

black masses are composed of the resting mycelium of a fungus (*Rhizoctonia*), and in this stage do no injury. If planted with the tuber, however, the fungus develops and may produce considerable injury in the growing crop by attacking the base of the steins.

Control is difficult, since it is almost impossible to get a disinfectant strong enough to kill the fungus masses right through without injuring the potato. Tubers with large *Rhizoctonia* masses should be discarded for seed and the remainder disinfected. Corrosive sublimate is effective as a disinfectant for *Rhizoctonia*, while formaldehyde is not.

Silver Scurf.

This is due to a fungus which lives in the skin of the tuber. The attacked skin becomes more or less silvery and glistening, usually in spots, which, however, may run together until a large area of the potato is affected. The substance of the tuber is not affected, and the chief injury appears to be in increased wilting in storage.

Hand-selected seed free from the disease, disinfection to kill any loose spores, and rotation are the only measures known against it.

Late Blight.

This shows as leaden-coloured, often sunken spots on the surface of the tuber. On cutting, a brown discoloration will be found in the flesh corresponding to these and extending perhaps for a considerable distance within. The disease may spread rapidly through the tuber in storage if too moist and warm. Infection of the tuber takes place from the disease in the "vines."

Control of it, therefore, in the tuber is only attained by the control of it in the vines, which is fortunately possible. There are, however, certain precautions which can be taken to minimize infection of the tubers, even though the disease has been bad in the tops:—

(1.) Allow the vines to die down and dry out for a week or so before digging. This gives time for the death of many of the delicate spores, which are easily killed; or cut or pull the tops and remove them before digging.

(2.) Do not on any account cover piled tubers in the field with infected tops. If this is done with tops in which the disease is still active, every tuber may be infected.

(3.) Affected tubers should not be used for seed. Disinfection is of no use against this or other internal diseases.

Wilt or Stem-end Rot.

This shows as a ring of brown or blackish dots on cutting a thin slice off the stem end. The discoloration usually dies out farther down the tuber. Such tubers are liable to undergo a "dry-rot" in storage, whilst, if planted, the "vines" from them are liable to wilt