

# Fodder Crops and Small Seed Production

Seasonal Notes by the Extension Division

**T**HERE is still a place for annual fodder crops on many dairy farms, particularly where their production is combined with a plan for systematic pasture renewal. Pastures on many dairy farms consist largely of inferior grasses which could with advantage be replaced with high-producing strains of better species, and opportunity can be taken during cultivation for fodder crops and pasture to level fields to allow for efficient sweeping with the buckrake when later the fields are ensiled.

## TOWN MILK SUPPLY

THE financial return of a town milk supply herd is closely associated with the quantity of milk supplied during autumn and winter. One way to increase this winter quota of milk is by growing supplementary crops. The most popular forage crops in the Auckland supply area are soft turnips and chou moellier; soft turnips are used to increase the milk supply during autumn and chou moellier during late autumn and winter.

## SOFT TURNIPS

Soft turnips sown in October are ready for feeding out in January. When the crop is needed for more than a 6-week period successive sowings should be made. About 5 to 7 acres of turnips are required for 50 milking cows, and the crop should be pulled and fed out or grazed in small breaks divided by an electric fence. If the crop is fed off, the herd should go on the break for a short period only immediately after milking.

## CHOU MOELLIER

Chou moellier is a valuable crop for winter feeding, and to obtain full advantage of the feed produced the crop is best cut and fed out to the herd. Where labour for hand feeding is short the crop can be grazed in breaks as with soft turnips, and here again to avoid the possibility of taint to the milk the period of feeding should be short. For late-summer or autumn feed the crop should be sown in September or October, and for winter feed in November or early December. About 5 acres are required for 50 milking cows.

## GRAZING RYEGRASS SEED AREAS

WITH ryegrass seed production it has become common practice to take the grass seed harvest from first-year stands that have been autumn sown with a simple mixture of ryegrass and white clover. Greater yields and higher germinating samples are usually obtained from these younger stands than from seed harvests in the second or subsequent seasons. After February sowings areas intended for seed production should be control grazed throughout late autumn and early winter (April-May) to retain growth at the 2 to 3in. stage. During mild seasons lenient grazing may continue throughout winter, or if feed is required for lambing ewes, the area can be spelled for early-spring feed. During severe winters and in spring grazing should not be severe, though at no time should growth be allowed to get out of control. On light land perennial ryegrass seed stands are normally closed for seeding in early October, but on heavy land and in wet seasons closing is postponed until later in the month. The aim should be to have the area grazed relatively closely (2 to 3in.) and evenly at the time of closing. Any uneven growth should be cleaned up either by topping or by a quick grazing with concentrated stocking immediately before the area is closed. Grazing of Italian and short-rotation ryegrass should be along the lines recommended for perennial ryegrass, though owing to their tendency toward more vigorous growth, they may demand closer attention to ensure adequate growth control. They may be closed

for seeding 7 to 10 days later than perennial ryegrass. When seed is being taken from older, less vigorous swards the area should be closed up 7 to 10 days earlier than for first-year stands.

## GRAZING CLOVER SEED AREAS

White clover seed crops are generally taken in the second and also often in the third years of the life of ryegrass-white clover seed stands. When growth has recovered after the ryegrass harvest the area should be closely grazed throughout late autumn and winter to suppress grass growth and attain a clover-dominant sward. This close, continuous grazing should be maintained throughout spring, especially on the heavier, more fertile soil types. Keeping the sward bared down not only encourages clover dominance but leads to profuse and more even flower-head development and checks the excessive foliage growth that may otherwise hamper seed maturity and threshing. White clover seed areas are normally closed up in late October-November, when the flower buds are beginning to appear. In dry seasons and on light soils they may be closed early in this period. On heavy soils and during wet seasons later closing is advisable. Should wet weather enforce strong foliage growth shortly after closing, it is wise either to top the area or quick graze it with a large mob of sheep during the second half of December.

—N. H. GREAVES

## HYBRID SEED MAIZE

THE introduction of hybrid seed maize to New Zealand growers in the last few seasons has completely changed the pattern of varieties now being grown. For several years the Department of Agriculture has undertaken the production of seed of Pfister Hybrid No. 360 from single-cross parent material obtained each year from the American breeders of this hybrid. Because of its high yield, uniform grain, and suitability to a wide range of soils and climates, Pfister No. 360 has virtually displaced all local varieties. Locally grown Certified seed is cheaper than imported hybrid seed would be and gives better yields of grain. Also the production of the hybrid seed locally means an appreciable saving in dollar expenditure. The Department of Agriculture has tried out a wide range of hybrid types from the United States of America, but though some are higher yielding under favourable conditions, none has yet been found which could be regarded as an all-round improvement on Pfister No. 360. Certified seed maize of this hybrid is available through seed merchants from the Department of Agriculture, Gisborne, and growers wishing to obtain supplies should arrange with their local merchants to obtain it. It is not wise to use again for seed the grain from an area sown with Certified hybrid seed, as some of the hybrid vigour of the true hybrid is lost in the next generation. This procedure should be countenanced only when it is impossible to obtain Certified seed. Then care should be taken to see that Certified seed was planted for the crop from which the seed is to be taken, and that the crop was growing in reasonable isolation from other types of maize and also from sweet corn.

—H. de O. CHAMBERLAIN

## EFFECT OF WEEDKILLERS ON CLOVERS

TRIALS have demonstrated that less damage is done to clovers if water-based preparations of M.C.P. and 2,4-D are used for the control of herbaceous pasture weeds such as buttercups, thistles, and ragwort. Clover damage is reduced to a minimum if hard grazing is carried out during dry weather immediately before the spray application. This has two advantages; the leaf area of the clover is reduced and therefore less spray is taken up by the clover, and the weeds are fully exposed to the spray.

—L. J. MATTHEWS