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DIRECTION OF HON. L. C. HALMRAST MINISTER OF AGRICULTURE

RESEARCH STATION, LETHBRIDGE

EXPERIMENTAL FARM, LACOMBE EXPERIMENTAL FARM, BEAVERLODGE

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PLANT PATHOLOGY LABORATORY, EDMONTON

EXPERIMENTAL FARM. MANYBERRIES EXPERIMENTAL FARM. FORT VERMILION ECONOMICS DIVISION. EDMONTON

FORAGE SEEDING DEPTHS

AND

Shallow seeding has long been advocated for grasses and legumes, and the recommendation still holds. But that there are different degrees of shallowness is evident from the work of Agronomist S. Church at the Lacombe Experimental Farm.

Brome and alfalfa were the crops he worked with and tests were conducted in greenhouse and field. The seeds were sown at depths of one-half inch, one inch, two inches and three inches, with a surface seeding added. In greenhouse and field the half-inch seeding depth for alfalfa produced the largest number of seedlings, but yields in the field favoured seeding at the one-inch depth. Both surface and two-inch seedings of alfalfa were inferior.

Brome also did well when sown one inch deep although it seemed less affected by depth of seeding than did the alfalfa. With brome, the greatest number of seedlings was produced from the one-inch sown seeds and better yields also resulted from this seeding depth.

Weather undoubtedly has an effect on the success of forage seeding. In the hot dry weather of early July, seed sown near the surface in 1959 did not germinate until the rains came. Seed planted a little deeper in the moist soil germinated and grew promptly. Fewer plants were obtained at these depths but higher yields resulted.

In 1960, soil moisture was more favourable but depth of seeding results were similar. It was noted also, that increased yields resulting from the one-inch seeding of both alfalfa and brome carried over into the second year.

On the basis of these tests, neither surface seeding nor deep seeding is advisable, says Mr. Church. The one-inch seeding would seem most suitable for both alfalfa and brome. Sowing in firm, moist soil aids in the desired depth of seeding and promotes rapid germination.

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