

# MULTIPURPOSE ORCHID PATHOGEN CONTROL

- Controls algae, bacteria, fungi and viruses on pots, bark, flats, benches, walkways, etc.
  - Helps eliminate damping off in flask seedlings.
- Controls crown rot, rust and botrytis.
- Disinfects tools to control disease spread.
  - Cost effective, pleasant odor environmentally friendly.
  - Available in half-pint, pint, and gallon liquid concentrate.

## MARIL PRODUCTS, INC.

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### **PRODUCT FEATURES**

- Broad spectrum disinfectant with wide variety of plant and surface applications
- Available in cost-effective liquid concentrate
- EPA approved for use directly on plants
- Environmentally friendly and biodegradable
- Gloves not required for use with diluted solution
- Excellent wetting agent
- Pleasant odor and does not discolor skin

#### APPLICATIONS

Physan 20 provides protection against a variety of pathogens that infect orchids and hard surfaces in orchid growing areas. Refer to Inserts #1 and #2, as well as the Physan 20 Mixing and Usage Guide for additional applications on plants and surfaces.

#### WORK AREAS, BENCHES, TRAYS

Spray or swab working surfaces before each work period, and again after each plant is completed to kill such diseases as Botrytis, Crown Rot, Downy Mildew, Root Rot, etc.

USE: 1 tablespoon PHYSAN 20 per gallon of water.

#### **POTS AND FLATS**

Used pots or flats should be brushed or washed first, then soaked in PHYSAN 20 solution for 10 minutes before using to kill such diseases as Crown Rot, Mildew, Root Rot and Rusts. Do not rinse.

USE: 1 tablespoon PHYSAN 20 per gallon of water.

#### **CUTTING TOOLS**

Soak cutting edge of tool for 10 minutes in PHYSAN 20 solution before use to kill such diseases as Botrytis, Root Rot and Stem Rot. Use wet tool on plants. At the end of work, dry and oil tools.

USE: 1 teaspoon PHYSAN 20 per quart of water.

#### **SMOKERS**

Cigarette smokers have tobacco mosaic virus on their hands. Dip hands in solution before handling plants or anything connected with the plants. It is a good idea to have a container of PHYSAN 20 solution always available as a hand dip. Allow to air dry.

USE: 1 Tablespoon PHYSAN 20 per gallon of water.

#### SEEDLINGS

From flask: soak seedlings 2-5 minutes before potting to remove agar. Soak compost with PHYSAN 20 solution. Helps eliminate damp-off. Keep hands and tools damp with PHYSAN 20 solution. Damp-off: Spray seedlings once per month as preventative maintenance. Spray anytime disease is evident.

USE: 1-1/2 tsp. PHYSAN 20 per gallon of water.

#### **ORCHIDS - ADULT PLANTS**

Spray anytime disease other than rot is evident. Spray once per month as preventative maintenance. Soak compost when fungus is evident.

USE: 2 teaspoons PHYSAN 20 per gallon of water.

#### **ORCHIDS - DIVIDING PLANTS**

Remove compost from plant, then soak plant for 2-5 minutes in PHYSAN 20 solution. Operate with wet hands and cutting tools. After division and root trim, soak divisions in PHYSAN 20 solution for 2-5 minutes. Pot in compost dampened with PHYSAN 20 solution.

USE: 1 Tablespoon PHYSAN 20 per gallon of water.

#### ALGAE

Greenhouse Glass: Spray or swab surfaces with PHYSAN 20 solution. Let stand for one hour or more or until the algae visibly begins to change to a lighter color. Wash off dead algae with water. Spray clean surfaces again with PHYSAN 20 solution.

USE: 1 teaspoon PHYSAN per gallon of water.

Walkways: For heavy algae infestation, spray or swab with PHYSAN 20 solution. Let stand for an hour or more. Brush and wash away the dead algae. Soak area again with PHYSAN 20 solution. Do not rinse. This product will inhibit the growth of algae on walkways. Allow to dry on surface, and repeat application if algae growth returns.

USE: 1 Tablespoon PHYSAN per gallon of water.

#### **ORCHIDS - BOTRYTIS**

During cool damp weather, spray plants, flowers and under benches at first sign of the spotting on flowers. Normally weekly spray will greatly reduce or eliminate the botrytis spotting.

USE: 1 teaspoon PHYSAN 20 per 3 gallons of water.

#### **CUT FLOWERS**

For containers, tubes and decorative vases. Recommend flower spikes be hardened in PHYSAN 20 treated water during harvesting, storage and shipping.

USE: 1 teaspoon PHYSAN per 2 gallons of water.

#### **ORCHID - ROT (such as Erwinia)**

Remove compost from plant, then soak entire plant 10 minutes or more. Cut away all rot with treated tool. Soak plant wounds again for 10 minutes. Repot in PHYSAN 20 soaked compost.

USE: 1 Tablespoon PHYSAN 20 per gallon of water.

#### **ORCHIDS - Phalaenopsis - Pseudomanas Cattleyea (Crown Rot)**

Spray plants weekly to assure solution getting around and in base of leaves.

USE: 1 teaspoon PHYSAN 20 per gallon of water.

#### **ORDERING INFORMATION**

Physan 20 can be ordered directly or through dealers. To find the dealer nearest you, or to place an order, call 800-546-7711 or check our Web site at www.physan.com.

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