

LATE BLIGHT OF CELERY

fruiting structures of the fungus (pycnidia) which look like minute black specks develop in the dead tissue of the lesions. Under favorable conditions for infection and disease development, the fungus will penetrate the host and produce visible symptoms in approximately 9 to 12 days. Celery and celeriac are the principal hosts in California.



Septoria Blight of Celery

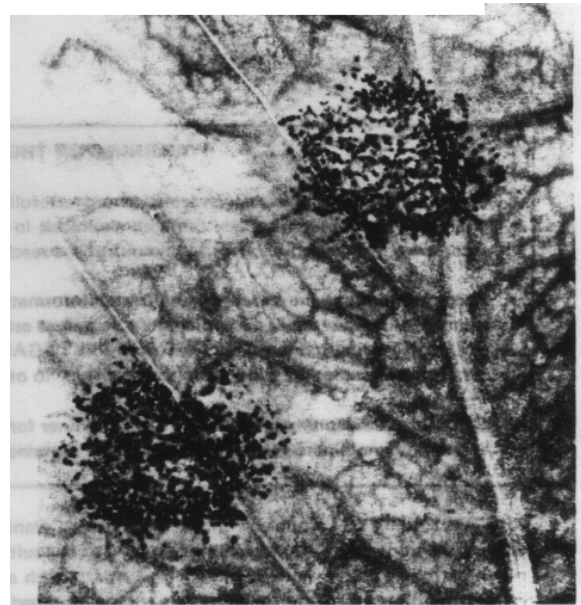
Late blight, also known as Septoria leaf spot, is one of the most important diseases affecting celery in the United States. Serious losses may occur in California during cool, wet periods if the disease is not controlled.

SYMPTOMS

Late blight is characterized by small, chlorotic spots on the leaves and petioles which later become brown lesions. The

DISEASE CYCLE

The disease is caused by a fungus, *Septoria apiicola*, which may be seed-borne and live in the soil in undecayed celery refuse for as long as 18 months. Disease development is favored by cool, moist weather. During wet weather spores are produced in great numbers and ooze out of the pycnidia. Spore masses are easily moved about in splashing water droplets and therefore winddriven rain or sprinkler irrigation enhance spread and development of the disease. Spores also may be disseminated by workers, animals, and cultivating equipment moving through infected fields.



Magnified view of the fruiting structures (pycnidia) of the septoria fungus

CONTROL

1. Infected celery seed is the principal means of perpetuation of this fungus, and a hot-water seed treatment is necessary to rid the seed of the fungus. Place a small quantity (1 or 2 pounds) of seed in a mesh bag and soak in water for 30 minutes at 118° F. Temperatures about 120°F. will markedly reduce germination. Agitate the water thoroughly and use accurate thermometer. After treatment immediately place the seed in cool, running water; then allow to dry. Retreat with fungicide, such as thiram or captan, before planting.

An alternative to hot-water treatment is the use of seed that is 3 years old or older. If old seed is used, the seeding rates should be increased to compensate for loss in viability.

2. Fungicide sprays are effective but need to be applied as soon as the disease appears in a field or as protectants before appearance of the disease. Once the disease becomes severe in a celery field, it is extremely hard to control. Effective fungicides are chlorothalonil (Bravo), anilazine (Dyrene) or combination treatments of benomyl (Benlate) + either Bravo or Dyrene. See your Farm Advisor for the latest recommendations.

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WARNING ON THE USE OF CHEMICALS

Pesticides are poisonous. Always read and carefully follow all precautions and safety recommendations given on the container label. Store all chemicals in their original labeled containers in a locked cabinet or shed, away from food or feeds, and out of the reach of children, unauthorized persons, pets, and livestock.

Recommendations are based on the best information currently available, and treatments based on them should not leave residues exceeding the tolerance established for any particular chemical. Confine chemicals to the area being treated. **THE GROWER IS LEGALLY RESPONSIBLE** for residues on his crops as well as for problems caused by drift from his property to other properties or crops.

Consult your County Agricultural Commissioner for correct methods of disposing of leftover spray material and empty containers. Never burn pesticide containers.

PHYTOTOXICITY: Certain chemicals may cause plant injury if used at the wrong stage of plant development or when temperatures are too high. Injury may also result from excessive amounts or the wrong formulation or from mixing incompatible materials. Inert Ingredients, such as wetters, spreaders, emulsifiers, diluents, and solvents, can cause plant injury. Since formulations are often changed by manufacturers, It is possible that plant injury may occur, even though no injury was noted in previous seasons.

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