



Guía ilustrada para los géneros de Staphylinidae (Coleoptera) de México. Illustrated guide to the genera of Staphylinidae (Coleoptera) of Mexico

Author: Frank, J. H.

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NAVARRETE-HEREDIA, J. L., A. F. NEWTON, M. K. THAYER, J. S. ASHE, AND D. S. CHANDLER 2002. *Guía ilustrada para los géneros de Staphylinidae (Coleoptera) de México. Illustrated guide to the genera of Staphylinidae (Coleoptera) of Mexico.* Universidad de Guadalajara and CONABIO; Mexico. xii + 401 pp. ISBN 970-27-0180-5. Hardback. \$40 (in the USA). Order from José Luis Navarrete (snavarre@maiz.cucba.udg.mx).

This book is a remarkable accomplishment. Its only antecedent in the history of Mexico and Central America was the volume on Staphylinidae (volume 1 part 2, pages 145-824 and plates 5-19) published by David Sharp in 1883-1887 in the series *Biologia Centrali-Americana*, and also volume 2 part 1, pages 1-46 and one plate by the same author in 1887 in the same series. Sharp's work, based on specimens in the museum now known as The Natural History Museum (London) and on earlier literature persisted as the only synthesis of the Mexican staphylinid fauna for 115 years!

Sharp's work itself was groundbreaking. But it was written with Latin species descriptions and the rest of the text in English. Although it had 14 plates of habitus drawings in color, it had no illustrations of diagnostic characters and no keys. And, of course, it was highly incomplete. Its inadequacies must have been especially evident to Mexican entomologists trying to use it to identify specimens.

The four-person American team (Newton, Thayer, Ashe & Chandler) that produced the 146-page chapter on Staphylinidae in *American Beetles* (Arnett and Thomas, editors, 2001) joined forces with José Luis Navarrete in tackling the Mexican staphylinid fauna. Now, at last, there is a book on Mexican staphylinids in Spanish and geared to Mexican entomologists.

The new book is much larger (401 pages) than the chapter in *American beetles* (146 pages). This is not because it deals with more genera: it deals with 384 in contrast with 523 known from America north of Mexico. It is much larger because it had fewer constraints on size and was therefore able to include more information. For example, it includes a 25-page introduction, which deals with the history of studies of staphylinids in Mexico, life cycles and behavior of staphylinids, and collection and preservation methods for them. In short, it tries to provide all the available information that a budding enthusiast needs to know. It provides 16 plates of excellent color photographs of adult specimens of that most difficult subfamily Aleocharinae. A complaint I have heard is that Aleocharinae "all look to be the same", but these plates show that there are huge differences: you just have to use a microscope to see them well. And, for each genus, it provides a habitus drawing of an adult along with a list of the known species and their distribution by (Mexican) state and other countries. It also has an index.

In short, this new book is far more complete (in terms of available information included) than is the chapter on staphylinids in *American Beetles*.

Perhaps one day we may look forward to a book on the staphylinids of America north of Mexico with illustrated keys down to the level of species, and with information of habitats and distribution and behavior. It will have to be a large book, because the fauna as of 2001 was known to have 4100 named species in 523 genera, and the task of species description and generic and tribal revision is not complete.

As to the Mexican fauna, it was known at the time of writing of this book to have only 384 genera with fewer than 2,000 species (with about 500 of these recognized but not yet described). So, how large is the Mexican fauna? I suspect that it is not smaller than that of America north of Mexico. Mexican entomologists can look forward to many decades of taxonomic work, and far more on behavior and ecology of their fascinating staphylinid fauna. Now, at least, thanks to José Luis Navarrete and his talented American collaborators, they have a solid foundation for future studies and the best book on that subject in the New World.

The scenario for studies in South America is much bleaker. There are 397 pages, in a journal issue, about staphylinids of the Amazon Valley, but the journal was published in 1876, and the article has no illustrations, and is in English with descriptions in Latin. The length of specimens is given in "lines" which, in the British system of the time, were each one-twelfth of an inch. Those things hardly encouraged Brazilian entomologists. There is a 392-page book about staphylinids of the province of Buenos Aires, with text in Spanish and descriptions in Latin, with no illustrations, published in 1886. That hardly seems to have promoted further studies by Argentine entomologists. There is a 658-page work, incomplete for the large subfamily Aleocharinae, on staphylinids of the West Indies. It has keys, but it has sketches of some structural characters of adults belonging to just four species in one genus, was published in 1943, and now is sadly out-of-date. The number of species I have seen from Jamaica and Haiti is at least 50% greater than reported in the book, and from those islands I have seen specimens even of genera that are unreported anywhere in the West Indies. I expect much the same will be true for other islands/countries. There are hundreds of scattered, shorter publications, most unillustrated, most without keys, in Latin, German, French, and English (few in Spanish or Portuguese). Against this background, I have received requests from entomologists in Argentina, Brazil, and Colombia, to

identify hundreds or thousands of specimens in some current project, such as an ecological survey of the fauna of a park, or suspected predators in a study in applied entomology. Perhaps they expected I could miraculously identify their specimens in a weekend or two, but the problems caused by lack of adequate taxonomic studies in their countries would take years to resolve. So, now we need an up-to-date book on staphylinids

for each major country in South America, one for the Central American countries, and one for the West Indies, like this one from Mexico—and then more, so that identifications can be made not just to genus but to species. We can always hope.

J. H. Frank

Entomology & Nematology Dept.
University of Florida
Gainesville, FL 32611-0630