

in February, are planted out in the field during May and June for harvest during the following January and February. In seasons when a shortage of household onions occurs some of these are harvested early as green onions. Usually transplants are sold directly off the field, as they are of doubtful keeping quality. Yields of 12 tons per acre are usual.

Seedling crops are sown directly into the field by single or multiple seeding units at the rate of 4 to 5lb. of seed per acre. Rarely is it necessary to thin this crop. Onions are harvested in March or April, graded, and the best types stored for winter and spring sales. The seedling crop produces bulbs of excellent keeping quality. Yields are generally slightly lower than from transplanted crops.

Varieties grown are Pukekohe Early Straw for early harvest and Pukekohe Long Keeper for transplant and seedling crops. Wheel hoeing is commenced as soon as the plants have emerged and continued at intervals until bulb growth prohibits this operation. The most costly item in onion production is hand weeding of the small plants. Successful weed control among the young plants has been obtained recently by spraying the rows of seedlings with a 10 per cent. solution of commercial sulphuric acid.

When the crop has fully matured the onions are lifted and allowed to lie in the field to cure, being turned at intervals by hand raking. Topping of onions is at times carried out in the field by manual labour or by mechanical onion toppers, but on some occasions the bulbs are stored untopped until they are finally sorted for marketing.

A ton of lime per acre is applied at least a month before seeding or planting out. The area used for onion growing is then fertilised with a mixture of 1 ton of bonedust, 1cwt. of sulphate of ammonia, and 1cwt. of potash per acre.

Onion downy mildew and onion thrips usually affect the onion crops and control measures by fungicides and insecticides are necessary.

Control of onion mildew can be obtained by spraying with Bordeaux mixture 5:4:50 to which 1 pint of summer oil is added as a spreader. Applications are first made when plants are

from 4 to 6in. high and fortnightly sprayings are generally necessary for adequate control.

The control of onion thrips (*Thrips tabaci*) is difficult during warm weather. Some control has been obtained by the application of sprays consisting of nicotine sulphate 1:200 and D.D.T. (50 per cent.) 1lb. to 100 gallons of water with the addition of 1 pint of summer oil to every 100 gallons of the mixture. Fortnightly applications are advisable as a normal treatment, but it is sometimes necessary to spray much more often. By spraying before infestation is apparent good control has resulted. The above sprays for onion mildew and thrips can be combined.

Cabbages

Cabbages are grown for harvest throughout the year, September being the most difficult month to produce good yields, because of seed-stem development.

Plants are raised in open seed-beds, where rigid disease control measures are carried out. Downy mildew in seed-beds is prevalent most months of the year, and spraying for caterpillars of the diamond-backed moth and white

butterfly is necessary during the warmer periods. Cabbage aphid is extremely difficult to control during January, February, and March.

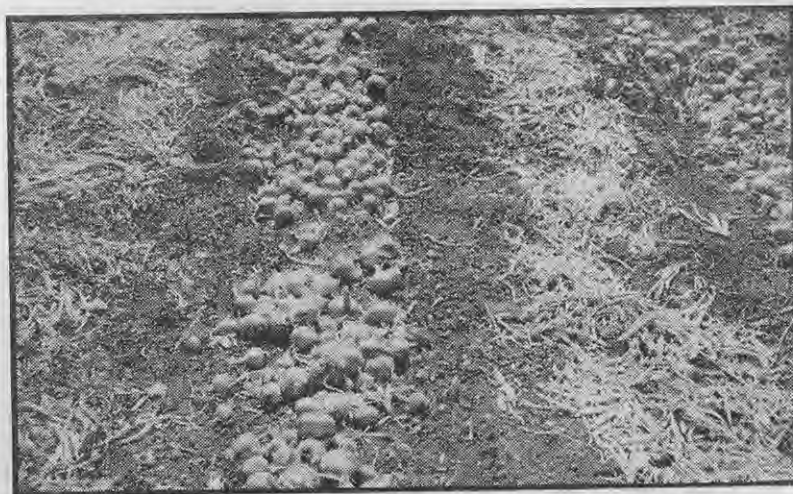
Spring-harvested types of cabbage are planted in June or July. The favoured varieties Greyhound, Jersey Wakefield, and Charleston Wakefield are harvested during September to December and yield from 6 to 8 tons per acre.

From October to January the variety Golden Acre is planted for harvest during December to April. This quick-maturing cabbage yields up to 14 tons per acre and is harvested from 8 to 10 weeks from planting out.

Cabbages for winter harvest are planted out during March, April, and May, the varieties being Early Market (Hendersons), Green Acre, and Copenhagen Market. These round-headed types yield excellently and successional plantings ensure supplies from May to August inclusive.

The planting programme mentioned above enables the grower, by selecting

Crop of Early Market cabbages ready for harvesting. Sparrow Industrial Pictures Ltd. photo.



Crop of onions cured and ready for bagging.

