

## Teratology in the genus *Mordellistena* (Coleopt.: Mordellidae)

by

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**ABSTRACT.** — Some interesting cases of teratology are noted.

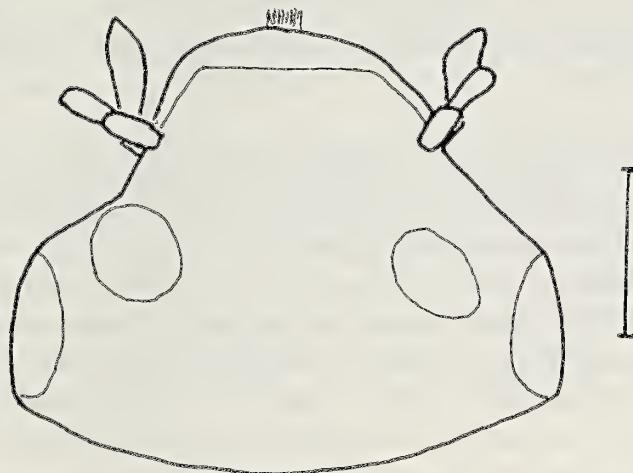


Fig. 1. Head of *Mordellistena pseudopumila* Ermisch, S. France, Port Vendres.

On a foray in the south of France I caught at Port Vendres on 14.VI.1954 a female *Mordellistena pseudopumila* Ermisch with four separate eyes. Two normal ones, at each side of the head one, and two on top of the head (fig. 1).

According to Balazuc (1948: 127) there are more teratological Coleoptera with one extra eye on top of the head. Nothing however seems to be reported about a complete duplication.

The head is only slightly heightened. The normal eyes have the usual features, the extra eyes on top are small, very finely hairy and the ommatidia, partly irregularly distributed, smaller (approximately 0.011 mm) than those of the normal eyes (0.015 mm).

Besides this very interesting case I have in my collection two other *Mordellistena*s with teratological features.

A male *Mordellistena grisea* Mulsant from Greece, Sparti, 7.VII.1978, leg. R. Batten, has a second right paramere. Balazuc (1948: 114, 115) mentions the bipartition of the genitalia. He writes: "L'étude des paramères montre que les deux composants sont énantiomorphes: c'est le gauche qui a l'orientation normale". This is conform the parameres of the specimen, as the left paramere is not doubled.

A male *Mordellistena pseudopumila* Ermisch from France, Quillan (Aude), 17.VII.1974, leg. R. Batten has the short spurs of the posterior tibiae both bifurcated at apex. Balazuc (1948: 249) only mentions the doubling of one spur and some cases of bifurcation of other external parts.

Of these anomalies the exact cause is still unknown. It would be interesting to find the facts which produce them. Moreover it is remarkable that all these anomalies occur in the same genus.

### REFERENCE

- Balazuc, J., 1948. La térapologie des Coléoptères et expériences de transplantation sur *Tenebrio molitor* L. — *Mém. Mus. natn. Hist. nat.*, Paris 25: 1-293, figs.

FELTWELL, J., 1981. THE LARGE WHITE BUTTERFLY. Series Entomologica, vol. 18, pp. XXVI, 535; 50 figs, 10 plates, 79 tables, ca. 4000 refs. ISBN 90-6193-128-8. Dr. W. Junk BV, The Hague. Price (bound) Dfl. 225.— (US \$ 98.—).

Insects can be studied from many different angles of vision. Taxonomists look for kinship relationships between species or groups of species, ecologists and ethologists are interested in aspects of the life of insects, applied entomologists direct their attention to frictions between human and insect economies, etc. Consequently, in a book containing information on all thinkable aspects of a single insect species, the different kinds of entomologists will each find something of interest and a lot of irrelevant information. And if the book is as expensive as the one reviewed here, very few entomologists may find the little information that interests them important enough to purchase it. But this is the publisher's concern. Let us consider the contents of the book.

The book contains information on all aspects of the Large White Butterfly, *Pieris brassicae*, from a description in the 17th century to Protozoan control and the date when the "virus resistant Cambridge stock" was established. To this aim, the author (I would rather prefer the word "compiler") spent 4000 hours in 50 different libraries in seven countries, as we are told by Dr. Miriam Rothschild who wrote the Preface. Out of 8000 references, 4000 were selected to produce the book. Really a tremendous task. The highly diverse information is grouped into 18 chapters, starting with Nomenclature and ending with Integrated Control. For some chapters (Nomenclature, Parasitic Control, Bacterial Control) the author found co-authors. Some of the information is summarized in 79 tables. Tables often give the information in a practical, condensed form, as in table 10.4 concerning the enzymes recorded in *P. brassicae*. In other cases, e.g. table 7.1 (wing length in a few widely scattered populations and bred stocks) the use of the table completely escapes me. Also the use of table 2.4 giving the distribution in England for each county is doubtful, certainly for students outside England, and especially since also a map of the distribution in Great Britain and Ireland is provided. A little overdone, making the book more expensive than necessary. Actually, the whole chapter on distribution (p. 27-45) could have been condensed to a single map depicting the world distribution with some annotations where necessary. I wonder why this chapter was not followed by the chapter on migration, the latter having been placed between the chapters Biochemistry and Senses.

The work would have gained much if comparisons had been made with other species. Even the little information on interspecific relationships (p. 84-86), however, is partly false: on p. 85 it is stated that "There is much evidence that *P. rapae* has replaced the native *Pieris* species (*protodice*, *virginiensis*) in North America". The "evidence" is not mentioned, and probably hard to find. Not only are there some four more native *Pieris* species in North America, but *P. rapae* has certainly not ousted *P. virginiensis*, the latter using different foodplants and living in a different habitat.

The use of a work as the present one depends, among other things, on the reliability of the references. With so many references, errors are hard to avoid, but if I read (p. 22) that Lempke's "Catalogus", which was published in many parts in Tijdschr. Entom. from 1936-1970, is said to have been published in 1936 (Ent. Ber. 79: 238-315) and 1953 (Ent. Ber. 14: 239-305), and (p. 501) that the title of a Dutch report is spelled "Insektenbestrijd in sprintkool" (recte: Insektenbestrijding in spruitkool), I can only hope that these are exceptions.

As much of the information concerns physiological and economic aspects, the book may be more useful to physiologists and applied entomologists than to taxonomists. But I dare to doubt the words of Miriam Rothschild that "the time has come when we are in desperate need of many similar compilations" (p. VIII). I do see the use of compilations, but it depends on the subject or theme chosen. Compilations on the senses of butterflies, hormones of butterflies, parasitic control of injurious insects, or a taxonomic revision of the genus *Pieris*, for instance, would be welcome. We are not in desperate need of compilations like the present one.

— R. de Jong.