

Book reviews

Weevil wilderness reviewed

Colonnelli, E. 2004: Catalogue of Ceutorhynchinae of the World, with a key to Genera. – Argania Editio, Barcelona. 124 pp. ISBN 84-931847-6-4. Price 80 EUR.

Curculionidae is one of the largest families in Coleoptera. Its further subdivision has been quite contentious, and we cannot yet consider the matter closed. Still, there are several clearly defined groups, for which a subfamily status seems appropriate. One of these subfamilies is Ceutorhynchinae.

Enso Colonnelli has studied the Ceutorhynchinae since the 1970's, and much of the present arrangement within the subfamily results from his work. Of this group, he has now published a one-volume catalogue that presents 1316 species in 167 genera.

Ceutorhynchinae seems to have a strong predominance in the Holarctic region. There are representatives in other regions, too, and a few of the recognized tribes are entirely or mostly extra-holarctic, but at least according to present knowledge they are rather species poor. Other subfamilies of weevils dominate in the tropics.

The subfamily is divided into eleven tribes. As a change from earlier arrangements, the genus *Amalus* is now included in a tribe Amalini, with just one species. Also as a change, the genus *Tapeinotus* is listed within the tribe Scleropterini.

There is no objective way to decide what should be considered a genus. As a result, different works apply different limitations for genera. During his studies, Colonnelli has raised a considerable number of old subgenera of *Ceutorhynchus* into genus level, which is their rank in the present catalogue. In some other recent works they have also been listed as genera. Still, what remains as *Ceutorhynchus* contains 375 species, while the largest of the separated genera has 67 species, and the others much less. Future phyletic investigation may yet change the picture. Co-

lonnelli also describes 16 new genera in this catalogue, most of them neotropical.

Colonnelli lists the species alphabetically in their genera. He also gives their synonyms, their known distribution by countries, and data on their ecology (where known). Naturally some countries may occasionally have been left out, but the general distribution is there to be seen. References are only to original descriptions of the valid names and the synonyms, not e.g. to taxonomic changes, nor to information about distribution or ecology.

There are numerous old descriptions of weevils that have not generally been assigned to any recognized species. Colonnelli has identified many such within Ceutorhynchinae. Sometimes the names have been senior synonyms to names in general use, but they are listed as nomina oblita, in accordance with the recently revised code of nomenclature. Thus, we need not change current use in these cases. In many cases there is just a mention of new synonymy, with no further explanation.

During the years a large number of junior primary homonyms have been replaced within Curculionidae, and many such names can be found in this catalogue, too. Yet there is one name, where Colonnelli himself has earlier changed the name for this reason, but where this junior homonym is used in the catalogue. That is *Ceutorhynchus assimilis* (Paykull, 1792) *nec* (Fabricius, 1775), a name replaced with *C. pleurostigma* (Marsham, 1802). Colonnelli does not explain why Paykull's name could not be used.

Colonnelli's catalogue does not bring many changes to the current use of species names in northern Europe. There are, however, *Ceutorhynchus granulicollis* Thomson, 1865, which need not be replaced by *C. gerhardti*, and *Stenocarus ruficornis* (Stephens, 1831), which is to be used for *S. umbrinus* (Gyllenhal, 1837) (not 1827). Otherwise it is more of a question how to delimit the genera.

Colonnelli's work is a useful tool for all work-

ers in Curculionidae. It brings together information from more than a thousand publications, giving an overview of the present knowledge of Ceutorhynchinae. We could naturally wish for references to other things written about these beetles, too, but that would already be another, much larger book.

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An excellent book on European Geometrids

Hausmann, A. 2004: *The Geometrid Moths of Europe, Vol. 2: Sterrhinae*. Apollo Books, Kirkeby Sand 19, DK-5771 Stenstrup, Denmark. ISBN 87-88757-37-4, Hardback, 600 pp. Price 960,00 DKK.

In recent years, even renowned experts of geometrid moths have refused to identify my sterrhine moths of south European origin. "Let's wait for the Hausmann's book!" has been the invariable excuse. This clearly indicates how badly a revision of this group was needed and awaited. Now, with the book in my hand, it is certain that it will really change a lot, perhaps most clearly so for amateur lepidopterists not having an easy access to the scattered literature, or regular access to major museums. It is now *possible* to be interested in Sterrhinae on the European scale; the future will show if this will also be *easy*. If not, this will hardly be the fault of the author, but rather that of the Mother Nature herself: there are just so many of them. Actually, I have always known that there are over 100 species of *Idaea* in Europe, but seeing them all together in colour plates still stroke me and, once again, brought brightly forward the disadvantages of living in northern Europe.

The book covers 196 European species of geometrids belonging to the subfamily Sterrhinae, in its traditional scope. There are short introductions to the subfamily, and to tribes and (sub)genera. Species accounts are relatively comprehensive, with an average of over 1.5 pages of text devoted to each species. Each account begins with a thorough treatment of nomenclatural is-

sues, followed by species description, data on phenology and biology, and a section devoted to comparisons with similar species. There are numerous text figures meant to aid identification. Distribution maps are presented for almost every species. In the end of the book there are 24 colour plates, and 61 plates with original line drawings, of both male and female genitalia of all the species.

No doubt, the author has put a respectable amount of effort in producing his book, which is clearly reflected in the quality of the outcome. The number of specimens examined (300,000) and the reference list are impressive. As a special merit, the remarkable length and a broad geographical coverage of the acknowledgements list has to be noted. Consulting local experts is definitely critical when revising the fauna of a region as large and diverse as Europe, from Ireland to Urals. Fortunately, no effort appears to be spared here. However, things are somewhat different as it comes to the original contributions to the taxonomy. In particular, twelve taxa have been raised to species rank, and 69 taxa downgraded to synonymy, but the reasons for these changes have not always been sufficiently explained. Moreover, I feel that the morphological data could have been presented in a more systematic way. Now I am afraid that a researcher intending to use morphological traits in a cladistic analysis cannot easily extract the data for his/her matrix from the book, and should personally re-examine the moths in collections. However, perhaps the cladist should do so anyway.

The colour plates are of outstanding quality. A very good point is that the number of specimens figured is high: there are frequently more than a dozen individuals per species in the colour plates. Clearly, showing the limits of intraspecific variation is a necessary property of any good identification tool. In contrast, however, there is mostly only one genitalia drawing presented for each sex of a species. This implies that there will probably still be a need to consult various sources when trying to identify a sterrhine moth on the basis of a genitalia slide. Even if within-species variation in genitalic structures may be limited, a single projection never does a good job in presenting a three-dimensional structure. This appears to be particularly true in the case of aedeagi: if this

structure appears to be compressed in a different way on a slide, even the excellent drawings may be of limited use.

The distribution maps are carefully compiled. For example, I am most happy to see that the maps are almost perfectly correct in the case of Estonia, my home country. Such an unusual situation is particularly admirable considering the fact that no one appears to be thanked for revising maps for this country (unlike in many other cases). This is why I am ready to trust in the correctness of faunistic data on those parts of Europe I am not familiar with. A most welcome practice is the use of a special symbol for occasional records, as opposed to areas of a species' residence. Indeed, in a scientific (rather than a philatelic) approach, we should primarily be interested in areas in which a species actually lives, and not so much in places in which it has been occasionally recorded. Unfortunately, however, such a policy appears not to be applied consistently. For example, although the text states that the Finnish records of *Cyclophora linearia* refer to occasional immigrants (which is certainly true), such a status of these records is not reflected on the map. If something could be further improved with respect to the distribution maps, then I would suggest that areas of uncertain occurrence would be clearly indicated. The accuracy of faunistic data cannot be the same for Great Britain, and Southern Russia, for example. Of course, this would not be an easy task to accomplish.

A highly positive feature of the Hausmann's book is also that the data on host plants are systematically provided with references. This is in sharp contrast with the unfortunate tradition in the major body of lepidopterological literature, in which data on host plants are carelessly borrowed from one work to another, making the original sources impossible to track, and the reliability of the data hopeless to confirm. I would like to believe that the new standards will spread.

As a life history ecologist, I have been waiting for a new generation of moth books to appear. In other words, should the handbooks start to broaden the array of data included in species descriptions – why not include data on fecundities, egg sizes and pupal weights? Or, as a minimum, an index of sexual size dimorphism in wing span? Such an expectation may sound unusual for peo-

ple used to the traditional format of entomological works. However, comparable life-history data are regularly included in systematic handbooks on vertebrates, birds in particular. Nobody considers this awkward, and the availability of life-history data on a number of species facilitates various types of comparative analyses to be performed. So far this is not the case with insects, which points at the unfortunate gap between the ecological and taxonomic research traditions in entomology. Another aspect of this situation is illustrated by the striking fact that no parasitoids are known for any *Idaea* species.

Summing up, even if Hausmann's book is not a new generation handbook qualitatively, the quantitative advancement it makes to the future of European lepidopterology is truly remarkable. It remains only to be hoped that European lepidopterology will be allowed to develop or, as the author says, "Let us hope that explorations of global species inventories is no longer obstructed by the nonsense of national and international legislation, which forbids collecting and thus promotes ignorance about nature and ecosystems!"

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Excellent book series on European Noctuid larvae

Beck, H. 1999–2000: Die Larven der Europäischen Noctuidae. Revision der Systematik der Noctuidae (Larvae of European Noctuidae). Revision of the systematics of the Noctuidae). With the help of Matti Ahola (numerous drawings) and Ivar Hasenfuss (systematic notes on Noctuoidea, Acronictinae, and occasional drawings). Volumes I–IV. 864+448+336+512 pp. ISSN 0723-595X, ISBN 3-923807-04-X. Price 530 EUR.

This huge series of four volumes belongs to the Herpiboliana book series on Lepidopterology (Band 5/1–5/4). Volume I describes the morphology and ornamentation of European noctuid larvae and provides keys and a revision of the systematics of Noctuidae based on larval ornamenta-

tion and adult features. Finally, a systematic list of the European species is provided. This volume is mostly in German. Volume II includes the figures for Volume I. (over 1,000 figures with several detailed illustrations). Volume III includes colour photographs and a general introduction (a technical part) that shows, for example, how to identify a larva, gives a systematic list, literature and more than 1,750 colour photographs on 99 plates, depicting about 900 species. Volume IV is divided into four sections as follows: (1) discussion of imaginal and larval systematics, (2) technical part with a list of abbreviations and terms, (3) special section with keys to identification and further taxonomic changes and corrigenda, and (4) short descriptions of the species. The latter two volumes are bilingual (German and English).

Volumes III and IV appeared a year after volumes I and II. This delay was actually lucky, as it made it possible to add material of about 50 further species. The original idea was to produce just one book with colour pictures and descriptions, but as material accumulated over the years, the author ended up with four volumes. According to the author, this is especially the merit of the opponents and colleagues who are listed in Preface.

Ivar Hasenfuss writes in a brochure about the book series: "In the work we now have in our hands for the first time a covering and scientific work about the larvae of European noctuids compiled by one of their best specialists. It is not only an identification series into the larvae based upon

their morphological markings (Features), but it includes also a photographic documentation of the habitus of inspected larvae and is so very handsome also as a 'Picture book'." And that is really true! The colour photos are almost consistently of high quality. One must not, however, think that identification could be done just by looking through the pictures. Due to the great number of species and also to the special ornamental world created by the colours and patterns of noctuid larvae, one must spend hours and hours to get acquainted with them. Surely, however, a person familiar with moth larvae can make most identifications just with the aid of the colour pictures. Others can also use them as a shortcut by collecting possible candidates for an unknown larva and then consulting the text and line drawings. Of course, before using the keys, one must familiarize oneself with the chaetotaxy and other features used in the descriptions of the larvae.

The books are rather expensive, but they contain such an unbelievable amount of knowledge on their pages that every museum and research institute should consider it a matter of honour to acquire these volumes to their collections. The books can be conveniently ordered from Dr. Ulf Eitschberger, Humboldtstr. 13a, D-95168 Markleuthen, Germany..

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