

WHAT IS THE REAL NAME OF THE ITALIAN ASCALAPHID?

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An endemic species of Ascalaphidae living exclusively in the Italian peninsula has been named for over a century *Libelloides italicus* FABRICIUS (1781). This is the case of a long-term, established, nomenclatorial situation which has apparently caused no problems. Unfortunately, FABRICIUS' type does not correspond to the Italian ascalaphid. Thus an old dispute has been re-opened and so the chronology concerning it are discussed.

In conclusion, *Ascalaphus italicus* FABRICIUS, 1781 is a junior synonym of *Libelloides coccajus* ([DENIS & SCHIFFERMÜLLER], 1775) (syn. n.) and a senior synonym of *Ascalaphus meridionalis* DE CHARPENTIER, 1825. There are two possible names for the Italian ascalaphid: *Libelloides latinus* (LEFEBVRE, 1842) (comb. n.), that is its valid name, and *Ascalaphus petagnae* COSTA, 1855 which is its junior synonym.

Key words : Ascalaphidae, Italy, nomenclature

INTRODUCTION

Both the authors have always paid particular attention to the chorological data deriving from ancient bibliographical sources, checking them with direct and indirect methods. This information allows a comparison between past and present geographic distributions evaluating any modifications in local fauna.

While looking at the problems involved in interpreting old references, LETARDI (1995) clearly demonstrated that there was considerable confusion in the nomenclature of the ascalaphids quoted in Italy, at least up to the last decades of the 19th century. Subsequently, on analysing the work of the Neapolitan entomologist ACHILLE COSTA, PANTALEONI (1999) found traces of past controversy.

In particular, it seemed that *Libelloides italicus* FABRICIUS (1781) was not, as had been believed for more than a century, the denomination of the Italian endemic species of Ascalaphidae (strictly confined to the peninsula) but a junior synonym of the Central European species *Libelloides coccajus* ([DENIS et SCHIFFERMÜLLER], 1775). The “case” was worth investigating.

DISTRIBUTION OF THE ITALIAN ASCALAPHID

In the Italian peninsula an endemic species of Ascalaphidae typically colonises the natural and semi-natural dry grasslands inside the hill vegetation belt (200–600 m) (ASPÖCK *et al.* 1980, PANTALEONI 1990*a*, 1990*b*, LETARDI 1998).

The geographical distribution of this taxon appears very defined. Even if listing only the material personally seen by the authors, unpublished or published (PANTALEONI 1986, 1988, 1990*a*, *c*, *d*, LETARDI 1991, 1998, PANTALEONI *et al.* 1994, BERNARDI IORI *et al.* 1995, LETARDI & PANTALEONI 1996, PANTALEONI & LETARDI 1998, LETARDI 2000), the species is reported in all the regions of the Italian peninsula and is limited to the north by the hills that face the Pianura Padana in Emilia-Romagna, and to the west by the hills of the province of Savona in Liguria.

Some bibliographic reports about collecting sites in the Alpine chain (LAZZARINI 1896, CASTELLANI 1958) are very dubious and almost certainly wrong (LETARDI 1995).

On checking the two main Turin collections known to us, those at the Regional Natural Science Museum (where all the historical entomological collections previously stored at the University are kept) and in the entomological section of the “Dipartimento di Valorizzazione e Protezione delle Risorse Agroforestali” (ex Istituto di Entomologia agraria) of the Agricultural Faculty, not one specimen of Italian ascalaphid from Piedmont was discovered.

THE FABRICIUS TYPE

FABRICIUS described *Ascalaphus italicus* in 1781, with the sentence “Habitat in Italia Dr. Allioni”, basing this on one or more specimens sent to him by the Italian entomologist CARLO ALLIONI.

CARLO ALLIONI (1728–1803) was a physician, Professor of Botany at Turin University and Director of the Turin Museum, treasurer of the Royal Academy of Science. He also spent many years studying entomology, assembling a conspicuous insect collection (GLIOZZI 1960, POGGI & CONCI 1996). According to the little information we have, he only collected insects in Piedmont, perhaps only near Turin (PASSERIN D’ENTREVES 1983).

ZIMSEN (1964: p. 612, n. 68) stated the type of this taxon is in the collection “Kiel”. This specimen is now in the Zoological Museum, University of Copenhagen, and thanks to Dr. N. P. KRISTENSEN, Professor of Systematic Entomology at the Zoological Museum, University of Copenhagen, we are able to obtain a photo (Fig. 1*b*). It is without doubt a *L. coccajus*.

As Dr. KRISTENSEN wrote to us, “the photographed specimen is the only one under that name in the Kiel collection drawer, and it bears the label ‘italicus’ written in what is believed to be Fabricius’ own handwriting. It cannot be doubted, then, that the specimen in question at least corresponds to his concept (or memory) of that species”.

According to TUXEN (1967) “Fabricius did not have the concept of type specimens that we use today”. Therefore, it is possible, but no longer provable, that other examples were present in the ALLIONI’s collection which was destroyed by fire (POGGI & CONCI 1996). Nevertheless, as did TUXEN (1967), ZIMSEN (1964) “realised that in the locality-collector reference FABRICIUS might give only the locality and collector (e. g. “in Italia Dr. Allioni”), or he might add: “Mus.” and then a name (Mus. Dom. de Bosc; Mus. Dom. Banks; Mus. Dom. Lund; etc.). From this she inferred, though it is nowhere stated explicitly in his books, that in the latter case he had described the species on material in other people’s collections, while in the first case the “type specimen” was to be found in his own collection. Her work, based on this axiom, showed this to be the case.”

THE HISTORICAL “CASE”

Figures in PETAGNA (1786) [*sub Ascalaphus barbarus*] (fig. 1d) and in CIRILLO (1787–1792) [*sub Ascalaphus italicus*] (fig. 1e) are the first descriptions of the Italian ascalaphid. Once again PETAGNA (1792) first distinguished the Italian ascalaphid, as *Ascalaphus barbarus*, from the Central European taxon [*L. coccajus*], he named it *Ascalaphus italicus*. The works of the two Neapolitan authors have had neither a fair diffusion among scientists of that period nor an adequate recognition by them. Therefore the “case” started with the publication of “Horae Entomologicae” by DE CHARPENTIER (1825).

This author was able to distinguish the Italian endemic species from the Central European one with a masterly comparative description strengthened by the publication of two beautiful colour figures (Fig. 1j and 1k). The specimens of one of the two species came from Pisa (Tuscany, central Italy), the others from Spain. He gave the name “*italicus*” to the Italian specimens and attributed the new name “*meridionalis*” to the others, but he did not justify his choice by stating the geographic origin. He supplied a bibliography of authors who had distinguished “*utramque speciem pro una eadamque*”, and asserted that he believed that all cited figures (SCHAEFFER 1763, 1766a, b [Fig. 1a], SULZER 1776, PANZER 1796 [Fig. 1g], DUMERIL 1823 [Fig. 1f]), with one exception (LATREILLE 1805 [Fig. 1h]), belonged to *Ascalaphus italicus* (*sensu* DE CHARPENTIER) due to the yellow spots on

the thorax, although the “*alarum figura seu ambitu*” was more similar to *Ascalaphus meridionalis*.

About fifteen years after, BURMEISTER (1839) rejected such a choice of names and considered *Asc. meridionalis* as synonymous of *Asc. italicus* and *Asc. italicus sensu* DE CHARPENTIER as synonymous of *Asc. lacteus* [now *Libelloides ottomanus* (GERMAR, 1817)]. It appears evident from the text that, according to the German author, the yellow spots on the thorax could not be considered characteristic, indeed he attributed to both the colour “*niger, thorace flavo-guttato*”.

A few years later, LEFEBVRE (1842) joined in the debate with a single phrase loaded with consequences: “Je crois aussi que M. Burmeister ferait mieux de ne pas confondre the *Lacteus* de Brullè avec Mon *Latinus* (l’*Italicus* de Charp.)”. Actually he found that the Italian ascalaphid was a different species from *Asc. lacteus* and, since it was still without a name, called it *Ascalaphus latinus*.

Immediately afterwards, RAMBUR (1842), who knew the work of LEFEBVRE (cfr. p. 341) and was in strong contrast with him on other issues (cfr. footnote page XIII), accepted the opinion of DE CHARPENTIER, but was evidently reluctant to make this resolution. In fact in the attached tables the figure of the Italian ascalaphid (Fig. 1l) appears with the new name of *Ascalaphus petagnae*. In the text, undoubtedly completed after the figures, Rambur disowned such a name (“La figure porte par erreur le nom de *Petagnæ*.” cfr. p. 346) adopting instead *Asc. italicus*. He justified his choice “parce qu’il l’avait reçu d’Italie, où le *Meridionalis* ne paraît pas se trouver.” To this last species he attributed a distribution centred in southern France, not beyond the Pyrenees to the west and “ni s’avancer beaucoup en Italie” to the east. However, RAMBUR didn’t blindly agree with the opinions of

Fig. 1. – First illustrations. a = *Libelloides primus femina* [sic!] tab. L fig. II in SCHAEFFER, 1766 [editio 1791]; b = *Ascalaphus italicus* FABRICIUS, 1781 typus [photo KRISTENSEN]; c = *Ascalaphus italicus* tab. XXV fig. 4 in ROEMER, 1789 [= SULZER, 1776 ?]. The true Italian Ascalaphid: d = *Ascalaphus barbarus* fig. XXII in Petagna, 1786 [editio nova cum XXXVIII iconibus ad naturam coloratis, Lipsiae, apud Ioannem Sommer, 1808]; e = *Ascalaphus italicus* tab IX fig. 9 in CIRILLO, 1787–1792; f = *Ascalaphus barbarus* tab. 57 fig. 5 in DUMERIL, 1823. *Ascalaphus italicus* sensu antiquo: g = *Ascalaphus italicus* heft III n. 23 in PANZER, 1796; h = *Ascalaphus italicus* tab. XCVII (bis) fig. 3 in LATREILLE, 1805; i = *Ascalaphus italicus* heft 7 fig. 1 in LABRAM & IMHOFF, 1836. The debate: j = *Ascalaphus meridionalis* tab. II fig. 8 vs. k = *Ascalaphus italicus* tab. II fig. 9 in de CHARPENTIER, 1825; l = *Ascalaphus petagnae* [= *Ascalaphus italicus* in text] tab. 9 fig. 3 in RAMBUR, 1842; m = *Ascalaphus italicus* v. *leucocelcius* tab. VII fig. 2 vs. n = *Ascalaphus petagnae* tab. VII fig. 4 in COSTA, 1855; p = *Ascalaphus italicus* tab. II s.n. in VAN DER WEELE, [1909]. [Source of illustrations: a, c, f, g, h, i, j, k Libr. Spinola in Regional Museum of Natural Science, Turin; b Zoological Museum, University of Copenhagen; d Libr. Zoological Institute, University of Rome 1; e Libr. Natural History Museum London; l Libr. M. M. Principi Bologna; m, n Libr. Istituto di Entomologia “G. Grandi” Bologna; p Libr. A. PANTALEONI Sassari.]



DE CHARPENTIER. In fact the *Asc. ictericus* described by the latter finds a place in the tables but is replaced in the text by *Asc. barbarus* sensu LATREILLE. Besides, in the preface (cfr. note to page IV), he accuses him, together with Burmeister, of displaying “une préférence fort peu légitime dans l’adoption de noms de genres et d’espèces, qui sont loin d’avoir la priorité”.

Also WALKER (1853) adopted DE CHARPENTIER’s opinion, citing, moreover, for the first time *Asc. meridionalis* of Italy.

Besides the figures of the two species (Fig. 1*m* and 1*n*), COSTA (1855: p. 7–8) published a long report on the denomination of the Italian Ascalaphid. He contested DE CHARPENTIER because he took it upon himself to give great importance to the presence or absence of yellow spots on the thorax, rather than to the shape and the outline of the wing. Moreover, he contested RAMBUR’s hypothesis that only one of the two species lived in Italy, having picked up both in southern Italy. Finally, he assigned to the Italian Ascalaphid the name given to him first by RAMBUR, *Asc. petagnae*, “sia per non accrescer nomi, sia perché pare che il Petagna fosse stato il primo a darci la figura di questa specie.”

HAGEN (1860) intervened five years later. He published a critical review of COSTA’s volume and a “Synopsis synonymica” of the genus *Ascalaphus* in which he stated that the Italian Ascalaphid was the *Asc. italicus* sensu DE CHARPENTIER. Concerning the report published by COSTA, he wrote (cfr. p. 45): “Costa giebt eine längere Erklärung, warum er den Namen A. Petagnae vorzieht, die mir zum Theil unverständlich geblieben ist.”

VAN DER WEELE ([1909]) closed the debate by agreeing with HAGEN’s opinion, also publishing a beautiful figure of the Italian Ascalaphid (fig. 1*p*).

USE OF THE NAME ASCALAPHUS ITALICUS

Ascalaphus italicus was described by FABRICIUS in 1781. It is extremely difficult to decipher the interpretation of the species of the Danish author from the bibliographical data alone. In the following works (FABRICIUS 1787, 1793) he considered his *italicus* synonymous (junior) of *Myrmeleon longicorne* LINNAEUS, 1764, and at the same time compared it to a figure of SULZER (1776: tav. 25, fig. 4)* [sub *Myrmeleon barbarus*] that in 1781 was referred to as *Asc. barbarus*.

* We have not been able to find this figure. According to HAGEN (1860), who saw it [no asterisks before the citation], and VAN DER WEELE ([1909]) it represents *Libelloides coccajus*. It was probably republished in ROEMER (1789) [cfr. “Prefatio” (p. V-VIII), publisher’s coincidence (STEINER), table (XXV) and figure (4)] (fig. 1*c*).

The name *italicus* was used up to at least 1825, date of publication of DE CHARPENTIER's "Horae Entomologicae", for at least three species: the true Italian Ascalaphid by CIRILLO (1787–1792) and perhaps by ROSSI (1790); the actual *Libelloides longicornis* (LINNAEUS, 1764) by OLIVIER (1790) [*teste* VAN DER WEELE ([1909])] and by DUMERIL (1823); *Libelloides coccajus* certainly by ROEMER (1789) (fig. 1c), DE VILLERS (1789), PETAGNA (1792), PANZER (1796)** and LATREILLE (1805, 1807) besides, according to VAN DER WEELE ([1909]), TROST (1801) and LEACH (1815).

Between 1825 and 1860 the majority of entomologists attributed the name *italicus* to the taxon currently named *L. coccajus*, with the exception of the authors involved in the "case". See for instance ANGELINI (1827), LABRAM and IMHOFF (1836) (Fig. 1i), DESMAREST (1845), and, according to VAN DER WEELE ([1909]), also PERLEB (1826), HERRICH-SCHAEFFER (1840) and CUVIER (1846). WALKER (1853), when citing *Asc. italicus* from southern France, was perhaps indicating the Provençal population of *Libelloides ottomanus*. Otherwise only DISCONZI (1857), in an unimportant local paper, used "*italicus*" for *L. longicornis* [*teste* DISCONZI, 1865: fig. 118].

After 1860, date of publication of "Synopsis der Ascalaphen Europas" by HAGEN, and moreover 1909, with the publication of VAN DER WEELE's monograph, the name *italicus* was exclusively attributed to the Italian Ascalaphid.

CONCLUSION

It appears evident that first DE CHARPENTIER (1825), though not explicitly, then RAMBUR (1842), expressly, attributed the name *italicus* to the Italian Ascalaphid as a consequence of the coincidence between the name and the geographical distribution of the species. In making this decision neither the descriptions by FABRICIUS, to tell the truth uninterpretable, nor the usage prevailing at the time were taken into consideration. Some authors disagreed with this formulation (BURMEISTER 1839, COSTA 1855), but the descriptive strength of the name *italicus* was too attractive not to prevail over a law of priority which was not codified in the time.

** This bibliographical reference is extremely problematic. The date of publication according to VAN DER WEELE ([1909]) is 1813, ILLIGER (1807) reported the same figure as *barbarus*, in DE CHARPENTIER (1825) we can read "*Asc. barbarus in tabula: Asc. italicus in textu*". Evidently several reprints [editions] with subsequent corrections were published. The copy, we have been able to examine (in the Spinola Library, the Regional Museum of Natural Sciences, Turin) quotes *italicus* only.

The examination of the type according to ZIMSEN (1964) proves who was right. The few doubts that remain about this designation certainly are not enough to consider it invalid, considering that the data in our possession, about the origin of the material sent by ALLIONI to FABRICIUS, enables us to confirm that the type locality of *Ascalaphus italicus* is Piedmont (under Article 76 and Recommendation 76A of the fourth edition of International Code of Zoological Nomenclature (International Commission on Zoological Nomenclature, 1999) [from now on simply ICZN]), thereby making it inevitable that the type of *italicus* does not correspond to the Italian Ascalaphid.

Ascalaphus italicus FABRICIUS, 1781 is therefore a junior synonym of *Libelloides coccajus* ([DENIS et SCHIFFERMÜLLER], 1775), and, as already pointed out by BURMEISTER (1839) and COSTA (1855), a senior synonym of *Ascalaphus meridionalis* DE CHARPENTIER, 1825.

Ascalaphus latinus LEFEBVRE, 1842 is an available name under the ICZN Article 12.2 and is the valid name of the Italian Ascalaphid. Also available, but a junior synonym of the first one is *Ascalaphus petagnae* COSTA, 1855 (originally written with a capital letter, corrected under the ICZN Articles 28, 32.4, and 32.5.2.5). To define the authorship of this name we have applied the ICZN Articles 11.5 (as in PANTALEONI 1999).

There is not doubt that in the case of *Ascalaphus italicus* [as *Libelloides italicus*] the prevailing usage is as the name of the Italian Ascalaphid. According to the General recommendations of ICZN (Appendix B, Stability of nomenclatures) this use “should” be preserved and this is possible only through the application of the ICZN Article 75.6 “Conservation of prevailing usage by a neotype” according to which an author “should maintain prevailing usage and request the Commission to set aside under its plenary power the existing name-bearing type and designate a neotype”. The discretion left to the authors is not clear however: they “should”, not “must”, preserve the prevailing use, especially in the presence of a threat to the stability and the universality of the names.

We are not sure whether or not to follow this recommendation. A useful and pragmatic decision would be in fact to maintain the name *italicus* for the Italian Ascalaphid. It would be necessary, however, to create a neotype based on material deriving generically from the Italian peninsula and not from Piedmont, modifying the same type locality of the species. Moreover it would be necessary to invalidate a FABRICIUS type of 1781, taxonomically perfectly identifiable. Finally we should bring to a close this old fascinating dispute with the perpetration of a “true historical falsehood”. All this appears to be out of proportion as the only aim is to avoid the two nomenclatorial changes listed below, that are not, however, going to cause

any particular problems. Simply, the Italian Ascalaphid will affectedly be called *latinus* rather than possessing the fine name *italicus*.

Ascalaphus italicus FABRICIUS, 1781 = *Libelloides coccajus* ([DENIS & SCHIFFERMÜLLER], 1775) (syn. n.)

Ascalaphus italicus sensu DE CHARPENTIER, 1825 *nec* FABRICIUS, 1781 = *Libelloides latinus* (LEFEBVRE, 1842) (comb. n.) = *Ascalaphus petagnae* COSTA, 1855

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