Growing Smooth Bromegrass for Forage

Area of adaptation
Smooth bromegrass (Bromus inermis) is the most widely used cultivated bromegrass. It has been grown for many years in Hungary, Austria, and Russia, resulting in those three common names for this bromegrass. It is a cool-season grass grown widely in Canada and the north-central United States. Adapted varieties have broadened the area of use of smooth bromegrass to the northern half of the country.

Smooth bromegrass survives periods of drought and extremes in temperature. It can be grown on a variety of soil types, but it grows best on well-drained silt-loam or clay-loam soils.

In Oregon, smooth bromegrass is best suited to areas east of the Cascades in areas of higher elevation and heavier, though well-drained, soils. It is fairly tolerant of alkalinity and somewhat tolerant of salinity and acidity.

Primary use
Smooth bromegrass is a leafy, sod-forming perennial grass that is best suited for hay or early spring pasture. It is deep-rooted and spreads by underground rhizomes. Forage quality of smooth bromegrass compares well with other cool-season grasses, being affected primarily by stage of maturity.

Varieties
Manchar, a variety recommended for many years in Oregon, is adapted to well-drained soil. A high-yield producer of palatable forage, it is well adapted for the Snake River Valley and higher elevations in central and northeastern Oregon.

Carlton, a leading variety of northern types, is particularly adapted to Saskatchewan and Alberta.

Cultivars of southern-type bromegrasses are being used much farther north now than previously. They produce good forage yields but are poor seed producers. They start growing earlier and stay green longer than northern types and are reasonably winter hardy. Examples of these newest southern types are Baylor, Blair, Lincoln, Regar, Saratoga, Fox, and Sac.

Establishment
A moist, fertile, firm seedbed is required for smooth bromegrass or bromegrass-legume mixtures. Most often planted in spring when weather conditions usually are more favorable, smooth bromegrass may be planted in the fall in warmer areas. Seed may be either drilled or broadcast. Drilling is preferred because it provides a more uniform depth of planting.

Plant seed 1/4 to 1/2 inch deep. Long, narrow seeds, however, often bridge in conventional seed drills and make planting difficult. Most hopper-type fertilizer spreaders can be calibrated to broadcast seed. If seed is broadcast, however, be sure to cover the seed. This can be done by light disking or by following with a drag or harrow.
Fertility and pH requirements

Smooth bromegrass is very responsive to N fertilization and requires a high level of fertility for maximum production. It is tolerant of salinity, alkalinity, and acidity, but it will perform best at a pH of 6.0 to 7.5.

If you plant smooth bromegrass with alfalfa or a legume, limit N applications to 40 to 50 lbs per acre to allow for the effect N has on reducing nitrogen fixation of the legume. If smooth bromegrass is grown without a legume, apply 100 to 200 lbs N per acre in split applications.

Specific fertilizer recommendations based upon soil test data are provided in OSU Fertilizer Guides 21 and 38.

Management

Growth stage is an important factor in smooth bromegrass management. Grasses are somewhat tolerant of light grazing during the tillering stage of growth. During this initial flush of growth, the growing point is below the ground. Later, shoots enter the jointing stage of growth. During this stage, the growing point may be destroyed by mowing or close grazing.

If the growing point is destroyed at early jointing, regrowth will be slow as new growth will have to come from basal buds not yet developed. When seed heads emerge, it is time to clip pastures or to harvest the forage for hay or silage. This will assure high-quality forage and quick regrowth of the new crop.

The aftermath crop similarly produces a growing point that is above ground approximately 5 weeks after first harvest. If it is necessary to harvest the regrowth before seed heads emerge, adjust the cutter bar to above the growing point (4 inches) to assure a good third harvest.

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