

BG-14

An early, winter-hardy, persistent, highly productive, perennial ryegrass blend

About BG-14

Hopes for persistent, early-maturing perennial ryegrasses with winter hardiness suitable for many of the colder winter areas of North America are now answered by BG-14. A blend consisting of two winter-hardy diploid and one tetraploid varieties, was developed to serve as a complement to the popular Barenbrug BG-3 (34). Farmers in the colder regions with good winter snow protection now have an early blend to plant on their lighter, dryer soils where a Spring flush of quality forage is desired. Grass has an optimum maturity for quality harvest. To always have paddocks in this optimum stage, farmers are recommended to have one paddock of BG-14 for every three paddocks of BG-3.

The ingredients of BG-14 have been carefully selected for their lack of winter growth activity and high frost tolerance, long term persistence, high digestibility, and disease resistance. BG_14 is quick to establish, and very quick to tiller forming a thick, dense stand with easy to mow and chop, long leaves and short stems. It is also Endophyte free. BG-14's potential for increased production and high digestibility will increase milk and meat production.

Site selection

BG-14 is more winter-hardy than most other early ryegrass varieties, but keep in mind that ryegrasses of all varieties are less winter hardy than other perennial cool season grasses such as tall fescue, timothy, or orchard grass. BG_14 should do well in areas where Fall dormancy 4-rated alfalfas are used. BG-14 should not be planted in those northern areas having sub-zero winters without snow protection. BG-14 is capable of good summer production in hot, arid areas if grown under irrigation and high fertility. Like all ryegrass, BG-14 does best on fertile, well-drained soils. However, it can also be planted in areas where the soil is so wet at certain times that few other grasses will grow satisfactorily. Whenever planting outside of traditional ryegrass areas, test plantings should be made first to evaluate its suitability for the environment.

Establishment

Soil samples should be collected and analyzed well in advance of establishment. Lime should be applied to achieve a minimum soil pH of 6. Ideally, lime should be applied six months in advance to allow time to react. Phosphorous and potassium should be applied according to soil test recommendations prior to planting. At planting, apply 30-40 lb./acre nitrogen to ensure good establishment. In moderate climate regions, or in hot dry areas with irrigation, plantings may be made in both the Spring and Fall. Fall plantings are recommended in summer drought prone regions.

There are a number of ways BG-14 can be established. Its seeding vigor and rapid establishment make it a perfect choice for no-till seeding, with or without herbicide suppression of the existing vegetation. Full cultivation seedings are best made with a Billion type seeder, or by broadcast with a spin seeder onto a well firmed seedbed, followed by light harrowing, then rolling. Existing stands can be thickened by frost seeding in late winter or by spot broadcasting and allowing the "hoof" to plant.

A no-till-seeding rate of 15 lb./acre, 25 lb./acre for precision drilled seedings, and 30-40 lb./acre for broadcast seedings has proven satisfactory. White clover is the natural companion for perennial ryegrass. Clover enhances pasture feed value and provides a source of valuable nitrogen. Barenbrug Alice and Menna are recommended. Seed at 2-3 lb./acre.

Management

Careful stand management during the first year is essential for long term productivity. BG-14 is a blend of perennial bunch grasses. A single shoot is produced from a single seed. As this shoot is clipped off, the plant sends up multiple new shoots, or tillers, from the basal buds at the base of the plant. Likewise, as these new tillers are clipped, more tillers are formed, creating an increasingly larger bunch. This tillering and bunching continues until the spaces are filled, forming a dense, leafy stand.

The tillering process is triggered by the basal buds receiving periodic exposure to sunlight. To maximize tiller growth during the first year, the height of the pasture should be maintained in the 3 to 10 inch range to allow maximum sunlight penetration. Once the newly seeded plants are firmly rooted, they should be lightly grazed or machine mowed several times before heavy use to promote tillering. Do not graze or clip shorter than 2 inches, and do not allow the stand to grow taller than 10 inches. Defer making hay until the second year. Once established, BG-14 should be grazed starting at the 6-inch height, leaving a 3-inch residual, or machine harvested for green chop, hay or silage at 10-12 inch range. Don't let it get too tall! Graze or mow to keep the stand leafy and vegetative. The leaf contains the nutrients and, up to 12 inches in height, the plant is 90% leaf. When allowed to grow taller than 12 inches, the quality drops dramatically as the plant switches from producing nutritious leaves to being reproductive, as evidenced by the production of reproductive stems and seed heads. Management should be aimed at maintaining a dense, leafy pasture cover.

To enhance production, the tactical application of 50 lb./acre of nitrogen is recommended at the start of Spring to jump start early growth, and periodic applications of 30-40 lb. acre are timed with rainfall or irrigation made during the summer to maintain production during this stressful heat period. In milder winter areas, an early Fall application of 50 lb./acre can extend the grazing period well beyond the normal season.

Cold winter survival is enhanced by entering winter with the grass left at a short, but still green length of 4-5 inches.