

BOOK REVIEW

CURLETTI, G., M. RASTELLI, S. RASTELLI, AND F. TASSI. 2003. **Coleotteri Buprestidi d'Italia.** Piccole Faune, Museo Civico di Storia Naturale di Carmagnola (Torino), Progetto Biodiversità (Roma), CD-ROM. ISBN 88-901201-9-3. Available from: Museo Civico di Storia Naturale di Carmagnola, Via San Francesco di Sales, 188, 10022 Carmagnola (TO), Italy; e-mail: mrastelli@tiscali.it; <http://web.tiscali.it/buprestidae>. Price 40 EUR (about 47 USD).

I love books almost as much as beetles! There is something satisfying about pulling an attractively-bound volume from its place on the shelf and smelling the aging paper while leafing through the pages. It is impossible, however, to ignore the advantages of electronic media and its growing popularity as an alternative to traditional print media. The work reviewed here is a recent, and praiseworthy, example of such. This CD-ROM covers the “jewel beetles” (family Buprestidae) of Italy, using keys and color photographs to aid in their identification. It is the first offering in a multimedia series called “Piccole Faune” (Small Fauna), whose stated objectives are to promote an appreciation of the invertebrate fauna of Italy among both professional and amateur natural historians in a richly illustrated, easy-to-use, computerized format. The CD is compatible with most MS-DOS and Windows computer operating systems using Netscape Navigator or Microsoft Internet Explorer browser software and includes 962 HTML pages, 1,330 color photographs, and approximately 6,500 hyperlinks. While the text and geographic scope are strictly Italian, this work should nevertheless prove highly useful to all those interested in the buprestid fauna of western Europe and, particularly, the Mediterranean Region.

The CD is organized into twelve main sections that are accessed through hyperlinks on the opening page. These include a preface with remarks on the beauty and significance of jewel beetles and an introductory section covering basic biology, taxonomic history, paleontology, and importance to humans (both past and present). Other sections give information about the authors, supplemental information about the work and its sponsoring organizations, instructions on how to use the CD, and an extensive bibliography containing 215 references. The remaining sections constitute the bulk of the work—these include systematic and alphabetical indices to the species, a photographically-illustrated dichotomous key, a section containing photographs of larvae representing most of the included genera, and provincial checklists.

The systematic index lists ten subfamilies, 17 tribes, 32 genera, 14 non-nominate subgenera, 191 species, and 18 non-nominate subspecies. The higher classification follows the “traditional” subfamilial system based on Lacordaire (1857), despite the trend among recent workers to adopt the tribal/subtribal system initially proposed by Holyński (1993) and most recently modified by Jendek (2001) and Volkovitsh (2001). This is not a significant detraction, since the work is faunal rather than taxonomic. *Cypriacis* is treated as a subgenus of *Buprestis*, even though it has been recognized as a full genus for many years now (Kurosawa 1988), but otherwise all of the nomenclature appears to be current. I was happy to see author name and year of publication included for all listed taxa, although a few author names (*e.g.*, “LeComte,” “Mitterpacher,” “Redtembacher”) and one taxon (“Kisantobiini”) were misspelled. Also, I would have preferred an alphabetical arrangement of species within each genus to facilitate finding them in some of the larger genera. At the end of the systematic list is a list of species previously recorded from Italy but now excluded from that fauna, with explicatory notes. This list could have been more comprehensive in view of the many species listed from Italy in a recent checklist (Gobbi and Platia 1995) that are not treated in this work.

A key feature (pun intended) of the work is the photographically-illustrated dichotomous key to the species and subspecies. Each couplet offers both descriptive text and a photographic image of the key character(s). Hyperlinks next to each choice advance the user to the next couplet or a detailed summary of the species. The photographs are a valuable addition to the key and allow it to be useful even to those lacking proficiency in Italian language or practical knowledge of Mediterranean buprestids. I tested the key using some different Palearctic species in my collection and found it to be very workable.

The key, systematic and alphabetic indices, and provincial checklists are all hyperlinked to one-page summaries for each of the species/subspecies covered in the work, which are accessed by clicking on the name of the species/subspecies in the aforementioned sections. Each summary page is divided into left, upper right, and lower right frames. The upper right frame contains the genus and species name, including author and year, and brief characterizations of its overall distribution and

recorded larval host plant genera. Some of the more widely used synonyms are also indicated, as are explicatory notes for a few species. The left frame of the page contains a dorsal habitus photograph of the species and, in the case of sexually dichromatic species, both sexes. Placing the cursor over the image reveals a popup note indicating specimen length and label data. The images are of good size, generally measuring at least 200 by 400 pixels, and clicking on them hyperlinks to an even larger version of the image. Most of the images are of sufficient clarity to discern details of surface sculpture, punctuation, and vestiture. The bottom right frame contains a shaded map of Italy indicating the provinces from which the species has been recorded. In the case of subspecies, different colors are used to distinguish their distributions from each other. Clicking on the map hyperlinks the reader to a provincial checklist page containing hyperlinked checklists for each of the provinces of Italy. Hyperlinks at the bottom of the species summary page access photographs of the male genitalia, and for a few species, notable color variants or live adults in field settings. Additional hyperlinks allow the reader to quickly navigate to most of the other main sections of the CD without having to backtrack, or to advance to the next or return to the previous species listed in the systematic index. The pages are attractively formatted, and I appreciated the option to navigate with a single click to the relevant location of the species in the key and both indices. The usefulness of these summary pages would have benefited by including subgeneric names, more comprehensive indications of synonymy, and greater detail regarding the biology of the species, although much of this can be found in the senior author's previous treatment of the Italian fauna (Curletti 1994).

One interesting feature of the CD is the option to simultaneously display summary pages for two species. Clicking on this choice brings up a split screen, with each split containing hyperlinks to the systematic and alphabetic indices. Navigating through the indices to select two species results in a side-by-side display of dorsal habitus and genitalia photographs. This should be particularly useful for comparing closely related species when the user has been unable to distinguish a species based on the characters given in the key.

I highly recommend this work to anyone interested in western Palearctic Buprestidae. Its thorough systematic treatment of the Italian fauna, photographic dichotomous key, and liberal use of high quality images make this one of the best references available for both amateur and expert students of the Mediterranean fauna. The electronic format is very well organized and, with some practice, enables the user to quickly navigate anywhere in the CD. A further advantage of the electronic format is the ability to cut and paste the text into one of the many language translation programs available on the internet, enabling non-Italiophones to translate desired portions of the work with relative ease. Try doing that with a book!

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