

Early Fungicides In Corn

Purpose:

Fungicide applications on corn have been growing in popularity over the past 5 years. Most of these applications have been targeted at the VT stage of corn (Tassel Emergence). More recently earlier application timings (i.e. V6 or 8 leaf stage corn) have been promoted partly due to the convenience of application at this time and/or the possibility of combining it with a final application of post-emerge herbicide. The purpose of this project was to investigate corn yield enhancement resulting from a V6 application of the fungicide Quilt (Syngenta Canada)

Methods:

Field scale trials were set up to conduct simple two replicate comparisons of an untreated check and an application of Quilt at the V6 stage. Most trials were conducted by members of the Thames Valley Soil and Crop Improvement Association.

Results:

Table 1. Yield response to fungicide application made at the V6 stage in corn at 18 sites in Ontario, 2012.

Field	Check	V6 Fungicide
	----- yield (bu/ac) -----	
1	222	220
2	173	178
3	174	175
4	214	214
5	263	250
6	186	188
7	182	180
8	213	214
9	229	231
10	144	145
11	170	176
12	189	191
13	160	167
14	223	228
15	219	220
16	214	214
17	204	210
18	187	175
<i>Average</i>	<i>198</i>	<i>199</i>

Crop Advances: Field Crop Reports

A total of 18 on-farm sites were included in this project. The yield results are highlighted in Table 1. On average there was a 1 bu/acre response to the V6 application of Quilt. A few sites had yield improvements of 5 bushels or more to the fungicide and some sites had reduced yields. No other information was gathered to aid in the interpretation of the data.

Summary:

The 2012 data from this project suggests that yield improvements from early applications of fungicide in corn are unlikely.

Next Steps:

Fungicide research projects must be examined under a framework of integrated pest management; that is applications of a fungicide must be part of a strategy that examines the pest pressure, the weather, other agronomic practices (rotation and tillage) and not simply driven by the commodity price or convenience of application. Future research can tackle some of these objectives.

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