MICHIGAN STATE UNIVERSITY EXTENSION

Michigan State University AgBioResearch

Evaluation of in-furrow fungicides tank-mixed with fertilizer to manage Rhizoctonia root and crown rot of sugar beet

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Location: Frankenmuth (SVREC)	**Treatment Timings:** In-Furrow at Planting
Planting Dates: May 6, 2019	**Pesticides:** see table
Soil Type: Loam	**O.M.:** 5.0 **pH:** 7.5
Replicates: 4	**Variety:** C-G351NT

Summary: Treatments of AZteroid alone, in combination with Redline, or in combination with Redline/Regalia provided significant Rhizoctonia root rot control.

All yields were well below the 29 T/A averages for Michigan in 2018. The high Rhizoctonia root rot pressure likely accounts for the severely low yields observed in this trial. As a result, no samples were collected for sugar quality and yield results should be considered relative to the non-treated and grower standard programs.

Table 1. End of season disease index and yield from the tested fungicide programs.

No.	Treatment, Rate[a]	Disease Index[b,c]	Yield (t/A)
3	AZteroid, 0.24 fl oz	34.5 b	8.2 a
4	AZteroid, 0.24 fl oz Redline, 3 gal/A	36.2 b	7.4 a
5	AZteroid, 0.24 fl oz Regalia, 1.35 fl oz Redline, 3 gal/A	37.8 b	6.8 a
2	Redline, 3 gal/A (Fertilized Control)	64.8 a	3.5 b
1	Non-Treated Control	67.8 a	3.4 b

[a] All rates, unless otherwise specified, are listed as a measure of product per 1000 rw-ft.

[b] Column values followed by the same letter were not significantly different based on Fisher's Protected LSD (α=0.05); if no letter, then the effect was not significant.

[c] Disease index was calculated by multiplying the disease incidence (0-100%) by the mean symptomatic root severity (1-7) and dividing by 7.