

## BOOK REVIEW

### I Tachinidi della fauna Italiana

#### Con chiave interattiva dei generi ovest-paleartici

Pierfilippo Cerretti

Volume 1 (573 pp. + CD-ROM), volume 2 (339 pp.)

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The Diptera Tachinidae! Some time ago they were called Larvaevoridae. But it is well known that revisions tend to bring into play old news, in the desire to find out which name the first describer used to define this family of dipteran parasitoids.

At the moment they are Tachinidae and this is the name Pierfilippo Cerretti uses to call them. Pierfilippo puts together a veritable bible, a “holy book” devoted to the Tachinids of Italy, where each of these dipterans has its systematic position together with all the morphological and iconographic information which identifies it.

The publication consists of two volumes and is entitled “The Tachinids of the Italian Fauna (Diptera Tachinidae) with interactive key to the West-Paleartic genera”. The volume format is 21 × 30 cm. The first, with an attached CD-ROM (computer support- “DATABASE” MOSCH) has a total of 573 pages, whereas the second “iconographic atlas”, has 339 pages. A substantial material support exudes brilliance of knowledge and images which help us become familiar with the Tachinids in their whole essence. Looking through the volumes in all their parts, I found all the steps of the time I spent with these intelligent “flies”. In some way, I even managed to tame one of them, namely the microtype egg-laying species *Pseudogonia ruffrons* (in my time it was called *Gonia cinerascens*), by rearing its larvae in a laboratory insect, *Galleria mellonella*. I found that the sophisticated biology of this tachinid was a model to illustrate one of the types of life cycles of these higher flies. Pierfilippo also uses this species, together with *Exorista larvarum*, *Eucelatoria bryani* and *Archytas marmoratus* to illustrate the biology, ecology and ethology of these flies. May Pierfilippo forgive me, if I use the term “flies” for his tachinids, to which he has devoted his life and for which he is willing to do anything! I was told this by Maria Luisa Dindo, who has known Pierfilippo in first person, having given him her contribution in building his “bible” on Tachinids.

Returning to the analysis of the work, the first part of the first volume contains a table showing the insect orders parasitized by the different genera (314 in total) of the Tachinids of the West-Paleartic sub-region (divided into six zoogeographic regions) where Lepidoptera prevail. Moreover, there is information concerning diversity and a qualified and comprehensive documentation. The second part of the first volume is mainly devoted to

the structuring of the “Morphological database of the interactive key and the logic and the potential of an interactive key”. In this part, the possible morphological manifestations of 98 adult body traits are considered. The identified stages are defined as well as the ease of detecting them. The third part, the last of the first volume, is devoted to systematics and it is the most extensive part, since it occupies 547 of the 583 pages of the whole book. The species are 629 in total and they are identified with a dichotomous key at the end of the genus to which they belong. All in all, 326 genera were counted. For each systematic identity, the author and the date on which this identity was found are indicated (this may appear obvious, but I wish to stress it). In particular, for all the genera the references to the figures, the *typus generis*, the literature and a wide morphological description are added. The genera have been framed in tribes and, more generally, in the four sub-families in which the family of Tachinidae is divided, namely Exoristinae, Tachininae, Dexiinae and Phasiinae.

The second volume, the iconographic atlas, contains a collection of useful images to interpret the characters of the interactive key of the genera and the dichotomous keys of the species (as is underlined in the introduction). In total 1270 images and 247 drawings are reported, which together give 1517 images, representing almost the totality of the Italian species. In fact 602 species (out of the 619 till now described) have been represented. Moreover, it has to be pointed out that the photo and SEM shooting have been done so as to bring out the parts containing significant morphological traits for the species identification. The significant peculiarities of these characteristics have in most cases been highlighted with red lines or rings, or even coloured, always in red.

This work (in Italian!) obviously aims to fill a crucial gap and perfectly succeeds in doing so. I myself suffered from this gap when I was involved in studying this family of Diptera, although, as I tried to explain, my main interest was to show the intelligence of these flies, which can connect with their hosts by “exploiting” the physiological and biochemical characteristics of the latter to their own advantage.

These carnivorous Diptera, sophisticated killers of herbivore insects, were included by human beings in the troops of beneficial insects.

I was glad to learn that today everything (or almost everything) about the Italian Tachinids is now known.

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