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**HOMOLOBUS (PHYLACTER) MERIDIONALIS VAN ACHTERBERG, 1979  
(BRACONIDAE, HOMOLOBINAЕ) IN IRAN: THE FIRST RECORD  
FROM ASIA**

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**Summary.** *Homolobus (Phylacter) meridionalis* van Achterberg, 1979 is newly recorded from Asia. Diagnostic characters of the species and subgenus are briefly discussed. A key to Iranian species of *Homolobus* is given.

**Key words:** Braconidae, Homolobinae, *Homolobus*, fauna, new record, Iran.

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**Резюме.** *Homolobus (Phylacter) meridionalis* van Achterberg, 1979 впервые указывается из Азии (Иран). Кратко обсуждаются таксономические признаки видов и подродов. Приводится определительная таблица иранских видов рода *Homolobus*.

#### INTRODUCTION

The subfamily Homolobinae includes three genera and 62 described species worldwide (Yu *et al.*, 2012). Members of the Homolobinae are large size and have an "ophionoid facies". The genus *Homolobus* Förster, 1862 is the largest genera of the subfamily with about 55 known species in the world and 20 species of it are known in the Palaearctic region (Yu *et al.*, 2012). Members of *Homolobus* are solitary koinobiont endoparasitoids of Lepidopteran larvae (Shaw & Huddleston, 1991; Kenis *et al.*, 2005), but has a final ectoparasitic phase (Allen, 1982). They are nocturnal parasitoids, usually attacking caterpillars various species of Geometridae and Noctuidae (Shaw & Huddleston, 1991).

The subfamily Homolobinae was fully revised and keyed by van Achterberg (1979), who reported 61 valid species, including 32 newly described species and 34 new synonyms. Several taxonomic studies on the genus *Homolobus* have been carried out in Western Palaearctic (Tobias, 1986; Shaw, 2010), South Asia (van Achterberg, 1992; Tobias *et al.*, 1998; Ahmad & Shuja-Uddin, 2001), East Asia (Maetô, 1982; Papp, 1989; Belokobylskij, 1998; Ku *et al.*, 2001).

Three species of *Homolobus* have previously been recorded from different parts of Iran (Yu *et al.*, 2012). The aim of this note is to improve our knowledge of the subfamily Homolobinae in Iran.

#### MATERIAL AND METHODS

The present study was carried out in six localities in Hamadan province in western Iran during April to November 2015. Material was collected using Malaise traps with alcohol as killing and preserving agent and light traps. Traps were placed in different habitats such as forest and rangeland. The species were identified by the key and descriptions provided by van Achterberg (1979). The photographs were taken using an Olympus AX70 microscope and an Olympus SZX9 stereomicroscope equipped with a Sony CCD digital camera. The depository of specimens is the insect museum of the Research Center of Agriculture and Natural Resources, Hamadan.

#### RESULTS

Two species belonging to the genus *Homolobus* were found and identified, of which *Homolobus meridionalis* is newly reported from Iran.

##### *Homolobus (Phylacter) meridionalis* van Achterberg, 1979

Figs 1–7

**MATERIAL.** Iran, Hamadan Prov.: Nahavand, Gian, 34°09'N, 48°13'E, 1650 m, 01.XI 2015, 1♀; Bu-Ali Sina Medicinal Plants Garden, 34°46'N, 48°30'E, 1950 m, Light trap, 10.VII 2015, 1♀, 1♂; leg. A. Rajabi Mazhar.

**DIAGNOSIS (FEMALE).** Body length 8.5–10.0 mm, yellowish; antenna with 47–48 segments, 3rd–6th segments of female without longitudinal keel at the inner side (Fig. 1); face rather flat, clypeus convex (Fig. 2), eye 1.9–2.0 times as long as temple (Fig. 3); propodeum smooth, with an irregular median carina; vein cu-a of fore wing inclivous, vein 2A of fore wing distinctly sclerotized basally, plical lobe of fore wing sparsely setose, vein 1A+2A of fore wings straight (Fig. 4), vein 2-SC+R of hind wing vertical (Fig. 5); tarsal claws with distinct tooth-shaped basal lobe (Fig. 7), length of hind femur 8.0 time its width; length of first metasomal tergite 3.0 times its apical width; ovipositor sheath long, 0.20–0.21 times as long as fore wing (Fig. 6).

**MALE.** Same as female, slender, body length 11.0 mm; antenna 48-segmented.

**BIOLOGY.** *Homolobus meridionalis* is reared from noctuid moth *Dryobota labecula* (Esper, 1788) (Lepidoptera: Noctuidae) collected on *Quercus* sp. in southern France (Shaw, 2015).

**DISTRIBUTION.** Palaearctic: Croatia, Cyprus, France, Greece, Italy, Morocco, Spain (Yu *et al.*, 2012), Iran (new record).

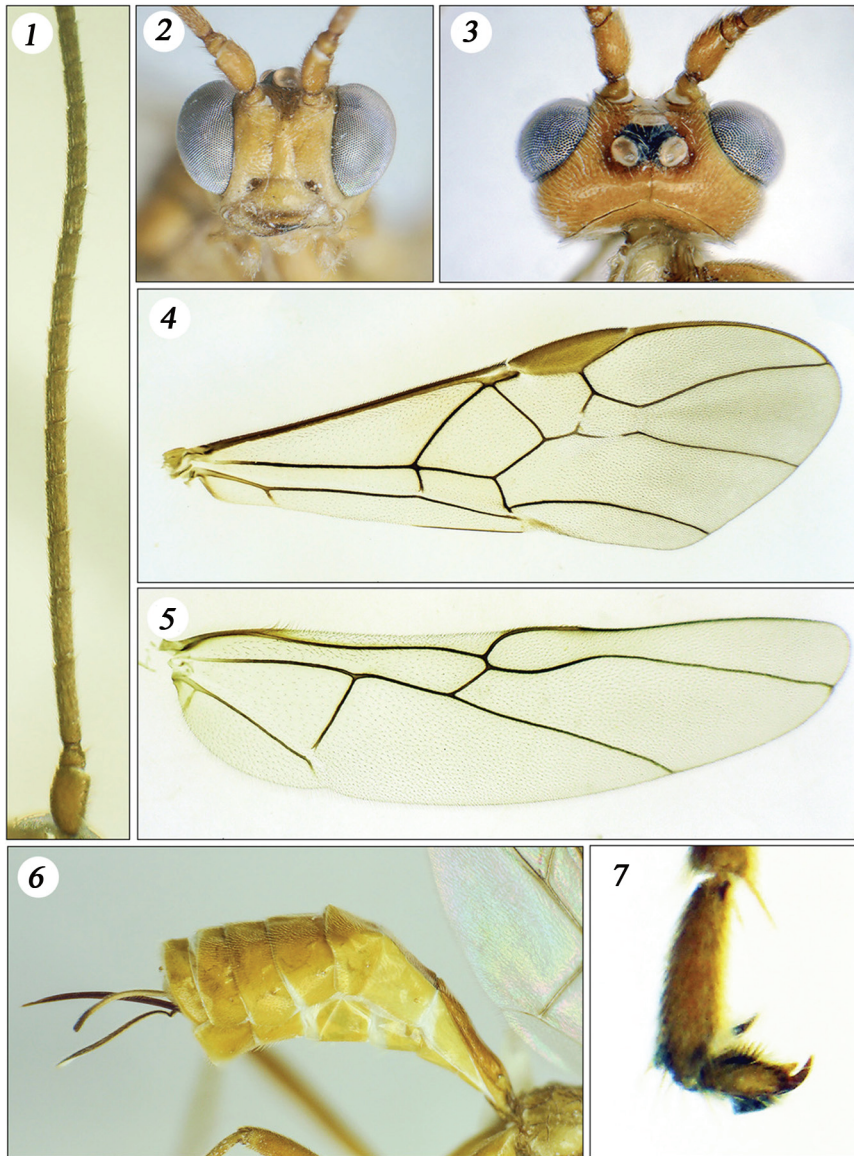
##### *Homolobus (Apatia) truncator* (Say, 1829)

**MATERIAL EXAMINED.** Iran, Hamadan Prov.: Gonbad, 34°41'N, 48°42'E, 2220 m, 5 & 19.X 2015, Light trap, 3♀, leg. A. Rajabi Mazhar.

**DIAGNOSIS (FEMALE).** Body length 6.5–6.9 mm, antenna with 50–53 segments, eye about 1.6 times as long as temple; propodeum smooth anteriorly, reticulate-rugose posteriorly, with a short irregular median carina; vein cu-a of fore wing slightly inclivous, vein 2A of fore wing sclerotized, plical lobe mainly bare, vein 2-SC+R of hind wing transverse; tarsal claws simple, length of hind femur 6.0 times its width; length of first metasomal tergite 3.2 times its apical width, ovipositor sheath 0.07 times as long as fore wing.

BIOLOGY. It is reared from caterpillar of Geometridae and Noctuidae as Lasiocampidae, Crambidae and Gelechiidae. (Yu *et al.*, 2012; Shaw, 2010).

DISTRIBUTION. Worldwide distributed species, including Iran (Yu *et al.*, 2012).



Figs. 1–7. *Homolobus meridionalis*. 1– inner side of basal segments of antenna; 2 – head, frontal view; 3 – head, dorsal view; 4 – fore wing; 5 – hind wing; 6 – metasoma, lateral view; 7 – tarsal claw.

### Key to Iranian subgenera and species of the genus *Homolobus*

1. Tarsal claws simple, without subapical tooth or lamella, inner hind claw ♀ convex or straight basally. (Subgenus *Apatia* Enderlein, 1920) ..... 2  
– Tarsal claws with a distinct subapical tooth or lamella, generally tooth-shaped (Fig. 7), inner hind claw ♀ concave ..... 3
2. Fourth labial palp segment 4.0 times as long as third one; eye about 1.6 times as long as temple in dorsal view; length of maxillary palp 1.3 times height of head .....  
..... *H. (A.) truncator* (Say, 1829)  
– Fourth labial palp segment 2.8 time as long as third one; eye about 2.3 times as long as temple in dorsal view; maxillary palp as long as height of head .....  
..... *H. (A.) ophioninus* (Vachal, 1907)
3. Vein 1A+2A of fore wing curved; 3rd–6th flagellar segments of female with longitudinal keel at the inner side; ovipositor sheath short, 0.04–0.07 times fore wing; vein 2-SC+R of hind wing transverse, longer than wide. (Subgenus *Chartolobus* van Achterberg, 1979) .....  
..... *H. (C.) infumator* (Lyle, 1914)  
– Vein 1A+2A of fore wing straight (Fig. 4); 3rd–6th flagellar segments of female without longitudinal keel at the inner side (Fig. 1); ovipositor sheath long (Fig. 6), 0.12–0.25X fore wing; vein 2-SC+R of hind wing vertical, wider than long (Fig. 5). (Subgenus *Phylacter* Reinhard, 1863) .....  
..... *H. (P.) meridionalis* van Achterberg, 1979

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