



Department of
Primary Industries and
Regional Development

Research Library

Experimental Summaries - Plant Research

Research Publications

1987

Control of peach leaf curl

P McR Wood

W Pickkering

Follow this and additional works at: <https://researchlibrary.agric.wa.gov.au/rqmsplant>



Part of the [Agronomy and Crop Sciences Commons](#), and the [Other Plant Sciences Commons](#)

Recommended Citation

Wood, P M, and Pickkering, W. (1987), *Control of peach leaf curl*. Department of Agriculture Western Australia, Perth. Report.

This report is brought to you for free and open access by the Research Publications at Research Library. It has been accepted for inclusion in Experimental Summaries - Plant Research by an authorized administrator of Research Library. For more information, please contact jennifer.heathcote@agric.wa.gov.au, sandra.papenfus@agric.wa.gov.au, paul.orange@dpird.wa.gov.au.

Department of Agriculture Western Australia

Division of Plant Industry
Plant Pathology Branch

EXPERIMENTAL SUMMARY 1987

P. McR. Wood
Plant Pathologist

W. Pickering
Technical Officer

Control of Peach Leaf Curl 87S2

Efficacy of a range of fungicidal treatments, applied as a single spray at leaf bud swelling to Sun Red nectarines was assessed in a trial at Stoneville.

The results are shown in Table 1.

Table 1. Percentage of leaf clusters showing primary infection by T. deformans

Treatment		Primary infection (%)			Mean
		Rep A	Rep B	Rep C	
Bordeaux	Copper	18	10	4	10.7
Kocide	Copper hydroxide	66	20	6	30.7
Fulasin	Ziram	6	4	14	8.0
Bravo	Chlorothalonil	36	14	8	19.3
Difolatan	Captafol	12	8	10	10.0
Control		46	52	60	52.7

Thus Bordeaux and Fulasin were the most effective treatments, giving similar disease control to the registered standard captafol. Fulasin also gave excellent control of peach leaf curl on Golden Queen peaches in a trial at Manjimup in 1986 (see 1986 Experimental Summary).

Control of Peach Leaf Curl 87MC39

In a trial at Manjimup, a range of fungicides was compared for control of peach leaf curl on Golden Queen peaches. However, due to dry spring conditions, the disease did not develop.

Control of Apple Mildew

The use of a single winter-dormant treatment of a mixture of Dormakil and the fungicide Nimrod was again assessed for its efficacy in controlling apple mildew. In trials at Kirup and Kendenup, good disease control was achieved in Jonathon apples.

The results are shown in Table 2.

Table 2. Chemical control of apple mildew 87BY35, 87AL42

Treatment	Primary infection (%)		Secondary infection (%)	
	(October)		(November)	(December)
	87BY35	87AL42	87BY35	87AL42
Standard Nimrod spray programme	13.2 ± 1.0	16.1 ± 1.8	39.8 ± 3.4	16.5 ± 1.0
Standard plus dormant treatment	2.6 ± 0.6	4.9 ± 0.7	8.25 ± 1.4	6.8 ± 1.0

Thus the addition of a dormant treatment greatly enhanced disease control.

Control of Apple Mildew 87MC38

The use of a single winter-dormant treatment of the fungicide Topas was evaluated for control of mildew on Jonathon apples in a trial at Manjimup.

Due to dry conditions in the spring only traces of primary infection were observed. However, following late rains in October, secondary infection developed. This was assessed in mid-December. The results are shown in Table 3.

Table 3. Fungicides for control of apple mildew

Treatment	Secondary infection (%)						Mean
	Rep 1	2	3	4	5	6	
Standard Topas spray programme	30.0	50.0	37.5	45.0	30.0	45.0	39.6
Standard plus dormant treatment A*	45.0	40.0	50.0	47.5	35.0	35.0	42.1
Standard plus dormant treatment B*	27.5	47.5	37.5	30.0	37.5	50.0	38.3

*A Topas with Paraffinic Oil.

B Topas with Triton B 1956.

Thus the addition of a winter-dormant treatment did not enhance control of secondary mildew infection. In view of extremely low levels of earlier primary infection, levels of secondary infection were surprisingly high. This suggests that fungal inoculum originating from outside the experimental block may have been involved.

Post-harvest Fungicide Treatment of Pears 87SW1

Storage losses in pears due to the development of fungal rots involving mainly Penicillium can be up to 60% in some cold stores.

A storage trial was therefore set up in 1987, using a range of fungicidal dip treatments on Packham pears. Fruit-rot assessments were done in January 1988. The results are shown in Table 4.

Table 4. Percentage of fruit with Penicillium rot

Treatment	Ungraded	Graded
Ethoxyquin (E)	5.0	5.5
E + Benlate	1.3	3.0
E + Rovral	1.0	5.5
E + Benlate + Rovral	0.0	0.0
E + Fungaflor	0.0	1.0
E + Ronilan	2.0	7.0
DPA + Benlate + Rovral	1.0	8.0

Thus the only treatment which completely controlled Penicillium fruit rot was Ethoxyquin with Benlate and Rovral added. When DPA was used with these fungicides, their activity was impaired. Either Benlate or Rovral alone gave inadequate control of rots, which supports local grower observations. Although good control was achieved with Fungaflor, it caused a high level of fruit blemishing.

There was generally more fruit rot in pears which had been graded. This probably resulted from damage during extra handling thus providing further sites for fungal infection.

