Book reviews

Weeping Lovegrass. Its Biology and Management

(In Spanish, with chapter abstracts in English. El Pasto Llorón. Su Biología y Manejo) Eds OSVALDO A. FERNANDEZ, ROBERTO E. BREVEDAN and ALFREDO O. GARGANO, Centro de Recursos Naturales Renovables de la Zona Semiárida (CERZOS) y Departamento de Agronomía, Universidad Nacional del Sur, C. C. 738 8,000 Bahía Blanca, Argentina, 1991. Paperback \$US 35.00 prepaid, xii + 393 pp. ISBN 950-43-3248-8.

This book presents an excellent review of the literature related to the biology and management of weeping lovegrass, *Eragrostis curvula* (Schrad.) Nees. Research on the species, primarily that from Argentina, United States, South Africa and Australia, some of the countries where weeping lovegrass is of agricultural and ecological importance, is reviewed. Management experience in Argentina is appropriately integrated into the discussions, and management and utilisation recommendations are given.

The 13 chapters are written by 15 Argentinian investigators and a U.S. lovegrass breeder. They deal with the introduction and early use of weeping lovegrass in Argentina, its taxonomy and morphology, the cytogenetics of *E. curvula* and some closely related species, breeding and the potential for improvement through hybridisation, mineral nutrition, growth and development, behaviour under water stress and resistance to drought and extreme temperatures, establishment, management and responses to grazing, quality and nutritive value, its place in beef cattle production systems, and seed production.

Weeping lovegrass has several characteristics

which have favoured its use under soil and climatic conditions unsuitable for successful growth of many forage grasses. Among these are its drought resistance, ability to grow in acid soils and mine spoils at pH 4.0 and in calcareous soils with pH near 8.0, adaptability to deep sands and loamy sands, and a root system which may extend to a depth of over 4 metres. The primary area of use in Argentina is the temperate semi-arid region between the 450–700 mm isohyets, with absolute minimum and maximum temperatures below $-10\,^{\circ}\text{C}$ and above $40\,^{\circ}\text{C}$, respectively.

From a forage standpoint, its primary deficiency is relatively low quality, except during early spring. After that time, the proportion of structural tissues increases rapidly, with decreasing nitrogen concentration and decreased energy and protein digestibility.

This publication elucidates many of the anatomical, morphological and physiological features of weeping lovegrass, a C4 plant, which determine its desirable characteristics as well as some of its deficiencies. Such information, coupled with the cytogenetic and breeding discussions of the highly apomictic E. curvula complex should prove to be of great value to other investigators engaged in work with weeping lovegrass now or in the future. Also, the book should be of interest and quite helpful to livestock producers and conservationists who read Spanish and live or work on soils and in climatic areas where the plant is adapted, whether they are using it now or may want to consider its potential usefulness under their conditions.

William C. Templeton, Jr.