CONTROL OF LIVERWORT AND MOSS IN NURSERY CONTAINERS

Control of Established Liverwort
Established liverwort (Marchantia) was controlled by:
- **Cyprex 65W** (dodine acetate), 0.4 to 0.6 oz product/gal
- **Microcop** (tribasic CU sulphate), 1.3 oz product/gal
- **Ronstar 2G** (oxadiazon), 200 lb product/A
- **Ornamental Herbicide 2** (oxyfluorfen + pendimethalin), 100 lb product/A
- **Actidione-Thiram** (cyclohexamide + thiram), 0.4 oz product/gal.
- **De-Moss** (cryptocidal soap), 6.4 oz product/gal.

Control of established liverwort was slow, and more than one application was required for all except the last two products. Repeat applications of all of them were necessary to control regrowth or reinestation.

Preventing Liverwort Establishment
Liverwort establishment was prevented on a clean potting medium by the following in addition to the treatments listed above:
- **Captan 50W**, 3 Tbsp product/gal.
- **Physan 20**, 0.4 oz. product/gal.

Prevention of liverwort growth in container-grown seedlings:

Pots of *Rhododendron* seedlings (*R. oreodoxa*, *R. argyrophyllum*, *R. hemslyanum*, *R. decorum*) were inoculated with liverwort and then treated for prevention of liverwort growth

The following treatments, applied twice, 6 weeks and 11 weeks after seeding, did not reduce seedling count more than 10% as recorded 15 weeks after seeding.
- **Microcop**, 1.3 oz product/gal
- **Physan 20**, 0.42 to 0.84 oz product/gal.
- **Captan 50W**, 3 Tbsp product/gal.

All except the lower rate of Physan controlled liverwort 100% during that period

Cyprex (2 applications) at 0.6 oz product/gal. plus x-77 reduced seedling count 70%. De-Moss, applied only at 11 weeks after seeding (1:10 or 1:20 dilution), reduced seedling count 25%, and controlled liverwort 99%.
Controlling Established Moss
Established moss (*Leptobrium, Pohlia, Funaria*) was controlled by:
**Ronstar 2G**, 200 lb product/A
**Ornamental Herbicide 2**, 100 lb product/A

Preventing Moss Establishment
Moss establishment was prevented on clean potting medium by **Physan 20**.

Phytotoxicity of Tested Chemicals on Liners of Azalea, Rhododendron and Kalmia:
- **Cyprex** - no injury on most plants. Slight to moderate leaf spotting on '-Anna Rose Whitney' rhododendron and 'Cannon Double' azalea.
- **Actidione-Thiram** - Injury on evergreen azalea.
- **De-Moss** - No injury at label rate of 1:20 dilution (6.4 oz/gal.). Leaf-burn at 1:10 dilution.
- **Microcop, Captan, and Physan 20** - No injury.
- **Ronstar** - No injury if applied on dry foliage and washed off.

Some of the rates reported in this article are much higher than labeled rates. Not all of these products are labeled for use on crop plants. ALWAYS READ AND FOLLOW THE LABEL ON THE PESTICIDE CONTAINER BEFORE USING ANY OF THESE PRODUCTS.
Also see, "Algae Control" Ornamentals Northwest Newsletter 10(2):14, Fall 1986.

**Pesticide Use** - Due to constantly changing laws and regulations, no liability for the suggested use of chemicals in this Newsletter is assumed by the ONW Newsletter. Pesticides should be applied according to label directions on the pesticide container.

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