

Illinois Grazing Manual Fact Sheet

SPECIES • COOL-SEASON PERENNIAL LEGUMES

Alfalfa



General Information

Alfalfa is a deep-rooted, perennial legume, and is considered the most nutritious and oldest-known crop grown for forage.

The first recorded occurrence of alfalfa in the United States was in Texas around 1700. From there, its use spread throughout the southeastern part of the country. Today, there are five types grown.

Alfalfa is an excellent plant for controlling soil erosion, improving soil, fertility and for providing nesting cover for wildlife.

Adaptability

Alfalfa is adapted to deep, fertile, well-drained soils. The soil should be high in calcium and should have a pH between 6.5 and 7.0 to support the best production.

Characteristics

Alfalfa will grow two to three feet tall with five to 20 erect stems rising from a fleshy, crown. The flower is generally bluish purple and shaped like a pea flower. However, some varieties' flowers are yellow. Clusters of three leaflets are arranged alternately on the stem. The deep-rooted plant has an almost straight taproot with very few branches.

Establishment

A soil test should be obtained before seeding alfalfa. Lime and fertilizer should be applied as recommended. Lime should be applied at least six months prior to planting.

Once a clean, firm seedbed is prepared, a cultipacker should be used before and after planting to ensure stand survival.

A nurse crop of small grain may be planted at a rate of 20 pounds per acre to protect the new seedlings. The nurse crop must be controlled to reduce competition for moisture, nutrients and sunlight.

Check with the Natural Resources Conservation Service or University Extension for proper seeding rates.

Alfalfa does well when planted with brome or orchard grass, and is moderately compatible when planted with Timothy, Tall Fescue, and Reed Canary grasses. Alfalfa also does well when planted with legumes, such as Bird's-foot Trefoil, Red Clover, and Alsike Clover.

The proper management of alfalfa requires intense labor and maintenance. Pests such as weevils and leaf hoppers need to be controlled.

Management

Alfalfa is very nutritious and highly palatable when used for hay or grazing.

When grown for hay, alfalfa should be cut at one-tenth bloom, or when new shoots begin to emerge from the crown.

Alfalfa will not cure well during cool, wet conditions. In these instances, a crimper should be used to improve the rate of curing.

Phosphorus, potassium and lime may be applied in the spring or fall, preferably in the fall. The last cutting should be timed to allow for one month of regrowth before the first killing frost. When managed properly, alfalfa will provide a protein content of 20 percent and a total digestive nutrient value of 60 percent or greater.

Alfalfa should not be grazed until plants reach a height of six to eight inches and should not be grazed closer than three inches.

When alfalfa is grown in a mixture of grasses, the chances of bloat are reduced. Otherwise, bloat inhibiting additives are recommended.

Fields of alfalfa should be small enough for livestock to graze off the forage in three days. The grazing period should be followed by 20 to 25 days of rest.

It is advisable to alternate grazing periods with hay cutting to get uniform use of the field and to keep the regrowth lush and productive.

Where to Get Help

For more information about alfalfa, contact the local office of the Natural Resources Conservation Service listed in the telephone directory under U.S. Government, or the University of Illinois Cooperative Extension Service.



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