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1975

Time and rate, comparative fungicide, fungicide application method trial, clover scorch economy demonstrations

A Bokor

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SUMMARY OF RESULTS

1975

A. BOKOR

Time and Rate Trial

75AL33

Comparative Fungicide Trial

~~75AL34~~

Fungicide Application Method Trial

75D8

Clover Scorch Economy Demonstrations

75AL35

TIME AND RATE TRIAL

(75 AL 33)

(1) AIM:

To obtain data on how rates and time treatments with the fungicide Benlate influence development of clover scorch in an ungrazed clover pasture.

(2) EXPERIMENTAL CONDITIONS:

Established diseased sub-clover pasture grazed up to the commencement of the trial.

1st spray 5/9 - fine warm and dry day
2nd spray 26/9 - cool and windy
3rd spray 20/10 - showery and mild.

(3) RESULTS

See separate tables

(4) CONCLUSIONS

Results indicate that the most effective a.i. rate is 150 g/ha applied at day one. Timing of application is more important than actual rates initially while rates are more important than repeat applications.

Future recommendations could be lowered one step on present rates.

TIME AND RATE TRIALPERIODIC VISUAL DISEASE RATINGS (0 - 5 scale)

Day	RATE a.i. g/ha	18/9	26/9	3/10	20/10	24/10	Mean
1. 1	0	2.67	2.33	3.17	4	3.0	3.03
2. 5/9	75	0.44	0	1.5	1.44	1.3	0.94
3.	150	0.33	0	1.0	0.56	1.3	0.64
4.	300	0.67	0	1.0	0.33	0.33	0.47
5. 21	0	2.67	2	2.83	3.89	3.0	2.88
6. 26/9	75	2.33	2.33	2.5	2.67	1.9	2.35
7.	150	2.78	2.67	3.0	1.67	1.1	2.25
8.	300	3.89	2.67	2.33	1.33	1.1	2.26
9. 1, 21	0	2.78	2.67	2.67	3.18	3.1	2.88
10.	75	1.22	1.0	1.33	0.56	0.6	0.94
11.	150	1.0	0	0.67	0.0	0.5	0.43
12.	300	0.0	0	0.50	0.0	0.2	0.14
13. 1, 21, 42	0	2.67	2.33	3.33	3.18	3.1	2.92
14. 20/10	75	6.67	1.0	1.0	0.56	0.5	0.75
15.	150	0.44	.33	1.0	0.11	0	0.38
16.	300	0.56	0	1.33	0.33	0	0.44

TIME AND RATE TRIAL

(75AL33)

RATE a.i.		TIME TREATMENT			
g/ha		1	2	3	4
0	26/ 9	937	1136	1131	1085
	17/10	2025	2341	2414	2416
	15/11	1853	2115	1847	1632
75		1236	980	1136	1120
		2581	2595	2784	1914
		2867	2625	3222	2943
150		1115	971	1043	1189
		2791	2556	2851	3036
		3893	2765	3657	3937
300		1383	977	1107	1284
		3035	2674	2606	2726
		4288	3242	3913	4095

The figures are dry matter yields (kg/ha) obtained from pasture cuts of four 125 x 40 cm² quadrat plots. Sampling was done on 26/9, 17/10 and 15/11.

TIME TREATMENTS

1. Sprayed on day 1 (5, 9, 75)
2. Sprayed on day 21
3. Sprayed on day 1, 21
4. Sprayed on day 1, 21, 42

COMPARATIVE FUNGICIDE TRIAL

75 AL 34

- (1) AIM: To compare the effectiveness of a range of systemic fungicides for the control of clover scorch (Kabatiella caulivora) with or without the addition of spraying oil.
- (2) Experimental conditions. The fungicides were applied on the 5th September. Warm sunny day, light wind and no dew or rain was recorded for 24 hours. Established sub-clover dominant pasture affected with clover scorch.
- (3) Results: See separate table.
- (4) CONCLUSIONS:

Based on visual scores initially all fungicides tested performed equally well. At later stages the plots treated with Tecto 40 Fl were beginning to show signs of the disease but the affect on production appeared to negligible. Tecto 40 Fl at the tested rate is 50% cheaper compared to the other fungicides. Addition of spraying oil does not appear to be affecting results.

No clear cut conclusions can be drawn from production figures partly because of the compensatory growth of grasses.

COMPARISON TRIAL 75 AL 34

Fungicide	Rate of a.i. gm/ha	Visual Scores					Dry Matter Yield kg/ha	
		18/9	26/9	3/10	20/10	24/10	15/11	
1. Benlate	150	0.11	0.67	0.67	0.78	1.00	2902	
2. + oil		0.00	0.33	1.00	0.67	1.00	3367	
3. Bavistin	150	0.44	0.00	0.67	0.33	0.30	2998	
4. + oil		0.44	0.00	0.33	0.22	0.67	2347	
5. Topsin	420	0.11	0.33	1.00	0.88	1.00	3058	
6. + oil		0.11	0.67	1.00	0.66	1.00	2923	
7. Tecto 40 Tl	150	0.44	0.67	1.50	1.89	1.70	3780	
8. Benlate	300	0.22	0.00	0.67	0.44	0.17	2825	
9. + oil		0.11	0.33	1.00	0.00	0.33	2208	
10. Bavistin	300	0.11	0.00	0.50	0.00	0.00	1942	
11. + oil		0.22	0.00	0.50	0.44	0.00	2598	
12. Topsin	840	0.11	0.00	0.33	0.11	0.17	2608	
13. + oil		0.11	0.00	0.33	0.33	0.33	2760	
14. Tecto 40 Tl	300	0.11	0.67	0.83	1.44	1.33	3158	
15. Oil control	-	2.33	2.0	3.17	3.78	3.00	3205	
16. Control	-	2.11	2.0	3.83	4.33	3.17	2590	

TIME AND RATE TRIAL

(75 AL 33)

Treatment Rate	Seasonal Dry Matter Production	
	26/9 - 17/10	17/10 - 15/11
0	26	1
75	36	27
150	41	52
300	34	64

FUNGICIDE APPLICATION METHOD TRIAL 75 D 8

(1) Aim: Test the comparative efficiency of boom spray versus mister for the application of the fungicide Benlate to control clover scorch (Kabatella caulivora).

(2) Experimental Conditions.

The clover pasture have collapsed earlier in the season and showed some recovery at the time of spray application (10th September). The weather was fine, warm, light wind.

(3) Visual Assessment on the 29th September.

Boom sprayed area (Benlate 300 g/ha). Good response to spraying. Uniform closed canopy of clover stand.

Mister treated area (Benlate 300 g/ha).

Good response to spraying. In many patches clover stand opening up due to scorch.

(4) Conclusions

Mister application is effective but coverage is not likely to be uniform, therefore mister application is not recommended.

CLOVER SCORCH ECONOMY DEMONSTRATION

HAY TRIAL (75 AL 35)

AIM: Demonstrate the economic value of Benlate spray treatment to control clover scorch disease (Kabatiella caulivora) in a hay crop.

EXPERIMENTAL CONDITIONS:

The first spray was applied on 30th September on replicated 0.5 ha plots. Fine mild weather at spraying with moderate breeze. Clover scorch well established in the pasture.

RESULTS:

T	Fungicide	Rate g/ha	No. of Application	Hay Yield kg/ha dry wt.
1.	Benlate	300	1	1865
2.	Benlate	300	2	2028
3.	Benlate	550	1	1823
4.	Control	-		1614

CONCLUSIONS:

Red mite damage and moisture stress has considerably affected the clover component of the pasture. Initially good responses have appeared to treatments. Rain at baling time also altered some of the results.

In spite of responses no valid conclusions could be drawn from the trial as regards to economic value of spraying.