

## Evaluation of RyzUp Smartgrass for Yield Enhancement in Corn

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**A** trial was conducted in 2012 in collaboration with Valent to investigate the potential for the plant growth regulator (PGR), RyzUp Smartgrass, in corn. Corn was planted on May 5 and harvested October 10. RyzUp Smartgrass was applied at the V2 stage on May 25 and at the V5 stage on June 8. Vigor evaluations were made 14 and 28 days after each application. The applications were made with a backpack CO<sub>2</sub> sprayer using 8002 nozzles and 28 PSI with a target application volume of 20 GPA.

Plants treated with 0.3 oz of PGR exhibited the greatest response. Both treatments at that rate had a distinct visual response early, but by 28 DAT this response had greatly diminished as the nontreated corn plants seemly caught up with the treated one. The 0.6 oz rates had a barely perceptible and nonsignificant influence on corn vigor. At harvest, none of the treatments showed a statistical improvement over the nontreated plots even though there was a 15 bushel (9%) difference between the nontreated corn and the V5 application at 0.3 oz.

**Table 1. Evaluation of the PGR RyzUp Smartgrass in corn.**

Product <sup>1</sup>	Rate oz/a	Stage	Response <sup>2</sup>		Harvest Moisture %	Test Weight lb/bu	Yield bu/a
			14 DAT %	28 DAT %			
non treated	-	-	0	0	14.4	59.9	181.6
RyzUp Smartgrass	0.3	V2	17.5	5	14.3	59.8	183.1
RyzUp Smartgrass	0.3	V5	13.7	7.5	14.4	59.8	196.6
RyzUp Smartgrass	0.6	V5	5	1.25	14.6	60.1	178.8
RyzUp Smartgrass	0.6	V2	3.75	1.25	14.2	60.0	177.0
LSD (0.05)			9.3	5.6	NS	NS	NS

<sup>1</sup> all applications included 0.25% NIS

<sup>2</sup> indicates the increase in vigor as estimated by plant height