

**continued longer.** One often sees small heads of cauliflower on stunted-looking plants. This comes about from two main causes. First, from larvae of maggots which sometimes do not kill the plant but so weaken it that there is little growth, only a small head forms and second, stunting of the plant due to the plants being too late when they are set out. Cauliflower plants when set out should be just large enough to handle easily. The larger they are when planted in the field the greater the likelihood of their becoming stunted and "blotting" or forming small heads. If plants, owing to unavoidable weather, have become rather large before it is possible to set them out, every effort should be made to start them earlier than as soon as possible and keep them growing. If the weather is hot and dry they should be watered and, in any case, the surface soil should be frequently loosened with the hoe or cultivator. If it is thought there is not enough available nitrogen in the soil to ensure a strong growth of plants, it is desirable to apply nitrate of soda broadcast at the rate of 100 to 150 pounds to the acre before the plants are set out.

**Varieties.** The varieties grown in most parts of Canada are the early ones. Where the autumn is long without severe frost, the later ones will develop. The early varieties are used for the early and late crops. Although they are sold under a number of different names they are all much alike. The Early Dwarf Prince is the one best known. Early Snowball is much like it. Although the seed is expensive, only the very best strains should be grown, as stated before. Of the late varieties, the Large Algers and Walcheren are two of the best.

In order to protect the heads from the sun and keep them white, the leaves are drawn together over the head and tied as soon as the heads begin to be exposed or a leaf is broken over the head. Before tying it is desirable to kill the cabbage worms with pyrethrum powder, if there are any. The head and leaves should always be dry when the latter are tied.

Frequently there is a large number of small heads not big enough to sell when the plants have to be pulled owing to severe frost. These may be pulled up with as many roots attached as possible and planted in a roothouse; first remove a some of the outer leaves, which will help to prevent wilting. The heads from these plants will be worth considerable when the outside crop is done.

For several seasons early cauliflower was grown quite satisfactorily in a cheesecloth enclosure at the Central Experimental Farm. In the enclosure the plants were exposed to the fly of the root maggot, and the air was moister than outside, favouring the development of the heads. For home use cauliflower might be grown quite successfully in a cold frame with a cheesecloth covering.

#### EXPERIMENT SHOWING THE IMPORTANCE OF PROTECTING CAULIFLOWERS FROM ROOT MAGGOTS.

For many years the tar-felt paper discs have been used on the Experimental Farms with good success in the protection of cabbage and cauliflower plants from root maggots, and experiments have been tried, from time to time, to find something better. The results obtained in 1918 at the Central Farm from two other methods are very striking, and from the results from corrosive sublimate at Ottawa, and by experimenters elsewhere, it would seem that this is also a very good remedy for root maggot and more easily applied than the tar-felt paper discs.

The seed of Early Snowball cauliflower used for the test was sown on April 4; the plants were pricked out in the hot-bed on April 25; and transplanted to the field on May 25. The soil was a light sandy loam well manured with rotted barnyard manure. There were 240 plants used, divided into 4 plots of 60 plants each. Most of the heads were ready for use on July 9. In Plot 1, a little oakum was put around each plant in the form of a collar close to the plant as soon as the plants were set out. In Plot 2, tar-felt paper discs were used as soon as the plants were set out, and it was necessary to replace the oakum and discs as, owing to the looseness of the soil, they soon became covered with it. In Plot 3, no protection was given, and, in Plot 4, a