

### BOOK REVIEWS

CLEMENTS, R. J. and CAMERON, D. G., Eds. (1980). *Collecting and testing tropical forage plants*. C.S.I.R.O., Melbourne. 154 pp. Price \$A5.00.

Unlike modern crop cultivars, most new forage plants have been selected from collections of naturally occurring ecotypes rather than from breeder's lines. This is particularly so for tropical forages and can be expected to continue into the foreseeable future. It is extremely relevant therefore that a book dealing with practical aspects of collection, conservation, classification and evaluation of wild forms of tropical plants should become available to scientists working in tropical regions.

The book provides an expanded version of lectures given at a Training Workshop on practical aspects of plant collection and other genetic resource activities. This Workshop was held in conjunction with a conference on 'Genetic Resources of Forage Plants', the papers of which will be published and provide important background information to this book.

The contents are arranged in eleven chapters. The first three chapters deal with the preparation for a collecting mission, plant sampling procedures and data collection at each site, including the need for and subsequent use of climatic, soil and vegetation descriptions.

A short chapter provides a general introduction to the aims and functions of plant quarantine, followed by two chapters which discuss the methodology and usefulness of classification of plant collections and practical aspects of information storage and retrieval. The latter examines both manual and computer-based data handling systems. In these chapters, as in many others, examples of actual data handling are presented.

Chapter 7 provides a comprehensive and practical coverage of all stages of evaluation from glasshouse or nursery situations to grazing trials. There is a good coverage of the measurements that should be made at each stage of evaluation and methods of recording these data. However, there is little emphasis or direction given on how to integrate this information into an overall ecotype rating or ranking, given most evaluation programs have the objective of finding productive and persistent species for one or a few well defined environments.

The final four chapters cover most aspects of the production, storage and dissemination of seed. This is often a neglected area in the overall evaluation and release of a commercial plant cultivar. Fortunately in this book there has been a good coverage of seed production (including choice of location, seed crop husbandry, harvesting and seed cleaning), seed testing and storage, general aspects of managing a genetic resources unit and an examination of the importance of an orderly framework for the processes involved in releasing a new commercial cultivar.

The general index is commendably extensive in its subject listing and cross-referencing. There is some unavoidable overlap in subject matter between chapters but once again the good cross-referencing is a feature of this book.

Scientists who have had reasonable experience in plant introduction and evaluation may find the treatment of many subjects slightly superficial. However, throughout the book there are numerous references to more indepth reviews of specific topics.

In summary, the book has achieved its aim of having direct, practical relevance to the field workers engaged in forage plant collection in the tropics, particularly those with limited expertise and research facilities.

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