2013 Copper Fertilizer + Herbicide Applied to 4 leaf Spring Wheat at Minot, ND

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'Barlow' hard red spring wheat was seeded into no-till flax stubble on May 15. Treatments were applied on June 18 to 4 ½ leaf wheat with 74° F, 39% RH, sunny sky and S wind at 5 mph. Treatments were applied with a hand held CO_2 propelled boom delivering 10 gpa to 5 foot wide by 20 foot long plots. The soil is classified as a loam with a pH of 7.5, OM of 2.4% and copper level of 0.51 ppm. The trial was a randomized complete block design with four replications. Plots were evaluated for crop injury and weed control on July 3 and July 23. The trial was harvested on September 4.

			--------- July 3 --------			-------- July 23 --------			Crop	Grain	Test	Grain
	Treatment	Rate	Crop Inj	fxtl	bdlf*	Crop Inj	fxtl	bdlf*	ht	protein	weight	yield
		oz/A	%	%	%	%	%	%	cm	%	lbs/bu	bu/A
1	Huskie Complete	17.3	0	52	93	0	56	91	76	15.2	64.1	56.6
2	Huskie Complete + LPI-6405 + LI 700	17.3 + 32 + 16/100gal	0	71	96	0	85	98	79	15.3	63.1	59.1
3	Huskie Complete + LPI-6450 + LI 700	17.3 + 32 + 16/100gal	0	80	98	0	90	98	74	15.2	63.0	60.6
4	Huskie Complete + LPI-6404 + LI 700	17.3 + 32 + 16/100gal	0	86	97	0	78	94	77	15.4	63.4	60.0
5	Huskie Complete + N-Pact Cu + LI 700	17.3 + 128 + 16/100gal	0	81	98	0	86	97	78	15.2	63.3	59.7
	C.V. %		0	19	4	0	22	3	5	1.5	0.7	4.9
	LSD 0.1		NS	18	4	NS	22	4	NS	NS	0.5	3.6

* bdlf = RR pigweed, common lambsquarter and common mallow mix.
NS = no statistical difference between treatments.

Summary

Crop injury was not observed on any treatment during the growing season. Season long broadleaf weed control was very good for all treatments with no obvious antagonistic interactions with copper products. All copper product treatments tended to enhance both broadleaf weed and foxtail control. Treatments had no effect on grain protein or plant height. Minimal but significant effects were noted on some of the treatments for test weight and grain yield.