

First record of *Syngrapha diasema* (Lepidoptera: Noctuidae) from Kolguev Island, Arctic Russia

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Abstract. The Lepidoptera fauna of the Kolguev Island is poorly known, with available samples being primarily collected from its southern area around the Bugrino Village. Here we report the first record of *Syngrapha diasema* from Kolguev, which is also the first Noctuidae member being accounted in this fauna. In total, 20 Lepidoptera species are recorded from this island.

Key words: Biogeography, Arctic islands, Barents Sea Region, moths, Noctuidae, Plusiinae, new records.

The Lepidoptera fauna of the Kolguev Island includes 19 species, although this low value is highly underestimated, with additional records of new species being quite possible (Kullberg et al. 2019). Several moth and butterfly families were still not reported from Kolguev, e.g. Noctuidae. There are two papers describing ecology and phenology of butterflies and one tiger moth species on this Arctic island (Bolotov 2012, Bolotov et al. 2015). Despite the fact that the Kolguev Island is completely covered by dwarf-shrub and sedge-moss tundra ecosystems, taiga forest moth and butterfly species are prevailed in its fauna (Kullberg et al. 2018). This study aims to describe the first record of *Syngrapha diasema* (Boisduval, 1829) from Kolguev, a first Noctuidae species encountered in this insular fauna.

We collected moth samples with a butterfly net along 170 km long route on the Kolguev Island on 4-18 August 2018 (from the Bugrino Village to the interior of the island, to the Krivoie Lake and the upstream of the Bugryanka River).

Moths were dissected using a standard approach (Schauff 2001). Images of specimens were taken with a digital camera (Canon EOS 80D with Canon EF 100mm f/2.8L Macro IS USM). The specimens are deposited in the collection of the Russian Museum of Biodiversity Hotspots [RMBH], Federal Center for Integrated Arctic Research, Russian Academy of Sciences, Arkhangelsk, Russia.

***Syngrapha diasema* (Boisduval, 1829) – Figs 1, 2.**

Material examined: Russia, Nenets Autonomous District: Kolguev Island, headwater of the Bugryanka River, herb-moss wetland with *Comarum palustre*, 68°55'52"N, 49°00'42"E, 07 August 2018, Spitsyn leg. – 1 ex.; Kolguev Island, headwater of the Bugryanka River, herb-moss wetland with *Comarum palustre*, 68°55'12"N, 49°03'43"E, 06 August 2018, Spitsyn leg. – 1 ex.

Comments: First Noctuidae species recorded from the Kolguev Island.

The Lepidoptera faunas of the Barents Sea Islands were studied incompletely. Kullberg et al. (2019) proposed that 40–60 additional species can be found in the region (Novaya Zemlya, Vaigach, Dolgiy, and Kolguev islands). Our new data supports this assumption. *S. diasema* is also a taiga forest species, as do most other moths and butterflies discovered from this Arctic island. Novaya Zemlya and Vaigach Island take more northern position than that of the Kolguev Island. However, their Lepidoptera faunas contain 30 and 22 species, respectively (Kullberg et al. 2019), while the Kolguev fauna contains 20 species. We assume that this lower num-



Figure 1. Record of *Syngrapha diasema* (Boisduval, 1829) from Kolguev Island.

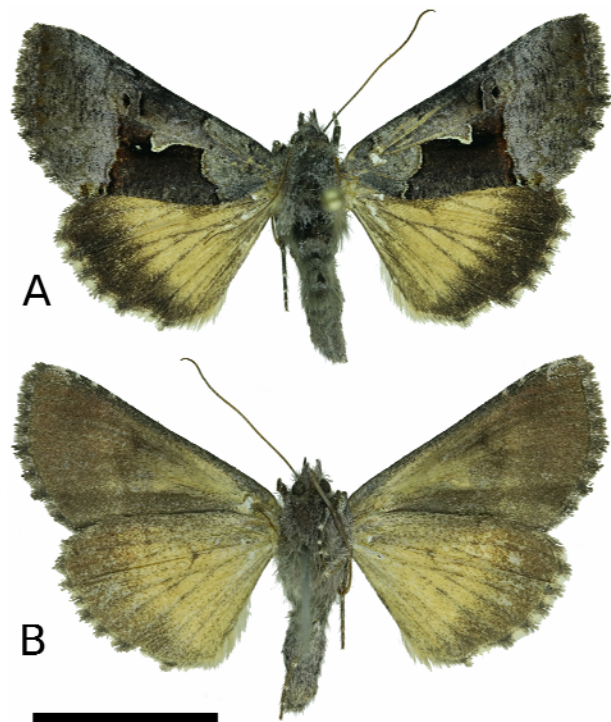


Figure 2. *Syngrapha diasema* (Boisduval, 1829) from Kolguev Island: A – dorsal side, B – ventral side. = 10 mm. Photos: Vitaly M. Spitsyn.

ber of species in Kolguev's fauna could be linked to its insufficient knowledge and to the lower habitat diversity on this plain island.

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