

BARREL MEDIC - CAN IT IMPROVE YOUR RANGE?

by

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Barrel medic is a close relative of bur clover and is also in the same plant genus as alfalfa. It has a promising future as an annual legume on Central California ranges.

Compared to Bur Clover

Barrel medic gets its name from its barrel-shaped bur, which is similar to that of bur clover, and from the genus name Medicago. It differs in appearance from bur clover by having pubescent (fuzzy) leaves and a small "ink spot" in the center of some leaves, especially in midwinter. The green color of the leaves is also slightly darker than that of bur clover leaves.

The most important difference between the two plants, however, is the ability of barrel medic to survive better in drier areas. It has demonstrated an ability to produce mature seed east of the Santa Lucia Mountains even during low-rainfall years. It also produces more forage on the coast during dry years than does bur clover.

A Nitrogen Builder

The agricultural importance of legumes such as medics and clovers is their ability to add nitrogen to the soil and thereby save the cost of nitrogen fertilizer -- both for the legume plant and for the associated nonlegume plants. Large amounts of nitrogen from the air can be fixed (changed into an available form for plants) in nodules on the roots of legumes provided an effective strain of root-nodule bacteria is present. A good stand of legumes on California dryland range adds an average of about 52 pounds of nitrogen per acre during one growing season (Holland, Street and Williams, 1969). This is equivalent to 250 pounds per acre of ammonium sulfate. There is a real potential, therefore, to improve rangeland fertility and production by establishing barrel medic on ranges where no effective nitrogen-fixing legumes now exist.

Varieties Available

Three varieties of barrel medic are available commercially: Jemalong, Harbinger and Hannaford. (The names, like the seed, come from Australia.) Jemalong has been used in most medic seedings in San Luis Obispo County and has usually produced a good stand when seeded according to Cooperative Extension recommendations. Harbinger and Hannaford appear to have the same advantages over bur clover as does Jemalong, however, and can therefore be substituted if Jemalong is not available.

Seeding Recommendations

Barrel medic should be seeded and managed the same as other annual range legumes -- see Farm Advisor Fact Sheet #5, Planting and Managing Annual Clovers on Dryland Range. In fact, it should be seeded in a mix with rose and sub clovers -- the varieties to use will depend on the rainfall and soil of the area. Contact your farm advisor for details.

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