



Alice White Clover

Alice white clover (*Trifolium repens*) is a perennial legume which spreads through the sward with branching stolons. As with other legumes, such as alfalfa and red clover, white clover has the ability to produce its own nitrogen through a symbiotic process with *Rhizobium* bacteria in the root nodules. White clover is mainly used in grazing pastures for its high nutritive value (both protein and minerals). Traditionally, there are two types of white clover: the small leafed and highly persistent varieties and the large leafed and less persistent varieties. Alice white clover is the first variety that successfully combines production (large leaves) and persistence.

Site selection and planting

White clover does well on most soil types, however, the pH of the soil is rather important. The pH should be at least 6.0, and the optimum is 7.0. If the pH is too low, high-calcium lime should be applied. Adequate levels of calcium, phosphorus and potash are very important. Alice white clover is a perfect companion with most cool season perennials like perennial ryegrass, orchardgrass and tall fescue. For combinations with Italian and annual ryegrass, red clover is a better choice.

Alice white clover can be planted in the fall, at least 8 weeks before killing frosts. A better way of planting in the Northern regions is frost-seeding in the early spring. When planted with grass, 2 to 3 pounds per acre is sufficient. For frost-seeding, 4 pounds per acre is recommended.

Seed inoculation

White clover can only fix nitrogen when the proper *Rhizobium* bacteria are present in the soil. To ensure nitrogen fixation, white clover seed should be inoculated with the right strain of *Rhizobia* prior to planting. Barenbrug offers pre-inoculated and coated Alice white clover seed that is ready to plant.

At A Glance

Key Features

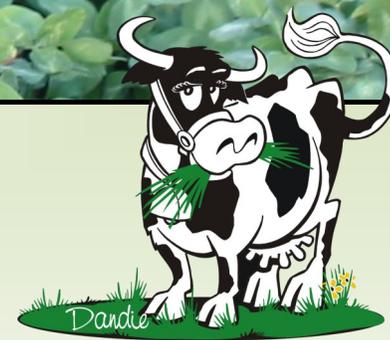
- High nitrogen fixation
- Winterhardy and persistent
- Large leafed
- Very palatable
- Tall, vigorous growth

Establishment

Seeding rate: 2-4 lbs/A



1828 Freedom Rd.
Suite 101
Lancaster, PA 17601
(717) 687-6224



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White clover and bloat

If a ruminant eats too much white clover, there is a chance of bloat. Bloat is caused by the production of both gas and foam in the rumen of the ruminant, caused by a surplus of protein. In order to prevent bloat, a maximum of 40 percent white clover in a pasture should be respected. If the animals are fed other non-bloating forages (e.g., hay, corn, corn silage) besides the clover, the risk of bloat significantly decreases. Bloat typically occurs when animals enter a clover-rich field (more than 50 percent) with an empty stomach. With the right management and feeding practices, the risk of bloat can be greatly reduced.

Management

Clover likes sunlight and therefore stands with clover should not grow too tall. This makes an excellent tool to control the percentage of clover. If the clover becomes too dominant, harvesting the field should be delayed. If the clover is struggling, more frequent harvests (grazings) should be considered.

Frequently Asked Questions

Q.Can white clover be frost-seeded?

A.Yes, frost-seeding is an inexpensive way to introduce white clover in a field. Results will vary depending on weather conditions.

Q.I have small leafed white clover in my fields but see no nitrogen effect on the grass.

A.Volunteer small leafed white clover fixes much less nitrogen than improved large leafed white clovers like Alice.

Q.I'm planting white clover in an old alfalfa field. Do I need to inoculate my white clover seed?

A.Yes, each legume species requires specific Rhizobium bacteria. If no or very little white clover is present in the field, inoculation is recommended.

Q.I have a nice stand of grass and clover. Should I add commercial fertilizer?

A.Clover starts fixing nitrogen in the late spring early summer. Nitrogen fertilizer applied in the spring will help increase production.