

Book review

Light trapping and the Moon

László Nowinsky 2008 (ed.): Light trapping and the Moon. Savaria University Press. Z-Press Kiadó KFT, Miskolc. ISBN 978-963-9882-05-8, 170 pp. Price 30 EUR.

Hungarian scientists, in the lead of professor László Nowinsky, have compiled a fundamental book about light trapping and the effect of moon on the catches. Although the influence of moon light is a guiding principle through the book, there are several other points of view concerning the nocturnal insects, mostly moths (Lepidoptera). The content is grouped under seven proper chapters plus a summary of results, a glossary (which I did not find!), acknowledgements and references.

Starting from the last mentioned, i.e. from the huge reference list, it is obvious that it looks impressive with its 350 separate items. The authors express that they have especially gone through the Hungarian literature, which surely is true. They have, however, cited quite widely also foreign researchers. As a small minus I would say that the three cited Finnish references, Heikinheimo (1971), Mikkola (1972) and Leinonen *et al.* (1998), give perhaps a little bit too modest impression of Finnish light trap articles.

Let's return to the beginning of the book. List of the authors shows, who the writers really are and their e-mail addresses make it easy to contact them, if needed. In the first chapter "Light Trapping" there is a thorough presentation of different types of light traps used. Jalas-type, familiar to Finnish collectors, is not presented, but there is, however, a citation, wherefrom it can be found. In almost all the chapters, the material is based to the same long term monitorings done in Hungary.

Chapter 2 "The Illumination Threshold of the Insect Flight" gives interesting lux-values to the beginning and ending of nocturnal flight, divided into two categories: before mid-night and before or after mid-night. A question arose to me, how

these values hold in northern light summer nights? It might be worth of studying! The next chapter gives the hourly distribution of several nocturnal moth species, both in tables and in numerous diagrams. In the fourth chapter "Moonlight and Lunar Phases", the authors come to the basic theme, i.e. the various effects moonlight might have on light trap catches, either some positive or negative ones. This and next two chapters, which together make two thirds of the contents of the book, illuminate the meaning of the moonlight upon the catch of nocturnal insects very thoroughly. This is done with a whole lot of diagrams, giving convincing figures of this phenomenon. Unfortunately, the results are somewhat conflicting – in many case, full moon decreases the catch, but not always!

In the seventh chapter, an interesting survey of "The Behaviour of Insects in the Vicinity of Artificial Light Sources" is given, based on several articles and on the personal observations of various collectors. It shows convincingly that there is not just one and only way to come to light – not at all. Instead, several different ways to approach light can be found, as those lepidopterologists have detected, who have been watching the flight of moths in the neighbourhood of the lamps.

This book is a huge package of information about the influence of the moonlight upon the catch of nocturnal insects. However, I would have wanted to see more results about potential differences between the sexes. As far as I could find there was no comment whether the results concern just males or both sexes combined. I think that it would be important and interesting to keep the sexes apart in tables and diagrams. Another small shadow of doubt to me is the fact that the materials date back from many decades and from many kind of lamps and traps. How much this makes bias into the results is hard to say, but it may have some influence, although the authors have tried to notice this problem. What role has

the global warming then? At least in Finland, the flight periods change along with the warming. Nowadays the species fly in quite different light conditions than let's say two decades ago and then their behaviour towards artificial lights may also change. These are just small notes, which are not meant to decrease the value of this excellent book. Everyone interested about the light trap-

ping itself, not just of the new species, which he now and then finds in the collecting jar, should get familiar with this large data of light trapping and the moon.

Juhani Itämies
Oulu, Finland