



FORAGE FACTS

Publication Series

MATUA GRASS

INTRODUCTION

Matua prairie brome grass, introduced from New Zealand in the 1980s, is a cool-season perennial bunch grass that has not been tested in long-term research projects in the United States. The closest related species to Matua are Rescuegrass, Cheat grass, Downy brome and Japanese brome.

TRAITS

Matua is a high-producing, high quality grass that appears to be extremely palatable. When given a choice, cattle have preferred Matua to ryegrass, and the cattle have consumed the Matua stems. Researchers in New Zealand reported that horses spent twice as much time on Matua as on ryegrass, timothy, orchard grass or tall fescue.

Work at the Noble Foundation in Oklahoma indicated that the perennial nature of Matua does not extend to the Central Great Plains region. Survival of perennial plants at several locations in Oklahoma has been rated at 10 to 70 percent when it has been managed as a winter annual. Pennsylvania researchers call Matua a perennial but add that each plant is short lived in that state. Matua must be managed as a winter annual in Kansas and allowed to produce seed or be overseeded every other year to perpetuate the stand.

MANAGEMENT CONSIDERATIONS

Producers using Matua on irrigated pasture in southwest Kansas have reported high performance for forage and livestock. Management requirements are 20 to 24 inches of irrigation above normal precipitation, 200 to 300 pounds of nitrogen applied in split applications, and 20 to 40 pounds of phosphorus annually. Production costs are about the same as a well managed corn crop on the same field.

Seeding rate recommendations are between 20 to 40 pounds per acre, which results in a high seeding cost per acre of \$30 to \$50. Livestock can be removed from matua pastures five weeks prior to seed maturity to allow for a seed crop.

Forage production is similar to brome or fescue with 40 to 50 percent of the dry matter produced from May to early June. Twenty to 40 percent of the dry matter will be produced from late June through August (depending on water application and air temperature), and 20 to 30 percent will be produced in the fall. Oklahoma researchers reported hay yields of 2.5 tons per acre on one cutting which tested between 10 to 15 percent protein content. Researchers compared that to a fescue grass yield of 3.5 tons per acre.

Carrying capacities on irrigated pasture have been in the 9 to 12 AUM per acre range with stocker gains exceeding 2 pounds per day in May and June. Rotational grazing is highly recommended for Matua-irrigated pastures. Eight paddocks appears to be ideal, but six can be effective especially when two circles are used. The rotation system should be based on using 40 to 50 percent of available forage each time through to obtain best animal and forage performance.

OTHER PUBLICATIONS

Irrigated Pastures (Forage Fact Sheet Series)

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