where, as a rule, the main part of the crop is most immature, though of good marketable size, when the tops are cut down by autumn frosts, and where there is little or no disease in the crop.

IMPROVEMENT BY HILL SELECTION.

After a variety has been originated, and after its general characteristics have been sufficiently fixed to introduce it, a variety may be changed, to some extent, by careful selection. This may be undertaken for the purpose of increasing the yield or to obtain a variety which is earlier or later, shallower in the eye, or of better shape. Selection may also be made to obtain a potato which is more resistant to disease and drought, better in quality, or with a higher percentage of starch, but while selection is desirable there needs to be more experimental evidence to show that marked, permanent changes in a variety can be made in this way.

The most accurate way to carry on hill selection is by the individual tuber or tuber-unit method by which the yield from each individual tuber is kept separate.

A simple method of selection, and one which will be found to give good results, is to dig enough of the general crop by hand each year so that enough seed can be selected from good hills to give a sufficient quantity of seed for the general crop. By this method the poor hills including potatoes of low vitality and those affected with disease are eliminated and the standard raised. This is perhaps the best method of selection for the average farmer.

While the methods of selection described are mainly for the purpose of increasing the yield, it is desirable to select at the same time for purity, trueness to type, improvement of shape of tuber, resistance to disease, and anything else which will improve the value of the crop.

KIND OF SETS TO PLANT.

Many experiments have been tried to determine the best kind of sets to plant, and, on the whole, it has been found that good marketable tubers cut into pieces so as to have, at least, three good eyes to a piece, and a liberal amount of flesh, are the best. A medium sized potato should make three to four sets, cutting the potato lengthwise and then across, when four are made. The less potatoes have sprouted in the dark the better the seed will be, hence they should be kept as dormant as possible by storing in a cool place.

CONDITION OF SETS WHEN PLANTED.

The sooner the sets are planted after the potatoes have been cut the better the yield will be. The sooner the sets are covered after they have been dropped in the field the larger the yield will also be. Coating the sets with land plaster or lime will also materially increase the yield.

BEST DEPTH TO PL

It is important to know the most economical depth to plant potatoes, as there is no doubt that different depths of planting will give different results, but there will not be the same results on all soils. The yield, however, is not the only point to be taken into consideration, the question of labour being impo tant also. While shallow planting has given the best yields at Ottawa in loose, sandy loam soil, the most economical depth is from four to five inches for good loamy soils on account of the harrowing which is necessary to destroy weeds and which would dig out sets which were planted shallower. Sets should be planted deeper in soils likely to dry out than in others more retentive of moisture.