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## Taxonomic remarks on *Agrochola wolfschlaegeri* Boursin, 1953 (sp. rev.) (Lepidoptera: Noctuidae)

### ABSTRACT

Concerning the taxonomic confusion which has occurred between *Agrochola kindermanni* (Fischer von Röslerstamm, [1837]) and *A. wolfschlaegeri* Boursin, 1953, formal and biological rationale for maintaining the situation as established by the first reviser (C. Boursin) is put forward; accordingly the name *Agrochola wolfschlaegeri* Boursin, 1953 (sp. rev.) is resurrected and *Agrochola consueta* (Herrich-Schäffer, [1852]) is synonymised with *Agrochola kindermanni* (Fischer von Röslerstamm, [1837]) (syn. rev.).

As the Sicilian populations of *A. wolfschlaegeri*, described as *Agrochola kindermanni sicula* Bischof & Bittermann, 1996, are shown not to be sufficiently distinct from the nominate subspecies, *Agrochola kindermanni sicula* Bischof & Bittermann, 1996 is synonymised with *A. wolfschlaegeri* Boursin, 1953 (syn. nov.).

Key words: Noctuidae, taxonomy, new synonymy, Sicily, *Agrochola kindermanni*, *A. wolfschlaegeri*.

### TAXONOMY OF *AGROCHOLA WOLFSCHLAEGERI* BOURSIN, 1953

Following HACKER'S (1989, 1996) thorough comments on the subject, the confusion arisen between the nominal taxa *Agrochola kindermanni* (Fischer von Röslerstamm, [1837]) and *A. wolfschlaegeri* Boursin, 1953 can be reconstructed as follows.

After the description of *Orthosia kindermanni* Fischer von Röslerstamm, [1837] (type locality: [Dalmatia], Fiume), the name was started depicting what in reality are two closely related species. BOURSIN (1953) recognised that there were two species and described *Agrochola wolfschlaegeri* (type loc.: Mazedonien, Ochrid, Petrina Planina) for a Balkan species, assuming that also the other species, viz. *kindermanni*, occurred in the Balkans, as he figured the male genitalia of a specimen labelled "Dalmatien". HACKER (1989) showed the correspondence between all the material from the Balkans and the species that since BOURSIN'S description was noted as *wolfschlaegeri*, the species known as *kindermanni*, in contrast, being only collected in Asia Minor; he therefore questioned about the type locality of the latter one (HACKER, 1990:

487). Later, HACKER (1996), relying on a wide array of evidence (including misidentifications of Dalmatian *wolfschlaegeri* which were identified by BOURSIN himself as *kindermanni*) and by virtue of its type locality, resurrected the name *kindermanni* to depict the widespread Balkan species, and, accordingly, synonymised *wolfschlaegeri*. The Asia Minor species was therefore named after the first available synonym for the eastern populations, viz. *Orthosia consueta* Herrich-Schäffer, [1852] (type loc.: Constantinopel) (the older name *Orthosia ballotae* Duponchel, [1842] being discarded because its type locality, viz. “Hongrie”, was somehow inclusive of *kindermanni*'s).

Despite the fact that HACKER'S arguments are well founded, the proposed solution does not seem entirely satisfactory. In fact, not only it is conceptually difficult affirming that any species does not occur in a particular region, but in the case of “consueta-like *kindermanni*” there are also substantiated references stating its occurrence in the Balkans, i.e. BOURSIN'S (1953) figured slide and the confirmation of old collection specimens from the Istanbul area (type locality of *Orthosia consueta*) (HACKER, 1996: 314, pl. S, fig. 18), which undoubtedly is part of the Balkan Peninsula. As there is no clear evidence that wolfschlaegeri-like and consueta-like *kindermanni* are vicariant species, both might well occur (or have occurred) simpatrically in the Balkan Peninsula. The proposed nomenclatural acts are certainly consistent with part of the existing data; nevertheless, in addition to the interest of the stability of nomenclature and the role of BOURSIN (1953) as first reviser which, in the absence of total contrary evidence, should be preserved, they might expose at the risk of loss of information. The fact that consueta-like *kindermanni* might have once occurred elsewhere in the Balkans and have subsequently undergone rarefaction or extinction is a virtual biological datum which would be totally lost, should *wolfschlaegeri* be maintained as a synonym of *kindermanni*.

As HACKER'S nomenclatural acts were not forced through neotype designation of a wolfschlaegeri-like *kindermanni* for *Orthosia kindermanni*, it seems largely parsimonious to restore the names in use for many decades as established by BOURSIN (1953), accordingly:

*Agrochola wolfschlaegeri* Boursin, 1953 sp. rev.

*Agrochola kindermanni* (Fischer von Röslerstamm, [1837])  
= *Orthosia consueta* Herrich-Schäffer, [1852] syn. rev.

STATUS OF THE SICILIAN POPULATIONS

Following HACKER's (1996) paper, BISCHOF & BITTERMANN (1996) described a new subspecies of *Agrochola wolfschlaegeri* from Sicily with the name "*Agrochola kindermanni sicula*", considering their type series to represent the first authentic Italian record of the species after MARIANI'S (1939) general quotation for Sicily. As a matter of fact, since the precise record by RAGUSA (1893), other specimens were again collected in Sicily (Madonie and Etna) only in the last fifteen years (e.g. GRILLO & PARENZAN, 1994), their examination permitted confirming that the species occurring in Sicily is *A. wolfschlaegeri* (BERIO, *in litt.*; ZILLI, 1995).

Unfortunately, rather than clarifying the status of the Sicilian populations, the description of *sicula* has further complicated a situation which had long been plain. Despite the fact that BISCHOF & BITTERMANN (1996) explicitly followed the views of HACKER (1996), who had synonymised the species-group name *wolfschlaegeri* with *kindermanni* and excluded that the species was polytypic ("*wolfschlaegeri* keine Unterart, sondern nur die Gebirgsform von *kindermanni* darstellt"), the authors compared *sicula* with an enigmatic taxon "*A. kindermanni wolfschlaegeri* BOURSIN, 1953" from the Balkan mountains. It was therefore implicitly established a new combination.

After a comparison between Sicilian and Balkan specimens of *wolfschlaegeri*, the subspecific status of the Sicilian populations becomes debatable, as none of the presumed diagnostic characters of *sicula* could be confirmed. The subtle colour differences identified by BISCHOF & BITTERMANN (1996) appear largely overcome by the chromatic variability occurring between Sicilian populations themselves, specimens from Mt. Etna being rather dark or nearly black (1 ex. in coll. BERIO) because of the well known phenomenon of selective adjustment to the dark lavic background. Regarding the differences in the male genitalia, these were stated to consist of:

- (1) valva narrower and more slender, a little broadening distally (in *k. kindermanni* and *k. wolfschlaegeri* broader and thence tapering distally);
- (2) clavus semicircular, more sharply curved than in the other reported subspecies;
- (3) clasper longer, more slender and branching from a narrower basis;
- (4) juxta shorter.

It must be noticed that the presumed diagnostic characters (1) and (3) can be even more evident in specimens from Bulgarian Macedonia than in Sicilian ones, character (2) being comparable (fig. 1). It can be therefore concluded that these characters fall within the range of variability of Balkan popula-

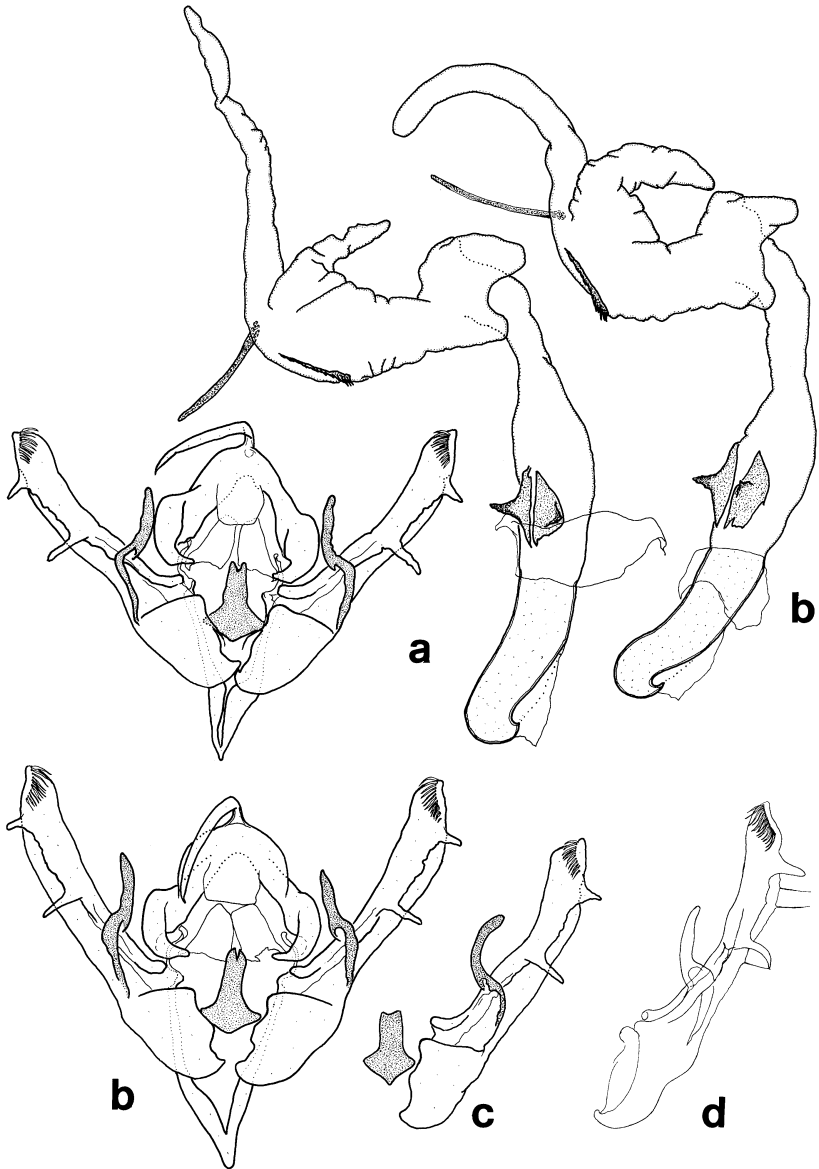


Fig. 1 - Male genitalia of *Agrochola wolfschlaegeri* Boursin, 1953: (a) Bulgaria (Kresna), (b) Sicily (Etna), (c) Sicily (Madonie; topotype of *sicula* Bischof & Bittermann, 1996), right valva and juxta, (d) Sicily (Etna; BERIO's drawing of slide no. 9378), right valva.

tions of *wolfschlaegeri*. Regarding the outstanding difference in the length of the juxta (character 4), this feature must be regarded as an artefact due to the accidental breaking of the sclerite in the specimens which were used for diagnosing *sicula*, as the juxta of other Sicilian specimens is clearly of the same length as that one of Balkan ones (fig. 1).

As the subspecific status of the Sicilian populations is not sufficiently corroborated by any other indication, *sicula* is here synonymised with nominate *wolfschlaegeri*.

*Agrochola wolfschlaegeri* Boursin, 1953

= *Agrochola kindermanni sicula* Bischof & Bittermann, 1996 nov. syn.

## RIASSUNTO

CONSIDERAZIONI TASSONOMICHE SU *AGROCHOLA WOLFSCHLAEGERI* BOURSIN, 1953 (SP. REV.)  
(LEPIDOPTERA: NOCTUIDAE)

Con riferimento alla confusione tassonomica determinatasi tra *Agrochola kindermanni* (Fischer von Röslerstamm, [1837]) e *A. wolfschlaegeri* Boursin, 1953, nel lavoro viene ristabilita la nomenclatura originariamente definita dal primo revisore del gruppo (C. BOURSIN) sulla base di motivazioni formali e di considerazioni biologiche. Viene pertanto ripristinato il nome *Agrochola wolfschlaegeri* Boursin, 1953 (sp. rev.), mentre *Agrochola consueta* (Herrich-Schäffer, [1852]) rientra nella sinonimia di *Agrochola kindermanni* (Fischer von Röslerstamm, [1837]) (syn. rev.).

Poiché viene dimostrato che le popolazioni siciliane di *A. wolfschlaegeri*, descritte come "*Agrochola kindermanni sicula*" Bischof & Bittermann, 1996, non sono sufficientemente distinte da quelle della forma nominale, il nome *Agrochola kindermanni sicula* Bischof & Bittermann, 1996 viene sinonimizzato con *Agrochola wolfschlaegeri* Boursin, 1953 (syn. nov.).

Parole chiave: Noctuidae, tassonomia, sinonimi, Sicilia, *Agrochola kindermanni*, *A. wolfschlaegeri*.

## ACKNOWLEDGEMENTS

The author wishes to express his most sincere thanks to all the colleagues who provided useful comments and/or allowed examination of specimens, namely S. Bella (Catania), E. Berio (†Genoa), S. Beshkov (Sofia), M. Fibiger (Sorø), J. Ganey (Sofia), N. Grillo (Palermo), P. Parenzan (Palermo), L. Ronkay (Budapest), and P. Russo (Catania).

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