



FORAGE FACTS

Publication Series

OLD WORLD BLUESTEM

INTRODUCTION

Old world bluestems are a group of grasses from the southeast Soviet Union, Turkey and surrounding areas that were introduced in the 1930s as 'improved' grasses. They are called bluestems, but they are not closely related to big bluestem and little bluestem. Silver bluestem, an undesirable native species, is the closest native relative.

ADAPTATION

The old world bluestems are the survivors of centuries of overgrazing. They are drought tolerant, aggressive, prolific seed producers and unpalatable in comparison to desirable species. Old world bluestems are adapted to high calcareous and high pH soils, and do well on any well drained soil.

On calcareous and high pH soils, old world bluestems invade neighboring pastures 10 or more years after establishment. In south-central Kansas, invasion into native rangeland has been common. The old world bluestems can invade any time another species or mixture is overgrazed, stressed by drought or wildfire, or otherwise suppressed. Once old world bluestems begin invading other pastures, there is no known way to stop the invasion.

The current varieties adapted in Kansas are Caucasian, Plains (southern Kansas only), WW Spar, and Ironmaster. Plains and WW Spar appear to be the least aggressive.

MANAGEMENT

Production management requires burning as the grass emerges from winter dormancy. Unfertilized old world bluestem pastures generally have similar production as native range, therefore, nitrogen and phosphorus applications are required for economical production.

Forage production normally occurs in May and June, but the leaf to stem ratio drops below one in as little as 45 days and the forage becomes mostly stems. Intensive rotational grazing can limit the stem problem, but the best animal performance has been observed in the early part of the growing season. Forage quality is similar to prairie hay, but the digestibility and palatability are lower than prairie hay.

Current recommendations from Kansas State University and the National Resource Conservation Service-USDA are for limited use of the old world bluestems with first consideration for currently recommended native and introduced species.

Contact: Paul Ohlenbusch
Extension Specialist
Range and Pasture Management
Telephone: 785-532-5776
FAX: 785-532-6315
E-mail: pohlenbu@oz.oznet.ksu.edu

Contact: Gary Kilgore
Extension Specialist
Crops and Soils, Southeast
Telephone: 316-431-1530
FAX: 316-431-2108
E-mail: gkilgore@oznet.ksu.edu

Kansas State University Agricultural Experiment Station and Cooperative Extension Service

Issued in furtherance of Cooperative Extension Work, acts of May 8 and June 30, 1914, as amended. Kansas State University, County Extension Councils, Extension Districts, and U.S. Department of Agriculture cooperating, Richard D. Wootton, Associate Director. All educational programs and materials available without discrimination on the basis of race, color, religion, national origin, sex, age, or disability.