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Description of a new species of Italian *Cnephasia* Curtis, 1826, from Mount Etna, with notes on the cnephasiine ovipositor (Lepidoptera Tortricidae) (*)

Abstract - A new species of Italian tortricid moth, *Cnephasia etnana* sp.n. from Mount Etna, Sicily, is described. Externally the new species resembles *C. abrasana* (Duponchel, 1843), or forms of *C. constantinana* Razowski, 1965, or *C. korvaci* Razowski, 1965. In male genitalia it is similar to the two last mentioned species, the differences are in the size of terminal plate of the *gnathos* (mainly in *C. korvaci*) and the smaller *aedeagus*; from *C. abrasana* it strongly differs in the structure of *sacculus*. The females of *C. etnana* and *C. abrasana* are very similar to one another mainly in the form of the ovipositor and *papillae anales* which are slenderer and more simple than in all known species of the subgenus *Cnephasia* s.str. inclusive the two compared species.

Riassunto - *Descrizione di una nuova specie italiana di* Cnephasia *Curtis, 1826, dal Monte Etna, con note sull'ovopositore delle cnefasiine (Lepidoptera Tortricidae).*

Viene descritta una nuova specie di Lepidoptera Tortricidae, *Cnephasia etnana* sp.n., raccolta sul Monte Etna, in Sicilia. Dalle caratteristiche morfologiche esterne la nuova specie assomiglia a *C. abrasana* (Duponchel, 1843) o a forme di *C. constantinana* Razowski, 1965 e *C. korvaci* Razowski, 1965. La conformazione dell'apparato genitale maschile di *C. etnana* richiama quello di *C. costantinana* o di *C. korvaci*, si differenzia per la parte terminale dello *gnathos* e per l'*aedeagus* più piccolo; la struttura del *sacculus* la separa invece da *C. abrasana*. Nell'apparato genitale femminile *C. etnana* è molto simile a *C. abrasana* sia per la forma dell'ovipositore sia nelle *papillae anales*, che risultano le più semplici e snelle del sottogenere *Cnephasia* s.str.

Key words: Lepidoptera Tortricidae, *Cnephasia etnana*, new species, Italy.

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INTRODUCTION

In a study on the fauna of Sicily we examined the tortricid moths collected by F. Hartig (1900-1980), and deposited at the Museo di Zoologia dell'Università di Roma "La Sapienza" (ex Istituto Nazionale di Entomologia), in Rome. Among the various specimens, found by Hartig in different localities of the island, mainly on the Mount Etna, many interesting species and a new taxon, *Cnephasia etnana* sp.n., have been identified

After the discovery of this new species, the Italian Tortricidae fauna of the genus *Cnephasia* Curtis, 1826, is composed by 23 species. Among them, besides the *C. etnana* sp.n., the following three species are probably the Italian endemites: *C. daedaleana* Razowski, 1983 from Sardinia, *C. pollinoana* Trematerra, 1991 and *C. zangheriana* Trematerra, 1991 from Southern Appennine (Trematerra, 1995).

Cnephasia etnana sp.n.

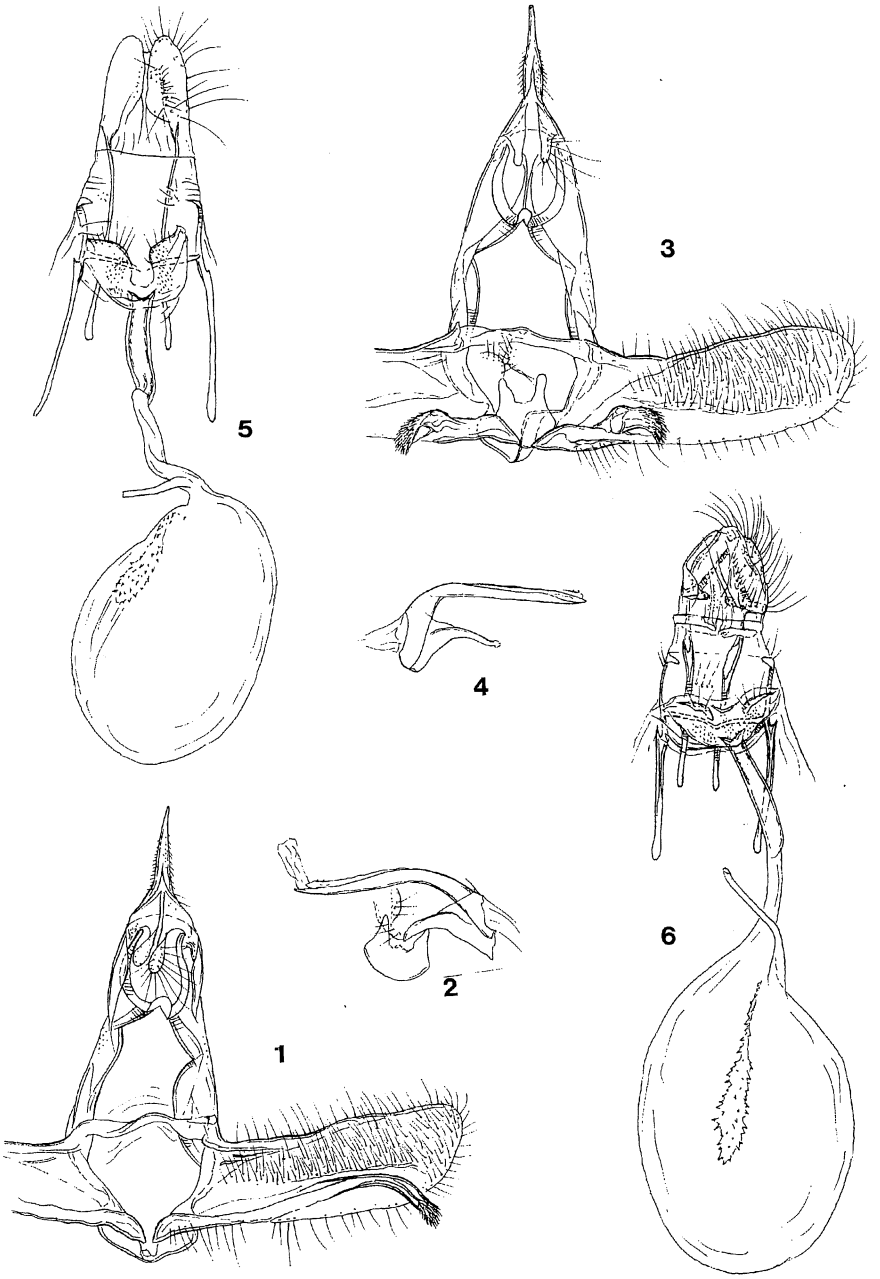
ADULT. Alar expanse 17 mm in male, 14 mm in female, labial palpus 2.5 and 2, respectively.
Head and thorax brown-grey. Forewing more expanding posteriorly in male than in female, termen oblique, almost unicolorous brownish-grey, with weak olive hue. Distal third paler, creamer, delicately strigulate with brown-grey; darker, indistinct suffusion at end on median cell; dark brown, fine strigulae in male across middle part of wing. Cilia slightly paler than wing, more yellowish, with brownish basal line. Hindwing pale brownish, with cilia much paler and creamer.

MALE GENITALIA: reported in figures 1-2. *Uncus* slender, tapering terminally; *socius* fairly large; *gnathos* delicate, with small terminal plate. Valva slender with rather oblique distal edge; *sacculus* long, with fairly long free termination. *Aedeagus* slender, weakly bent; a few (two larger) minute thorns on distal portion of *carina penis*.

FEMALE GENITALIA: reported in figure 5. *Papillae anales* fused longitudinally, each a slender, subovate lobe; ovipositor rather short, in major part membranous; *apophyses posteriores* much longer than *apophyses anteriores*; eighth tergite weakly sclerotized. *Sterigma* also weakly sclerotized except for two distal lobes; *colliculum* long, rather membranous with traces of outer sclerites; *signum* half length *corpus bursae*.

MATERIAL EXAMINED: Holotype, male and allotype, female both labelled as follows: "Mte Etna vers Sud., Castagneti di Pedara, 900-1100 m., 26-V-49, H[ar]t[i]g leg." (collection: Museo di Zoologia dell'Università di Roma "La Sapienza", Rome).

Paratypes: 7 males and 1 female, same data of holotype, but 14.V.49; 1 male and 5 females, same data of holotype, but 26.V.49; 1 female, M.te Etna vers. Sud, Regala 800 m. (Pedara), 23.V.49, H[ar]t[i]g leg. (collections: Museo di Zoologia dell'Università di Roma "La Sapienza", Rome; Trematerra, Campobasso).



Figs 1-6 - *Cnephasia etnana* sp.n. and *Cnephasia abrasana* (Duponchel): male and female genitalia. *C. etnana*, holotype, male (figs 1-2); same species, allotype, female (fig. 5); *C. abrasana* male, Austria (figs 3-4); same species, female, Austria (fig. 6).

REMARKS: Externally the new species resembles some unicolorous cnephasiine moths like West Palaearctic *Cnephasia abrasana* (Duponchel, 1843) or forms of *C. constantinana* Razowski, 1965 from NW Africa or *C. korvaci* Razowski, 1965 from Asia Minor.

In male genitalia it is similar to the two last mentioned species. The differences are small, seen in the size of terminal plate of the *gnathos* (mainly in *C. korvaci*) and the smaller *aedeagus*. The shapes of the valva and *sacculus* are in Cnephasiini variable (cf. *C. interjectana* Haworth, 1811 or *C. korvaci*) (Razowski, 1962 and 1981). From *C. abrasana* it strongly differs in the structure of *sacculus* (cf. figs 1-4).

The females of *C. etnana* and *C. abrasana* are very similar to one another (figs 5-6) mainly in the form of the ovipositor and *papillae anales* which are slenderer and more simple than in all known species of the subgenus *Cnephasia* s.str. inclusive the two compared species.

Notes on the cnephasiine ovipositor

The floricomous ovipositor is characteristic of Cnephasiini with a few exceptions (Razowski, 1987). The distal lobes of the *papillae anales* are very broad, flattened dorso-ventrally, provided with large groups of *capitate setae* at their bases, the proximal parts of *papillae* are well developed, rather slender. The representative of *Cnephasiella* Adamczewski, 1936 has much longer ovipositor with very long *apophyses posteriores* and the *labii* slenderer than in *C. etnana* and *C. abrasana*. In all of them there is no trace of the area covered with the *capitate setae* and the anterior part of *labium* is atrophied. Some adaptative changes are also seen in the shape of the eighth tergite and the *sterigma* which are most specialized in *C. incertana* (Treitschke, 1835).

The shape of the ovipositor and especially the *papillae anales* are directly depending on the mode of oviposition and thus have no taxonomical importance. They certainly appeared at least twice within this genus as the males of the species discussed are genitalically extremely similar to each other. The subgenus *Cnephasiella* was established mainly on basis of the shape of the ovipositor but retained as valid thanks its unique structure of the *gnathos*, and venation (Razowski, 1987).

DERIVATIO NOMINIS. The name of the new *Cnephasia* derives from the Mount Etna, Sicily Italy.

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