

2016 Radiate® Trial

Purpose: Radiate from Loveland Products Inc. contains two plant growth hormones, Indole-3-butyric acid (auxin) and Kinetin (cytokinin) and is marketed as improving early season vigor, promoting shoot and root growth and reducing early season stress. The purpose of this trial was to evaluate the effect of a single application of Radiate on soybean yields and income in 2016.

Procedure: A single foliar application of Radiate was compared to an untreated control at 18 locations in 2016. The Radiate was applied at 2 oz per acre from V3 through V5 at all locations.

Results: The Radiate significantly increased yields by 6.3 bushels per acre at one location (Ionia 2) in 2016. When all sites were combined and analyzed, the yields produced by the Radiate and the untreated control were essentially equal. A single foliar application of Radiate was profitable at one location in 2016.

We want to thank Crop Production Services of Munger and Loveland Products Inc. for providing and delivering the Radiate and Ned Birkey and Dan Rajzer for coordinating these trials.

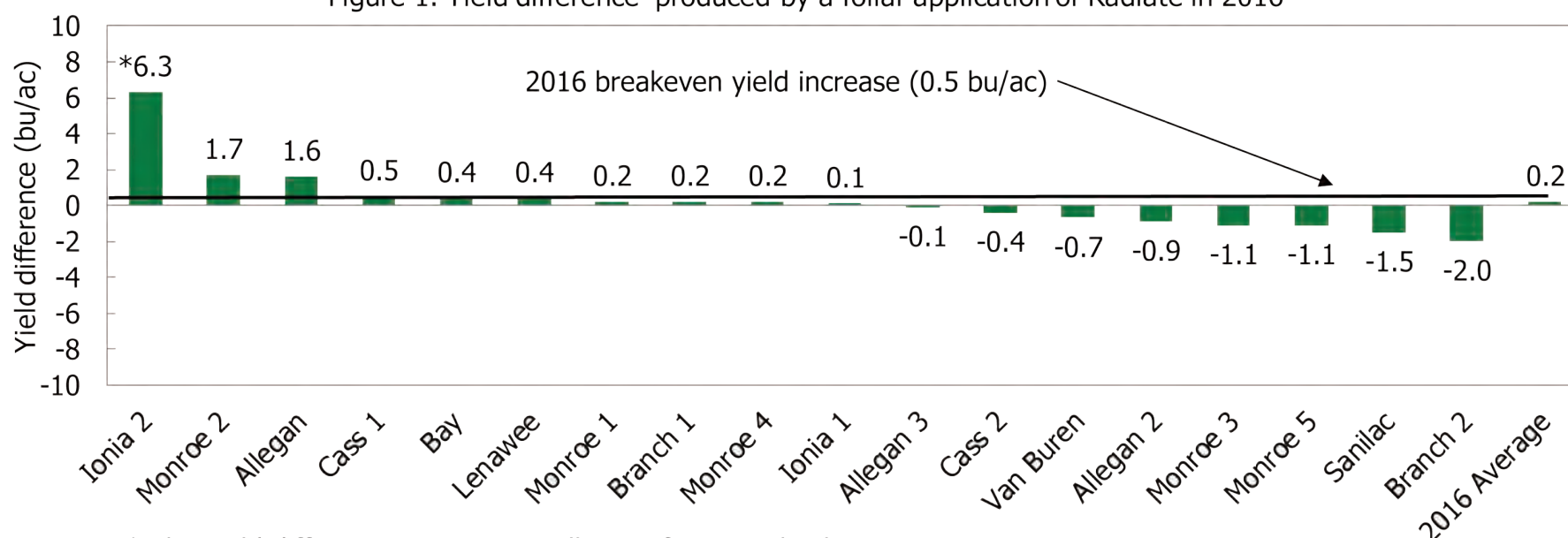
Table 1. The effect of a single foliar application of Radiate on soybean yield and income in 2016

Location	Untreated control	Radiate	LSD _{0.10}	Yield difference
	----- Yield (bu/ac) -----			Yield (bu/ac)
Ionia 2	67.4 b	73.7 a	2.6	6.3
Monroe 2	62	63.7	3.7	1.7
Allegan 1	59.9	61.5	8.9	1.6
Cass 1	49.7	50.2	3.2	0.5
Bay	77.9	78.3	1.7	0.4
Lenawee	63.6	64.0	2.1	0.4
Monroe 1	55.6	55.8	1.4	0.2
Branch 1	69.2	69.4	0.5	0.2
Monroe 4	63.7	63.9	1.3	0.2
Ionia 1	77.6	77.7	0.4	0.1
Allegan 3	73.7	73.7	2.5	-0.1
Cass 2	36.5	36.1	2.5	-0.4
Van Buren	55.1	54.2	5.7	-0.7
Allegan 2	45.2	44.3	6.9	-0.9
Monroe 3	69.2	68.1	2.9	-1.1
Monroe 5	57.9	56.8	7.6	-1.1
Sanilac	64.5	63.0	2.5	-1.5
Branch 2	67.7	65.7	7.2	-2
Average	62.0	62.2	0.7	0.2
	----- Income (\$/ac) -----			
Average income	\$570	\$568		

Radiate cost = \$4.50 per acre

Application cost was not included as Radiate is compatible with all post-emergence herbicides

Figure 1. Yield difference produced by a foliar application of Radiate in 2016



* The yield difference was statistically significant at this location