Pink Rot of Celery

Pink rot, also known as Sclerotima rot and cottony rot of celery, occurs in all areas of California where the crop is grown. The disease, which is favored by cool moist conditions, may appear at any stage of growth but is most prevalent in late stages of development of the celery plant.

**SYMPTOMS**

The fungus, *Sclerotinia sclerotiorum* (*Whetzelinia sclerotiorum*) invades the celery plant at or near the ground level. The fungus usually starts infection on injured or senescent petioles. Under moist conditions, a white to pinkish cottony growth develops on the petioles and around the base of the plant. This is soon followed by a pink colored, watery, soft rot that causes a rapid collapse and death of the plant.

During the course of the disease the fungus produces hard black bodies called sclerotia. The irregularly shaped, dark-brown-to-black sclerotia vary in size from 1/16 to 1/2 inch across and enable the fungus to persist in the soil in the absence of a susceptible crop. From the sclerotia, saucer-shaped spore-bearing structures called apothecia arise on stalks during wet, cool periods. The apothecia release spores into the air but they are not important to infection of celery in California. It is the resumption of vegetative growth by sclerotia close to a celery plant that generally accounts for infection.

Division of Agricultural Sciences
University of California
HOST RANGE

Sclerotinia attacks a wide range of plants. The more susceptible ones include clover, lettuce, tomato, bean, and several members of the cabbage family. Relatively nonsusceptible crops suited to culture on infested land include sugar beet, spinach, and cereals. Although cropping the land with a nonsusceptible plant prevents the buildup of sclerotia, a short rotation of this kind is usually ineffective as a control.

CONTROL

Pink rot is usually prevalent in fields that have been overwatered and is rare in fields that have been irrigated properly. Take care to keep the tops of the beds as dry as possible particularly as plants approach maturity.

Fungicide application - Make a single application of 5.33 pounds of Botran 75W per acre 4 to 8 weeks before harvest. Use a sprayer with drop nozzles and direct the spray (100 gallons per acre) to base of plant and adjacent soil.

No satisfactory method of eliminating sclerotia from infested land has yet been found.

PLANT

PESTICIDE USE WARNING- READ THE LABEL

Pesticides are poisonous and must be used with caution. REAP the label CAREFULLY BEFORE opening a container. Precautions and directions MUST be followed exactly. Special protective equipment as indicated must be used.

STORAGE: Keep all pesticides in original containers only. Store separately in a locked shed or area. Keep all pesticides out of the reach of children, unauthorized personnel, pets and livestock. DO NOT STORE with foods, feeds or fertilizers. Post warning signs on pesticide storage areas.

USE: The suggestions given in this publication are based upon best current information. Follow directions: measure accurately to avoid residues exceeding tolerances, use exact amounts as indicated on the label or lesser amounts given in this publication. Use a pesticide only on crops, plants or animals shown on the label.

CONTAINER DISPOSAL: Consult your County Agricultural Commissioner for correct procedure for rinsing and disposing of empty containers. Do not transport pesticides in vehicles with foods, feeds, clothing, or other materials, and never in a closed cab with the vehicle driver.

RESPONSIBILITY: The grower is legal is responsible for proper use of pesticides including drift to other crops or properties, and for excessive residues. Pesticides should not be applied over streams, rivers, ponds, lakes, run off irrigation or other aquatic areas except where specific use for that purpose is intended.
BENEFICIAL INSECTS: Many pesticides are highly toxic to honey bees and other beneficial insects. The farmer, the beekeeper and the pest control industry should cooperate closely to keep losses of beneficial species to a minimum.

PROCESSED CROPS: Some processors will not accept a crop treated with certain chemicals. If your crop is going to a processor, be sure to check with the processor before making a pesticide application.

POSTING TREATED FIELDS: When worker safety reentry intervals are established be sure to keep workers out and post the treated areas with signs when required indicating the safe reentry date.

PERMIT REQUIREMENTS: Many pesticides require a permit from the County Agricultural Commissioner before possession or use. Such compounds mentioned in this publication are marked with an asterisk (*).

PLANT INJURY: Certain chemicals may cause injury or give less than optimum pest control if used: at the wrong stage of plant development; in certain soil types; when temperatures are too high or too low; the wrong formulation is used; and excessive rates or incompatible materials are used.

PERSONAL SAFETY: Follow label directions exactly. Avoid splashing, spilling, leaks, spray drift or clothing contamination. Do NOT eat, smoke, drink, or chew while using pesticides. Provide for emergency medical care in advance.

The authors are A.O. Paulus, Extension Plant Pathologist, Riverside; D. H. Hall, Extension Plant Pathologist, Davis; and Beth Teviotdale, Extension Plant Pathologist, Parlier.