Xestia gelida (Sparre Schneider, 1883) (Lepidoptera, Noctuidae) rediscovered in Norway

LEIF AARVIK & CLAUS CHRISTIANSEN


The second Norwegian record of the boreal noctuid moth Xestia gelida (Sparre Schneider, 1883) is reported. The first Norwegian specimen, the holotype, was collected in Sør-Varanger, Finnmark, in 1882. The species was rediscovered in Nord-Trøndelag, Lierne municipality, in 2010. The faunistical history of the moth in Fennoscandia and its habitat and ecology are described. The habitat and the moth, including the holotype, are figured.

Key words: Lepidoptera, Noctuidae, Xestia gelida, Norway.

Leif Aarvik, Natural History Museum, University of Oslo, P.O. Box 1172 Blindern, NO-0318 Oslo, Norway. E-mail: leif.aarvik@nhm.uio.no

Claus Christiansen, Søråsveien 24, NO-1430 Ås, Norway. E-mail: clch@frisurf.no

Introduction

A group of species of the noctuid genus Xestia Hübner, 1818, is specially adapted to the northern conifer forests. These dull moths all have the same basic wing pattern and were placed in the subgenus Anomogyna Staudinger, 1871 (Fibiger 1993), currently in the extended subgenus Pachnobia Guenée, 1852 (Fibiger et al. 2010). They have strong affinity to an environment dominated by spruce and bilberry, and are more or less dependent on primeval forest. This makes them vulnerable to modern forestry, and several of the species are placed on national red lists, e.g. Gärdenfors ed. (2010) and Kålås et al. (2010). A striking adaption is the synchronized alternate year flight in Pachnobia species. This adaption is even shared with species of other genera of Noctuidae living in the same habitat. It probably makes them less vulnerable to parasites (Mikkola 1976). A typical member of Pachnobia is Xestia gelida (Sparre Schneider, 1883). The holotype was collected in Finnmark, Sør-Varanger in 1882. Until 2010 when the moth was rediscovered in Nord-Trøndelag, the type remained the only specimen known from Norway.

The records

The second (Fig. 1) and third Norwegian specimens of X. gelida were captured in Nord-Trøndelag (NTI), Lierne: Nordli, Kalvikbekken UTM 33W VM 4582 4861 (EIS 103), at 450 m. altitude on 5 July 2010, leg. L. Aarvik & C. Christiansen, and 12 July 2010, leg. C. Christiansen. Both specimens, males, were attracted to sugar ropes around midnight. These baits are ropes of sisal soaked in a solution of red wine and sugar. The ropes are cut in lengths of about one meter and are hung on low branches at dusk. The use of these ropes has proved to be effective in attracting moths (Elven 2006), and is especially useful in northern areas where the nights are too light to attract moths by artificial light.