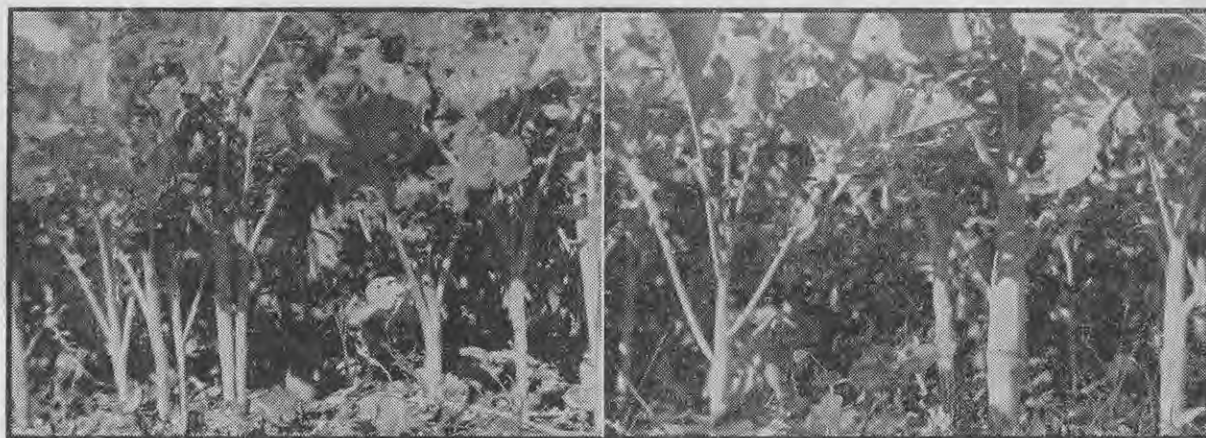


CHOU MOELLIER IN MID-CANTERBURY



Young plants of the Medium Stemmed (left) and Giant (right) types of chou moellier.

Like other brassicas, chou moellier requires a reasonably firm seed-bed, and the seed should not be sown too deeply. The earlier and more thorough the cultivation, the better the crop that may be expected.

Sowing the Seed

Small areas are sown in 21 or 28in. rows, either in ridges or on the flat, and intercultivated. On larger areas the seed is usually drilled in 7in. rows similarly to rape. Chou moellier areas are seldom sown down to grass at the same time, as the heavy growth of leaf has a smothering effect on other plant growths, but where that is done the rate of seeding is reduced considerably, 8oz. per acre usually being sufficient.

Times of sowing vary considerably according to the time that the feed is required. Where it is used to replace the rape crop it is planted at the end of September or in early October to be ready to be fed off in January. However, the bulk of the crop is sown between the middle of October and the end of November. No hard-and-fast rules are apparent, and sowings are also made during December, usually in the districts nearer the foothills.

Chou moellier is popular with some farmers for sowing as a mixture with swedes. The taller-growing chou moellier protects the swedes from insect attack and allows them to grow without check. An added advantage is that the extra leafage allows the mixture to be fed by a flock that includes old ewes whose mouths are not good enough to enable them to eat the harder roots.

As with turnips and rape, reverted or serpentine superphosphate is safer to use than straight superphosphate when sowing. Under dry conditions straight superphosphate tends to burn the seed, thus spoiling the germination. Equal quantities of lime and superphosphate mixed some days before application give equally good results; this mixture needs to be turned several times at intervals to prevent it setting.

Rates of seeding vary from 2 to 4lb. per acre when chou moellier is sown alone, but 2½lb. per acre appears to be general. When chou moellier and swedes are sown together the rate varies between 10oz. and 1½lb. of chou moellier and 6oz. and 1lb. of swedes. Quite often a few ounces of chou moellier seed is mixed with seed for a rape crop.

Utilisation

Chou moellier is a good, safe fodder crop and under reasonable conditions is capable of producing a heavy yield of nutritious and succulent feed. Though it does not have the quick fattening qualities of rape, it can replace this crop where the climate is not suitable for growing rape. However, its main value is in its ability to produce a large amount of autumn, winter, or early-spring feed.

Sheep are grazed on chou moellier as on rape or turnips. Cattle are sometimes grazed similarly, but usually the plants are cut and carted to another field for feeding.

Seed Production

For the production of seed chou moellier should be planted about the end of November, or in the colder areas early in December. Unlike rape, which runs to seed if planted in autumn, chou moellier demands a long growing season for seed production. Failure to recognise this fact may result in a large proportion of the crop failing to flower the following year. Crops sown for seed are not grazed.

In the early years of seed production in Mid-Canterbury, where all the Certified seed is grown, crops were cut with a binder, stooked, and threshed from the stook, usually by a header harvester travelling from stook to stook. Of recent years the binder has been discarded and most of the crops are now direct headed, a few being first windrowed and then picked up. The plant can withstand a fair amount of wind even when ripe, and though ripening may be somewhat uneven, the crop can usually be left until most of the plants are ready.

The seed should be bagged in quantities of 40 to 50lb. (fertiliser sacks are suitable) and hung on a fence similarly to ryegrass. If the sacks are filled loosely and turned occasionally for the first few days, the seed will dry out in the bags.

Late unseasonable frosts occasionally catch the crop in the seeding stage, with more or less serious results. A very severe frost will kill the young seed while leaving the pod apparently healthy on the outside. A lighter frost may affect only the pollination of the flowers that are mature at that time; when that occurs the very small seed capsules fall off before developing. The later flowers will not be affected, but will not seed in the normal way. Good pods will develop at the top of the stalk, followed by an empty space, then more seed pods.

Pests and Diseases

Chou moellier is a hardy plant and usually is not attacked by pests or diseases. It can withstand drought to a great extent and is highly resistant to the effect of club root. It is less affected by aphid and diamond-backed moth than rape or turnips, and though it is occasionally badly attacked by diamond-backed moth, as were some young stands during last summer, generally no great damage is done.

Aphid appears to be more serious when the crop is running to seed. In a very dry spring the plants are weakened and the insects may seriously affect the seed yield. Again, it is usually a combination of adverse circumstances that causes the trouble. White butterfly does some harm, but serious damage is not usual.

Greater Use of Crop Expected

Chou moellier is finding a definite place in farming programmes and indications are that its use may be expected to increase. With the increased acreage being grown for seed, adequate supplies should be assured and farmers will be able to plan their crops with confidence. A few years may pass before sowings of this crop reach a more or less stable level, for there is plenty of scope for expansion.