

L-10

IMPORTANT STEPS IN GROWING SWEET CLOVER

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1. Sweet clover is destined to play an important part in the agriculture of Texas as soon as farmers realize its value and learn to grow it successfully.

2. It supplies excellent grazing and is unexcelled for improving soil fertility when plowed under. Therefore it should play an important part in the soil conservation program wherever it is adapted. The extensive root system, together with the plants above the surface, adds a great deal of humus, thereby not only adding plant food but also improving the physical condition of the soil and increasing its water-holding capacity.

3. Results at the Experiment Station at Denton and of demonstrations in various counties have fully proved the real worth of biennial sweet clover as a grazing and soil improving crop in north Texas.

4. The annual yellow blooming and annual white blooming (Hubam) are well adapted to South Texas and the Gulf Coastal Prairie as winter and spring legumes. In these sections the seed should be sown in the fall but further north it is safer to plant in the early spring to prevent danger of being winter killed. Hubam clover is more palatable than the annual yellow blooming sweet clover, and hence is more suitable for grazing. The latter, however, is an excellent winter legume for soil building.

5. Both the white and the yellow blooming biennial and the white blooming annual (Hubam) sweet clover will grow on practically every type of soil except loose sand, provided the soil contains sufficient lime. The yellow blooming annual will do well even on soil with very little lime.

6. At the Denton Station biennial sweet clover has done well: seeded in close drills or broadcast in February; when drilled in spring oats after the oats have been sown; when planted in three foot rows in fall or spring sown oats; and when alternated with sudan grass in three foot rows.

7. If the clover is planted in three foot rows in fall-sown oats, a small strip of oats should be removed with a sweep before the clover is sown, as otherwise the oats might smother it. It is usually more satisfactory to plant the clover with spring oats in January or February as then it has an equal chance with the oats. The clover should be cultivated as soon as the oats have been harvested. According to results at the Denton Station, farmers on the black uplands of north Texas who plant oats and need good late summer and fall pasture will find that planting sweet clover in three foot rows in their oats in late February or early March will prove very satisfactory. The growth will be better than where clover is close drilled in the oats.

8. If planted in alternate three foot rows with sudan grass, the biennial sweet clover should be sown about the middle of February and the sudan two months later. Grazing should not start until the grass is about 18 inches high. This method will supply good summer and fall grazing. The clover hardly ever gets killed back by cold before December and stools out again in early spring.

9. In west Texas it is easier to get a stand of sweet clover by sowing it in the previous season's corn, cotton, or grain sorghum middles without further preparation of the land than by broadcasting. For this purpose a four-hole kafir or sorghum plate in the planter may be used. The opening sweep or lister point and the covering shovel should be removed. The seed should be covered lightly by means of a small sack filled with soil or by some other weight dragging behind the seed chute.

10. The seed should be planted at the rate of 15 to 20 pounds per acre when drilled or broadcast and six to eight pounds per acre when planted in three foot rows. It should always be planted shallow and on a firm seed bed. Most of the failures with sweet clover can be attributed either to planting the seed too deep or to planting on a loose seed bed.

11. When sown with oats the grain should be drilled in first and then the clover drilled in very shallow or broadcast and harrowed into the soil.

12. It is important that the oat crop be mowed five or six inches above the ground when harvested for grain or hay, so as not to injure or kill the sweet clover. The biennial clover will then furnish grazing during the summer and fall and also during the following spring and summer at which time it will go to seed. A good crop of hay can usually be harvested in the spring of the second year and the succeeding growth should then be plowed under for soil improvement about the time it goes to seed.

13. Mature clover may also be harvested and threshed for seed. If the seed is allowed to mature the clover will usually reseed itself in the field. For the sake of the land, however, it is better to rotate the crop instead of growing it on the same land year after year.

14. Since there is no definite way to tell whether the soil is properly inoculated, or whether the bacteria are still active and functioning properly in utilizing the nitrogen of the air, it is a good crop insurance to inoculate the seed before planting. Another method is to give the field a light application of soil from a sweet clover, alfalfa, or bur clover field late in the afternoon and then disk or harrow this soil into the land. The seed inoculation, however, is simpler and more practical. The bacterial culture may usually be obtained from your seed dealer. The directions for applying the culture are on the containers.