



CANNON R.J.C. 2020: COURTSHIP AND MATING OF BUTTERFLIES. CAB International, Boston, 392 pp. ISBN 9781789242638. Price GBP 95.00, EUR 115.00, USD 135.00.

When I received this book, I was really curious to see how much of what is a very broad topic, butterfly mating, would be covered. I became even more curious when I read that the author, although an applied entomologist, is an amateur lepidopterist. On thoroughly reading this book, I was pleasantly surprised by its very broad scope. What I found was a large amount of information that was new to me, even though I am a professional lepidopterist!

The book is organised in ten chapters, each dealing with a different view of butterfly courtship and mating. After the detailed introduction, the author describes the male and female roles in sexual selection, the importance of visual signals, mate location, searching strategies, courtship behaviour, and even what happens in the female's reproductive tract. The author explains the role of chemical signalling in the life of butterflies, from pheromones to anti-aphrodisiacs, the function of UV patterns and iridescence in mate recognition and the diverse origin of the vivid colours of butterflies, all of which is richly referenced by a very long list of scientific publications (59 pages!), many pictures and six pages of glossary.

It is quite understandable that such a magnificent book will have some weaker parts. These can be divided into two groups. The first concerns the "taxonomic" examples in each of the chapters. To be more exact, I am happy with this, but they do not always represent the "units" recognised by butterfly taxonomists. For instance, in Chapter 5 on courtship behaviour (but similar confusions occur in almost all chapters), page 126 – *Melanargia*

lachesis (treated in the subchapter "Pierids") bears a British vernacular name "Iberian marbled white", yet it does not belong to the Pieridae but the Nymphalidae: Satyrinae. After several pages, there are the subchapters "Nymphalids" (page 133), "Satyrids" (page 144) and "Danaiids" (page 145, the correct spelling would be Danaids), but all three groups are currently classified in a single family Nymphalidae. Well, why not split these butterflies into three groups, the single family is quite large, but why then have several paragraphs about *Bicyclus anynana* under Nymphalids (page 137), when it is a member of the subfamily Satyrinae? The second weak feature is the figures. I have to admit that the majority are excellent and illustrative, but some contain errors (for instance switched male and female in Fig. 2.31, misidentifications as in Fig. 9.23 or Fig. 10.23, wrong legend as for Fig. 8.9) or some of them are almost identical with no clear clue why the pictures were selected for publication (for instance Fig. 2.22 *b* and *c* or Fig. 10.12). A bit strange is the use of Chinese labels on some photographs from Wikipedia (for instance Fig. 2.32, where the Chinese text is simply the Chinese name of the species, name of the photographer and the city where he lives).

Still, my criticisms should not discourage any potential reader as everyone interested in butterflies should read this really monumental book. I recommend the book as an important manual and source of knowledge for anybody interested in the lives of butterflies, from amateurs to a wide spectrum of professionals studying either butterflies or generally interested in behaviour, ethology or reproduction.

Z. Faltýnek Fric
Institute of Entomology, Czech Academy of Sciences
České Budějovice