

# Burclover

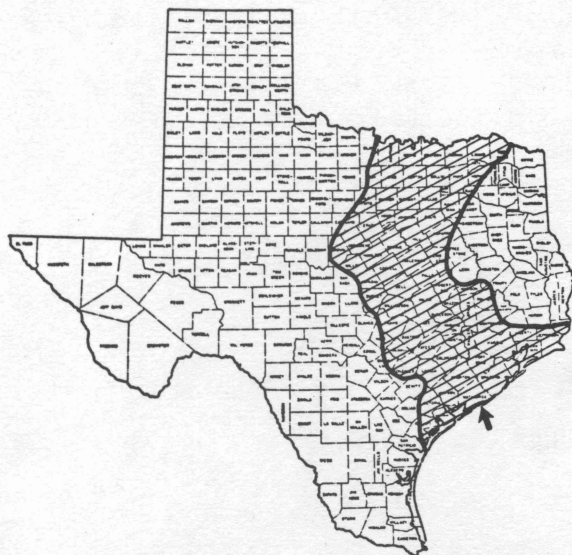
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**BURCLOVER** IS A LOW-GROWING, winter annual reseeding legume. It germinates with fall rains and matures in late spring. In general, burclover has a short growing season, low total forage production and can tolerate neither very low nor high temperatures. Good stands are seldom obtained the first growing season.

Planting burclover on productive soil is not recommended because of its low-production potential and the bloat hazard that accompanies it. However, burclover volunteers annually on thousands of acres of Texas land in areas shown on the map. It is well adapted to a large acreage of poor soils in the area. The primary purpose of this leaflet is to discuss management of the existing burclover acreage, rather than to encourage planting more of it on soils that can produce more forage from another legume.

## Varieties

**CALIFORNIA BURCLOVER** (*Medicago hispida*) is the variety most widespread in the burclover area in Texas. The leaves have no spots in them and the burs containing the seed have short hooked spines.



Area of adaptation of burclover

**SPOTTED BURCLOVER** (*Medicago arabica*), sometimes called Southern burclover, is usually recognized by the purple spots in the middle of the leaves. It has larger burs, longer spines, more winter hardiness and less drouth tolerance than California burclover. *Manganese* burclover is a selection of Spotted burclover and is easily distinguished by large red spots in the leaves. It matures earlier than either California or Spotted burclover.

**COGWHEEL BURCLOVER** (*Medicago tuberculata*) has spineless round pods that have a tough, woody covering. The seed usually remain on the plants long enough to allow harvesting. This variety has a longer growing season and in tests in the Brazos River Valley near College Station, it produced more forage than California burclover. One selection of Cogwheel has been released by the Texas Agricultural Experiment Station. The spineless burs make it more desirable in sheep-producing areas than the spiny varieties.

**BUTTON BURCLOVER** (*Medicago orbicularis*) has a smooth seedpod coiled in the shape of a button. This variety produced more forage than California burclover in the Brazos River Valley, but less than the California variety in upland tests at College Station. Button may be more productive on the high-lime soils in the Blackland and Grand Prairies. Like Cogwheel, this burclover is preferred in sheep-producing areas over those with spiny burs.

**LITTLE BURCLOVER** (*Medicago minima*) has spread across Central Texas into the Edwards Plateau and Rolling Plains, but its small size and slow growth make its value doubtful. Seed are not available commercially. It has velvet-like bluegreen leaves and the soft spiny burs are very small.

## Establishment

In areas where California or Spotted burclover volunteer consistently, it is not practical to attempt establishing one of the improved varieties. The established variety likely would give too much competition to the seedlings of the seeded variety.

*TIME OF PLANTING* is determined by the kind of seed material used. Hulled seed should be planted after September 15 as soon as ample soil moisture is available. Unhulled seed may be planted any time after harvest. Hulled seed should be inoculated immediately before seeding with the same type inoculant as is used for alfalfa.

*SEEDING RATES* are 10 to 15 pounds per acre for hulled seed. Unhulled seed usually are planted at the rate of 5 to 10 bushels of burs per acre.

*SEEDING METHODS* differ for the two types of seed. Hulled seed may be seeded with a grain drill equipped to plant small seed, or with any seeder that handles small seed, or they may be broadcast. Broadcasting is about the only practical means of planting seed in spiny burs. Cogwheel and Button seed in the bur may be planted with a picker-wheel type cotton planter. Burclover may be seeded in a short sod or on a clean, firm seedbed.

*FERTILIZATION* will be necessary for good growth on low fertility soils. A soil test is the best means of determining the type and amount of fertilizer needed. General recommendations may be obtained from the Extension leaflet for specific areas (example: L-225, Fertilizer Recommendations for the Blackland and Grand Prairies).

## Management

*GRAZING* management is important in obtaining safe, profitable utilization of burclover. Bloat is a constant threat when cattle and sheep are grazing dense stands, but it usually can be controlled with good management.

An adapted oat variety should be seeded in areas where stands of burclover volunteer and little or no

cool-season grass is expected. Where 50 percent or more of the forage is grass, the bloat problem is not nearly so great as when burclover provides most of the grazing. Rescuegrass or annual ryegrass are often used because they frequently produce volunteer stands the following fall. However, these two grasses make their peak growth in mid-to-late spring and thus are not so effective as oats in reducing bloat on burclover.

Livestock grazing succulent plants should have free access to dry hay. This should be grass hay when they are grazing a legume such as burclover. The animals eat little hay when the grazing is adequate but the hay will help boost milk or meat production from the pasture, in addition to reducing bloat.

Some livestock operators mow strips through the pasture rather than feed hay. The mowed forage cures or partially cures and the animals eat enough of it to satisfy their body requirements for dry matter and to keep down bloat.

*HAY AND SILAGE* are not usually made from burclover, because often the yield is too low to justify harvesting. If hay or silage is to be made, the burclover should be cut in full bloom. When oats are seeded on burclover pastures and the forage is not needed for grazing, a dense stand and good growth may justify putting up the crop as hay or silage.

*SEED PRODUCTION* from burclover generally is good when growing conditions are favorable, but the seed are difficult to harvest. Cogwheel plants may be cut with a plow when nearly mature, windrowed and combined from the windrow when cured. Button burclover falls down when mature, but most of the plants may be picked up with a pickup attachment on a combine. The other varieties usually must be allowed to die, the dead plants raked off and the remaining burs raked up by hand or with special suction equipment.

*Pastures Are a Cash Crop - Treat Them As Such*

TEXAS AGRICULTURAL EXTENSION SERVICE

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