

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

USDA Systematic Entomology Laboratory

Entomology Collections, Miscellaneous

2007

Book Review of *Longicorn Beetles of Japan* by N. Ohbayashi and T. Nisato. 2007.

Steven W. Lingafelter

Systematic Entomology Laboratory, ARS, USDA, National Museum of Natural History, Washington, D.C. 20013-7012, U.S.A.

Follow this and additional works at: <https://digitalcommons.unl.edu/systementomologyusda>



Part of the [Entomology Commons](#)

Lingafelter, Steven W., "Book Review of *Longicorn Beetles of Japan* by N. Ohbayashi and T. Nisato. 2007." (2007). *USDA Systematic Entomology Laboratory*. 32.

<https://digitalcommons.unl.edu/systementomologyusda/32>

This Article is brought to you for free and open access by the Entomology Collections, Miscellaneous at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in USDA Systematic Entomology Laboratory by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

The Coleopterists Bulletin, 61(4):540–541. 2007.

BOOK REVIEW

OHBAYASHI, N. AND T. NIISATO (EDS.). 2007. **Longicorn Beetles of Japan**. Tokai University Press, Kanagawa, Japan. 818 pp. ISBN 978-4-486-01741-7 (hardbound in slip case). Price: approximately US\$400. Available from the publisher, Tokai University Press, www.press.tokai.ac.jp.

This monumental book of 818 pages, edited by Nobuo Ohbayashi and Tatsuya Niisato, with contributions of 11 authors (M. Hasegawa, T. Kurihara, H. Makihara, T. Niisato, N. Ohbayashi, A. Saito, S. Saito, M. Satô, T. Shinkai, M. Takeda, and H. Tanabe), represents the pinnacle of quality that can be attained for a regional treatment of a taxon. The book contains 78 plates of 1,463 dorsal photographs of well-pinned beetles (averaging 3.5 cm in length), representing all Japanese species of Cerambycidae. There are also 318 live shots of Cerambycidae on host plants. Further, there is an illustrated key to adults, spanning 116 pages, with very clear line drawings at every point, enabling relatively easy identification, without language barriers. With this book, anyone can, with reasonable ease, identify nearly all specimens of Japanese Cerambycidae.

This book follows several important publications on Japanese Cerambycidae. In 1969, Kojima and Hayashi prepared the first photographic guide to this family. This book, titled "Insects' Life in Japan, Vol. 1. Longicorn Beetles" provided hundreds of dorsal habitus photographs of pinned specimens and live shots of many others, all in color. Nakane (1980) prepared a nice book that treated many families of Japanese Coleoptera and included nearly 400 photographs of pinned Cerambycidae, all of larger size and greater quality than Kojima and Hayashi (1969). Ohbayashi, Satô, and Kojima (1992) attained a new level of quality by producing the monumental work, "Illustrated Guide to Longicorn Beetles of Japan." While that work was superb, its illustrated keys to adults (as well as larvae and pupae) lacked any Latin or English names, which essentially made them inaccessible to most westerners.

Ohbayashi and Niisato's present work begins with an introductory section on the evolution and phylogeny of the group, with a brief review of the literature on these topics. The text is all in Japanese. The introduction is followed by a very well-illustrated section on morphology. The diagrams of external features, hind wings, genitalia, and larva are very clear and labeled in English and Japanese. Following this is an illustrated larval key to subfamilies. In this key the names are only in Japanese. The key is followed by a short section showing larval feeding with 16 color photos (but the text and figures legends are in Japanese). A section on biogeography of Japanese Cerambycidae follows, with text in Japanese. This is followed by a section on collecting and curatorial methods. Included here are color photos showing tropics netting, log gleaning, beating, and mercury vapor lighting methods. There are nice photographs showing how to prepare specimens (larvae and adults) after their collection. The text of these sections is in Japanese. A short section on photographic methods in Japanese is provided.

The next section is a large, illustrated key with clear line drawings and Japanese/Latin species names to all adult species. This key spans 116 pages. Despite the fact that the key text is in Japanese, it is very accessible by anyone since all the entries have clear illustrations and the termini have the Latin names. My only complaint about the key is that it initially relies on wing venation and mesonotal structure to distinguish among a few subfamilies. Since these characters require some dissection, it presents a hurdle to some users. Perhaps it would have been better to have simpler characters and not necessarily constrain species within a subfamily to appear together in the key.

The next large section, with the species synopses, spans 340 pages. The names are in Japanese and Latin, with synonyms and references in English. The main text is in Japanese, making it difficult for me to access or critique. From my examination, the language usage is quite clean and I have found very few spelling errors of the names. I do want to point out that some different classification and spellings are used from those common to New World literature. For example, they apparently disagree with my hypothesis that *Anoplophora malasiaca* is a synonym of *Anoplophora chinensis*. Spondylidinae is used as a subfamily that includes Aseminae. Methiini is spelled as "Methini." They use Purpuricenini instead of Trachyderini. Gleneini and Phytoeciini are subsumed in their Saperdini.

The species synopses are followed by a small section discussing the species artificially introduced or historically recorded (but apparently not currently present) in Japan. This treatment includes 40 species and the names are in Japanese and Latin, with the bulk of the text in Japanese. A 90-page list of host plants follows, each with the cerambycid species known or suspected to develop within them. The plant and beetle names are in Latin and Japanese. A modest but not exhaustive literature cited section follows, showing the more important references to Japanese fauna. There are about 200 references included. There are two indices, one in English and one in Japanese.

In summary, this book most closely follows the model of Ohbayashi, *et al.* (1992). It appears as though all the photographs in the present book are new—as I was unable to find any overlap between the two books. The illustrated key to adults is a great improvement in the new book since it has Latin names at the ends of the couplets.

This book is a scientific masterpiece, a work of art, and is unrivaled in quality. Admittedly \$400 is a big chunk of change, but I highly recommend taking the plunge to have this beautiful volume grace your shelf.

Literature Cited

- Ohbayashi, N., M. Satô, and K. Kojima (eds.). 1992. An Illustrated Guide to Identification of Longicorn Beetles of Japan. Tokai University Press, Kanagawa, Japan. 696 pp.
- Kojima, K., and M. Hayashi. 1969. Insects' Life in Japan, Vol. 1. Longicorn Beetles. Hoikusha Publishing Company, Osaka, Japan. 295 pp.
- Nakane, T. (ed.). 1980. Colored Illustrations of the Insects of Japan, Vol. 1. Coleoptera, enlarged & revised edition. Hoikusha Publishing Company, Osaka, Japan. 274 pp.

Steven W. Lingafelter, *Systematic Entomology Laboratory, ARS, USDA, National Museum of Natural History, Washington, D.C. 20013-7012, U.S.A.*

(Received 2 October 2007; accepted 15 October 2007. Publication date: 10 January 2008.)