

# VEGETABLE DISEASES, II

An Aid to Identification and Control



1. STEM ANTHRACNOSE OF LIMA BEAN



2. SQUASH MOSAIC ON LEAF AND YOUNG FRUIT



3. BACTERIAL SPOT OF PEPPER



4. DOWNY MILDEW OF CABBAGE  
Insert shows *Alternaria* following damage



5. LETTUCE DROP



6. FUSARIUM WILT OF SWEET POTATO  
Insert shows stem damage



7. WHITE LEAF SPOT OF TURNIP



8. RUST OF SNAP BEAN



9. SCAB OF IRISH POTATO

# Photo Description And Life History Information

**1. Stem Anthracnose of Lima Bean**-caused by the fungus *Colletotrichum truncatum*.

In addition to the brick-red, blotchy discoloration on the pod, similar symptoms may occur on leaves and stems. The damaged pods have poor value on the market. The causal fungus survives in the soil on debris of lima bean for 1 to 2 years and can survive on contaminated or infected seed. No resistance in varieties.

**2. Squash Mosaic on Leaf and Young Fruit**-caused by a virus.

Damage to leaves and fruit can be severe. In some instances squash fruit, which are normally yellow, may become green or green and yellow blotched. The virus is transmitted by cucumber beetles. Several other plants, including certain weeds, are hosts of the virus. Good resistance in certain varieties.

**3. Bacterial Spot of Pepper**-caused by the bacterium *Xanthomonas vesicatoria*.

Common on tomato and on many different kinds of pepper, but especially severe on pimiento. Causes damage primarily to leaves. Several spots on one leaf may cause it to turn yellow and drop. Peppers are small and inferior when leaf damage is heavy. The bacteria can survive on undecayed pepper plant debris and on infected seed. The disease is spread on infected transplants.

**4. Downy Mildew of Cabbage**-caused by the fungus *Peronospora parasitica*.

Damage occurs mostly to young plants or to exposed leaves of heading plants. The same fungus also attacks collards, turnips, kale, and broccoli. The fungus *Alternaria* often invades leaves damaged by downy mildew. Good resistance to downy mildew in some varieties.

**5. Lettuce Drop**-caused by the fungus *Sclerotinia sclerotiorum*.

Causes severe rot of leaves. The fungus survives as small, black, irregular bodies called sclerotia in old plant parts and in the soil.

**6. Fusarium Wilt of Sweet Potato**-caused by the fungus *Fusarium oxysporum f. batatas*.

Damage occurs to roots and stem and is best detected as a dark brown discoloration of the vascular system just beneath the surface of the stem. The fungus can survive in infected potatoes and in the soil for several years. The fungus may also attack tobacco.

**7. White Leaf Spot of Turnip**-caused by the fungus *Cercospora brassicae*.

The circular spots help to distinguish this disease from similar turnip leaf spots of anthracnose or downy mildew. The latter spots are more irregular. The white leaf spot fungus survives in the soil from 1 to 2 years.

**8. Rust of Snapbean**-caused by the fungus *Uromyces phaseoli*.

Damage occurs primarily to leaves. The fungal fruiting structures (spores) erupt through leaf surfaces and result in a loss of food-manufacturing leaf area and a rapid loss of water. Yields can be severely reduced in years favorable for rust infection. Good resistance in both bunch and pole bean varieties. The fungus survives from year to year on old bean debris.

**9. Scab of Irish Potato**-caused by *Actinomyces scabies*.

Damage is only to the surface of the potato. The potato may become distorted as well as scabby; these blemishes ruin the market value for potatoes. The organism causes greatest damage at soil pH values around 5.5-6.5. Correcting the pH to a point below pH 5.5 will usually eliminate the problem.

**CLEMSON**  
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