

## Management of *Ascochyta* Blight in Chickpea and Sensitivity to Fungicides at Hettinger

‘Dylan’, a large kaboli type chickpea, was seeded on April 6. Treatments 10 and 11 were applied on June 3 (25 days after emergence). Treatment 12 was applied on June 16 (38 days after emergence).

Treatments 2 – 9 were applied on June 22 (10% bloom). A second application to treatments 2 – 9 and 11 was on July 11 (90% bloom). Treatments were applied with a tractor mounted CO<sup>2</sup> propelled plot sprayer delivering 20 gpa at 40 psi to 5 foot wide by 20 foot long plots. The experiment was a randomized complete block design with four replications. The trial was harvested on August 5.

Treatment	Product Rate	Plant Disease		Grain Yield	Test Weight	1000 Seed Weight	Disease on Seed	Seed Size (mm)			
		7/15	7/27					>9	8 - 9	<8	
	Oz/A	-----	0-9*	-----	Lbs/A	Lbs/bu	grams	0 – 9**	-----	%	-----
1	Untreated	0	3.0	3.2	951	56.1	316	5.8	31	38	30
2	Bravo / Bravo	32 / 32	1.0	2.2	1907	55.3	439	1.2	60	27	13
3	Headline / Headline	7.2 / 7.2	2.0	2.8	1700	55.1	380	2.8	56	28	16
4	Endira / Endura	8 / 8	0.5	2.0	1902	55.3	400	2.5	59	27	13
5	JAU6476 / JAU6476	5.7 / 5.7	0.5	2.2	2147	55.0	405	2.0	62	26	12
6	Quilt / Quilt	7 / 7	2.0	2.8	1688	54.6	394	2.0	52	32	16
7	Quadris / Quadris	6.2 / 6.2	1.5	1.8	1773	55.2	396	2.2	54	29	16
8	Bravo / Headline	22 / 7.2	0.8	2.2	2047	55.1	400	1.2	63	27	10
9	Bravo / Quadris	22 / 6.2	1.8	2.8	1822	55.2	397	1.8	57	30	13
10	Headline – 25 DAE	7.2	1.2	2.5	1580	55.6	376	2.5	50	31	19
11	Head.25 / Headline	7.2 / 7.2	0.8	2.0	1967	55.2	421	1.5	63	26	10
12	Headline – 38 DAE	7.2	2.5	2.8	1627	55.6	354	2.8	48	33	20
Trial Mean			1.5	2.4	1773	55.3	390	2.4	54	30	16
C.V. %			54.2	24.9	16.4	0.8	9.9	58.9	17.0	13.9	40.1
LSD .05			1.1	NS	419	0.7	56	2.0	13	6	9
LSD .01			1.5	NS	565	NS	75	2.7	18	8	12

\*Plant Disease: 0 = none, 9 = plants completely dead.

\*\*Disease on Seed: 0 = none, 9 = disease on all seed.

### Summary

The trial was located on a site that had a severe infestation of chickpea ascochyta 4 years previously. Weather conditions were generally dry through May resulting in minor disease symptoms. June was relatively wet and disease symptoms became more prevalent at the end of this month. July and August were relatively hot and dry, and were not conducive to disease progression. All fungicide treatments provided significant disease control onto the seed resulting in significantly higher yields and seed quality than the untreated check. Applications prior to initiation of flowering (trts 10 and 12) provided relatively poorer disease protection. Applications at 90% bloom (July 11) appear to have been the key timing for preventing disease movement onto the pods.