Background
New corn fungicides being marketed are often registered on all corn types, including sweet corn. Yield trials were conducted in the past on sweet corn, however newer products haven't been properly evaluated under Ontario growing conditions.

Objectives

1. Evaluate commercially available foliar fungicide products in the Ontario marketplace on their respective impacts on disease control and harvestable yield.
2. Determine the difference, if any, in crop yield response from fungicide application on tolerant and susceptible hybrids.
3. Determine if certain fungicide application timings, or combinations of timing, result in greater yields.

Materials & Methods

Sites: This trial was duplicated across two sites, separated by 29 days between planting dates in order to separate harvest dates and accommodate mechanical harvest requirements. Site #1 was located near Tupperville, ON and hosted the "early planting" and Site #2 was located near Glanworth, ON and hosted the "late planting".

Setup: Industry standard practices regarding soil preparation, crop nutrition, and weed control were followed.

Individual plots of a standard full season, disease "tolerant" sweet corn hybrid (GSS3951, planted at 22,000 seeds/acre) and a full season , disease "susceptible" hybrid (GH6462, planted at 22,000 seeds/acre) were planted with enough replicated plots to test **10** unique treatments, including an untreated check. The trial in Tupperville was planted on May 26, 2025 and the trial in Glanworth was planted on June 24, 2025. Individual plots were planted 4 rows wide, in 30" row widths to a length of approximately 17.5 feet.

The following treatment schedule was applied to each hybrid at both sites:

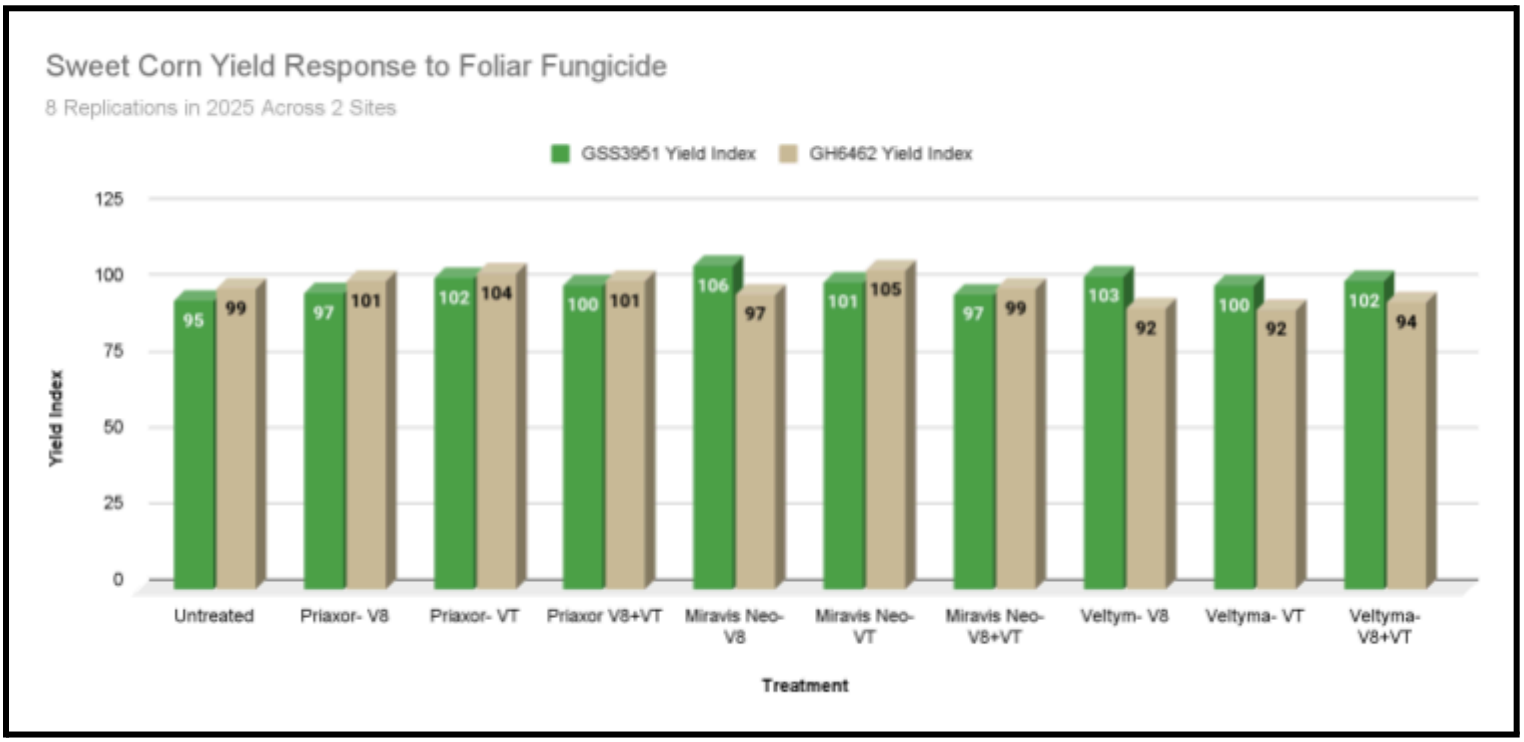
Treatment	Timing	Est. DAP	Treatment	Timing	Est. DAP
Untreated	NA	NA	Miravis Neo	VT	50
Priaxor	V8	30	Miravis Neo	V8 + VT	30 + 50
Priaxor	VT	50	Veltyma	V8	30
Priaxor	V8 + VT	30 + 50	Veltyma	VT	50
Miravis Neo	V8	30	Veltyma	V8 + VT	30 + 50

Application Details:
Water volume = 15 gallons/acre
Priaxor application rate = 120mL/ac
Miravis Neo application rate = 400 mL/ac
Veltyma application rate = 200 mL/ac

Harvest Data Collection
A mechanical harvester harvested individual plots with stripper plates set to a minimum of 2". Individual plot weights were recorded. Harvest occurred on August 27, 2025 at the Tupperville site and on September 26, 2025 at the site near Glanworth.

Results
Overall:
Disease incidence and severity were very low in 2025. In Tupperville, there were no noted foliar diseases on any treatment, including the untreated check, both prior to tassel and harvest. In Glanworth, very low pressures of Tar Spot and Northern Corn Leaf Blight were noted. Disease was first noted the second week of September with pressures remaining very low until harvest. Variability in harvest data is mostly a result of variability in growing conditions across the trial area and should not be seen as the impact of products tested.

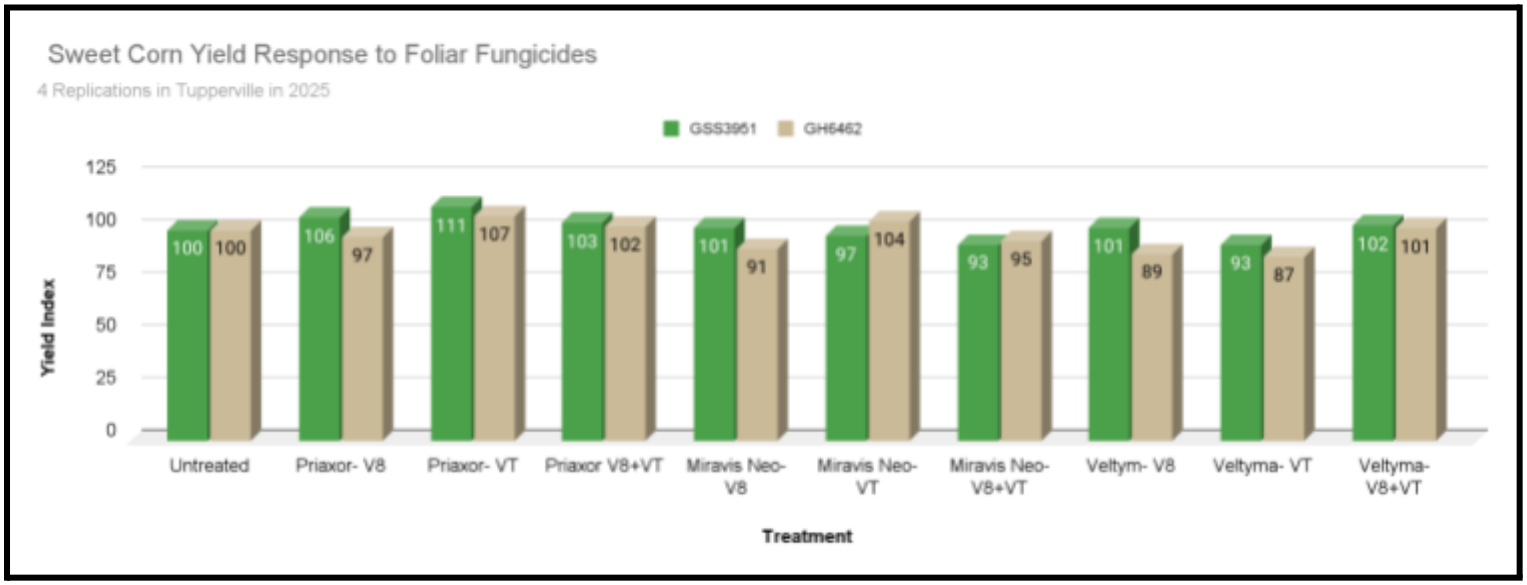
GSS3951, after two years of study, has still shown a positive yield response to fungicide application even in the absence of leaf diseases. However, limited differences in yield exist between product or treatment timing under these conditions. It is still believed that differences would become evident in the presence of disease.



Tupperville, ON: "Early" planting:

The combination of early planting and low rainfall are suspected to have contributed to the lack of disease pressure observed at this site. At no stage in the crop development were any of the diseases of concern, Tar Spot and Northern Corn Leaf Blight, observed at this site.

The untreated check for both hybrids had an average yield index. Yield Indexes for treatments Priaxor- VT, Priaxor V8+VT and Veltyma- V8+VT were greater than 100 for both hybrids.

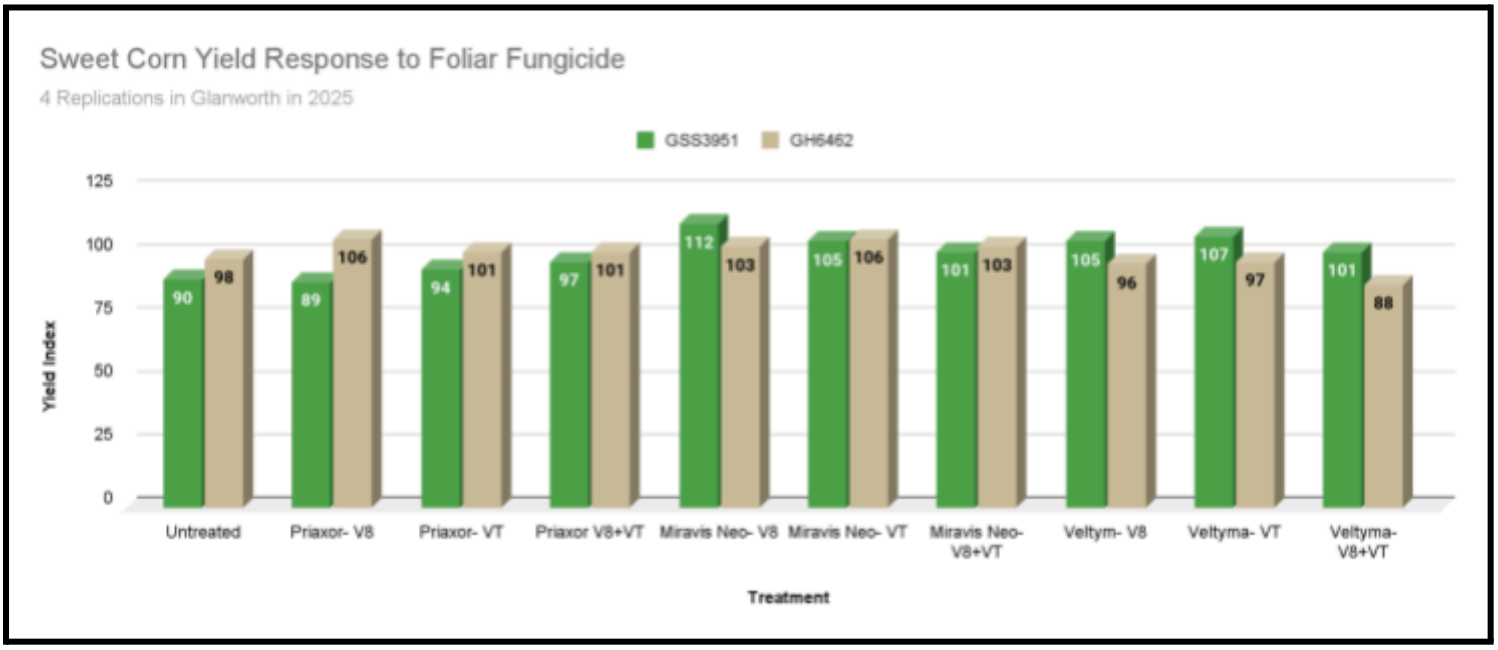


Sweet Corn Fungicide Studies (Ontario, 2025)

Glanworth, ON: "Late" planting:

The levels of Tar Spot and Northern Corn Leaf Blight were very low as the weather conditions during the growing season were not very conducive to the diseases of concern. The second week of September was when Tar Spot and NCLB were first noticed with levels remaining low until harvest.

The three Miravis Neo treatments showed yield indexes that were greater than 100 for both hybrids.



Multi- Year: