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New occurrence *Ancylolomia tentaculella* (Hübner, 1796) in Hungary (Lepidoptera: Crambidae)

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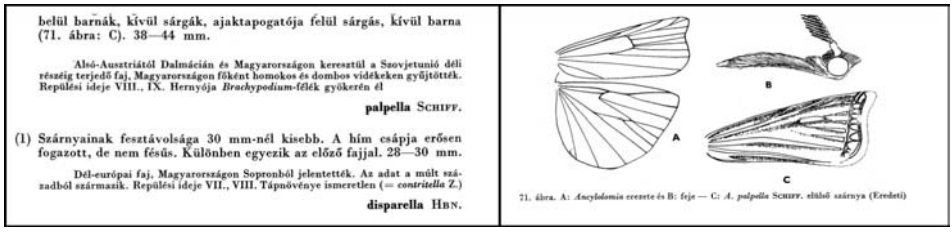
FAZEKAS, I.: *New occurrence Ancylolomia tentaculella (Hübner, 1796) in Hungary (Lepidoptera: Crambidae).*
Abstract: Three species of *Ancylolomia* are recorded from Hungary. Data are reported on the geographical distribution of *Ancylolomia tentaculella* (Hübner, 1796) in Hungary. Biological data and habitats of the species are presented. Distribution is shown on maps. Structure of male genitalia and morphological characteristic of wings are illustrated with colour figures and distributed map. With 5 figures.

Keywords: Lepidoptera, Crambidae, Ancylolomia tentaculella, faunistic, new distribution data, biology, Hungary.

Introduction

The new paper on *Ancylolomia* species in Hungary is the result of about 120 years' work by various Hungarian lepidopterists (ABAFI et al. 1896, SZENT-IVÁNY & UHRIK-MÉSZÁROS 1942, GOZMÁNY 1963, FAZEKAS 1995, 1996, PASTORÁLIS 2011, FAZEKAS et al. 2011). Among the most productive contributors to *Ancylolomia* taxonomy are to be mentioned GOZMÁNY 1963: p. 133–134.) with two species, *A. palpella* Denis & Schiffermüller 1775 and *A. disparella* (Hübner, 1813) (See Fig. 1).

Previously widely used reference books on the Crambidae of Hungary such as GOZMÁNY (1963) lack many species and are no longer compatible with modern nomenclatural and taxonomical standards. There is no top quality identification literature covering the complete fauna of Hungary. Unfortunately there is only scant faunistic data for many Hungarian regions and appropriate long-term observations are mostly wanting.



belül barnák, kívül sárgák, ajaktapogatója felül sárgás, kívül barna (71. ábra: C). 38—44 mm.

Alsó-Ausztriától Dalmácián és Magyarországon keresztül a Szovjetunió déli részéig terjedő faj, Magyarországon főként homokos és dombos vidékeken gyűjtötték. Repülési ideje VIII., IX. Hernyója *Brachypodium*-félék gyökerén él

palpella SCHIFF.

(1) Szárnyainak fesztávolsága 30 mm-nél kisebb. A hím csápja erősen fogazott, de nem fésűs. Különben egyezik az előző fajjal. 28—30 mm.

Dél-európai faj, Magyarországon Sopronból jelentették. Az adat a múlt századból származik. Repülési ideje VII., VIII. Tápnövénye ismeretlen (= *contritella* Z.)

disparella HBN.

A

B

C

71. ábra. A: *Ancylolomia* creszte és B: feje — C: *A. palpella* SCHIFF. elülső szárnya (Eredeti)

Fig. 1. Title page and part of text page from „Fauna Hungariae" (GOZMÁNY 1963)

Ancylolomia tentaculella was first found in l939 by an anonymous collector near Szeged (Szőreg) and the specimen deposited in the Hungarian Natural History Museum, Budapest. The species was found near a neighbouring city in Hódmezővásárhely twenty-one years later. These specimens are also in the Budapest museum. The specimens were identified mistakenly for *A. palpella*. The antennae and genitalia of *A. tentaculella* differ strikingly from those of the sister species *A. palpella*. Unfortunately, Gozmány did not recognize this and the species were omitted from his book (see GOZMÁNY 1963: p.p. 133–134.).

Although BLESZYŃSKI (1965) mentions this species from "Ungarn", the record was probably based on specimens collected outside present-day Hungary, but this report is surely doubtful (SLAMKA 2010).

A. tentaculella was for the third time found in 2001 and 2005 by Ferenc Buschmann near Nagykáta and Jászberény; besides unexpected new localities in 2011 by Szabolcs Lévai in Mezőtúr (FAZEKAS et al. 2012). From 13 September 1939 to 23 August 2011, various Hungarian lepidopterists collected *A. tentaculella* in five localities as follows.

Material and methods

The moths were sampled using light trap and hand collecting between 1939 and 2011. The collected specimens are preserved in Hungarian Natural History Museum, Budapest. A Breukhoven stereo microscope type BMS (140 Bino Zoom) was used for the investigations of the adult and genital slides were made. The photographs and drawings of the genitalia were made with an Olympus microscope with a drawing tube and BMS digital camera (type: Eyepiece & C-mount camera 3 megapixels). The photographs of the adults were made with a Sony camera type DSC-HX100V. The microscopic investigations and photographs were made by the author.

Ancylolomia tentaculella (Hübner, 1796)

Tinea tentaculella Hübner, 1796; Samml. Eur. Schmett., Tineae: 26: Taf. 33., Fig. 230. Locus typicus: "Italy".

Synonym: *Ancylolomia irakella* Amsel, 1949.

References: Bleszynski 1965, Fazekas et al. 2012, Goater 1986, Slamka 2008.

Fig. 2. Adults of *Ancylolomia tentaculella* (Hübner, 1796): Hódmezővásárhely (to the left), Szeged, Szőreg (to the right)

Diagnosis: Wingspan from 29 to 39 mm. A locally rather variable species. Forewing light ochreous and with a few black scales, with a conspicuous narrow creamy white median longitudinal stripe which is weakly angled towards tornus beyond the cell (Fig. 2). Antennae of male are deeply serrate (Fig. 3). Females are normally larger.

Male genitalia: similar to those of *A. palpella* but apex of uncus hook shaped, gnathos strong, valve with parallel margins, sharply bent upwards about in the centre (Fig. 4).

Female genitalia: bursa copulatrix saccate, VIII tergite half-moon shaped, apophyses posteriors with papillae anales and thus unlike *A. palpella*.

Similar species in Europe: *Ancylolomia palpella* ([Denis & Schiffermüller], 1775), *A. disparalis* (Hübner, [1825]), *A. tripolitella* Rebel, 1909 and *A. pectinatella* (Zeller, 1847).

Biology: The typical habitats are mainly in the salt meadows, open sand steppes with Scots pine (*Pinus sylvestris*) woodlands and saline pasture, edge of agricultural land. The third discovery, an outstanding achievement, was the finding of the meta-population that lives in the Körös branch of a river in the outskirts of Mezőtúr. *A. tentaculella* is very

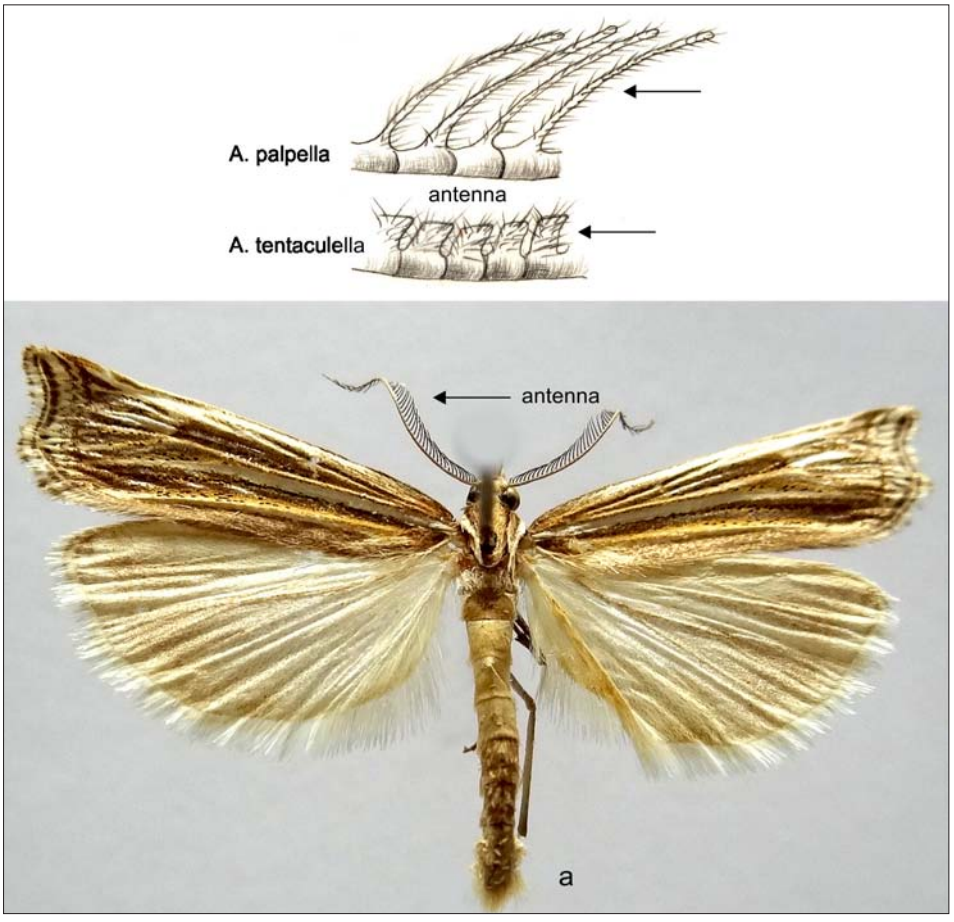


Fig. 3. Male antennal structure of *Ancylolomia palpella* ([Denis & Schiffermüller], 1775) and *Ancylolomia tentaculella* (Hübner, 1796) (upper picture); diagnostic characters of *Ancylolomia palpella* (a)

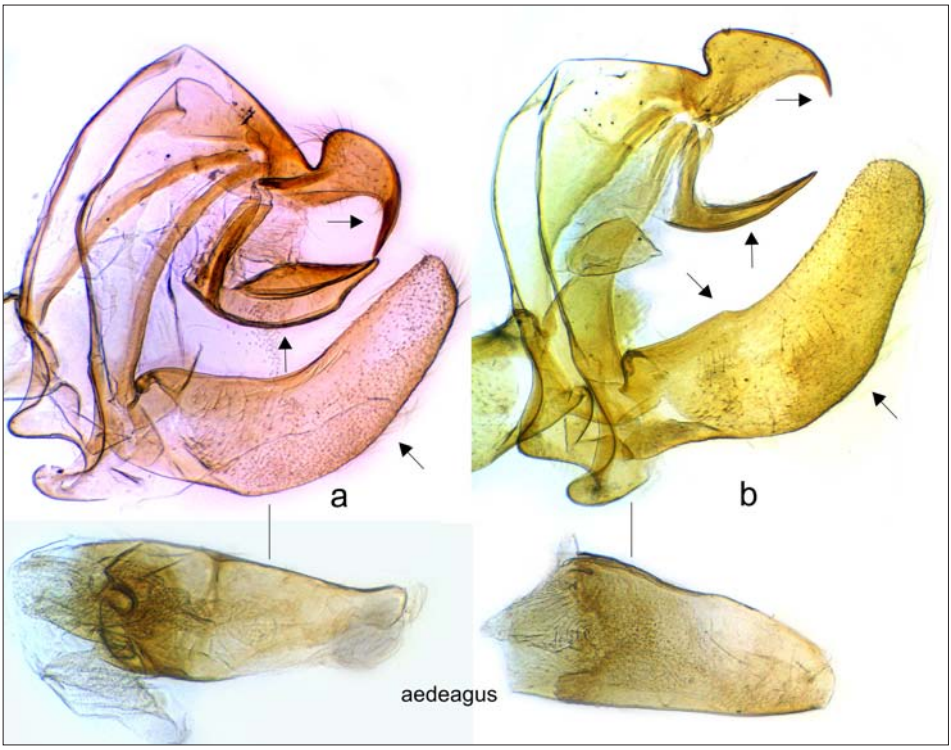


Fig. 4. Male genitalia: a) *Ancylolomia tentaculella* (Hübner, 1796), b) *A. palpella* ([Denis & Schiffermüller], 1775)

local and rare in Central and south-east Hungary. The collected specimens were captured between mid-August and mid-September. According to BLESZYNSKI (1965) the moths fly from July to September and in October in Syria. In England observed in June in July (GOATER 1986). The larva feeds from end September to middle July. Probably oligophagous on *Poaceae*, known food plant that *Dactylis glomerata* L.

According to GOATER (1968) the larva in a vertical tunnel 3–4cm long at the base of stems of large grasses.

Known localities in Hungary (Fig. 5): Published dates (FAZEKAS et al. 2012); ♂, H-Nagykáta, Cseh-domb, UTM DT04, 2001.VIII.19., leg. et coll. Buschmann, F., det. et gen. prep. Fazekas, I. No. 3226; ♂, H-Jászberény, újerdői homokterület [= sand area], UTM DT15, 2005.VIII.27., leg. et coll. Buschmann F., det. Fazekas, I.; ♂, Mezőtúr, Körös, Peresi-holtág, 2011.08.23. leg. et coll. Lévai, Sz.

New localities: ♂, "Coll. Velez, Europa, Hungaria, Szeged, Szőreg, 1939.IX.13. [unknown the collector], ♀ (sic!)" [gen. prep. Fazekas, I. No. 3242]; 1♂, Hódmezővásárhely, 1959.VIII.13., leg. fénycsapda [= light trap]; 2♂, Hódmezővásárhely, 1960.VIII.13., leg. fénycsapda [gen. prep. Fazekas, I. No. 3241]; 1♂, Hódmezővásárhely, 1960.VIII.15., leg. fénycsapda. All specimens deposited in Hungarian Natural History Museum, Budapest.

Distribution: According to recent studies, there are isolated populations in Central Europe only in NW Romania, Central Hungary and Switzerland, usually rare. Widespread and locally frequent (Goater, pers. comm.) in southern Europe from Spain across Italy

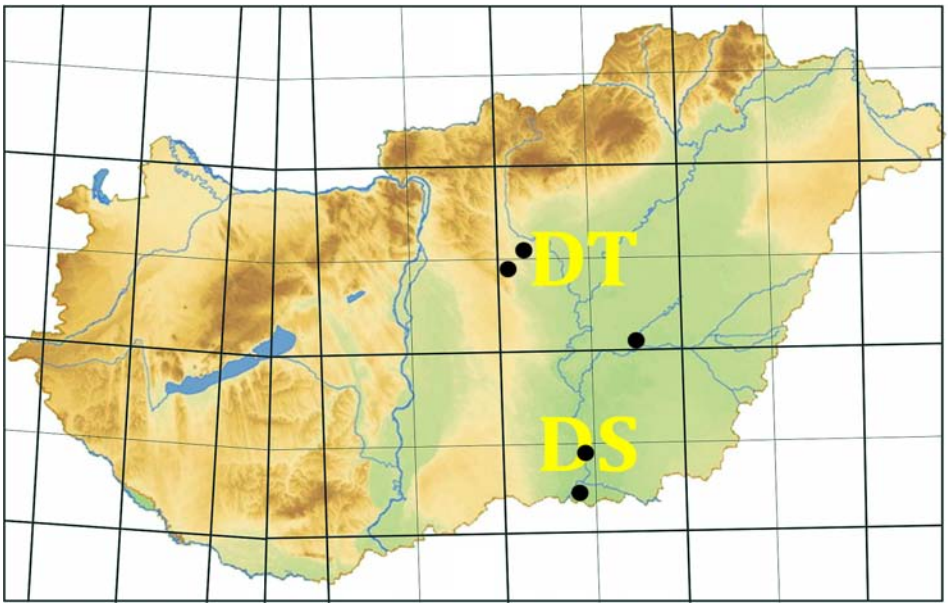


Fig. 5. Known localities of *Ancylolomia tentaculella* (Hübner, 1796) in Hungary

to Balkan Peninsula. Recorded in SE-England (GOATER 1986), though probably an immigrant from southern Europe on each occasion (1935 and 1952). Apart from this, well-known from West Asia to Ural Mountains.

Remarks: In Hungary known only from Great Hungarian Plain but very local and rare; this species is very rarely recorded. Not known from Transdanubian Hills and mountain regions. The flight period of observation is deficient. Early stages unknown in Hungary. Further studies are necessary to verify the relationship between *A. tentaculella* and *A. palpella*.

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