

# CANOLA SCLEROTINIA FUNGICIDE, CREC, 2003

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Hyola 357 Magnum<sup>1</sup> canola was planted May 15 at 14 live seeds /ft<sup>2</sup> at the Carrington Research Extension Center. Established canola density ranged from 8 to 13 plants/ft<sup>2</sup>. Previous crop was sunflower heavily-infected with sclerotinia head rot. Experimental design was a RCB with four replications. Plot size was 5 x 25 ft and a canola border separated each plot. Fungicides were applied at 30 to 40 percent or 50 to 60 percent bloom with a CO<sub>2</sub> pressurized hand-boom sprayer with 8002 twin-jet nozzles, 20-inch spacing, 40 PSI and 18 GPA. Approximately 1.7 million ascospores were applied/plot with the CO<sub>2</sub> pressurized hand-boom sprayer at 40 PSI and 18 GPA on July 7 to canola at 50-70 percent flower. The misting system applied water 2 minutes/30-minute periods continuously starting on

July 7 and concluding prior to swathing with the objective of keeping the foliage wet for sclerotinia infection and development. Plant disease incidence and severity were visually evaluated on August 12 by examining 50 plants/plot. The trial was swathed on August 18 and machine-harvested on August 25.

Disease incidence was less than the untreated check with the 50 to 60 percent bloom application of Endura and JAU6476 (Table 1). Plot severity generally was less than the untreated check with Endura and JAU6476. Generally, trends of decreased sclerotinia and increased seed yield occurred with delayed fungicide application. Disease and yield were negatively correlated.

**Table 1. Canola response to Sclerotinia fungicide treatments.**

Trt	Product	Rate/A	Treated		Sclerotinia			Seed Yield
			Bloom Stage		Incidence	Plant Severity*	Plot Severity	
			30-40%	50-60%				
			2-Jul	4-Jul	%	0-5		lb/A
1	Untreated				69	2.3	32.1	1534
2	Blocker	48 fl oz/A	x		59	2.3	27.4	1391
3	Blocker	48 fl oz/A		x	63	2.6	32.1	1487
4	Blocker	48 fl oz/A	x		63	2.5	31.4	1421
	Topsin M	8 oz wt/A						
5	Ronilan	12 oz/A	x		77	2.5	37.9	1576
6	Ronilan	12 oz/A		x	66	2.0	27.1	1664
7	Endura	5.8 oz/A	x		58	2.0	23.6	1593
8	Endura	5.8 oz/A		x	44	1.9	16.6	1695
9	JAU6476	5 fl oz/A	x		55	2.3	25.7	1745
	Induce	0.125 % V/V						
10	JAU6476	5 fl oz/A		x	49	2.2	21.1	1753
	Induce	0.125 % V/V						
11	JAU6476	5.7 fl oz/A	x		57	2.1	24.0	1720
	Induce	0.125 % V/V						
12	JAU6476	5.7 fl oz/A		x	47	1.9	18.3	1660
	Induce	0.125 % V/V						
13	Rovral	14.4 fl oz/A	x		64	2.4	30.0	1540
	COC**	1 % V/V						
14	Rovral	14.4 fl oz/A		x	57	2.3	26.4	1466
	COC	1 % V/V						
15	Topsin M	16 oz wt/A	x		75	2.2	32.9	1581
16	Topsin M	16 oz wt/A		x	65	2.4	31.1	1527
17	TD2193-07	20 fl oz/A	x		63	2.4	30.2	1476
18	TD2193-07	20 fl oz/A		x	65	2.1	27.8	1525
19	V-10114	19 fl oz/A	x		69	3.1	42.3	1745
20	V-10116	9.5 fl oz/A	x		59	2.3	26.8	1756
21	V-10116	9.5 fl oz/A		x	58	2.5	28.5	1777
Mean					61	2.3	28.3	1596
C.V. (%)					17	12	20	13
LSD (5%)					15	0.4	8.1	NS

\*Plant disease severity: 0=no symptoms and 5=plant completely affected and low yield potential.

\*\*COC = HI-PER-OIL (Agrilience).