

Short communication

## *Amphipyra kautti* (Lepidoptera: Noctuidae: Amphipyrinae), new species for the Iranian fauna

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*Amphipyra kautti* (Lepidoptera: Noctuidae: Amphipyrinae) گونه‌ای جدید برای فون ایران

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### چکیده

در بررسی‌های فونستیک در سال ۲۰۱۱ در دامنه جنوبی رشته کوه‌های زاگرس در ایران، یک نمونه ماده از گونه *Amphipyra kautti* Hacker, 2002 متعلق به خانواده Noctuidae و زیرخانواده Amphipyrinae از مناطق کوهستانی در استان کهگیلویه و بویراحمد جمع‌آوری و شناسایی شد. این گونه که برای اولین بار از ایران گزارش می‌شود، همراه با ویژگی‌های افتراقی، تصویر الگوی بال و اندام تناسلی نمونه جمع‌آوری شده ارائه شده است. اطلاعات مربوط به یک گونه دیگر از همین جنس که در این مطالعه جمع‌آوری شده نیز ارائه شده است.

واژگان کلیدی: جدید، گزارش جدید، فون، پراکنش، *Amphipyra kautti*

دریافت: ۱۴۰۰/۱۱/۲۸، پذیرش: ۱۴۰۱/۰۳/۲۰

Fibiger & Lafontaine (2005) defined a new concept for the subfamily Amphipyrinae based on a single character of heavily sclerotised scaphium that is separated into two long, basally broad, tapered and apically pointed plates in male genitalia. Although, the two sclerotised plates are secondarily lost in some species. Lafontaine & Schmidt (2013) believe that more molecular work should be done to bring better resolution to the phylogenetic relationships of the tribes and subtribes of the Amphipyrinae. Recent phylogenetic research of Keegan *et. al.* (2019; 2021) resulted in several genera being transferred from Amphipyrinae to six different subfamilies, and it is expected that more members of Amphipyrinae will be reassigned as further research is done. Amphipyrinae s.s. consist

Received: 17 February 2022, Accepted: 10 June 2022

Subject Editor: Ebrahim Ebrahimi



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largely of Lafontaine & Schmidt's (2010) tribes Amphipyriini and Psaphidini, along with the East Asian genus *Nacna* Fletcher (Keegan *et. al.*, 2019).

Autapomorphic characters of the genus *Amphipyra* Ochseneheimer, as stated by Fibiger & Hacker (2007), are as follows: abdomen extremely flattened, laterally with a broad fringe of long scales; valvae without corona and ampulla absent. Several species of *Amphipyra* undergo summer diapause and their larvae usually feed in the canopy of trees.

Among nearly 49 Palearctic *Amphipyra* species, twelve species have been recorded from Iran (Hacker, 1990; Ebert & Hacker, 2002; pers. Commun. H. Rajaei). In this paper, *Amphipyra kautti* Hacker, 2002 which was collected from Zagros Mountain ranges is newly reported for the fauna of Iran. Two other species from Amphipyriinae which were collected during our survey are also presented.

Sampling was carried out by light traps powered by 12-volt batteries and 8-watt UVB light tubes. Materials were deposited in the Insect and Mite Collection of Ahvaz, Plant Protection Department, Shahid Chamran University of Ahvaz. Genitalia slides were prepared following Fibiger (1997). Identifications were done according to available literature such as Hacker (1998), Fibiger & Hacker (2007) and by studying museum materials at Hungarian Natural History Museum, Budapest by the first author. Systematics and nomenclature are according to Fibiger & Hacker (2007), with later modifications by Keegan *et. al.* (2019; 2021). Adults were photographed by Canon EOS 600D and genitalia with a Canon SX40 attached to an Olympus SZX12 stereomicroscope.

#### **Noctuidae Latreille, 1809**

#### **Subfamily Amphipyriinae Guenée, 1837**

#### **Tribe Amphipyriini Guenée, 1837**

#### ***Amphipyra kautti* Hacker, 2002 (Fig. 1)**

**Material examined:** Kohgiluyeh-va-Boyerahmad Prov., Kakan village, 30°32'22" N 51°49'56" E, 2500 m, 11.VIII. 2011, 1 female.

**Identification:** Wingspan 29 mm (Fig. 1A). Antenna filiform. Overall color of head, thorax, legs, abdomen, and wings beige-brown, scattered with creamy or light brown dots; antemedian line dark brown and wavy; basal streak dark brown; postmedian line with two hump-shaped wave; stigmata are not prominent and indicated by small indistinct whitish or greyish dots; Outwards from the postmedian line, the ground has a lighter hue, then become darker towards the terminal area. Hindwing light brown, lighter basally, with a weakly marked medial line.

Female genitalia (Fig. 1B). Ovipositor short, rounded, anterior and posterior apophyses almost with the same size, narrow ostium bursae scobinate especially in the basal part of ductus bursae, a rounded hump on subbasal part of corpus bursae where ductus seminalis arises. The basal half of corpus bursae is cylindrical and its apical half is globular.

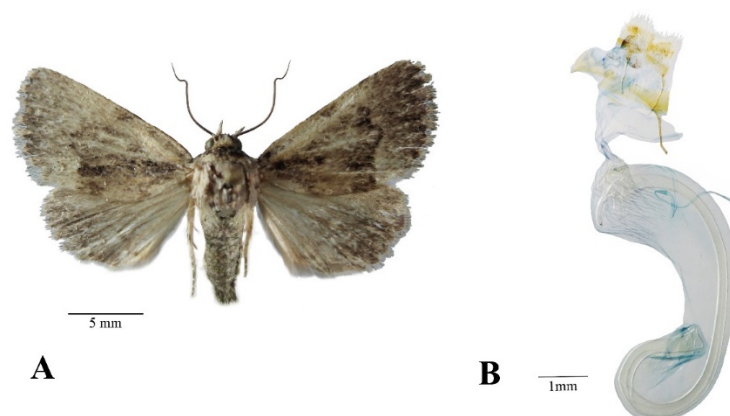
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This species is smaller than the closely related *A. micans* Lederer, 1857, and *A. molybdea* Christoph, 1867. Marginal, ante- and postmedian areas are somewhat more distinct than in *molybdea*. The latter elements are much more conspicuous in *A. micans*. Chocolate-brown basic color is particularly striking in *A. kautti*.

**Distribution:** This species has only been recorded from the type locality in Turkey (Demirkazik, Ala-Dag, Toros Mts, Nigde Province), by Hacker (1998). This is the first record in Iran from southern parts of the Zagros mountain range in Kohgiluyeh-va-Boyerahmad province.

**Bionomy:** It is attracted to light. Early stages and host plants are unknown in Iran and elsewhere.

**Remark:** *Amphipyra kautti* was originally described as the subspecies *Amphipyra submicans kautti* Hacker, 1998 from Turkey (Hacker, 1998). Then, it was raised to species by Fibiger & Hacker (2007). *A. submicans* Kuznetsov, 1958 is currently synonymized with *A. molybdea*.



**Fig. 1.** Wing pattern of *Amphipyra kautti* (A) and its female genitalia (B), new record for the fauna of Iran.

#### *Amphipyra tragopoginis* (Clerck, 1759)

**Material examined:** Khuzestan Prov.: Baghmalek, Mal Aqa, 31°35'57" N 50°00'50" E, 1100 m, 10.V.2011, 2 males.

**Distribution:** It is distributed in Europe, North Africa, Turkey, Levante area, Iran, Caucasia and Transcaucasia, Russia, Central Asia, Afghanistan, Pakistan, and India; and introduced in North America (Fibiger & Hacker, 2007). In Iran, it was recorded from Fars, Kohgiluyeh-va-Boyerahmad, Kordestan, Lorestan (Ebert & Hacker, 2002) and Kerman (Hacker & Meineke, 2001).

**Bionomy:** This species occurs in forests and open areas both in rocky places and grasslands. The larvae are polyphagous on low plants including *Taeaxacum*, *Tragopogona*, *Verbascum*, *Galium*, *Melilotus* (Fibiger & Hacker, 2007).

We would like to express our sincere gratitude to Dr. Péter Gyulai for help in species identification and Dr. Hossein Rajaei for help in providing data on *Amphipyra* recorded species of Iran. The authors also sincerely thank Mr. M. K. Dehghani for his kind help during

the sampling programs. This study was financially supported by the Shahid Chamran University of Ahvaz (#SCU.AP1400.671).

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