

***Nothris verbascella* (Denis & Schiffermüller),
a new gelechiid moth (Lepidoptera, Gelechiidae)
for the Maltese Islands**

Michael ZERAFA¹

The family Geleciidae has a worldwide distribution. There are more than 4,700 described species (HUEMER & KARSHOLT, 2010) accommodated in about 500 genera. In Malta it is represented by 37 species distributed in 26 genera (KARSHOLT, 2013). The tribe Chelariini in Europe comprises 17 species in 6 genera. In Malta only one species has been recorded so far: *Anarsia lineatella* Zeller, 1839 (KARSHOLT, 2013). A second species of Chelariini is reported for the first time in the present work. It belongs to the genus *Nothris* Hübner, 1825, a Palaearctic genus represented by about 20 species (EMMET, 2002), including four European species (KARSHOLT, 2013). The main characteristics of this genus is that the labial palpus has segment three longer than segment two, with a dense triangular tuft of scales at the apex of segment two beneath. The forewing is elongate with veins R5 and R4 stalked, R5 to costa. Hindwing broader than forewing, trapezoidal, apex weakly produced, cilia two-thirds width of wing; veins CuA1 and M3 connate, M2 nearly parallel, M1 and Rs stalked (EMMET, 2002).

***Nothris verbascella* (Denis & Schiffermüller, 1775)**

Material examined: Malta, Rabat, L-Andrijiet, 30.iv.2006, 1 ♀, beating; Ghajn Żnuber, 9.v.2012, 1 ♀, ex larva; Bingemma, 11.vi.2014, 1 ♂, ex ova (dates indicate emergence of the adult).

Short description: Adult (Fig. 1.): Wingspan 18.3–19.2 mm; head pale buff almost cream, labial palpus with segment 3 longer than segment 2; pale buff with lower half of tuft on segment 3 fuscous brown. Segment 2 curved and almost at 90° to segment 3. Antenna filiform; buff with brown scape. Thorax pale buff with two small brown spots on the side of the mesothorax. Forewing pale buff to pale ochre, sometimes becoming ochre near the apex and termen; sparsely irrorate with black scales. Black basal spot on costa. Stigma and a spot at the fold black. Sometimes with a smaller black spot between the previous spots in middle of wing. Termen with black spots. Cilia pale buff slightly greyish. Hindwings broader than forewings with weakly formed apex; pale grey with a brownish lustre. Cilia pale buff. Abdomen fuscous above, pale buff below. Legs pale buff irrorate brown.

Distribution: *Nothris verbascella* is found throughout Europe: Albania, Austria, Belgium, Bosnia and Herzegovina, Balearic Islands, Britain, Bulgaria, Corsica, Cyprus, Czech Republic, Danish Mainland, Dodecanese Islands, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Kaliningrad region, Latvia, Macedonia, Montenegro, Poland, Portugal, Romania, Sardinia, Serbia, Sicily, Slovakia, Spain, Sweden, Switzerland, The Netherlands and Ukraine. It is also found in central, southern and eastern Russia (KARSHOLT, 2013). It is also known from Turkmenistan and North Africa (EMMET, 2002).

¹ 16, 'Agape', Triq l-Imagħzel, Naxxar, NXR 3660, Malta. E-mail: family_zerafa@hotmail.com



Figure 1: *Nothris verbascella*.

Biology: *Nothris verbascella* has been recorded on various species of *Verbascum* namely *V. densiflorum* Bertol., *V. phlomoides* L., and *V. thapsus* L. (CORVER, 2009). In Britain it was also recorded on *Verbascum pulverulentum* Vill. (EMMET, 2002). In Malta larvae and ova have been collected from *Verbascum sinuatum* L. Young larvae feed in the heart of the plant especially on flowering shoots. They partly mine the tender parts and hide under the hairs of the plant's tomentose leaves. Larger larvae spin a web on the underside of the leaves sometimes contracting it. Pupation takes place in a loosely spun cocoon in a fold of the same leaf; almost always on the underside. The pupa is brown and adecticous object (body appendages are not free but their shape is clearly outlined). Probably producing three or more overlapping broods in Malta. From ova collected in April 2014 only one developed into an adult whereas hymenopteran parasitoids emerged from the others.

ACKNOWLEDGMENTS

I would like to thank Dr Ole Karsholt of Copenhagen for confirming the identity of the species.

REFERENCES

- CORVER, S.C. (2009) Microlepidoptera: Gelechiidae. <http://www.microlepidoptera.nl> (accessed December 2014)
- EMMET, A.M. (2002) Gelechiidae (Pp. 221–223). In: EMMET, A.M. [ed.], *The Moths and Butterflies of Great Britain and Ireland*. Vol. 4 (part 2). Harley Books. 278 pp.
- HUEMER, P. & KARSHOLT, O. (2010) Gelechiidae II (Gelechiidae: Gnorimoschemini). In: HUEMER, P., KARSHOLT, O. & NUSS, M. [eds.], *Microlepidoptera of Europe* 6, Apollo Books, Stenstrup. 586 pp.
- KARSHOLT, O. (2013) Fauna Europaea: Gelechiidae. In: KARSHOLT, O. & NIEUKERKEN, E.J. VAN [eds.], *Fauna Europaea: Lepidoptera, Moths*. Fauna Europaea version 2.6.2, <http://www.faunaeur.org> (accessed December 2014)

Received: January 10, 2015
Accepted: February 20, 2015