CONTROLLING POWDERY MILDEW ON HEATHER

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Powdery mildew on heather, *Erica persoluta* L., was first reported by Sciaroni, Pritchard, and MacLean (1950). In contrast to most powdery mildew diseases, there is very little evidence of the fungus on the heather plant. Instead, the fungus prevents the terminal bud from developing, and as a lower bud begins to grow, there is a slight growth sideward before the upward growth begins. The result is a crook in any infected stem. New growth on infected plants is somewhat stunted and lighter green or slightly yellowish.

Because of the recent occurrence of this problem in Monterey County and the introduction of some experimental fungicides effective on powdery mildew fungi, an experiment was started in cooperation with Douglas Anderson of Imagio and Anderson Nursery in Watsonville.

Each treatment was done on 10 established plants in a heather planting with symptoms of mildew infection and was replicated three times. Plants were sprayed every 20 days for a three-month period using a carbon dioxide backpack sprayer equipped with a TeeJet SS8004 nozzle. At the end of the experiment, the plants were rated as to their growth. Materials used and ratings are given in the table.

The differences between the check and the treatments are not large, but this reflects improvement in growth over a period of only three months. During this time, all of the treatments resulted in improved growth, thus indicating disease control.

None of the materials is cleared for use on heather. Only Physan, Benlate, and Funginex are commercially available in California.

Effects of Powdery Mildew Fungicides on Growth of Heather (*Erica persoluta*) Plants

Treatment	Concentration per gallon	Equivalent concentration per 100 gallons	Rating*
DuPont DPX-4423†	2.37 ml	1/2 pt.	6.40
DuPont DPX-4423	4.73 ml	1 pt.	6.43
DuPont DPX-4423 + Benlate	2.37 ml .76 gm	1/2 pt. 2-2/3 oz.	6.43
Ciba-Geigy 64251-10W‡	.93 gm	3.3 oz.	6.43
Ciba-Geigy 64251-10W	1.39 gm	4.9 oz.	6.36
Ciba-Geigy 64251-10W	1.86 gm	6.6 oz.	6.10
Funginex 20%	5.6 ml	1.2 pt.	6.43
EI 222§	1.26 ml	1/4 pt.	6.53
EI 222	1.89 ml	2/5 pt.	6.53
Bayleton**	4.54 gm	1 lb.	6.53
Physan	14.6 ml	3 pt.	6.86
Physan	19.7 ml	4-1/6 pt.	6.16
Nimrod 2E††	5.7 ml	1.2 pt.	6.16
Nimrod	8 ml	1.7 pt.	6.40
Nimrod + Tween 20	5.7 ml 10 ml	1.2 pt. 1 qt.	6.20
Nimrod 2E + Sunspray 7E‡‡	5.7 ml 10 ml	1.2 pt. 1 qt.	7.00
Untreated check	—	—	5.56

* Plants rated on amount of growth and color: 0 = no new growth or change in color; 10 = best new growth and color change.
† Experimental compound E. I. DuPont de Nemours & Co.
‡ Experimental compound Ciba-Geigy Co.
§ Experimental compound Eli Lilly Co.
** Experimental compound Bayer Co.
†† Experimental compound ICI United States Inc.
‡‡ 98.8 percent paraffinic oil, Sunoco.

LITERATURE CITED

Sciaroni, R.H., A.E. Pritchard, and N.A. MacLean. 1950. Heather Troubles. University of California Agricultural Extension Service Mimeograph, San Mateo County. 5 pp.

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