

First record of *Nola crambiformis* Rebel, 1902 (Insecta: Lepidoptera, Nolidae) from the Russian Altai

Anton Volynkin

Altai State University, South Siberian Botanical Garden, Lenina str. 61, RF-656000, Barnaul, Russian Federation; Tigirek State Natural Reserve, Nikitina str. 111, office 42, RF-656043, Barnaul, Russian Federation
E-mail: volynkin_a@mail.ru

Abstract: A little-known species of Lepidoptera, *Nola crambiformis* Rebel, 1902, is recorded in the Russian Altai for the first time. This is an easternmost known locality of the species. Adults, male and female genitalia and the habitat of the species are illustrated.

Key words: Lepidoptera, Nolidae, *Nola*, Altai, Asia

The family Nolidae was definitively separated from Noctuidae Latreille, 1809 only several years ago (Nieukerken *et al.* 2011; Zahiri *et al.* 2011; Zahiri *et al.* 2012). The genus *Nola* Leach, 1815 (Nolidae: Nolinae) is widely distributed in all continents (except Antarctica) and contains more than 100 species in the Palaearctic Region (Zahiri *et al.* 2012). *Nola crambiformis* Rebel, 1902 was known only from the South Ural region in Russia (Figure 1). In 2006, Nupponen and Fibiger (2006) published a re-description and new data on *N. crambiformis* which confirm the wide distribution of the species in the southern Ural Mountains (Orenburg and Chelyabinsk Regions) (Figures 2, 6, 7). Later, Fibiger *et al.* (2009) reported *N. crambiformis* for West Kazakhstan (Uralsk), South-East Kazakhstan (Dzhungarian Alatau Mountains) and Uzbekistan (without locality).

From 2005 to 2011, the author conducted an intensive faunistic study of the Noctuoidea fauna of the Russian part of the Altai mountain country. The moths were collected using an ultraviolet and a mercury light-trap. The results of the study have recently been published (Volynkin 2012). The Nolidae fauna of the Russian Altai contained seven species, including three species of *Nola*: *N. karelica* Tengström, 1896, *N. aerugula* (Hübner, 1793) and *N. confusalis* (Herrich-Schäffer, 1847). In the summer 2012, two male specimens of *N. crambiformis* (Figures 3, 4 and 5) were collected in the southwestern part of the Russian Altai (Figure 8). This is an easternmost known locality of the geographical distribution of this species.

Nola crambiformis occurs in the summer in the various open steppe and meadow habitats (Fibiger *et al.* 2009). In the Russian Altai, the species was found in the rocky steppe slope with the dominance of *Artemisia* spp. and shrubs of *Caragana* spp., *Spiraea* spp., *Ribes* spp. and *Berberis sibirica* Pall. (Figure 9). The Altaic collection site of *N. crambiformis*

is up to 500 km distant from the previously known localities in southeast Kazakhstan.

MATERIAL EXAMINED: 2 males, 1 female, "04-07.VII.2012, Russia, Altai Republic, Ulagan district, Aigulaksky Ridge, vicinity of Aktash village, 1400 m, 50°19'14" N, 087°36'01" E, shrubby stony steppe slope. At light-trap. Volynkin A.V. leg.", Slides AV1193, AV1194 Volynkin (the specimens are deposited in the collection of Anton Volynkin, Barnaul, Russia).

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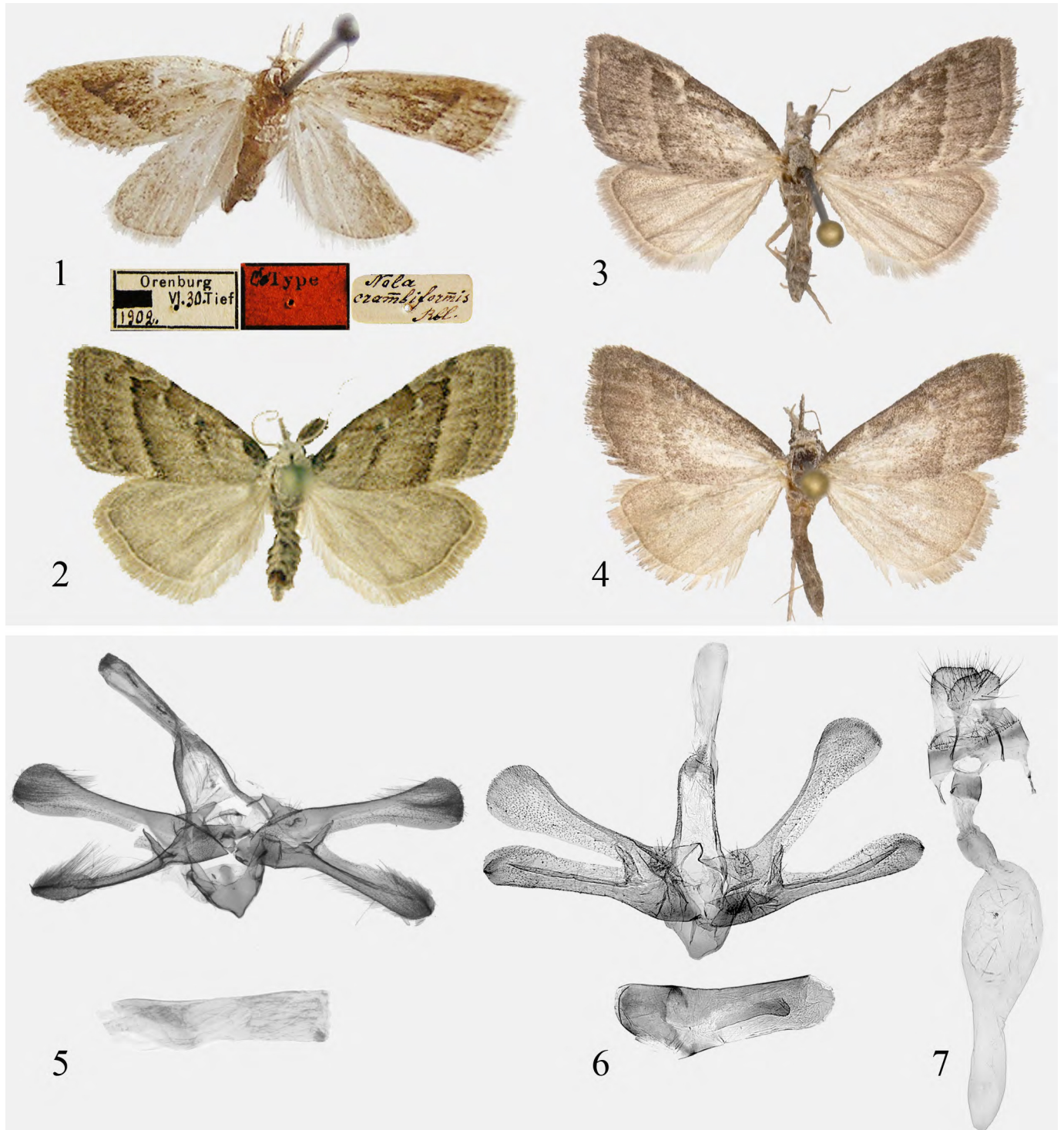
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Figures 1–7. *Nola crambiformis*, adults and genitalia: **1**) syntype female, Orenburg (ZISP); **2**) male, Ural, Burannoe (coll. K. Nupponen) (photo by V.S. Kononenko); **3**) male, Russia, Altai Mts, Aktash vill. (coll. AVB); **4**) male, same locality (coll. AVB); **5**) male genitalia, Russia, Altai Mts, Aktash vill., slide AV1194 Volynkin; **6**) male genitalia, Russia, South Ural, slide 3.02122005 Nupponen (photo by V.S. Kononenko); **7**) female genitalia, Russia, South Ural, slide 1.02IV2006 Nupponen (photo by V.S. Kononenko).



Figure 8. Map of a new locality of *Nola crambiformis*.



Figure 9. Russia, Altai Republic, Ulagan district, Aigulaksky Ridge, vicinity of Aktash village, 1,400 m, 50°19' N, 087°35' E, the habitat of *Nola crambiformis*.