

**BROME, MOPT:** A cool-season grass that originated in Europe. It grows two to four feet tall with leaves six to sixteen inches long. It is an aggressive sod-former that can become sod-bound if not adequately fertilized with nitrogen. Till rigorously to revive sod-bound stands. Has good spring growth, but goes dormant in the summer. Regrows in fall with adequate moisture. Does poor to fair on dryland. Has no awns (beards) on seed heads, unlike other bromes. Leaves have a distinctive "W" wrinkling a short distance below tips.

**Use for Hay:** Excellent grass for pastures which are short on irrigation water. Cut in bloom stage for best quality. Usually only one cutting per year. When mixed with alfalfa, hay yields often are triple those of smooth brome alone.

**Use for Pasture:** Rates fair as a pasture grass since leaves are located high on the plants. Graze lightly early; then allow 28 days for regrowth. Cut newly established stands for hay the first year. Manage 4- to 6-inch stubble if continuously grazed.

**Planting Rate:** 8 pounds pure live seed per acre

**Varieties:** 'Lincoln': strongly rhizomatous and aggressive; sod binds rapidly; more basal leaves; begins growth earlier in the spring; better establisher; better drought resistance; poorer recovery after cutting or grazing. Plant on dryland or for grazing, 'Manchar': weaker sod-forming; sod binds less rapidly; leaves mostly on stem; better recovery after cutting; shorter- and finer-stemmed; matures earlier; hardier. The better choice when mixed with alfalfa, 'Achenbach': an aggressive variety similar to Lincoln; seed can be hard to find.

**BUFFALOGRASS:** Dense, sodformer by stolons; 2" to 6" tall. Matforming. Leaves basal; sheaths may have some marginal hairs near collar; blades sparsely long and hairy. Prefers medium to heavy textured soils. Can withstand heavy grazing.

This species has separate male and female plants. The male plants send up seed heads. The female forms burs that are close to the ground.

**Planting Rate:** 4-8 pounds pure live seed per acre

**Varieties:** 'Sharps', 'Texoka'

**FESCUE, TALL:** A cool-season grass which originated in Europe. It prefers clay or clay loam soils. It has tough leaves which have only fair palatability. This means it must be managed carefully for optimum use and feed quality. Grow under irrigation or on subirrigated land. It can withstand poorly drained sites.

Many tall fescue stands are infested with an endophytic fungus that produces an alkaloid which is

toxic to livestock. This toxin can cause fescue foot in cattle and summer fescue toxicosis in cattle, sheep and horses. The toxin causes weight gain, and problems with reproduction and milk production. High soil nitrogen levels seem to enhance the toxicity. Fescue lameness is more common in late fall and winter. Toxicosis increases when air temperatures are over 75° to 80° F.

The toxin is most concentrated in seed heads. To reduce toxicity problems, keep plants young and vegetative. Tall fescue is not recommended to use during hot weather and do not dilute tall fescue with other grasses or legumes. Endophytic-free seed is available for planting. But no guarantee exists that the established grass from this seed will not later become infected.

**Use for Hay:** Best hay quality is acquired by harvesting at the boot stage or very first sign of heading. Hay yields are limited since most leaves are basal. Hay quality good, palatability is fair to poor.

**Use for Pasture:** Because tall fescue loses quality and palatability rapidly after heading, keep it grazed down. It has a tough root system which withstands trampling. One of its advantages is that it can be productive season-long with adequate moisture. In mixed species pastures, a heavy stocking rate is needed to ensure tall fescue is grazed. Livestock will select other forages first, if allowed the chance.

**Planting Rate:** 8 pounds pure live seed per acre

**Varieties:** 'Fawn': has good yield capacity in spring and early summer. Better seedling vigor, but earlier maturity. 'Kentucky 31': less palatable than 'Fawn', 'Alta': oldest of developed varieties, Endophyte-free cultivars: 'Forager', 'Johnstone', 'Mzark' and 'Martin' are examples.

**GRAMA, BLUE:** A native warm-season grass which is prevalent in the shortgrass prairie. Seed stalks grow 8 to 24 inches high; curly leaves grow two to six inches long. It prefers silt to clay soils and is an aggressive sod-former. One of the best drought tolerant grasses.

**Use for Hay:** Not suitable for hay as a result of low leaf growth.

**Use for Pasture:** Withstands trampling and grazing well. Not very productive, but supplies excellent summer or winter pasture feed. Do not graze to less than two inches tall. Will go dormant in summer in drought years.

**Planting Rate:** 2-3 pounds pure live seed per acre

**Varieties:** 'Hachita': from New Mexico; superior forage production, 'Lovington': from New Mexico; good seedling vigor; better establishment under drought, and 'Alma'.