

Scientific note

***Aproaerema cinctelloides* (Nel & Varenne, 2012)
is not a Mediterranean island endemic**

(Lepidoptera, Gelechiidae, Anacampsinæ)

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The genus *Aproaerema* Durrant, 1897 comprises in Europe a total of 30 species many of which are difficult to identify due to significant overall similarity (Elsner et al. 1999, Huemer & Karsholt 2020). Recently, *Aproaerema cinctelloides* was described as a new species, morphologically very close to, though significantly distinct from, *A. cinctella* (Clerck, 1759) (Nel & Varenne 2012). Originally, *A. cinctelloides* has been supposed to be endemic to Corsica. Here, we report that *A. cinctelloides* does also occur in several different places in mainland Europe.

The first specimens outside of Corsica were collected in Germany between 2010–2019 and identified from DNA barcodes using the holotype of *A. cinctelloides* as a reference, which is present in the private collection of Thierry Varenne (Nice, France). According to genetic analysis using the tools provided in the BOLD database (Ratnasingham & Hebert 2007; <http://boldsystems.org/>), *A. cinctelloides* and *A. cinctella* are separated from

each other by a mean genetic K-2-P distance of 5 %. The maximum intraspecific variation in *A. cinctelloides* is 1.28 % with two separate clusters, one from Germany and Corsica, the other from Lower Austria to the Balkans (see Huemer et al. 2020 for details).

At present, only one German population of *A. cinctelloides* is known, occurring highly locally in the Danube valley east of Regensburg, central Bavaria within steep formations of Jurassic limestone with a markedly xerothermophilic microclimate (Figs 1, 2). In the course of the recent extensive DNA barcoding survey of European Gelechiidae, *A. cinctelloides* was also detected in SE Europe (Greece, northern Macedonia) (Huemer et al. 2020), and in Lower Austria (Stark, unpublished record).

From our recent data, we conclude that *A. cinctelloides* is a local, xerothermophilic species which may have been overlooked in mainland Europe due to the overall similarity to the sibling taxon, *A. cinctella*, which is common and has a much broader ecological ampli-



Fig. 1. *Aproaerema cinctelloides*, new for Central Europe (Bavaria: Donauhänge near Regensburg, August 21 2010, BC ZSM Lep 61448, leg. Segerer, coll. ZSM). Photo: A. H. Segerer (scale bar: 2 mm).

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Fig. 2. Habitat of *A. cinctelloides* in central Bavaria. Photo: A. H. Segerer.

tude. Presumably, *A. cinctelloides* can be found in suitable habitats also elsewhere in Europe. Any *A. cinctella*-like specimens collected at hot, dry locations should be thoroughly checked for identity.

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