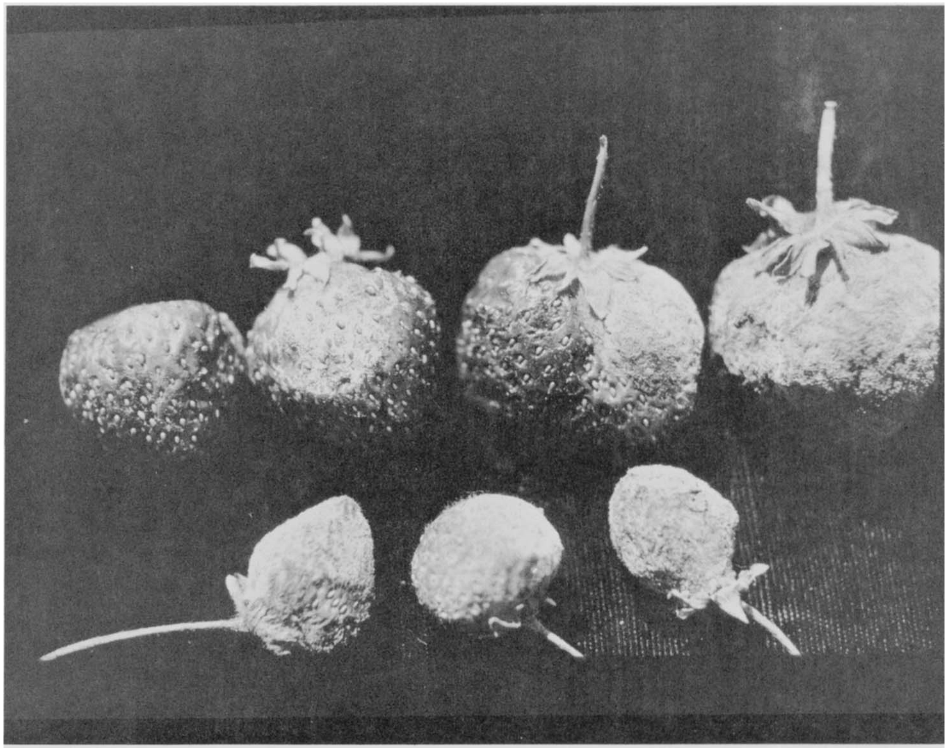
ROT

cinerea

ROYCE BRINGHURST



Gray mold on strawberries, above, is characteristic of strawberry fruit rot infection caused by **Botrytis cinerea.**

Topsin M and Benlate at either dosage rate, or Mertect at the 32 oz rate.

The Tioga variety planted in early August was used for the 1973 tests. Five replications were made, using 12 plants per plot. Table 2 summarizes the results from four different harvests. Again all three fungicides significantly reduced fruit infection.

During the 1973 picking season, berries from the Tioga plots were harvested immediately after spraying and three days later. They were held in cold storage (42°F) from four to six days and at room temperature for 48 hours. Three pint baskets per plot were used in each of these storage tests. Storage experiments for both the zero and three-day wait after treatment were repeated twice. The results of these storage tests are reported in table 3.

All three fungicides significantly reduce the incidence of rot in stored fruit. With two exceptions, there were no significant differences between fungicides or dosage rates. High temperature prior to the May 21 picking date resulted in high rot counts.

There were no significant differences in performance of the three chemicals, except for the 16 oz rate of Mertect in the four tests conducted over a two year period. Some protection after harvest can be expected if berries are picked within four days of treatment. Possibly this protection could extend longer than the period tested.

TABLE 2
BOTRYTIS INFECTION LEVELS
AFTER VARIOUS FUNGICIDE TREATMENTS ON THREE STRAWBERRY VARIETIES

TUFTS—SUMMER PLANTED, 1972

Treatment		Percent fruit infected			
Material	Rate/100 gal	May 4	May 18	June 1	June 7
Check	0	18a*	31a	22a	10a
Mertect (42%F)	16 fl oz	6b	11b	7b	2b
Benlate (50W)	8 oz	3b	6c	4c	2b
Topsin M (70W)	6 oz	4b	5c	3c	2b
SHASTA—SECOND YEAR, 1972					
Check	0	–	12.5a	14.2a	11.8a
Mertect (42%F)	16 fl oz	–	2.4b	3.6b	2.5b
Benlate (50W)	8 oz	–	1.1c	2.1b	1.4c
Topsin M (70W)	6 oz	–	1.0c	1.9b	1.6c

TIOGA—SUMMER PLANTED, 1973

		Percent fruit infected			
		May 21	May 25	May 30	June 4
Check	0	36.6a	6.0a	5.6a	21.1a
Benlate (50W)	8 oz	.8b	1.3b	1.8b	1.2c
Topsin M (70W)	6 oz	1.1b	1.4b	.7b	1.8c
Topsin M (70W)	12 oz	.6b	2.5b	.8b	2.1c
Mertect (42%F)	16 fl oz	.9b	1.8b	.2b	12.0b
Mertect (42%F)	32 fl oz	1.3b	1.0b	.9b	5.6c

* Numbers not sharing common letter within a column, within an experiment differ at the 1% level of significance.

TABLE 3
BOTRYTIS INFECTION LEVELS AFTER STORAGE
FOLLOWING TREATMENT ON THE TIOGA VARIETY DURING 1973

		Percent fruit infected			
Treatment		Treated May 21		Treated June 8	
Material	Rate/ 100 gal	May 21 Harvest	May 25 Harvest	June 8 Harvest	June 12 Harvest
Check	0	63.5a*	17.0a	38.0a	48.9a
Benlate (50W)	8 oz	32.5b	6.3c	8.5c	27.3b
Topsin M (70W)	6 oz	33.3b	14.6b	9.4c	18.5b
Topsin M (70W)	12 oz	38.4b	14.8b	8.9c	26.9b
Mertect (42%F)	8 fl oz	39.6b	9.8c	19.4b	17.7b
Mertect (42%F)	16 fl oz	45.9b	10.7bc	8.7c	16.5b

* Numbers within a column not sharing common letter differ at 1% level of significance.

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