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Reed Canarygrass, Ryegrass and Garrison Creeping Foxtail

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Reed canarygrass

Reed canarygrass is a tall-growing, cool season perennial with a rhizomatous root system (it roots by sending out runners).

Reed canarygrass has been widely used in the north-central United States for many years. In recent years it gradually has been accepted in the lower corn belt. It adapts well to Missouri. Some of the most vigorous, productive stands of reed canarygrass in the state are in the extreme southeast in the delta area.

No other forage plant is as well adapted to wet, marshy areas as is reed canarygrass. It is known to withstand flooding for as long as 49 days without permanent injury. The exact length of time that it can withstand inundation depends on the temperature, current and silt content of the water as well as the condition of the plant.

Comparisons to other grasses

Early reports that reed canarygrass was a poor forage were apparently unfounded. Animals grazing reed canarygrass during spring and summer perform similarly to those grazing orchardgrass, timothy or brome, and better than those grazing fescue.

Reed canarygrass is not as well adapted for fall and winter grazing as is tall fescue. It is one of the first cool season grasses to stop growing and lose its green color. It stops growing early in the fall and cattle will not accept it during this period if other forages are available.

Mixtures

A legume can be maintained with reed canarygrass despite its ability to form a thick sod. Its upright growth characteristic allows a substantial amount of light to filter down to the legume.

When reed canarygrass is seeded in wet, low areas, ladino or alsike clover are good choices for a companion legume. On upland sods, ladino, red clover, birdsfoot trefoil and alfalfa may be grown successfully with it.

Reed canarygrass is one of the earliest grasses to begin spring growth. For best results in a pasture system, it should not be allowed to get higher than 14 or 15 inches. This is an important factor in grazing management.

In pure stands, reed canarygrass will respond to extremely high rates of nitrogen. It has a very high production potential under these conditions. It probably will have more summer growth under these conditions than any

other cool season grass in Missouri.

Varieties

Several improved varieties of reed canarygrass are available. Ioreed was developed in Iowa and more recently Rise has been released by Rudy Patrick Seed Company.

Establishment

Reed canarygrass may be established in the same manner as other cool season grasses. When seed is 80 percent or better in germination, a seeding rate of 5 to 8 pounds per acre is adequate. Many times seed is extremely low in germination and low in vitality. This is the greatest cause of seeding failures. It may be fall-seeded during August or seeded very early in the spring.

Hay

Reed canarygrass can be made into hay, but take care to keep it from becoming coarse and stemmy. Because of its very early spring growth, graze it first to delay the haying period. If it is cut for hay without grazing the first growth, mow it when the first heads begin to appear. Reed canarygrass makes excellent hay for horses — they prefer it over good quality timothy hay.

Erosion control

Reed canarygrass was first used in the southern corn belt to control erosion in ditches, waterways and gullies. It is unexcelled for this purpose. It is especially adapted to use as a sod in areas where establishing stands by seeding is difficult. Small pieces of sod are embedded at 1- to 2-foot intervals across gullies in early spring or fall when the soil is wet. Reed canarygrass shoots will emerge through 6 to 8 inches of sediment should it be deposited on top of them.

Seed production

Seed production usually is a problem due to shattering. The seed head matures from the top of the panicle downward. The first mature seed will shatter before the remainder of the seed in the head is ready to harvest. The period between ripening of the first seed and the start of extreme shattering is only two or three days. This factor is responsible for much of the low-quality seed available.

Reed canarygrass seed yields will be increased by applying 100 to 125 pounds of nitrogen per acre. For seed production, apply nitrogen from December through January.

Ryegrass

The name ryegrass primarily applies to two species of the genus *L. perenne*. is known as perennial ryegrass.

Italian ryegrass usually is considered to be an annual, but under some conditions it is assumed to be a biennial. Perennial ryegrass is a short-lived perennial. Seed supplies of ryegrass are usually a mixture or hybrid, or both, of the two species.

Ryegrass is a palatable bunch grass that may be used as a winter annual and will make a quick top growth and heavy root development. It usually is effective when seeded in late summer or early fall as a winter cover crop and nurse crop for longer-living legumes and grasses.

Ryegrass seldom is used in Missouri as a field crop because of its short-lived nature. It usually dies in summer after ripening; subsequent growth must come from volunteer seedings or reseedings. It will grow on fairly wet soils, but does not withstand stagnant water. The ryegrasses are not adapted to regions that have extremes of cold, heat or drought. High summer temperatures and drought probably prevent it from being widely used in Missouri.

It is sometimes seeded into thin stands of lespedeza where the lespedeza has been cut for hay or pastured heavily. Under these circumstances, 15 pounds of ryegrass may be broadcast on the unprepared seedbed. For best results, seed should be covered with a disc or grain drill.

Ryegrass also works in combination with small grains for fall, winter and early spring grazing. In several experiments it increased the beef gains from 80 to 135 pounds per acre when used in this manner.

Rapid growth and an extensive root system make ryegrass a good soil stabilizer on sites where wind and water erosion may occur following cultivation of row crops. It is sometimes broadcast by airplane into rice and soybean fields shortly before combining. Fall-sown ryegrass has more ability to establish itself on unprepared seedbeds than most of the more commonly used forages.

When seeded alone, ryegrass usually is seeded at the rate of 25 pounds per acre. When seeded with small grain the rate is about 10 to 15 pounds, and when seeded with clovers or other grasses, about 5 to 8 pounds per acre.

Except for specialty uses, ryegrass is not recommended for general pasture use in Missouri. It will not take the place of more permanent grasses in grass-legume mixtures.

Garrison Creeping Foxtail

Garrison Creeping Foxtail is a rhizomatous cool season grass that starts growth early in spring and grows late in fall if moisture is available. It was originally selected from a field growing in North Dakota. It was brought into the area from eastern Germany or western Russia by immigrants in the early days of homesteading. Creeping foxtail now grows in many of the pothole sloughs of North Dakota.

In general, this grass could be compared with reed canarygrass, as it will grow in wet areas and wet waterways.

Garrison Creeping Foxtail is not as productive as reed canarygrass, nor will it withstand dry weather or close grazing on upland areas. There has been some interest in creeping foxtail because it is a more dependable seed producer than reed canarygrass.

It will survive periods of complete inundation in early spring and fall and will grow in shallow water during summer. It has moderate tolerance for alkaline conditions. It is considered a palatable grass, and at comparative growth stages cattle usually prefer grazing creeping foxtail to reed canarygrass. This is especially true during the fall months.

It is best adapted to the northern Midwest, but has done well on sites in all of the Midwest states. It has performed very well in wet areas in tests in Missouri at the Elsberry Plant Material Station.

Seeding should be done in late summer from Aug. 1 to Sept. 1. The next best alternative is seeding in March

and April.

Rate of seeding should be around 5 pounds per acre or 40 germinable seeds per square foot. It can be broadcast or seeded with a brilliant seeder. Seeding procedures as used with any other grass at seeding time can be used with foxtail.

Companion crops such as ladino, alsike clover may be grown with Garrison Creeping Foxtail in wet areas. On moderately heavy areas in northern Missouri, birdsfoot trefoil is a good companion crop with creeping foxtail.

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