Panogen Turf Fungicide:

Morton's New Chemical for Lawn Spraymen

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MOST contract applicators have customers who, at one time or another, have worried over brown or thin spots in turf areas where grass is wilting or dying.

Chances are this is a result of turf diseases. If so, one cure is near at hand, because treatment with Panogen Turf Fungicide will control the spread of already established diseases. Preventive treatment in a regularly scheduled spraying program will keep the turf healthy and vigorous.

Panogen Turf Fungicide is a red liquid which mixes completely with water to form a clear solution. It affords ease of application, is effective for control of common turf diseases, and is economical to use.

Active Ingredient

This new fungicide contains methylmercury dicyandiamide. This organic mercury compound has proven itself in the past as an effective broad spectrum fungicide which controls most of the fungi causing foliage diseases or seedling diseases, such as damping-off. Methylmercury dicyandiamide is an ingredient in Panogen seed treatment fungicide, which is commonly used for treatment of seeds such as small grain, cotton, beans, and peas to help control seed rot, smut, seedling blight, and other diseases.

It is also an ingredient in Morton Soil Drench, a product sold to treat soil for control of various soil-inhabiting fungi. It has been used successfully as a spray on numerous types of flowers and ornamentals.

In addition to being an excellent fungicide, methylmercury dicyandiamide is safe when applied to growing plants. At the low concentrations needed for fungus control, there is no danger of injury to these plants. Methylmercury dicyandiamide is a broad spectrum fungicide which has proven effective for control of most common disease-causing fungi. This is particularly important in the case of turf diseases, where diagnosis of the actual causative fungus may be difficult. Panogen Turf Fungicide is effective against all of the common turf diseases.

Formulation

PTF is a liquid, generally sold in glass bottles, but also available in 5-gallon cans. The liquid is completely clear, but contains a red dye for identification purposes. Freezing point of the liquid is –16° F, and consequently the compound can be stored at low temperatures without danger of crystallization. Should the liquid freeze it will readily thaw out when brought to higher temperatures. No decomposition takes place at freezing temperatures.

Color

Panogen Turf Fungicide contains a powerful red dye, and when diluted with water, the mixture maintains a faint pink color which readily identifies it. There is not enough red dye in this mixture to cause any problems with discoloration of objects which may accidentally be sprayed. People walking on newly treated turf will not pick up any of the red color on their shoes.

Compatibility

In many cases, it might be desirable to apply this fungicide in conjunction with other materials needed for treatment of the turf. It may, for example, be desirable to make fertilizer applications to turf areas. Testing has shown that PTF is compatible with common constituents of liquid fertilizers, such as potassium salts, phosphates, urea, ammonium salts, nitrates. Panogen Turf Fungicide can consequently be mixed with these materials at the time of application.

Sometimes it may be desirable to apply an insecticide for control of chinch bugs, crickets, mosquitoes, chiggers, etc. Tests have shown this chemical is stable in tank mixtures with several different insecticides, such as DDT, aldrin, dieldrin, heptachlor, Trithion.

Iron chlorosis is sometimes a problem on turf. If it is desirable to apply iron salts for control of iron deficiency, these materials can be mixed with PTF in the tank.

When mixing this fungicide with materials such as liquid fertilizers or insecticides, it is advisable to make up the tank mixture just prior to use. It should not be stored for any period of time before use. It must be remembered that not all known formulations of the materials mentioned above have been tested.

Stability

Panogen Turf Fungicide does not deteriorate during storage. Even after many years it will maintain its clear appearance and no decomposition will take place either at high or low temperatures.

Results of Tests

This product has been thoroughly tested by agricultural colleges, universities, golf courses, parks, and homeowners. These tests range from carefully planned experiments, replicated many times, to demonstration-type tests. All kinds of grasses, such as bluegrasses, bentgrasses, fescues, ryegrasses, St. Augustine grass, and other ground covers such as dichondra have been treated with Panogen Turf Fungicide successfully. Diseases such as melting out, fading out, dollar spot, copper spot, brown patch, and snow mold are all controlled by the proper application of this fungicide.

In order for PTF to effectively

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control turf diseases, it is important that the active ingredient is brought in intimate contact with the grass leaf and with the soil surface. Fungi which cause diseases may be present both on the grass and on the soil surface. To accomplish most effective distribution, Panogen Turf Fungicide has to be diluted with a suitable amount of water. Recommended rates of application range from 1½ to 3 fl. ounces per 1,000 square feet of turf area. For best distribution, it is suggested that these quantities be diluted with 10 gallons of water per 1,000 square feet.

Equipment needed for application ranges from sprinkling can to power sprayer, depending on the size of the area treated. Excellent results and ease of application are all accomplished by using devices such as Hozon applicators or other proportioning equipment.

When to Treat

Panogen Turf Fungicide can be used either for prevention of turf diseases or for control of the spread of already established diseases. Preventive treatment is advisable since disease which has already occurred may have thinned out or damaged the turf to such an extent that it will take some time for new grass to fill in.

Several applications are necessary for all diseases, since new fungus is carried in by air currents, with rain, and from traffic over the grass areas. For dollar spot, copper spot, and brown patch, 1½ fl. ounces should be applied at approximately 7-day intervals. For melting out and fading out, 3 fl. ounces should be applied at 10-14-day intervals. Applications should be started as soon as the grass greens up in the spring.

To prevent snow mold, use 3 fl. oz. of the chemical in 10 gallons of water, and spray, particularly in areas where snows may accumulate or where snow mold is known to appear. This treatment should be repeated at least once during midwinter thaws.

It is best to treat with PTF in the morning or in the evening when temperatures are moderate.

For more information on turf diseases, refer to the Nov. '62 issue of Weeds and Turf, *page W-1, "How to Control Turf Diseases." Ed.*

For best results the lawn should be mowed the day before treatment and clippings removed.

Establishing New Lawns

A use of Panogen Turf Fungicide which may prove exceedingly valuable is in establishing new turf areas. Much of the sprouting grass seed may succumb to seed rot or damping-off diseases, especially if weather conditions are adverse. Fungi causing damping-off are ever present in the soil. Applying PTF at time of seeding will serve as an insurance that the grass seed will not be attacked by harmful fungi and that an even, healthy stand of grass will result. For new turf areas, apply the fungicide diluted at a ratio of 3 fl. oz. per 10 gal. of water per 1,000 square feet to the area prepared for seeding. Plant grass seeds over treated soil in usual manner and water thoroughly.