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***Epiblema cnicicolana* (Zeller, 1847) (Lepidoptera: Tortricidae) from Adygea – the first record in Russia, the Caucasus and the easternmost locality of the species**

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Abstract. *Epiblema cnicicolana* (Zeller, 1847) (Lepidoptera: Tortricidae: Olethreutinae) is recorded from Russia for the first time. A single male specimen was collected at light in a fruit and berry garden near the settlement of Kelermesskaya, Republic of Adygea (North-Western Caucasus). This record significantly extends the known geographic range of the species to the north-east. The previously known range of this European species reached as far east as Slovakia and Hungary. Detailed descriptions of the adult habitus and male genitalia are provided, along with diagnostic comparisons with closely related species. The recorded species differs from other representatives of the genus *Epiblema* Hübner, [1825] in its oval uncus, long socii, relatively narrow cuculli, and the absence of a pronounced projection at the ventral angle of the valvae. In terms of the genitalia structure, it is most similar to *E. inulivora* (Meyrick, 1932), which occurs in the East Caucasus.

Key words: Lepidoptera, Tortricidae, *Epiblema cnicicolana*, first record, Adygea, Russia.

***Epiblema cnicicolana* (Zeller, 1847) (Lepidoptera: Tortricidae) из Адыгеи – первая находка в России, на Кавказе и самое восточное местонахождение вида**

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Резюме. Впервые на территории России обнаружена листовёртка *Epiblema cnicicolana* (Zeller, 1847) (Lepidoptera: Tortricidae: Olethreutinae). Единственный самец пойман на свет на участке плодово-ягодного сада в станице Келермесской Республики Адыгея. Данная находка дополняет известные сведения о распространении вида. Ранее известный ареал этого европейского вида достигал на востоке Словакии и Венгрии. Приведены описания габитуса, гениталий и сравнение с близкими видами. От других представителей рода *Epiblema* Hübner, [1825] выявленный вид отличается овальным укусом, длинными социями, относительно узкими кукулюсами и отсутствием выраженного выступа в нижнем углу вальв. По строению копулятивного аппарата наиболее схож с *E. inulivora* (Meyrick, 1932), обитающим на Восточном Кавказе.

Ключевые слова: Lepidoptera, Tortricidae, *Epiblema cnicicolana*, первая находка, Адыгея, Россия.

Introduction

The global fauna of tortricid moths of the genus *Epiblema* Hübner, [1825] comprises more than 100 species [GBIF, 2025]. Most of them are distributed in the Holarctic region, while several occur in South Asia and Africa. Twenty-eight species are known from Russia [Sinev et al., 2019]. Of these, ten have been recorded in the Western and Central Caucasus of Russia (Krasnodar and Stavropol regions, Adygea, Kabardino-Balkaria, Karachay-Cherkessia, North Ossetia – Alania and Ingushetia) [Sinev et al., 2019].

Epiblema cnicicolana (Zeller, 1847) is widely distributed in Europe [Kuznetsov, 1978; *Epiblema...*, 2025]. It has been recorded in the Czech Republic [Laštůvka, Liška, 2011], Hungary [Pastorális, Buschmann, 2018], the United Kingdom [Agassiz et al., 2024], Greece [Huemer et al., 2025], as well as in Spain, France, Italy, the Netherlands, Germany, Austria, Slovenia, Slovakia and Romania [*Epiblema...*, 2025]. Field studies of tortricid

moth communities conducted by the authors in 2025 in the Republic of Adygea (the North-Western Caucasus) (Fig. 2) yielded the first record of *E. cnicicolana* for Russia.

Material and methods

An automatic light trap equipped with a DRV 500W E40 TDM mercury-tungsten lamp was used as a collection device. The trap was combined with a white reflective screen to increase its efficiency. The device was powered by a 220 V AC mains supply.

The adult image was taken with a Canon EOS 800D camera. Photographs of the male genitalia were taken using an MC USB 3.0 C-mount digital camera mounted on a LOMO MSP-1 stereomicroscope. The genitalia slide was prepared following the standard method [Robinson, 1976]. Species identification was based on the structure of the male genitalia within the genus *Epiblema* [Pierce, Metcalfe, 1922; Chambon, 1999; *Epiblema...*, 2025] (Figs 4–6).

Subfamily Olethreutinae Walsingham, 1895**Tribe Eucosmini Meyrick, 1909****Genus *Epiblema* Hübner, [1825]*****Epiblema cnicicolana* (Zeller, 1847)**

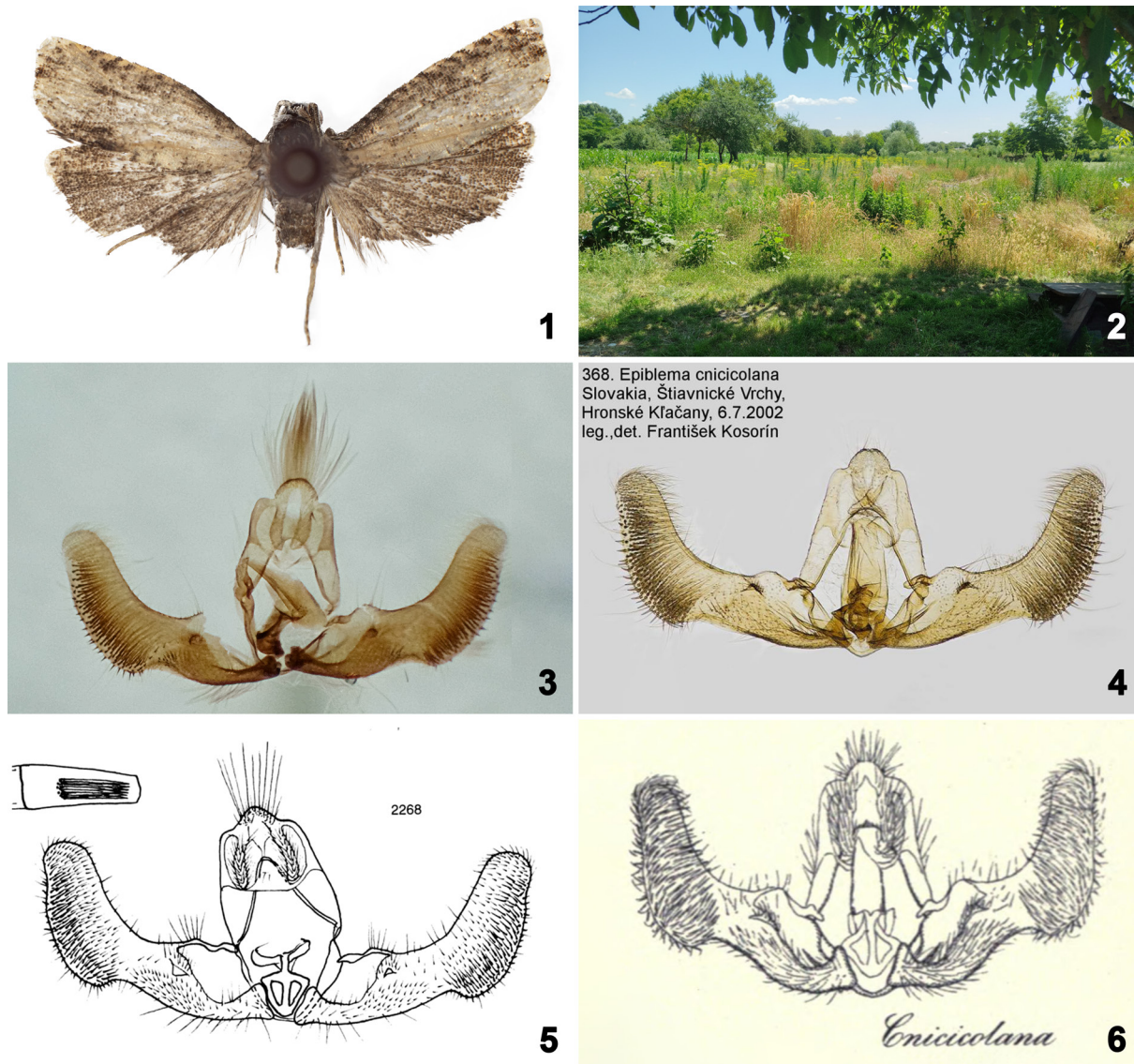
(Figs 1, 3)

Material. 1♂ (Zoological Museum of Southern Federal University, Rostov-on-Don, Russia), Russia, Republic of Adygea, Giaginskaya Distr., Kelermesskaya Cossack village, 44°47'55.9"N / 40°07'30.8"E, homestead, fruit and berry garden plot, 17.07.2025 (V.G. Slyunkova).

Notes. According to the Lepiforum database [Epiblema..., 2025], the species is monophagous on *Pulicaria dysenterica* (L.) Gaertn. ex Bernh., 1800. This plant is not agriculturally significant, prefers moist soils, and typically grows in meadows near water bodies. *Epiblema cnicicolana* is likely a meadow, hemi-hygrophilous species.

Literature sources indicate imago flight activity from May to June [Epiblema..., 2025; Jonko, 2026]. However, the specimen discussed here was collected in mid-July. Its condition suggests that the adults flight period in the region was probably nearing its end.

Brief morphological characteristics of the collected specimen. The specimen is worn. Habitus resembles that of *E. cirsiana* (Zeller, 1843), but it is considerably smaller, with a forewing length of 12 mm. On the mounted specimen, two white spots are clearly discernible: the larger one in the dorsal part of the wing and the second smaller, located below and closer to the tornus (Fig. 1). The characteristic preapical costal strigulae typical for the tribe are distinctly visible along the costa.



Figs 1–6. *Epiblema cnicicolana*, dorsal view, habitat, male genitalia.

1 – male, general view (photo by N.S. Elfimova); 2 – habitat (photo by T.V. Slyunkova); 3–6 – male genitalia. 4 – photo by F. Kosorin [Epiblema..., 2025]; 5 – after Chambon [1999: fig. 2268], aedeagus removed and shown in left upper corner; 6 – after Pierce and Metcalfe [1922: plate XXIII].

Рис. 1–6. *Epiblema cnicicolana*, общий вид сверху, местообитание, гениталии самца.

1 – самец, общий вид (фото Н.С. Елфимовой); 2 – местообитание (фото Т.В. Слюньковой); 3–6 – гениталии самца. 4 – фото Ф. Косорина [Epiblema..., 2025]; 5 – по Шамбону [Chambon, 1999: рис. 2268], эдеагус извлечен и помещен в левый верхний угол; 6 – по Пирсу, Меткалфу [Pierce, Metcalfe, 1922: таблица XXIII].

Table 1. Comparison of diagnostic characters in male genitalia of *Epiblema cnicicolana* and *E. inulivora*.Таблица 1. Сравнение диагностических признаков в строении гениталий самцов *Epiblema cnicicolana* и *E. inulivora*.

Morphological structure / Морфологическая структура	<i>E. cnicicolana</i>	<i>E. inulivora</i>
Uncus Ункус	Oval, almost round Овальный, почти круглый	Conical Вытянутый, заостренный
Cucullus Кукуллус	Narrower apex, with a slight curvature Вершина уже, присутствует небольшой изгиб	Broader square-shaped apex Вершина более широкая, квадратная
Valva Вальва	Neck of the valva wide. Large, deep basal cavity; short distance to lower margin / Шейка широкая. Базальная ямка большая, глубокая, расстояние до нижнего края небольшое	Neck of the valva narrow. Shallow basal cavity; greater distance to lower margin / Шейка узкая. Базальная ямка неглубокая, расстояние до нижнего края больше
Harpe Гарпа	Pointed, positioned closer to the upper margin Заостренная, расположена ближе к верхнему краю	Rounded, located lower – closer to the lower margin of the valva / Округлая, расположена ниже – ближе к нижнему краю вальвы

The genitalia have the typical structure of the genus *Epiblema*. The examined specimen is distinguished by a rounded uncus, long, setose socii and the elongated tegumen. The valvae are of medium width, elongated, with a small basal processes, rounded costa and harpe. The moderately setose cucullus is broad at the base and tapers towards the distal apex. An isolated tuft of setae is presented on the sacculus. A notch on the ventral margin of the valva anterior to the ventral angle of the cucullus is absent, which is not a universal feature within *Epiblema*. The aedeagus and juxta exhibit morphology commonplace for the genus; the cornuti are deciduous (Fig. 3).

The species differs from other representatives of the genus *Epiblema* by its oval uncus, long socii, narrow cuculli, and the absence of a pronounced projection at the ventral angle of the valvae. In the genitalia structure, it is most similar to *E. inulivora* (Meyrick, 1932), which occurs in the East Caucasus, including the Chechen and Dagestan republics [Sinev et al., 2019]. A comparison of the diagnostic characters is presented in Table 1.

Possible explanations for the record of *E. cnicicolana* in Adygea. The species has the European range and a tendency to expand southeastward [*Epiblema*..., 2025]. Given the climatic similarity to the southern regions of Europe, Adygea offers favourable conditions for species already adapted to a moderately warm subcontinental climate. Landscapes in the Western Caucasus that contain suitable habitats with populations of *Pulicaria dysenterica* [*Pulicaria*..., 2026] may function as ecological refugia for the species in question. The rest of Eastern Europe, from which it has not been recorded, represents a disjunction in its range, although this pattern does not preclude the existence of small local populations in intermediate areas.

However, the primary reason, in our opinion, is the insufficient study of the microlepidoptera fauna in southern Russia, including the North-Western Caucasus, despite a relatively substantial number of relevant publications [Shchurov, 2002, 2004a, b, 2007, and others]. The situation is further complicated by the presence of many taxonomically challenging species.

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