MANAGEMENT

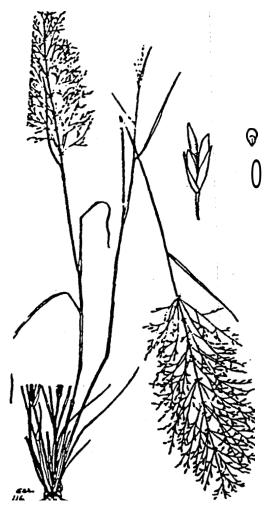
AND

**USES** 

OF

'COCHISE' LOVEGRASS

Eragrostis lehmanniana Nees X
E. trichophora Coss. and Dur.
(E. trichophora Coss. and Dur.
Syn E atherstonei Stapf.)



Eragrostis trichophora Coss, and Dur. Spikelet X 4

## In Arizona

'Cochise' lovegrass is a perennial, warm-season bunchgrass introduced **from** Pretoria, South Africa, in 1961. It was field-tested **as** Eragrostis atherstonei Stapf., atherstone lovegrass. In 1979, it was reidentified as a cross, and released as the cultivar \*Cochise\*.

Plants can attain heights up to 48 inches under favorable environments. The species is reported to be sparingly stoloniferous, but this characteristic is rare in 'Cochise'. 'Cochise' lovegrass has some of the characteristics of both weeping lovegrass and Lehmann lovegrass. The leaf blades are grayish-green and loosely rolled. Leaf sheaths are pallid or purplish. Leaf vernation is rolled, There are no auricles and leaf sheaths are open. The ligule and collar are hairy, extending to 2 mm on rights. There are tufts of spreading hairs at the base of the panicle branches, the rachilla bases are persistent, leaving the rachis prickly in the mature

Area of Adaptation: The full range of 'Cochise' lovegrass adaptation in the United States is not known. Observations have shown it to be adapted from the Mexican border north to the 35th parallel (about to Albuquerque, New Mexico), and from Miami, Texas (101st Prime Meridian) west to Lockeford, California (122nd Prime Meridian), at elevations of 1500 to 6000 feet (460 to 1840 M). 'Cochise' has survived -25° F (-32° C) at Albuquerque, New Mexico, whereas Lehmann lovegrass is cold-sensitive at approximately 15° F (10° C). 'Cochise' has become established and performed well in 10- to 12-inch (25- to 50-cm) annual precipitation zones. 'Cochise' is well-adapted to sandy through silt loam (medium to coarse textured) soils.

Basically, 'Cochise' overlaps the Lehmann lovegrass area of adaptation with the added benefit of being adapted and more productive at higher elevations and higher rainfall areas. 'Cochise' establishes easier, yields more forage, and persists better than Lehmann on identical sites.

Suggested Uses: 'Cochise' was selected for use in rangeland improvement and critical area stabilization. It will provide soil protection from wind and water erosion while yielding high amounts of forage for range livestock and wildlife grazing. If used in range improvement plantings with native species, 'Cochise' should not make up more than 25%, by seed number per pouhd, of the seed mixture.

Establishment: One pound of 'Cochise' seed contains approximately 4,000,000 seeds. A standard seed rate (20 pls/ft²) would require about 1/4 pound pure live seed per acre; however, because of seed size, one pound pure live seed per acre is the least amount of seed that can be uniformly distributed by drill or broadcast planting. When used on critical areas or broadcast planted, the seeding rate should be twice that of drill planting.

Drill' seed 1/4-1/2 inch deep in a firm, weedfree seedbed where competing vegetation has been removed. Broadcast seeding can be done where rough terrain or other obstructions prevent the use of a drill. Water entrapments constructed by root plowing, pitting, furrowing, plowing and bulldozing are highly beneficial for establishing grass stands in semi-arid, 10-12 inch precipitation zones. Seeds can be planted up to three months prior to the summer rainy season.

Management: When seeding mixtures are planted for restoring rangelands to their natural cover, atherstone lovegrass should make **up** no more than **25** percent of the mixture, by actual seed count. Management is based on those plants that are climax to that particular range site. Atherstone lovegrass may be seeded in pure stands where immediate cover is needed or where the site has deteriorated and climax vegetation cannot be established. No grazing is recommended for critical area plantings; however, light grazing may be necessary to prevent plants from becoming decadent. Pure stands and/or critical area plantings need to be fenced and managed separate from adjacent rangeland.