plant. Identification was made using keys provided by Mitroiu and Andreescu (2008) and Gibson (2015).

Results

Two Cleonyminae species of the genera *Chalcedectus* and *Notanisus* were identified.

Genus *Chalcedectus* Walker, 1852

Chalcedectus sinaiticus (Masi, 1936)

Material examined: IRAN, Hormozgan province, Roodan, Sar Kahnan, 27° 25'N, 57° 07'E, 25.vi.2013, Malaise trap, T. Tavakoli leg., 1 ♀.

Comments: Only one species of *Chalcedectus* has been recorded previously from Iran. *Chalcedectus balachowskyi* Steffan known as parasitoid of *Osphranteria coerulescens* Redtenbacher (Col.: Cerambycidae) on *Rosa* sp. (Steffan, 1968). Steffan (1968) discussed morphological difference of *C. sinaiticus* and *C. balachowskyi* but both species have been reported from Fars province in the south of Iran.

Diagnosis: The most important characters of this species are as follow: enlarged hind femur with ventral comb of teeth, complete notauli, antennal clava of female with lateral preclaval process, pronotum short medially, scutellum carinate posteriorly, propodeum with patches of dense silvery hairs.

Distribution: This species known from north of Africa and west of Middle East on *Acacia* sp. (Fabaceae) (Noyes, 2016) and Iran (Hormozagan province) (**new record for Iran**).

Genus *Notanisus* Walker, 1837

Notanisus vanharteni Gibson, 2015

Material examined: IRAN, Fars province, Shurjestan, 30° 49'N, 51° 51'E, 2030m,

20.vi.2012, ex *Dorema ammoniacum* (D. Don.) (Apiaceae), S.A. Alehosein leg., 1♀.

Diagnosis: This species recently described from United Arab Emirates and differs from that of *N. yemenensis* Gibson, 2015 in following characters: head in frontal view and mesosoma extensively reddish-coppery, head sometimes with face or at least frontovertex in dorsal view extensively reddish-violaceous, metacoxa darker brown dorsally but without metallic luster, gastral petiole dark, fore wing with broad infusate region behind discal venation; antennal clava with slender, setose, terminal spiniform process; pronotum postero-laterally with large, triangular, smooth and shiny differentiated region bearing several conspicuous setae. scutellum punctulate-reticulate anteromesally but with larger reticulations laterally and posteriorly, propodeum with medial sculptured region entirely rugose to rugulose-reticulate along length of median carina; metacoxa dorsobasally with patch of several setae (see illustrations of Gibson, 2015).

It characterized by reduced stigmal and postmarginal veins, which were treated as the *oulmesiensis* species group by Gibson (2015).

Distribution: This species known only from Arabian Peninsula (United Arab Emirates) and our collection from Iran is the second record (**new record for Iran**).

Discussion

This research shows the genera and species of the subfamily Cleonyminae in Iran reaches 6 and 7, respectively (Table 1).

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Table 1. List of the subfamily Cleonyminae of Iran and their host and distribution.

Genera	Species	Hosts	Distribution	Reference
<i>Calloccleonymus</i>	<i>Calloccleonymus pulcher</i> Masi, 1940	<i>Rogulascolytus mediterraneus</i> Eggers (Scolytidae), <i>Xylopertha reflexicauda</i> (Lesne) (Bostrychidae)	East-Azarbaijan province	Lotfalizadeh and Khalghani (2008)
	<i>Chalcedectus balachowskyi</i> Steffan, 1968	<i>Osphrantheria coerulescens</i> Redtenbacher (Cerambycidae)	-	Steffan (1968), Sharifi and Javadi (1971)
	<i>Chalcedectus sinaiticus</i> (Masi, 1936)	-	Hormozagan province	New record
<i>Cleonymus</i>	<i>Cleonymus laticornis</i> Walker, 1837	Cerambycidae on <i>Prunus divaricate</i> Ledeb	Mazandaran province	Damavandian and Feli Kohikheili (2015)
<i>Heydenia</i>	<i>Heydenia pretiosa</i> Förster, 1856	<i>Xylopertha reflexicauda</i> (Lesn) (Bostrychidae), <i>Ruguloscolytus mediterraneus</i> Egger, <i>Phloeosinus bicolor</i> Brulle (Scolytidae)	East-Azarbaijan and Alborz provinces	Lotfalizadeh and Gharali (2008), Davatchi and Chodjai (1968)
<i>Notanisus</i>	<i>Notanisus vanharteni</i> Gibson, 2015	Seed eater pests on <i>Dorema ammoniacum</i> (Apiaceae)	Fars province	New record
<i>Oodera</i>	<i>Oodera monstrum</i> Nikol'skaya, 1952	-	Kordestan province	Nazemi-Rafie et al. (2011)

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دو گزارش جدید از زنبورهای زیرخانواده Cleonyminae (Hymenoptera: Pteromalidae) از ایران

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چکیده: دو گونه از زنبورهای زیرخانواده Cleonyminae (Hymenoptera: Chalcidoidea, Pteromalidae) با نام علمی *Chalcedectus sinaiticus* (Masi, 1936) و *Notanisus vanharteni* Gibson, 2015 برای نخستین بار در ایران شناسایی شدند. این گونه‌ها از جنوب ایران جمع‌آوری شدند. گونه *N. vanharteni* از روی گیاه *Dorema ammoniacum* (D. Don.) پرورش داده شد و گونه *C. sinaiticus* توسط تله مالیز جمع‌آوری گردید.

واژگان کلیدی: بال‌غشاییان، بالاخانواده Chalcidoidea، خانواده Pteromalidae.

Notanisus، *Chalcedectus*