

conclusion, that it is much more preferable when growing alfalfa for seed, to use the Grimm sort rather than any other variety.

SEEDING IN ROWS LOWERS THE COST OF SEEDING AND INCREASES THE YIELD

The figures on the chart reproduced here illustrates what has commonly been observed and often reported, viz., that for seed production alfalfa sown thinly in wide rows is likely to prove very much more satisfactory than when sown in any other way. As little as 1 pound per acre is now being sown on several farms in southern Alberta. It is our opinion that seeding in rows 30 or 36 inches apart, at the rate of 2 pounds per acre, is likely to prove the most satisfactory method in alfalfa seed production on our lighter, drier lands.

PREPARATION OF LAND

When alfalfa is to be sown in rows for seed it is not necessary that the land be fallowed or even that intertilled crops precede the alfalfa, although both of these preparations will, of course, give the crop the best possible start. Stubble land that has been worked in such a way as to rid it entirely of creeping rooted grasses is quite satisfactory to sow alfalfa when the crop is put in in wide rows. The land should be plowed deeply either in the fall or spring and thoroughly worked down. The use of the land packer is advisable and the surface soil should be made quite mellow by surface cultivation with the disc, cultivator or harrow.

SEEDING

The seed may be sown with the ordinary grain drill by closing either four or five of the spouts and allowing the 5th or 6th run. In order to sow as thinly as suggested it is necessary to increase the bulk of the seed by adding to it cracked barley or cracked wheat or some other material.

The seed should be sown very shallow, preferably not more than an inch in depth. The soil should be firm so that moisture to germinate the seed will be available at the depth to which the seed is planted. When only a small quantity is to be sown the garden drill may be used.

The best time for seeding alfalfa is in the rainy season or between the 20th of May and the 20th of June. It may be sown rather later when the soil is in a particularly favorable condition or in years when the rains are delayed beyond the usual time.

INOCULATION IMPORTANT

For the same reason that inoculation is advisable when sowing alfalfa for forage purposes, it is also important that it be used when growing the crop for seed. Soil from an old successful alfalfa field may be mixed with the seed before sowing, or artificial bacteria culture may be purchased in packages containing sufficient to treat from 20 to 60 pounds of seed for from 25c to \$2.00 per package. The Bacteriological Department of the Ontario Agricultural College at Guelph, and the Manitoba Agricultural College at Winnipeg, are prepared to supply this material at 25c per package. The Earp-Thomas Farmogerm Company of Bloomfield, New Jersey, supplies the culture for \$2.00 per package of the same size. The last mentioned, although expensive, has given very excellent results at Saskatoon. Where the soil can be obtained free from weeds and plant diseases, it would seem that it is the surest means of getting the crop satisfactorily inoculated.

CULTIVATION

When alfalfa is sown in rows for seed, weeds are likely to make considerable growth the first year, unless the land is particularly clean. To control the weeds it is necessary to intertil the crop; it is seldom necessary to hoe the rows, but even this is sometimes advisable. If the land is thoroughly prepared and gotten as clean as possible the alfalfa, if sown at the right time, will make a very early start. Thereafter, intertillage should be given often enough to control the weeds and keep a mulch on the land to lessen the loss of moisture by evaporation.