

# Linseed a Valuable Crop in South Island Rotations

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**W**ITH an assured market at a fixed price, linseed is a crop worthy of consideration on many South Island mixed farms. Although this season some autumn sowing has been carried out, linseed has always been looked on, as it is in this article, as a spring-sown crop. However, there is no reason why autumn sowing should not prove quite satisfactory under suitable conditions.

**G**IVEN warm weather and a reasonable supply of moisture, the crop is quick to establish and makes rapid growth. Dry weather is desirable as the crop nears maturity to condition the seed and facilitate harvesting.

Linseed has been grown in the past principally on the browns of Canterbury, and while it is satisfactory on a wide range of soil types, it usually does best on land with a clay subsoil.

## Place in Rotation

The old belief that linseed would not give its best yields unless grown on land out of browntop has not proved to be correct. Generally highest yields are obtained on land out of good pasture. However, the crop can be grown successfully practically anywhere in the rotation, if the soil fertility is sufficiently high and the land reasonably free of weed seeds. Wheat is the most popular crop to follow linseed. Sowing a grass-seed mixture with the crop is now common, and while it is not suggested that this is the best method of establishing pasture, at least it is cheap, and some excellent pastures have been established in this way.

## Cultivation

Cultivation methods vary with the conditions. If the land is skimmed out of grass during the autumn or the hustler used, and a well-rotted turf is ploughed down during the winter, an excellent seed-bed can be produced by subsequent cultivation.

Whatever method is adopted the resulting seed-bed must be fine, well consolidated, and free from weeds. To obtain this condition at minimum cultivation costs early ploughing is advisable, as it gives time for the weather to play its part in mellowing and consolidating the soil.

Whether the crop is sown on one furrow or the paddock skimmed or hustled before deep ploughing, care is needed to see that the land is worked to the bottom of the furrow, otherwise the moisture-holding capacity is reduced and the crop is severely checked during a dry period.

Although the roller compacts the surface soil only, it is advisable to sow on a rolled surface to obtain an even depth of seed at drilling.

## Varieties

Bison has been the variety most widely grown in recent years and has

given satisfactory results. For the past two seasons the Department of Agriculture has carried out variety trials and in these Golden Viking, Walsh, and Rio have shown promise, and seed stocks of these varieties are being multiplied for commercial use.

## Sowing and Manuring

Linseed should be sown as soon as the soil is sufficiently warm to give quick establishment. In Canterbury an early October sowing is usually most suitable. Under favourable conditions late-sown crops may give payable yields, but in seasons such as the one just past harvesting difficulties are likely to arise.

A seeding rate of between 30 and 40lb. an acre is recommended, although in the larger-seeded varieties this should be increased. It is advisable to drill on a rolled surface through every coulter of the grain drill. Set the coulters right back and if possible use well-worn coulter tips. The seed should be planted not more than 1in. deep. Neither cross drilling nor the broadcast method has proved as reliable as drilling one way.

Superphosphate or serpentine superphosphate at 1cwt. an acre assists in quick establishment and root development of the crop.

Light harrows should follow the drill to give an even cover of seed. Except on light stony land, rolling after drilling is not recommended.

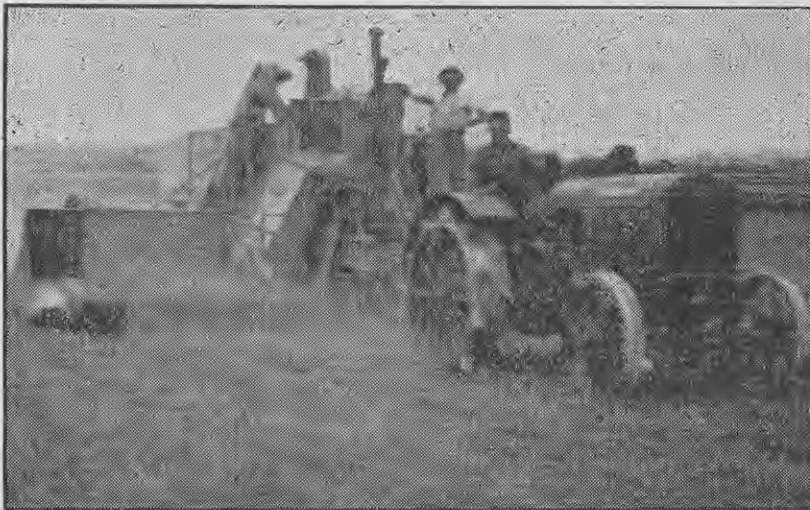
As linseed thrives on a semi-acid soil, a heavy application of lime just before sowing is not desirable. If, however, lime has been applied to pasture some time before ploughing, no ill effects will result.

Normally harrowing is not necessary after the crop is established. If, however, heavy rain crusts the surface after sowing, a light tine harrow with well-sharpened points may be employed. Such harrowing should be carried out at a reasonably-slow pace, advisably in the direction of the drill.

## Harvesting and Yield

If linseed is sown in October, it will normally be ready for harvest in late February or in March. Under favourable soil and climatic conditions direct heading can be quite satisfactory, but if ripening is not even, reaping and threshing out of stook or stack is probably most reliable. The seed finishes well in the stook and can be stacked some days before it is ready to thresh.

If labour is not available for stooking, linseed may be windrowed and later picked up with the header. When this practice is adopted it is advisable to cut with the binder rather than the mower. Although cutting with a high stubble increases wind risk, it has the advantage of helping to condition the seed. Yields vary considerably, half a ton an acre being considered a fair average.



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