

Focus Orchard Trial: Comparing black spot fungicide programmes

Orchard: Coilfield Orchard

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Trial details

Variety: Red Delicious on N Spy rootstock
 Trees planted 5.5 X 3.05 m = 596 trees/ha
 Tree height: 3.25 m

The trial orchard had a history of black spot with a significant infection in the previous season.

Aims of trial were:

- To demonstrate the efficacy of registered black spot fungicides.
- To compare programs using protectant or curative fungicides.
- To demonstrate a new fungicide (Fontelis).

All trees were hand sprayed with fungicides. Dilute volume to point of run-off.

An unsprayed control tree was left.

Sweeping and mulching of leaves was done on all orchard except this block.

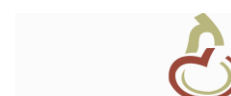
Treatment	Spray Program	Fungicide	
1	Untreated Control	Nil	No spraying
2	Protectant	Ziram	Aim to spray at regular intervals (before rainfall)
3	Protectant	Sythane	
4	Protectant	Fontelis	
5	Curative	Sythane	
6	Curative	Fontelis	Aim to spray after infection periods
7	Curative + Protectant	Sythane + Dithane	

Observations

- Despite the orchard having a history of apple black spot no disease established due to very dry weather conditions.
- District orchards also very clean of black spot this year.
- 7 protectants applied, at average 12 day intervals.
- 5 curatives applied, however only one decent rainfall (29th Sept) when trees were at the pink tip stage.

Weather and Spray program

	Sep	Oct	Nov
1st		<i>Curative</i>	
2nd			
3rd			
4th		<i>Protectant</i>	
5th			
6th			
7th			1.0
8th		0.2	6.8
9th			
10th			<i>Curative</i>
11th		2.4	
12th		5.8	
13th		<i>Curative</i> 3.6	
14th			<i>Protectant</i>
15th			
16th			5.0
17th			
18th		<i>Protectant</i>	
19th			<i>Curative</i>
20th			
21st	<i>Protectant</i> 0.2	0.4	
22nd	0.2	1.8	
23rd			
24th			
25th			
26th			
27th	<i>Protectant</i>		<i>Protectant</i> 0.6
28th			
29th	46.8		<i>Curative</i> 3.0
30th	1.0	<i>Protectant</i>	0.2
31st			





Sweeping under trees removed most over-wintering leaves



Overwintering leaves the source of spores for new spring infections