

REED CANARY GRASS

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There is a large acreage of potentially fertile land in Michigan which, because of poor drainage, grows very little palatable forage. Reed Canary grass will grow on those wet, lowland areas, and the grass will be somewhat sub-irrigated during the summer months when rainfall is limited. Used as pasture, the grass will produce green succulent feed after the upland pastures have become dry and dormant.

DESCRIPTION

Reed Canary grass is a hardy, coarse, leafy perennial which tends to grow in dense bunches and spreads underground by short creeping rootstocks.

The seeds are oblong, blackish, brown or gray in color, smooth and free from chaff. Well matured clean seed weighs 44-48 pounds per bushel.

The seeds mature at the top of the plant first and then successively downward. The seed shatters very readily, especially if the weather is dry and warm at ripening time.

ADAPTATION

This grass does best where the climate is moist and cool, but the plant is sensitive neither to heat nor cold. It makes its best growth on fertile, moist, swampy soils and is especially suited to swampy locations or lands which frequently overflow. The grass apparently benefits from being covered with water during the winter or dormant season. While this grass can be grown on upland soil, there are other crops such as alfalfa, clovers and several of the cultivated grasses which are usually to be preferred. Reed Canary grass is only partially adapted to alkali or salt marshes, but appears to be well adapted to most of the wet areas in the northern half of the United States.

GROWING CANARY GRASS

A fine, smooth well packed seedbed is to be preferred whenever possible. The attempts to get a stand on marsh grass sod or any other unprepared seedbed have been largely unsuccessful.

Most of the areas on which Canary grass should be grown in Michigan are wet in the spring and seedbed preparation is difficult.

As a rule, the best time to prepare a seedbed in those areas is in the dry part of the summer, at which time the areas can be worked down to a good firm seedbed.

If fertilizer is to be applied, it should be put on before the last disking or harrowing and worked into the soil. An application of 300-400 pounds of 0-9-27 should be beneficial wherever Canary grass is sown.

WHEN TO SEED

Where possible, an early spring seeding is to be preferred. The seedbed in this case should be prepared the summer or fall previous and the seed sown in late March or early April when the top inch or two of soil has thawed. The freezing and thawing of the ground will cover the seed sufficiently. Late fall seedings, after growing weather has passed, will make it possible to get the seed on the ground and it will not start germination and growth until early the next spring.

Frequently, however, the areas on which Canary grass is to be sown are under water or too wet to sow except in the dry summer period. If such is the case, the seed should be sown between August 15 and September 1, so that the seedlings will get sufficient start to overwinter successfully. Late spring or early summer seedings are to be avoided if possible. Roll or cultipack after late summer seeding.

Frequently the use of a roller or cultipacker insures a seeding where otherwise the seeding will fail. Be sure to cover the seed from $\frac{1}{4}$ to $\frac{1}{2}$ inch if making a late summer seeding.

BUYING SEED

In buying seed, select that which is mature, as indicated by a large proportion of dark gray to brown seeds and few light colored or immature seed. Germination should exceed 85 per cent and the seed should be free from harmful weed seeds.

SOWING THE SEED

Broadcasting or drilling the seed solid is preferable to sowing in rows, and a more even stand will be obtained. Row seeding uses less seed, but the hay or pasture forage will be coarser. Seed alone rather than with a nurse crop; this method gives the grass a much better chance to establish itself than where it is sown with a nurse crop. Nurse crops, on most areas in Michigan where Canary grass should be sown, would only complicate getting the grass started.

SEEDING RATES

Reed Canary grass should be sown from 4 to 6 pounds per acre. If good seed is used, there is no advantage in seeding at heavier rates. Sometimes mixing the Canary grass seed with timothy aids materially

in distribution. A mixture of one-half timothy and one-half Canary grass makes for evener and more efficient distribution and as the Canary grass spreads, the timothy is crowded out. Reed Canary grass is likewise slow to start and to establish and frequently the timothy fills in until the Canary grass gets started.

MANAGEMENT OF NEW SEEDINGS

New seedings should not be pastured or cut the first season because the plants establish themselves slowly. If annual weeds are thick, they should be clipped relatively early to keep them from reseeding and to keep down the competition.

USE OF THE CROP FOR PASTURE

Reed Canary grass is primarily a pasture plant. It is long-lived and because of the wet areas where it is grown, it has a long grazing season and produces an abundance of succulent forage. Reed Canary grass can be pastured the entire season and should not be allowed to get too coarse because it becomes unpalatable.

PALATABILITY

Reed Canary grass has been criticized because of its lack of palatability. Frequently this criticism is due to the fact that the pasture was not stocked heavily enough to keep up with the new growth and as a result, the plants get too large and tough.

The livestock should be confined on the pasture and not given their choice of several kinds of pasture at the same time. Whereas Canary grass is not so palatable as alfalfa or smooth bromegrass, it is much more palatable and nutritious than most of the native vegetation now found growing on the fertile, poorly drained areas in Michigan.

CANARY GRASS FOR HAY

It appears that the best time to cut this grass for hay is at the time when the first heads begin to appear. In this stage the hay should contain from 10-12 per cent protein. As the plants mature, the stems become coarser and are less palatable and nutritious.

GETTING RID OF THE GRASS

Because this grass spreads by underground rootstocks, farmers frequently ask whether it will become a bad weed. The plant however, is not aggressive and when it is plowed up for a cultivated crop no extra weed eradication practices are necessary to kill the plants.

PRODUCING SEED

The seed of Canary grass shatters relatively soon after it is mature. Consequently, the seed must be harvested by special means. Several farmers in Michigan have harvested the heads with a sickle, putting them in a sack and taking care to keep the heads right side up so that the seeds will not fall out as the heads are cut off.

A header made by stripping off all unnecessary parts from an old binder and building a large hopper on the platform has been satisfactory. The sickle bar is raised high enough to cut off the heads and the reel then carries them into the hopper. The heads must then be cured out and the seed flailed out by hand. Combining of the seed appears to be a very practical way of harvesting the seed in large scale operations. The seed crop will vary from 50 to 200 pounds an acre.



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