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Short communication

FIRST REPORT OF *DESERTOBIA ANKERARIA* (STAUDINGER, 1861) (LEPIDOPTERA: GEOMETRIDAE) IN SERBIA

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Desertobia ankeraria (Staudinger, 1861) is a Natura 2000 target species and it is included in Annex II of EEC 92/43 Habitat Directive. It is a strictly protected species in Slovenia (Čelik, Verovnik, Gomboc, and Lasan, 2005), Croatia (Mihoci & Franjević, 2011) and Hungary (Varga, 2010). Its distribution ranges over Italy, Austria, Slovenia, Croatia, Hungary, Romania, Turkey, Armenia, Turkmenistan and Iran (Beshkov & Zlatkov, 2011). Recently *D. ankeraria* has been reported in Bulgaria (Beshkov & Zlatkov, 2011), Greece (Toth, Babics, and Benedek, 2013) and the Former Yugoslav Republic of Macedonia (Beshkov & Gashtarov, 2014). This species inhabits xerothermic oak woodlands and maquis (Beshkov & Gashtarov, 2014; Toth et al., 2013). Adults appear in one generation from the second half of February to the beginning of April.

Desertobia ankeraria is similar to the four species *Erannis defoliaria* (Clerck, 1759), *Phigaliohybernia aurantiaria* (Hübner, 1799), *P. marginaria* (Fabricius, 1777) and *Alsophila aceraria* (Denis & Schiffermüller, 1775). The male antennae and brushed male genitalia of *D. ankeraria* and the first three mentioned species are illustrated in Beshkov and Zlatkov (2011), Beshkov and Gashtarov (2014) and Beshkov (2011), and dissected male genitalia in Leraut (2009). It is not necessary to dissect the genitalia or to brush the tip of abdomen in order to determine the male genitalia. The most prominent difference in *D. ankeraria* males are the antennae, which are slightly bipectinate with short lamellae (Beshkov & Zlatkov, 2011), displaying a more slender appearance than in other the abovementioned species. Moreover, *D. ankeraria* is syntopic and synchronic only with *Agriopis marginaria* (Fabricius, 1776), which has black marginal dots on the fore- and hind wings in contrast to *D. ankeraria*. Females are wingless, covered with light grey hairs with black spots.

The imposing rocks called Vražji Kamen are situated in the upper part of the Pčinja River Valley near the village of Trgovište (UTM 34TEM89, E 22°03'01'', N 42°23'13'', 711 m) (Fig. 1). The geological substrate is Molasse (Babović & Cvetković, 1976). According to Zlatković (2011), *Carpino orientalis-Quercetum mixtum* Mišić 1967 is present at Vražji Kamen. On 5 March 2016, several types of traps were operating: (a) three

traps with pot and funnel with one 8W actinic/or 368 nm and one 8W "blacklight" tube powered by 12V batteries; (b) a 220V generator was used for powering a "tent-like" trap with 160W MVL at the top and a pot with funnel with 20W-368 nm blacklight below; (c) a pot with funnel with 20W 368 nm lamp used at a distance of 60-70 m from the "tent-like" trap. Three males (Fig. 2) were collected in the trap with actinic and "blacklight" tubes, which was set up at the highest location. This is the first report of *D. ankeraria* in Serbia.

According to Leraut (2009), *D. ankeraria* occurs up to 600 m a.s.l. Toth et al. (2013) found it at 690 m. Vražji Kamen represents the locality with the highest known altitude in Europe where *D. ankeraria* is found. Near the trap we found *Quercus pubescens* Wild., which was reported as a larval food plant of *D. ankeraria* by Leraut and Čelik *et al*. (2005). *Q. petraea* (Matt.) Liebl. was also mentioned as a food plant and Toth et al. presumed that *Q. coccifera* L. may also be a food plant. It is certain that there is not enough knowledge about the ecology of this species.

Here we propose the Serbian name of Ankerov mrazovac for Angoran Umber. The main reason why this species has not been reported in Serbia until now is that, to our best knowledge, there has been no study of moths in this part of Serbia. The period of the year and the short flight period are probably the most important reasons for it is being neglected in the overall areal. Several new and rare taxa for Serbia were registered in this area this year (Beshkov & Nahirnić, 2016). Having fieldwork experience in the Pčinja River area, we were able to predict its presence here. It can be expected along the Pčinja Valley and surrounding mountains in similar habitats, especially on Mt. Starac. Part of this area, the "River Pčinja Valley", is protected as Landscape of Outstanding Features. The habitats of *D. ankeraria* need protection according to the EEC 92/43 Habitat Directive and Natura 2000 Areas need to be established for them. Vražji Kamen has been recognized to be of interest for nature protection and therefore investigations to evaluate the status of protection of this locality were carried out last year by the Institute for Nature Conservation of Serbia. For the time being, this area does not meet all the necessary conditions to be protected.

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Figure 1. Habitat of *Desertobia ankeraria* (Staudinger, 1861) at Vražji Kamen in the upper part of the Pčinja River Valley (Photo: Beshkov S.).

Figure 2. Male *Desertobia ankeraria* (Staudinger, 1861) from Vražji Kamen in the upper part of the Pčinja River Valley, 5 March 2016 (Photo: Beshkov S.).

ПРВИ НАЛАЗ *DESERTOBIA ANKERARIA* (STAUDINGER, 1861) (LEPIDOPTERA: GEOMETRIDAE) У СРБИЈИ

АНА НАХИРНИЋ и СТОЈАН БЕШКОВ

Извод

Desertobia ankeraria (Staudinger, 1861) је Натура 2000 врста и наведена је у Директиви о стаништима ЕУ EEC 92/43 и Додатку II . Заштићена је у Словенији, Хрватској и Мађарској.

По први пут је забележена у Србији у долини реке Пчиње близу Трговишта на локалитету Вражји камен. Врста је примамљена у светлосну клопку 5. марта 2015. године. *D. ankeraria* најчешће насељава разређене ксеротермне храстове шуме, а гусенице се хране листовима храста медунца *Quercus pubescens* Wild. и китњака *Q. petraea* (Matt.) Liebl. Такво станиште и храст медунац су нађени на Вражјем камену током наших претходних истраживања фауне лептира у јужној Србији.

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