Field Pea Fungicides for Powdery Mildew Management

Greg Endres

The trial was conducted to evaluate powdery mildew (PM) control of selected fungicides and response by field pea varieties. Carneval (PM tolerant) and Cruiser (PM susceptible) were planted on May 26 with inoculated seed at 300,000 pls/A. Fungicides were applied July 12 with a hand-boom sprayer with 8002 twin-jet nozzles at 18 GPA, 30 PSI, 69º F air temp., 87% RH, 10 mph wind, and clear sky to field pea at <10% bloom. Disease was visually evaluated with a scale of 0-9 (0 = no disease and 9 = heavy disease throughout plants). The trial was harvested September 17. Carneval exhibited less PM than Cruiser. PM was reduced with fungicides when evaluated August 18, but disease levels generally were similar to the untreated check at the later evaluation. Seed yield with Headline improved compared to the untreated check. Carneval yield with Quadris Opti improved compared to the untreated check.

Table. Field pea fungicides for powdery mildew management, Carrington, 2004.

			Powdery mildew		Seed	
			18-Aug	26-Aug	Yield	TW
			0-9		bu/A	lb/bu
Carneval			2	3.3	74.7	62.4
Cruiser			4	8.0	61.8	62.0
LSD (0.05)			1	0.6	3.4	NS
		rate/A				
	Amistar	3 oz	3	5.8	70.6	62.2
	Endura	8 oz	3	6.1	70.7	62.3
	Headline	6 fl oz	2	5.8	71.4	62.4
	Kumulus	8 lb	3	4.8	62.0	61.9
	Quadris Opti	1.6 pt	3	5.5	69.6	62.3
	Untreated Check	x	4	5.9	65.1	62.1
LSD (0.05)			1	0.8	NS	NS
LSD (0.1)					5.8	
Carneval	Amistar		2	3.5	77.5	62.4
Carneval	Endura		2	3.5	77.3	62.8
Carneval	Headline		2	3.2	79.3	62.5
Carneval	Kumulus		2	2.5	61.4	62.0
Carneval	Quadris Opti		1	3.3	81.6	62.6
Carneval	Untreated Check		3	3.8	70.8	62.2
Cruiser	Amistar		4	8.2	63.6	62.0
Cruiser	Endura		4	8.7	64.0	61.8
Cruiser	Headline		3	8.5	63.4	62.3
Cruiser	Kumulus		3	7.2	62.6	61.9
Cruiser	Quadris Opti		4	7.7	57.7	62.1
Cruiser	Untreated Check		5	8.0	59.3	62.0
LSD (0.05)			NS	NS	10.0	NS
mean			3	5.7	68.2	62.2
CV (%)			24	11.5	8.6	0.5