

good colour in the seed. Good dogstail seed is a golden yellow, but if the crop is cut too late, the seed becomes very dark brown. As this dark seed is not sought by the overseas buyer, the grower should take care to ensure that the seed is harvested at the correct stage.

As soon as the seed is coloured and can be rubbed out of the heads in the palm of the hand and the rubbed-out seed retains its shape when rolled with fair pressure between the palm of the hand and the thumb, the crop may be cut. The straw is very slippery, so care is necessary when handling the sheaves for stooking.

Many years ago it was the practice to sow some perennial ryegrass with the dogstail. The ryegrass straw, being less slippery than the dogstail straw, helped to keep the sheaves together. This is no longer done, because small ryegrass seed is very difficult to dress out of the dogstail seed and the seed trade is becoming more and more selective in buying lines of high purity.

Crested dogstail threshes readily provided it is allowed to dry out thoroughly in the stook.

An alternative method of harvesting, particularly if the crop is not very dense, is to cut with the binder and run the cut material off without tying. This "windrowed" material is left until thoroughly dry and then picked up and threshed with the header harvester.

Another method used generally with lighter crops is to cut with a 6ft. mower fitted with an inside shedder so that the swath is reduced to about

4ft.; the cut material is left to dry out and then picked up and threshed with a header. Windrowing is, however, not very popular, as there is risk of inferior colour in the seed due to late harvesting and the germination of the seed may be affected.

## Ordinary Seed Crops

A considerable proportion of the dogstail seed is harvested from areas which have not been sown out specially for seed production. much of the lighter land farmers often include up to 3lb. of crested dogstail seed per acre in the general pasture seed mixture. As these pastures increase in age the amount of dogstail tends to increase in the sward. It is frequently impossible to stock these paddocks sufficiently intensely to keep the dogstail from running to seed. These pastures may not be closed up at all for seed production, but in late January or February (or whenever the seed heads are sufficiently far advanced) and provided sufficient seed heads are showing, a stripper is run over the area.

## Stripped Seed

Generally the stripped seed lacks the golden yellow of binder cut seed, the reason being that stripping has to be delayed until the seed is fully mature. If the seed is stripped too early, it will heat in the sacks. For this reason, and as a precaution, it is advisable to fill the sacks only loosely and hang them on a fence to dry out. The sacks should be shaken up and turned every day until the seed is dry. Alternatively the stripped seed may be spread in a thin layer on top of a cover placed on the grating in the wool shed. This also involves turning the seed every day.

Stripped seed, though lacking colour, is generally of good germination provided it has not heated. Because this seed is generally taken from paddocks which have been sown with a pasture mixture, there is usually some ryegrass seed present. This ryegrass seed, particularly that which is the same size as the dogstail seed, is difficult to dress out and the purity of lines of stripped seed is therefore generally not as good as that of lines harvested by the binder cutting method.

#### Seed Dressing

Dressing losses can be high, depending partly on the method of harvesting, stripped seed usually having a greater amount of impurity than binder harvested seed.

The most difficult seed impurities to dress out of crested dogstail are Californian thistle, ryegrass, and catsear. Hairgrass and sweet vernal can also be troublesome if the awns have been removed during threshing. Yorkshire fog, particularly if it has been shelled, is also a source of dressing loss, as the shelled seed is almost the same size as the crested dogstail.

A good line of crested dogstail should have a purity of 98 per cent. and a germination of 90 per cent.

# Export of Seed

As the quantity of seed produced in a normal season is far too great for New Zealand's requirements, an export trade has developed. The quantity exported frequently includes a carry-over from the previous year's production, which accounts for the fact that in some years the export figure exceeds that for production.

Great Britain is the principal importing country, but at various times seed has been exported to most European countries, including France, Denmark, Holland, Belgium, Sweden, Switzerland, Eire, and, before 1933, Germany. In addition Australia, Canada, the United States of America, South Africa, and the Falkland Islands have bought seed.

# Use in New Zealand

The use of this seed in pasture mixtures has declined to some extent because farmers are inclined to blame the seed stalk and seed head for some foot trouble in sheep. However, it is still included in many mixtures for use on second-class country, particularly where rainfall is adequate. Dogstail is a bottom grass which will stand more or less continuous or set grazing such as is practised on many sheep farms, particularly in the south.