Catalogue of the Tiger Beetles of Canada and the United States 1999 *by* Richard Freitag. NRC Research Press, Ottawa, ON. 195 pp. ISBN: 0-660-17640-8. Paper. $39.95 Can.

Dr. Freitag has given us a remarkably comprehensive bibliography of the North American tiger beetle fauna. He includes over 2400 references, far more than I would have thought existed. For each subspecies and for each species in which subspecies are not recognized, there are the following entries: type locality; range within North America; synonyms, each with type locality, its sex and its type depository; and the same information for the type of the valid name. The remaining references are grouped under the following headings: immature stages, taxonomy, re-description (if applicable), biology, and habitat. The category "taxonomy" is interpreted relatively broadly to include mention in regional lists, locality records, inclusion in other bibliographies, among other types of works. The number of references to some of the commoner species is staggering; those for *Cicindela sexguttata* occupy almost all of two pages.

There is also a useful treatment of Cicindelinae as a whole, including about a hundred papers of broad scope with a code indicating the categories of information in each entry. There is a similar list for each genus. The species of *Cicindela* are listed in alphabetic order within each of Rivalier's genera (ranked as subgenera by Freitag). Some will be annoyed by this, finding a complete alphabetical treatment of *Cicindela* as a whole more convenient. As I am interested in the family tree of tiger beetles, I don't mind learning Rivalier's ideas.

It is an unfortunate fact of life that all comprehensive works are already out of date when they roll off the presses. This book is no exception: the most recent references within it date from 1997, and tiger beetle research continues to blossom, as can be confirmed by a glance at any recent number of the journal Cicindela.

Freitag's catalogue is a necessity for any entomologist contemplating work on tiger beetles. It would also be valuable for researchers with a broad interest in such topics as behavior, ecology, and evolution of insects in general. I prize it as a key to the North American tiger beetle literature, and I keep it next to the Bousquet and Larochelle 1993 Catalogue of the Geadephaga. The Freitag work has a high standard of accuracy; I have been unable to locate a single typographical error (although, of course, I was unable to check every page number and date). He has found many rare and poorly known references. I recommend this catalogue enthusiastically and without reservations.

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Interrelationship Between Insects and Plants 1998 *by* Pierre Jolivet. CRC Press, Boca Raton, FL. 336 pp. ISBN 1-57444-052-7. Hard Cover. $59.95 US

This book (336 pages, hardcover) describes the variety of relationships between insects and plants. Following a general introduction (Chapter 1) outlining the various types of plant-insect interactions, the subsequent chapters move into more detail on a range of topics, which are as follows:

2. Plant-feeding insects and arthropods of the geological past
3. An early twentieth century classification of food plant selection among phytophagous insects
4. Relationships between insects and fungi

5. Physiology of food selection
6. Carnivorous and protocarnivorous plants
7. Myrmecophily and ant-plants
8. A rare plant-insect relationship: epizoic symbiosis
9. Galls and mines
10. Insect mimicry and homochromy in relation to plants
11. Natural weed control in the Holarctic region and in the tropics using phytophagous insects
12. Pollination
13. Coevolution (or not) between insects and plants
14. A general review of insect-plant relationships; some thoughts about learning; the canopy

Following these chapters is a two-page epilogue (Chapter 15), an extensive glossary (18 pages), 42 pages of references, and three indices: plant (10 pages), insect (8 pages) and general (12 pages).

The author clearly states in his Foreword that "This book is not on insect physiology but an essay about all aspects of the interactions between insects and plants. Its aim is to be different from the other texts in covering more topics." And in the Preface, "The present book contains topics related to insects and plants generally absent from ordinary books. There are plenty of books on physiology, chemistry and genetics of plant selection by insects, but none includes carnivorous or myrmecophilous plants, pollination, etc. You have to find that in specialized treatises." These two quotes provide perhaps the most insight into the scope of this book. This book does give generally useful information about specific plant-insect systems that are not as critically discussed in other texts. The information appears to be complete and up to date on the most recent research conducted in the specific areas discussed.

However, I did not find the book all that easy to read, as it tended to meander from topic to topic with no clear connecting thought between. Further, there are injections of non-insect examples that detracted from the plant-insect relationship being discussed that did not, in my opinion, add to the readers' understanding. The author's use of figures did not necessarily clarify the concepts being discussed. For example, the same figure (showing an aphid probing, penetrating and ingesting plant material with its stylets) would be referenced to describe how aphids feed and, later on, as a demonstration of how little is known about how insects with ovipositors select host tissue. Chapters 1 through 3 were the most difficult to read critically. From Chapter 4 onward, the chapters tended to be more focussed and flowed more logically from introduction to conclusion; however, there are some not so minor difficulties with the presentation that detracted from the main thesis.

I found several instances of spelling errors, confused tenses within sentences and in general poor sentence structure. The text fluctuates from a scientific exposition on plant-insect interactions to a loosely structured free-flowing dialogue, analogous to that of a brainstorming session. Less than half the chapters are concisely put together, well written and clear; the rest are heavily interspersed with unrelated rambling tangents. On the whole it is a text which will provide many helpful directions for those in the plant-insect interactions field but cannot be taken as the sole authority on any given interaction or as a stand-alone book, as the author himself so clearly pointed out.

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