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***Mecyna lutealis* (Duponchel, 1832), a new Crambid moth
(Lepidoptera: Crambidae) in the fauna of Russia**

***Mecyna lutealis* (Duponchel, 1832) – новая огневка
(Lepidoptera: Crambidae) в фауне России**

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Ключевые слова: Lepidoptera, Crambidae, *Mecyna lutealis*, Южный Урал.

Abstract. Crambid moth *Mecyna lutealis* (Duponchel, 1832) is reported from the South Urals and it is the first-time record of this species in Russia. Male and female genitalia of *M. lutealis* and the close species *Mecyna flavalis* ([Denis et Schiffermüller], 1775) are illustrated.

Резюме. Огневка *Mecyna lutealis* (Duponchel, 1832) приводится для Южного Урала, и это первая находка вида в России. Проиллюстрированы гениталии самцов и самок *M. lutealis* и близкого вида *Mecyna flavalis* ([Denis et Schiffermüller], 1775).

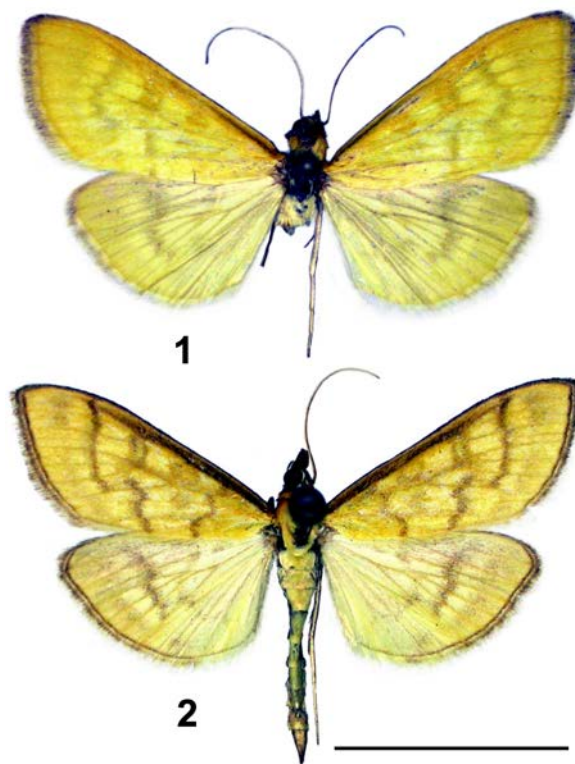
The genus *Mecyna* Doubleday, 1849 is represented by five species in the fauna of Russia. One of them, *M. flavalis* ([Denis et Schiffermüller], 1775), is a trans-palaearctic widely distributed species. Taxon *lutealis* (described as *Botys lutealis* Duponchel, 1832) was considered a synonym of *M. flavalis* for a long time, but Marion [1951] showed differences between *M. flavalis* and *M. lutealis*, proving the latter to be a good species.

Mecyna lutealis inhabits the south of Central Europe. According to Slamka [2013] it is present in Spain, France, Switzerland, Germany, Italy, Czech Republic. The eastern border of the range goes through Greece, Serbia, and Romania. So, the finding of this species in the South Urals is rather unexpected, especially as no records from European part of Russia are known.

Three specimens were taken by the author in different localities in the Guberlinskie Mts., South Urals. All findings were made by light-trapping in xerothermic open habitats.

Material. Russia, Orenburg Region, Kuvandyk District: env. of Syrt Mt., 26.06.2011, 1 ♀ (collection of Zoological Institute of RAS, Saint-Petersburg, Russia); 2 km SW of vill. Beloshapka, 4.06.2011, 1 ♂ (collection of E. Tsvetkov); SE of vill. Podgornoe, 21.06.2011, 1 ♀ (collection of E. Tsvetkov).

Males and females of *M. lutealis* and *M. flavalis* are well distinguished by genitalia. The structure of cornuti in vesica is different in males (Figs 3–6), however it varies within a species. Vesica is armed with two large and a few smaller cornuti in both species, but in *M. flavalis* conspicuous long cornutus is developed (among the smaller ones, which sometimes form a patch). In males of the second species vesica is armed with a horn-like stout cornutus and another



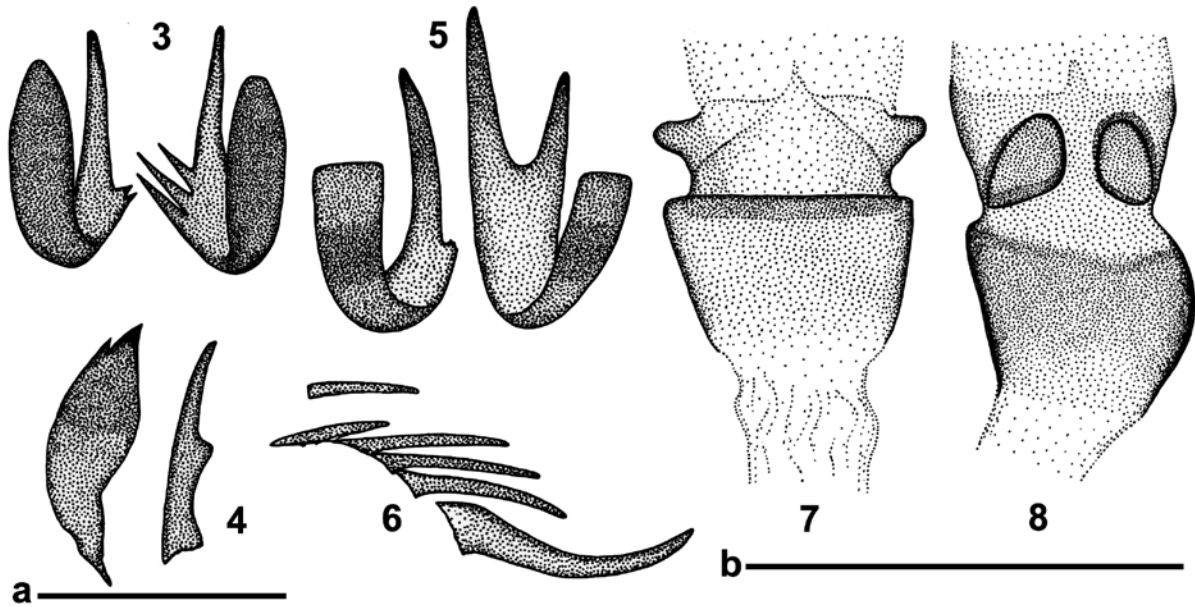
Figs 1–2. *Mecyna* sp., imago. Scale bar 1 cm.

1 – *Mecyna lutealis* (Orenburg Region); 2 – *Mecyna flavalis* (Stavropol Region).

Рис. 1–2. *Mecyna* sp., имаго. Масштабная линейка 1 см.

1 – *Mecyna lutealis* (Оренбургская обл.); 2 – *Mecyna flavalis* (Ставропольский край).

small cornutus or a patch. The structure of two large cornuti also has differences: in *M. flavalis* one of these cornuti bears two large processes, while in *M. lutealis* there is only one large process and from one to three small ones (on each of two large cornuti). Females differ by the shape of antrum (Figs 7, 8). Antrum of *M. lutealis* is symmetric with a pair of lateral processes lacking in antrum of compared species. Two wide ventral processes of antrum are characteristic for



Figs 3–8. Genitalia of *Mecyna* sp. (3, 4, 7 – *Mecyna lutealis*, Orenburg Region; 5, 6, 8 – *Mecyna flavalis*, Stavropol Region).
3–6 – cornuti in vesica (different groups in each species), scale bar *a* 0.25 mm; 7–8 – antrum of females, scale bar *b* 1 mm.

Рис. 3–8. Гениталии *Mecyna* sp. (3, 4, 7 – *Mecyna lutealis*, Оренбургская обл.; 5, 6, 8 – *Mecyna flavalis*, Ставропольский край).

3–6 – корнутусы везики (различные группы у каждого вида), масштабная линейка *a* 0.25 мм; 7–8 – антрумы самок, масштабная линейка *b* 1 мм.

M. flavalis. The latter species usually has better developed markings on the wings than *M. lutealis*. There is a slight difference in the shape of medial line on the hindwing: in *M. lutealis* the line is usually abruptly concave, forming a deep hollow, while the hindwing of *M. flavalis* is usually with medial line, forming a shallow hollow (Figs 1, 2).

References

- Marion H., 1951. *Mecyna lutealis* Dup. bona species et f. *citralis* H.-S. (Crambidae). *Revue française de Lépidoptérologie*. 13(1–2): 10–15.
Slamka F. 2013. Pyraloidea of Europe (Lepidoptera), Volume 3, Pyraustinae & Spilomelinae. Identification – Distribution – Habitat – Biology. Bratislava. 357 p.