



## First report of Waterlily Leafcutter moth (*Elophila responsalis* Walker, 1866) from Rajasthan, India

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### Abstract

The moth species *Elophila responsalis* is commonly known as the waterlily leafcutter moth. In India, it was previously recorded in different regions, but the present observation provides the first record of an *Elophila responsalis* from Rajasthan state.

**Keywords:** *Elophila responsalis*, Moth, Rajasthan

### Introduction

The order Lepidoptera comprises Butterflies and Moths. According to a recent study, 1,57,424 Lepidopteran species have been reported globally (van Nieukerken *et al.*, 2011) [13]. Of them, 13,500 species of moths have been reported from India (Chandra, 2011). In Rajasthan, 56 species of moths belonging to 41 families were observed from Ajmer (Sharma, 2016) [11]. A 16 species of moth belonging to 5 families were observed from the Sariska Tiger Reserve, Alwar (Dar and Jamal, 2021c) [4]. A 34 species of moth belonging to 26 genera and 05 families were recorded from three sites (Sariska Tiger Reserve, Nahargarh Biological Park, Keoladeo National Park) of the Aravalli Hill Range of Rajasthan state (Dar *et al.*, 2021) [5]. A 19 species of moths under 18 genera were recorded from Jodhpur (Gehlot *et al.*, 2021) [6]. A total of 154 species of moths belonging to 18 families were observed from Dungarpur, Banswara, Udaipur, and Rajsamand districts of Southern Rajasthan (Koli and Prajapati, 2021) [8]. A 28 species of moths belonging to five families were recorded from Jaipur city (Savita and Trigunayat, 2021) [9]. A 65 species belonging to 13 families were recorded from Jaipur city (Savita and Trigunayat, 2023) [10]. A 43 species from 09 families were recorded from Jhalawar district of Rajasthan (Jain and Verma, 2023) [7]. The dramatic decrease of moths is believed to have drastic effects on birds, bats, and plants due

to the keystone role of moths in an ecosystem (Dar and Jamal, 2021a, b & c).

### Materials and Methods

Opportunistic observations were also made in Bhilwara city of Rajasthan. Analysis of the “Moths of India” website for reporting this moth species from the country's different states. Photographs of moth species was taken with the help of Nikon p500 camera.

### Results and Discussion

The moth *Elophila responsalis* is primarily known from Australia, where it has been found in Queensland. *Elophila responsalis*, commonly known as “waterlily leafcutter moth,” has been observed in different states of the country, including Maharashtra, Delhi, Gujarat, Chhattisgarh, Karnataka, West Bengal, Punjab, and Kerala (Table 1). On 21.09.2022, we first observed this species in Rajasthan (Tilak Nagar, Bhilwara) (Plate: 1). This moth species is known to feed on the leaves of plants like *Marsilea*. The wingspan is about 20 mm. The wings have a brown, white, and yellow pattern.

The species was reported in different states of the country, including Maharashtra, Delhi, Gujarat, Chhattisgarh, Karnataka, West Bengal, Punjab, and Kerala earlier (Table 1). Therefore, the present paper reports this species for the first time from Rajasthan, India.

**Table 1:** First reporting of *Elophila responsalis* in India.

S.no.	State	Date of reporting	Observers
1.	Maharashtra	20.08.2020	Amol Prakash Kambli
2.	Delhi	23.08.2020	Sourabh Kumar Singh
3.	Gujarat	08.10.2020	Rajesh Prabhakar Mahajan
4.	Chhattisgarh	03.05.2021	Gulsan Kumar
5.	Karnataka	20.07.2021	Tarun Karmakar & Pritha Dey
6.	West Bengal	26.08.2021	Subrata Majumdar
7.	Punjab	02.08.2022	Rajesh Prabhakar Mahajan
8.	Kerala	11.02.2023	Seema Merchant

(Source: <http://www.mothsofindia.org>)

*Elophila* spp.

Media code: MOI-pnx968



Tilak Nagar Bhilwara, Bhilwara District, Rajasthan, India. 2022/9/21. © Anil Tripathi

**Plate 1:** Moth *Elophila responsalis* reported from Bhilwara, Rajasthan, India**Acknowledgements**

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