

CONTROL OF CERCOSPORA SPOT IN THE 1981/82 SEASON

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OPSOMMING

Cercospora-vlek van Fuerte word beheer deur benomil, kaptafol, Cu-oksichloried, Cu-hidroksied en prochloraz, terwyl captan ondoeltreffend teen die siekte gevind is.

Die koper-formulasies op hulle eie of in spuitprogramme met kaptafol is genelig om die beste resúltate te lewer.

SUMMARY

Benomyl, captafol, Cu-oxychloride, Cu-hydroxide and prochloraz controlled Cercospora spot of Fuerte, while captan proved ineffective against the disease.

The copper-formulations sprayed alone or in spray programmes with captafol tended to give the best results.

INTRODUCTION

Information obtained in previous experiments on the chemical control of Cercospora spot disease of avocados showed that Benomyl was effective (Darvas, 1977) and two sprays during the growing season provided satisfactory control of the disease (Darvas, 1978).

Further experiments proved the efficacy of captafol and copper-formulations against Cercospora spot (Darvas and Kotzé, 1979; Darvas and Kotzé, 1981; Darvas, 1982; Kotzé, du Toit and Durand, 1982).

The testing of the above-mentioned fungicides and some other chemicals continued in the 1981/82 season.

MATERIALS AND METHODS

The site of the experiment was block 34 of Westfalia Estate where six randomly selected Fuerte trees were used in each treatment. Trees were sprayed with high volume ground sprayers twice in the growing season, first in mid-November 1981 and again in mid-January 1982. An average of 360 fruits were harvested per treatment and evaluated for disease incidence on 8 April 1982.

The test fungicides included Benomyl, captafol, copper oxychloride, copper hydroxide,

captan and prochloraz. Nu Film 17 was used as a standard wetting agent except in treatment No. 9, where Agridex was added.

RESULTS

TABLE 1: The control of *Cercospora* spot on Fuerte with two-spray treatments

Treatment number	Treatments	Number of applications	Date of applications	Mean number of <i>Cercospora</i> spots/fruit
1	Benomyl 0,025% a.i. + Nu Film 0,02%	2	Nov. 1981 Jan. 1982	0,9b
2	Cu-oxychloride 0,25% a.i. + Nu Film 0,02%	2	Nov. 1981 Jan. 1982	0,4b
3	Cu-hydroxide 0,23% a.i. + Nu Film 0,02%	2	Nov. 1981 Jan. 1982	0,4b
4	Captan 0,1% a.i. + Nu Film 0,02%	2	Nov. 1981 Jan. 1982	2,4ab
5	Prochloraz 0,04% a.i. + Nu Film 0,02%	2	Nov. 1981 Jan. 1982	1,0b
6	Captafol 0,08% a.i. + Nu Film 0,02%	1	Nov. 1981	0,5b
	Cu-oxychloride 0,25% a.i. + Nu Film 0,02%	1	Jan. 1982	

Treatment number	Treatments	Number of applications	Date of applications	Mean number of <i>Cercospora</i> spots/fruit
7	Captafol 0,08% a.i. + Nu Film 0,2%	1	Nov. 1981	0,7b
	Cu-hydroxide 0,23% a.i. + Nu Film 0,02%	1	Jan. 1982	
8	Captafol 0,08% a.i. + Nu Film 0,02%	1	Nov. 1981	1,3b
	Captan 0,1% a.i. + Nu Film 0,02%	1	Jan. 1982	
9	Captafol 0,08% a.i. + Nu Film 0,02%	1	Nov. 1981	0,5b
	Cu-oxychl. 0,25% + Bitertanol 0,012% a.i. + 0,1% Agridex	1	Jan. 1982	
10	Control	—	—	3,2a

Means with letters a and b differ statistically at 0,05 level (Duncan's multiple range test)

DISCUSSION

Cercospora spot infection was generally light in the 1981/82 season due to low rainfall. This and the relatively large variation within treatments resulted in only a few statistical differences between the various treatments. Captan applied alone failed to control the disease, whereas all other treatments significantly reduced *Cercospora* spot. The treatments which tended to give the best results were the copper formulations sprayed alone or in a spray programme with captafol.

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