Research brief . . .

Outdoor experiments for controlling ROSE POWDERY MILDEW

OUTDOOR EXPERIMENTS for control of powdery mildew of rose, resulting from infection by *Sphaerotheca pannosa*, were conducted at Livermore in 1969. Twelve plants of the variety "Forever Yours" were used per treatment, and each treatment was replicated three times. The roses were sprayed once every two weeks (with two exceptions when the intervals were three weeks) from July 23 until November 24 and 25 when results were recorded. All treatments were applied as sprays and all of the foliage was treated to the point of run-off. Triton B1956 spreader-sticker was added to each spray treatment at the rate of 1.2 ml (¼ tsp) per gallon.

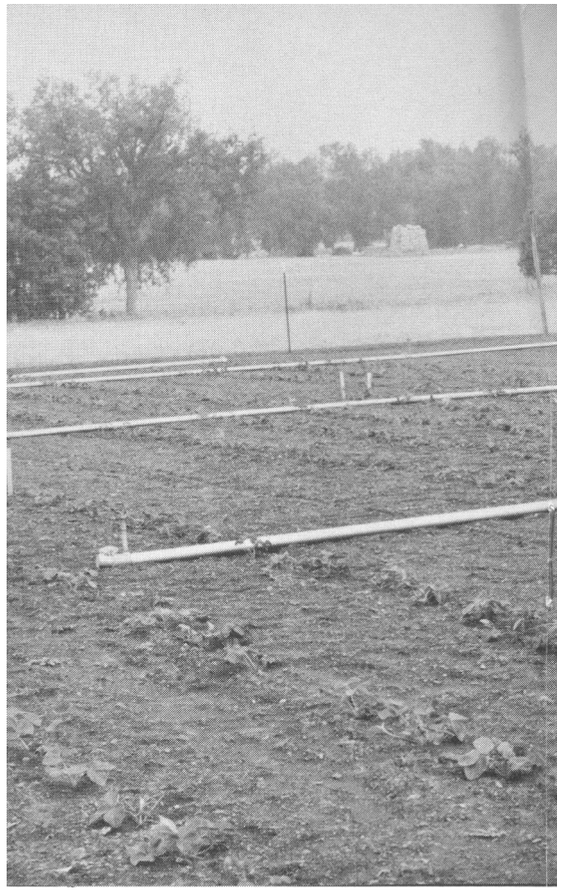
Results

The results (see table) show that all materials gave control as compared with the untreated checks. All of the Parnon and Benlate treatments gave better control than Karathane, which is now the most commonly used material for powdery mildew control on outdoor roses. However, of the materials tested, only Parnon and Karathane are presently available and are recommended for powdery mildew control on roses.—*Robert D. Raabe, Professor; and Joseph H. Hurlimann, Laboratory Technician II, Department of Plant Pathology, University of California, Berkeley.*

ROSE POWDERY MILDEW CONTROL ON THE VARIETY "FOREVER YOURS"

Spray treatment	Conc./gal. or ppm active material	Equivalent conc. of formulated material	Number of infected leaves	Percentage of leaf surface infected	Disease rating*
CS8248					
1.2% Parnon (Emulsion)	30 ml	6 tsp/gal	28.1	9.5	2.7
CS8527					
2% Parnon (Emulsion)	22 ml	4½ tsp/gal	23.9	11.1	2.7
CS8529					
2.6% Parnon (Emulsion)	15 ml	3 tsp/gal	28.5	11.0	3.1
CS8254					
1.5% Parnon + 75% Phaltan	10.4 gms	⅓ oz/gal	58.3	10.6	6.2
CS8253					
3% Parnon + 75% Phaltan	10.4 gms	⅓ oz/gal	82.2	11.0	9.0
Benlate					
(50% active)	50 ppm	1⅓ oz/100 gal	55.3	7.3	4.0
	100 ppm	2⅔ oz/100 gal	44.1	9.1	4.0
	200 ppm	5⅓ oz/100 gal	31.6	9.8	3.1
Mertect					
(60% active)	25 ppm	½ oz/100 gal	84.4	20.8	17.6
	50 ppm	1 oz/100 gal	73.5	23.2	17.1
	100 ppm	2 oz/100 gal	80.4	16.9	13.6
Buckman TCMTOB					
(65% active)	50 ppm	1 oz/100 gal	84.0	23.3	19.6
	100 ppm	2 oz/100 gal	80.3	23.8	19.1
	200 ppm	4 oz/100 gal	64.7	17.7	11.5
Karathane	4 gms	14.1 oz/100 gal	58.6	16.2	9.5
Untreated check			110.7	32.5	35.9

* Disease rating is number of infected leaves times percentage of leaf surface infected—smaller numbers indicate best control of powdery mildew.



Strawberries derived from the heat-treated, foundation

MERISTEM

A young strawberry plant growing on a filter paper bridge within a culture tube.