Agrochemicals, Preparation and Mode of Action

The mode of action of pesticides is a dynamic area of research. With an ever increasing amount of information on the activity of new or currently available pesticides, as well as continuous revisions in pesticide regulation and registration, older texts that focused on pesticide mode of action become obsolete in only a few years. In this book, Cremlyn presents the latest and most current information on the preparation, use, and activity of pesticides. In addition to scientific information on pesticide activity, the text also includes a good overview of the metabolic processes involved in pesticide action and an excellent historical perspective on pesticide development and use. An entire chapter is also dedicated to toxicological and other environmental aspects of pesticide application.

The book devotes a great deal of attention to the chemistry and activity of natural and synthetic insecticides, as well as novel methods of insect control. In the latter case, a number of interesting topics, such as sex attractants, antifeedants, synthetic juvenile hormone mimics, and microbial insecticides are discussed. In addition to insecticides, other pesticides including herbicides, fungicides, fumigants, plant growth regulators, rodenticides, nematicides, and molluscsides are also covered in some detail. For each of these pesticide categories, compounds are organized by chemical classification. Although the author does not focus on the absorption, translocation, or metabolism of pesticides, he does extensively discuss pesticide synthesis, chemistry, and biochemical mechanisms of action.

This book is unique in that it is one of only a few texts that comprehensively examines the chemistry, physiology, and use of all pesticides, rather than only a single group, e.g., herbicides or insecticides. Consequently, it should provide a very useful reference to pesticide scientists in academia, industry, government agencies, and other research institutions. J. M. DI TOMASO, Department of Soil, Crop and Atmospheric Sciences, Cornell University, Ithaca, NY 14853.

Terminology for Grazing Lands and Grazing Animals
The Forage and Grazing Terminology Committee, Vivian G. Allen, Chair, Department of Crop and Soil Sciences, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061-0404. 1991. 38 p. $5.00.

It is not easy to create a definitive work by committee. This rather large and highly qualified committee has prepared a very useful glossary of terms. The degree of accomplishment and unanimity that was achieved is commendable. The reader/user of this glossary will find it to be particularly useful since the committee has defined both useful terms, and terms often used in the literature, but that the committee has judged to be nonuseful. This is rather refreshing since terms tend to be rapidly coined in developing fields, and nonuseful terms are rarely dropped.

However, there seems to be some obvious omissions. The committee elected to not include many of the terms having to do with grazing lands, even though this topic was included in the title. For example, there is no reference under the categories of grazing land terms, ecological land types or miscellaneous terms, of any terms having to do with the successional status of the vegetation on these lands, nor of monitoring. The management of most natural grazing lands is dependent on understanding the successional relationships found there, and by the use of monitoring to determine if the management strategies are successful. Other terms related to either the grazing process or to grazing lands that seem to be missing are such terms as use, utilization, proper use, multiple use, herd, herding, and livestock or class of livestock. Under vegetation terms they have failed to define the term shrub to go along with fob, grass, and grass-like. Since tens of millions of grazing land acres throughout the world are dominated with species of shrubs, it seems that this term should have been defined.

Thus, even though this booklet is designed to provide a reference to terms that can be cited, many terms related to grazing lands are not found. This, of course, will tend to reduce the value of this mostly excellent work. — PAUL T. TUELLER, Department of Range, Wildlife and Forestry, University of Nevada, Reno, 1000 Valley Road, Reno, NV 89512.