



On-Farm Demonstration Trial: Crop Protection Studies Soybean Gall Midge Management Trial

Mike Witt—on-farm trials coordinator and agronomist, ISU Extension and Outreach

Andrew Weaver—agricultural specialist, Northwest Research and Demonstration Farm
Dordt University, Agriculture Department

Objective

Determine the effects of insecticides and genetic traits on corn rootworm management to define best management practices.

Introduction

Soybean Gall midge is an emerging pest in western Iowa that causes significant yield losses on field edges of infested fields. There currently are very few insecticides for this pest that can be effective given its morphology and life cycle. The objective of this trial was to investigate what effect using an insecticide Counter® or Thimet® would have on the yield of a field in which a mild infestation of soybean gall midge was observed.

Materials and Methods

Crop Year–2021

Trial	210114
Trial County	Sioux
Soil Type	8B, 31, 91, 91B, 133, 310B, 310B2, 310C2, 428B
Previous Crop	Corn
Tillage	No-Till
Current Crop	Soybean
Hybrid–Variety Number	P22T86E
Hybrid–Variety Company	Pioneer/Corteva
Row Spacing	30 in.
Seeding Rate	140,000/ac.
Planting Date	April 3
Harvest Date	September 27
Experimental Type	On-Farm Demo
Replications	4
Insecticide Treatment	Counter 6 oz./ac. Thimet 9 oz./ac.

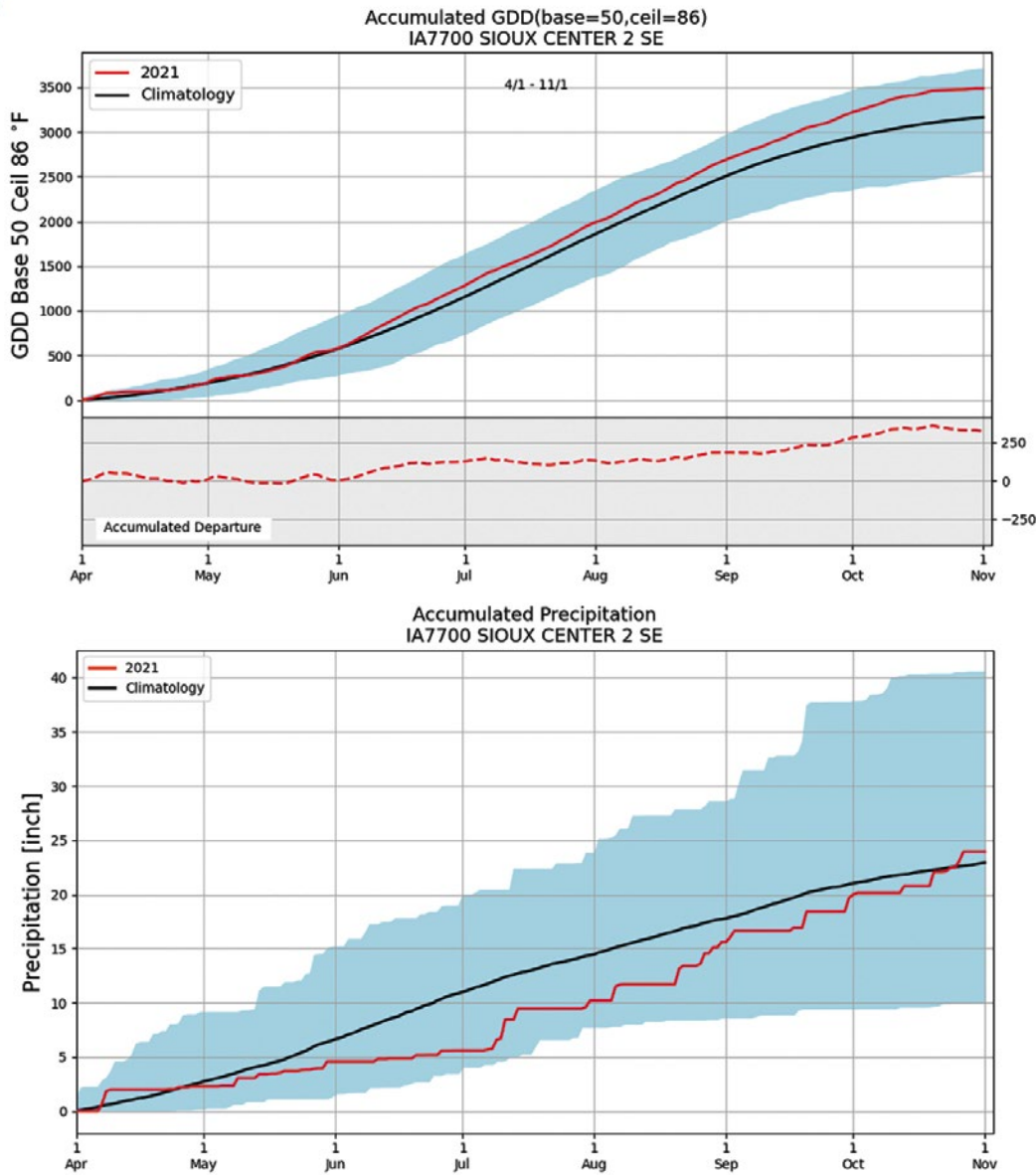
Results

Trial Number	Treatment	Yield (bu./ac.) ^a	P-value ^b	Root Ratings ^c
210110	Thimet	78.6 a	0.55	0.2 a
	Counter	81.3 a		1.6 bc
	Untreated Check	78.7 a		1.1 b

^aValues denoted with the same letter within a trial are not statistically different at the significance level of 0.10.

^bP-value = the calculated probability that the difference in yields can be attributed to the treatments and no other factors. For example, if a trial has a P-value of 0.10, there is 90% confidence the yield differences are in response to treatments. This is consistent for demonstration trials.

Location Climate Analysis



Key Takeaways

- There were no significant differences between the two treatments of insecticide in relation to yield when compared with the untreated check
- Gall Midge pressure was observed, but at a low level in this trial location.

NOTE: The results presented are from replicated demonstration trials. Statistics are used to detect differences at a location and should not be interpreted beyond the single location.