

and die prematurely, as a result of the fungus spreading from the set up the sprouts.

A sample of potatoes showing a considerable percentage of this is better discarded for seed purposes. If no other seed is available, however, cut each tuber close to the stem end and throw out those infected. This can be done before disinfecting.

#### **Fusarium Rots.**

A number of fungi belonging to the genus *Fusarium* cause dry-rots. First infection takes place in the field, and the disease may gradually spread through the tuber, and from one tuber to another in storage. Control is difficult. Rotation, sound seed, and the careful sorting-out of all injured or diseased tubers before shipping or storing must be followed.

#### **Soft-rots.**

Soft-rots, which break down the substance of the potato to a soft, evil-smelling mass, are generally the work of bacteria which obtain entrance through mechanical injuries, or follow some of the above-mentioned fungi. They develop very rapidly under warm, moist conditions and furnish an additional reason for selecting only sound tubers for storage.

#### **Non-parasitic Diseases.**

These are certain troubles not apparently caused by parasites, but by physical conditions.

"Internal brown-streak" much resembles "wilt," but the brown dots are not arranged in so regular a ring, nor confined so much to the stem end.

"Internal brown-spot" appears as larger brown or blackish spots and blotches, one to many in number, scattered through the tuber. Both these appear to be due to soil conditions, possibly to overheating of the soil in hot weather.

"Second-growth" results in irregular-knobbed tubers, due to heavy rain or irrigation after growth has been checked by drought.

"Hollow-heart," or hollow-potato," is chiefly found in oversized tubers and is due to too rapid growth. "Black-heart," a black rubbery condition of the centre of the tuber, is due to lack of ventilation in storage, especially if accompanied by warmth.

### **DISEASES OF THE GROWING CROP.**

#### **Late Blight.**

This is by far the most destructive potato-disease. It is, however, a disease of moist climates and does not occur in the Dry Belt in ordinary years.

It appears first on the leaves, usually not being noticed until late summer or fall. Brown, water-soaked spots appear, which gradually