

Cooperative Extension---The Pennsylvania State University

Plant Disease Facts

Department of Plant Pathology
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DISINFESTING TOOLS, EQUIPMENT, POTS, FLATS, AND BENCHES

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Prewash tools, benches, and equipment to remove soil and plant debris because disinfestants do not penetrate these well. Then disinfest as noted below. Rest clean tools in a bucket of disinfestant or on clean newspaper or plastic sheeting or in an empty, clean container. Or, hang them up so that they do not become contaminated with soil or plant debris. Do not walk on greenhouse potting soil, benches, or on equipment that must be kept free of soilborne plant pathogens unless your shoes have been dipped in disinfestant or are wrapped in clean plastic. Pots, flats or other containers which are used year after year can be disinfested along with potting soil by placing them under the cover used to seal in the fumigant if they are of a material compatible with the fumigant (for example, steam for wood, clay; methyl bromide for plastic, wood, clay). Containers can be submerged in a liquid disinfectant for 10 minutes and then allowed to air dry.

When using pruning tools, disinfestant can be carried in a squeeze, spray or mist bottle. Thoroughly wet the cutting surfaces with the disinfestant and allow the tool to drain and air dry. If sap or resin builds up on the tool, scrub this off with a rag that is kept in the disinfestant. Then dip, pour, or spray more disinfestant onto the tool. Let it drain and air dry or let it soak in the disinfestant for 10 minutes. When pruning specifically to remove diseased plant parts, it is best to alternately use 2 tools so that one can soak in disinfestant while the second is in use.

MATERIAL	APPLICATION	TARGET PESTS
STEAM or DRY HEAT	Heat materials to 180-200 °F for 30 min. under a cover to contain the heat	Bacteria, Fungi, Insects, Nematodes, Weeds
70% ALCOHOL (grain, rubbing, or wood alcohol)	Dip or swab the object and let dry. Do not rinse.	Bacteria, Fungi, Nematodes
SODIUM HYPOCHLORITE (Clorox* EPA reg. no. 5813-50)	Mix 1 gal. in 9 gal. of water. Dip, spray, or brush on and let drain. Rinse metal objects to prevent corrosion.	Bacteria, Fungi, Nematodes
HYDROGEN DIOXIDE (ZeroTol* EPA reg. no. 70299-1, TerraClean* EPA reg. no 70299-5)	Mix as directed by the label. Dip, spray, or brush on or soak tool. Rinsing is not required to prevent corrosion of metal.	Bacteria, Fungi, Nematodes
QUATERNARY AMMONIUM (Green-Shield* EPA reg. no. 499-368; Physan*)	Wash floors, benches, cutting knives and other impervious surfaces.	

*Trade Name

NOTICE: THE USER OF THIS INFORMATION ASSUMES ALL RISKS FOR PERSONAL INJURY OR PROPERTY DAMAGE.

WARNING! PESTICIDES ARE POISONOUS. READ AND FOLLOW ALL DIRECTIONS AND SAFETY PRECAUTIONS ON LABELS. HANDLE CAREFULLY AND STORE IN ORIGINAL LABELED CONTAINERS OUT OF THE REACH OF CHILDREN, PETS, AND LIVESTOCK. DISPOSE OF EMPTY CONTAINERS RIGHT AWAY, IN A SAFE MANNER AND PLACE. DO NOT CONTAMINATE FORAGE, STREAMS OR PONDS.

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Issued in furtherance of Cooperative Extension work, Acts of Congress, May 8 and June 30, 1914, in cooperation with the U. S. Department of Agriculture and the Pennsylvania Legislature. D. Jackson, Director of the Cooperative Extension Service, The Pennsylvania State University.

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