

BOOK REVIEW

The Role of Centrosema, Desmodium, and Stylosanthes in Improving Tropical Pastures. Eds. R. L. Burt, P. P. Rotar, J. L. Walker, and M. W. Silvey (1983). Westview Tropical Agriculture Series, Westview Press, Boulder, Colorado. pp. 292. (Available at U.S. \$30.50 from Bowker Publishing Co., Epping, Essex, U.K.).

The genera *Centrosema*, *Desmodium* and *Stylosanthes* contain the principal legumes upon which tropical pasture improvement has been based and constitute the main unexploited reservoir of germplasm for future domestication. The central section of this book contains excellent, authoritative reviews of what is now known about the origins and diversity of material in each genus, the adaptation of the cultivars in use to varying climatic, soil, and grazing situations, and the prospects for further plant collection and selection. The reviews of *Centrosema* (R. J. Clements *et al.*) and of *Desmodium* (B. C. Imrie *et al.*) have put together material in a new way which is unavailable elsewhere. *Stylosanthes* (R. L. Burt *et al.*) has received more research attention and this is imaginatively displayed in this and other chapters. Perhaps more emphasis might have been given in these chapters to the response of legumes to grazing since this has so often been their downfall in farm practice. The contributions by R. A. Date on *Rhizobium* germplasm resources, specificity and nitrogen fixation are equally authoritative.

I think it is unfortunate that the editors did not stop there, as the balance of the book, which addresses the general theme of pasture improvement, is often uneven in standard and relevance, episodic and superficial. There is a thoughtful chapter (I. Vallis *et al.*) on the role of legumes in soil improvement, and three other overlapping chapters on the same theme. We get a detailed treatment of the content of amino acids essential for human nutrition (p. 7), learn that "The Republic of South Africa has developed an amazingly efficient and productive livestock industry . . ." (p. 9), discover (quite correctly) that Queensland produced less than two million tonnes of pasture seed in 1974 (p. 14) and progress to a minimum spanning tree for the grass *Urochloa* (p. 275). The photographic reproduction is poor, there is no subject index, but the reference lists are invaluable. The book should be bought by all pasture scientists because of the excellent material it contains which is specific to the book's title.

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