SHILAP Revista de lepidopterología, 50 (197) marzo 2022: 115-119 eISSN: 2340-4078 ISSN: 0300-5267
https://doi.org/10.57065/shilap.199

New addition to the larval food plants of *Trypanophora semihyalina* Kollar, [1844] from India (Lepidoptera: Zygaenidae)

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Abstract

Rubus ellipticus Smith 1815 (Rosaceae) is reported as new larval food plant for *Trypanophora semihyalina* Kollar, [1844] for the first time from India.
KEY WORD: Lepidoptera, Zygaenidae, *Trypanophora semihyalina*, food plants, India.

Nueva planta nutricia de *Trypanophora semihyalina* Kollar, [1844] de India (Lepidoptera: Zygaenidae)

Resumen

Se cita por primera vez a *Rubus ellipticus* Smith 1815 (Rosaceae) como nueva planta nutricia para *Trypanophora semihyalina* Kollar, [1844] en India.
PALABRAS CLAVE: Lepidoptera, Zygaenidae, *Trypanophora semihyalina*, planta nutricia, India.

Introduction

Lepidoptera comprises of Butterflies and Moths. According to VAN NIEUKERKEN *et al*. (2011), 157,424 species of Lepidoptera under 15,578 genera have been reported globally. 13,500 species of moths have been reported from India (CHANDRA, 2011). Moths are characterized by drably-colored scales on the body, phytophagous and predominantly nocturnal nature. They are also considered vital for ecosystem services because of various roles such as agricultural pests (SHARMA & BISEN, 2013), food for mammals (VAUGHAN, 1997), birds (WILSON *et al*., 1999), night pollinators (MACGREGOR *et al*., 2015). They are very sensitive to climate changes and vegetation alterations, making them an important group for monitoring climate and habitat changes (DAR & JAMAL, 2021a). The sudden decline of moths has severe effects on birds, bats and plants because of keystone role of moths in an ecosystem (DAR & JAMAL, 2021b). *Trypanophora semihyalina* Kollar, 1844 is a species of moth in the Zygaenidae family. It is found in south-east Asia, including India, China, Hong Kong and parts of Taiwan (ANONYMOUS, 2022).

Previous recorded food plants of this moth caterpillar are *Barringtonia acutangula* (L.) Gaertn. (Family: Lecythidaceae), *Bombax ceiba* Linnaeus (Malvaceae), *Careya* sp. Roxb. (Lecythidaceae), *Carissa carandas* (Linnaeus Apocynaceae), *Gardenia* J. Ellis (Rubiaceae), Holarrhena sp. R. Br. (Apocynaceae), *Lagerstroemia* including *Lagerstroemia indica* (L.) Pers. (Lagerstroemia) and *Lagerstroemia speciosa* (L.) Pers. (Lagerstroemia), *Ricinus communis* Linnaeus (Euphorbiaceae), *Rosa* sp. Linnaeus (Rosaeceae), Shorea robusta Roth (Dipterocarpaceae), *Terminalia* including *Terminalia*

catappa Linnaeus (Combretaceae) and *Terminalia tomentosa* Linnaeus (Combretaceae) and *Ziziphus* including *Ziziphus mauritiana* Lam. (Rhamnaceae) (ROBINSON *et al*., 2010). MESHRAM & GARG (2000) reported this moth as a defoliator of *Gmelina arborea* Roxb. (Lamiaceae). This caterpillar also seen as pest on *Mangifera indica* Linnaeus (Anacardiaceae) in southern West Bengal (JHA & PAUL, 2002). *Psidium guajava* Linnaeus (Myrtaceae) is also reported as larval host plant from West Bengal in previous studies (ARAJUSH PAYRA, 2020).

Results and discussions

On 31-VIII-2019, First author found the caterpillar (Figs 3-4) of *Trypanophora semihyalina* Kollar feeding on *Rubus ellipticus* Smith (Rosaceae) inside Baba Ghulam Shah Bashah University in Rajouri district of Jammu and Kashmir, India at an altitude of around 1200 m and the coordinates were recorded as (33º23'38.2'' N, 74º20'36.8'' E) (Fig. 4). After August same species caterpillar was found on 6-IX-2019 and 2-XI-2019 on *Rubus ellipticus*. Caterpillar was showing defense (Fig. 1) also on touching the leaf in the form of watery drops like.

Acknowledgement

Authors are thankful to Mr. Sankararaman H for the identification of caterpillar of *Trypanophora semihyalina* Kollar, [1844] and Authors are also very thankful to Sh. Om Prakash Sharma (IFS Retd.) for the identification of food plant *Rubus ellipticus* Smith, 1815.

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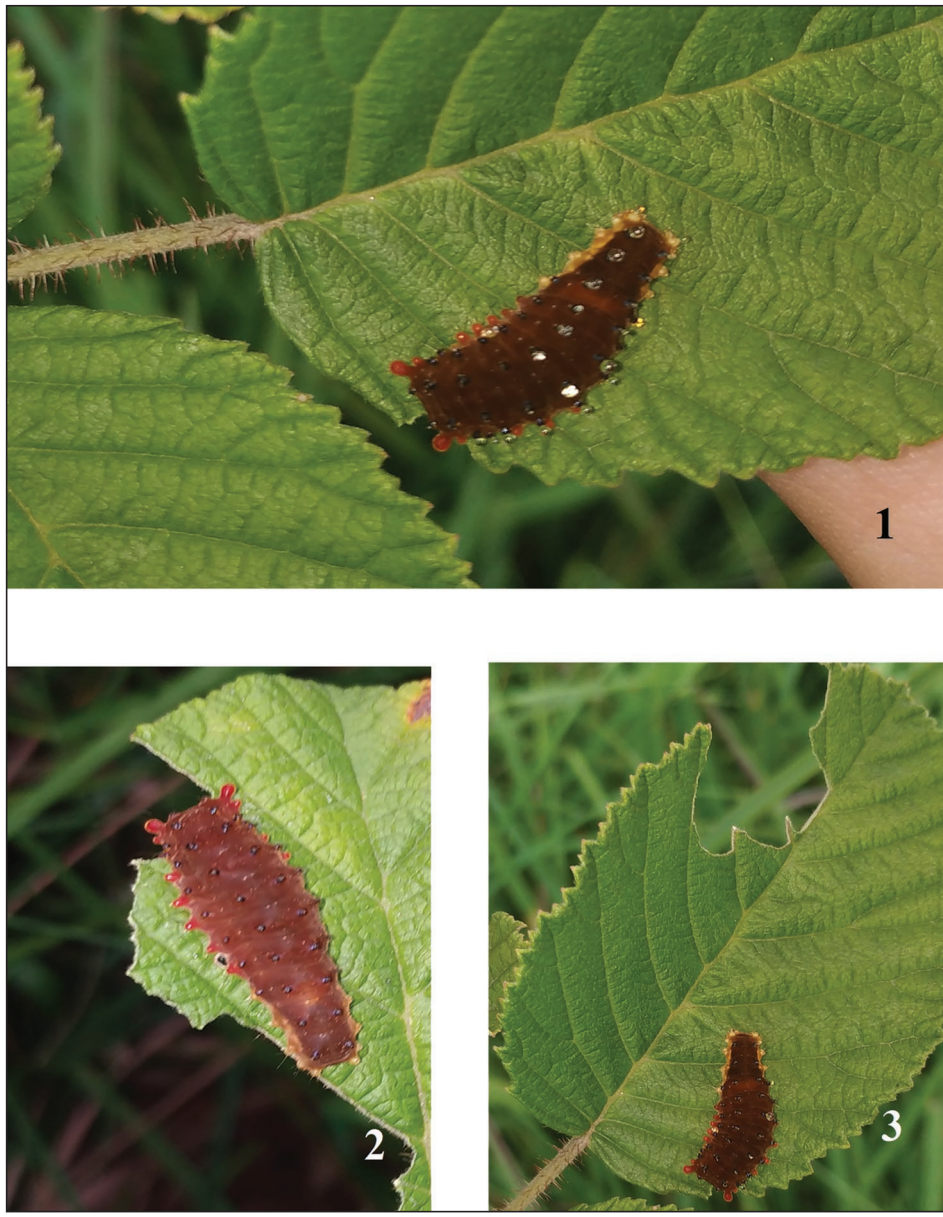
(Recibido para publicación / *Received for publication* 24-VII-2021)
(Revisado y aceptado / *Revised and accepted* 30-VIII-2021)
(Publicado / *Published* 30-III-2022)



Figures 1-3.– 1. Caterpillar of *Trypanophora semihyalina* Kollar showing defense. **2-3.** Caterpillar feeding on *Rubus ellipticus*.

Figure 4.– A map showing the Location of *Trypanophora semihyalina* caterpillar in Rajouri district of Jammu and Kashmir, India. (Map source: Google Earth Maps).