

COPPER DIHYDRAZINIUM SULFATE

Harold E. White

Floriculture Department

University of Massachusetts

This material according to a recent release by the Olin Mathieson Chemical Corporation is now being marketed under the trade name of OMAZENE and can be purchased from the following distributors: Burgevin Horticultural Service Inc., The Chemical Building, Port Chester, New York; The Edco Corporation, Elkton, Maryland or Olin Mathieson Chemical Corporation, Mathieson Building, Baltimore, Maryland. Omazene is packaged in 4 lb. size bags, twelve to a case, and in 50 lb. bags.

Copper dihydrazinium sulfate or Omazene has been used by a number of growers here in the western part of the State for control of mildew on roses and several other flower crops. The material is quite effective against mildew and blackspot of roses. Preliminary tests are reported by Mathieson Chemical Corporation that Omazene shows promise for use in control of other fungus diseases on fruits and vegetables as well as ornamentals.

For control of mildew on roses in the greenhouse use Omazene at the rate of $\frac{1}{2}$ to $\frac{3}{4}$ lbs. of the 50 percent wettable powder to 100 gals. of water (1 to $1\frac{1}{2}$ tablespoons per 2 gallons of water). Apply during dry sunny weather so foliage will dry quickly. Previous formulations of this material have had such good wetting qualities that no additional wetting agents were found necessary. On outdoor roses the Omazene can be used at an increased rate, using 1 to $1\frac{1}{2}$ lbs. per 100 gals. water (2 to 3 tablespoons per 2 gals.), applications to be repeated as required. Avoid inhaling the dust or spray mist. Inside, provide adequate ventilation and use goggles and respirator when necessary. In other words have the same respect for this chemical as you should for any other fungicide or insecticidal chemical.

According to the manufacturers this material can be combined and is compatible with the following materials: Ferbam, Zineb, Captan, Malathion, DDT and nicotine sulfate. Also such wetting agents as Triton B-1956, Santomerse, Drift and National Sticker may be used if needed.

Omazene appears as though it may have more wider use as a fungicidal material.

Have You Ever Paused To Think About the Importance of Water?

Do You Know That - -

A yearly average rainfall of 48 inches (65,000 gals. of water) is sufficient to manufacture 2,000 lbs. of steel.

25 lbs. of newspaper carried into homes every week require about 10,000 gals. or 30 barrels of water.

One cow consumes 15-25 gals. of water a day.

Transpiration or loss of water from leaves of plants is at the rate of 250-1,000 lbs. (31-125 gals.) of water per pound of dry matter produced.

One corn plant uses 400 lbs. of water per growing season.

If the water transpired from one acre of corn were to condense and stand on the soil it would amount to approximately a 15 acre inch depth per season or 407,310 gals.

One acre of maple trees transpiration loss from the leaves is about 28.3 acre inches of water per year.

One acre of grass or clover loses by transpiration 500-750 tons of water a season.

One acre of 25-30 year old apple trees lose 600 tons of water a season.

Plants on the average are made up of 75 percent water, 25 percent dry matter. The dry matter consists of about 11 percent carbon, 10 percent oxygen, 2 percent hydrogen and 2 percent ash (contains the mineral matter).

Now you know what becomes of the gallons of water you apply every week to your greenhouse roses, carnations, chrysanthemums, snapdragons, and other crop plants.