

any tubers showing symptoms of these should be discarded, as under favourable conditions they may infect the subsequent crop, and in any case carry infection to the soil in which they are planted. Precautions should be taken against the potato-moth. Thorough moulding of the crop is the best preventive. Infected tubers should not be put into storage, as the pest may increase, causing serious damage to the whole line.

Other diseases likely to be encountered are wilts, mattery eye, and blackleg. These cause the upper leaves to become rolled and flaccid, generally commencing with one stem. Later the whole plant may wilt and die down long before the healthy plants. Discoloration of the flesh of the potato, more especially near the vascular tissue of the stem end, frequently is associated with one or more of these troubles. In some crops infection is too high for rogeuing to be practicable, but in the seed-plot all plants showing these symptoms should be dug at once and the haulms and tubers removed.

Emphasis must be laid upon careful handling of the seed and thorough inspection of the tubers. Several cases have come under notice where apparently sound seed has developed storage rots after it has been subjected to warm humid conditions favourable to the development of such diseases. What might happen when seed has been handled carelessly or damaged tubers allowed to pass in a line is therefore evident.

THE SEED-PLOT.

To rogue efficiently a large area of potatoes takes time and labour. To buy fresh supplies of "mother seed" at frequent intervals is costly. The regular grower of certified seed is therefore advised to plant a seed-plot to supply his own requirements. Using his purchased line as foundation stock he should go through his crop about flowering-time and mark with sticks a large number of healthy plants which have also healthy neighbours. These marked plants should be examined periodically during the remainder of the growing-season, and the stick removed if any doubts arise regarding the health of the plant. It should be kept in mind that bolters, being more vigorous and disease-resistant than the rest of the crop, are likely to appear promising, and should be avoided.

As the greatest spread of virus takes place later in the season, the marked plants should be dug in an immature state, as soon as good seed-sized tubers are formed. When digging, a standard should be set, say 6 to 8 tubers of average size per root, and any plants falling short of this should be rejected. The seed should be "greened" and stored under the best conditions available, in shallow trays if possible. By this means sufficient seed could be procured for the planting of a seed-production plot.

This plot should be isolated from all other potatoes, on land that has not grown potatoes for several years. The importance of isolation cannot be overstressed. Probably the *worst* location would be a few rows down the centre of the main crop, where it would be liable to infection from all sides. Two varieties should not be grown side by side. It has been proved that certain