

INSTERUS HZ

Dr. Bruce Webb, CEO

Paradigm Shift in Sterile Insect Technique

1

EFFECTIVE

The technology is based on a naturally occurring virus: 100x more effective than biopesticide products of its kind.



2

BIO-PESTICIDE

Insterus^{Hz} is one of only a few biopesticides developed for use in large acreage row-crops.



3

LOW RISK PROFILE

Species-specific control pose low risk to non-targets. No harmful products are used to manufacture or apply Insterus^{Hz}.



4

FIELD TESTED

Trials showed Insterus^{Hz} reduced corn earworm (CEW) numbers and damage by >75% in Bt or non-Bt sweet corn.



5

EASY TO APPLY

Single-site releases will cover several hectares per application. Insterus^{Hz} integrates well with chemical approaches.



What is Insterus^{Hz}?

An insect sterilizing virus for *H. zea* and *H. armigera*

- Patented isolate of a natural virus
- Biopesticide by EPA standards
- Non-GMO

- Biological insecticide
- Released as live, sterile moths
- Low "dose" (10 moths/ac in trials)

- Preventative mode of action
- Does not interfere with other IPM
- Females produce fewer or no eggs

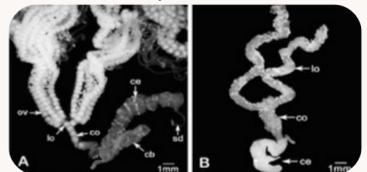


HzNV2 virus – present in 20% of moths in field



Transmitted during mating – cost-effective and efficient

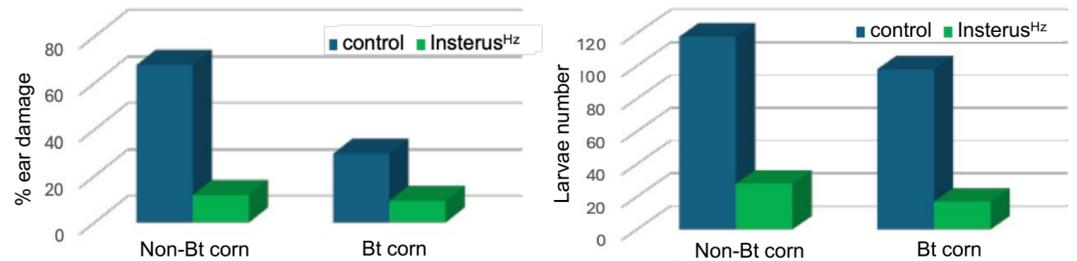
Female reproductive tracts:



Normal up to 1500 eggs Insterus^{Hz}-infected sterile

A new paradigm for reducing insect pests

Insterus^{Hz} Field Trials



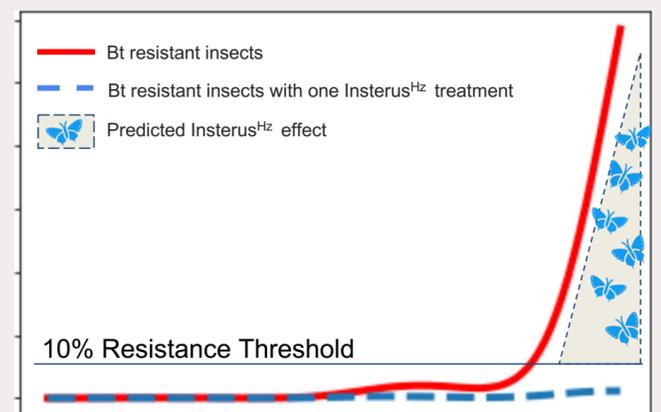
Corn ears (200) were collected from Bt and non-Bt fields treated with control CEW or sterile Insterus^{Hz} CEW moths. Ears were assessed for damage.

- **High Efficacy:** Insterus^{Hz} reduced pest numbers, damage by up to 80%
- **High Efficiency:** One Insterus^{Hz} moth infects and sterilizes 8-10 moths

Insterus^{Hz} can suppress Bt resistance

Models show that Insterus^{Hz} can suppress Bt resistance below 10% threshold, making Bt traits **more durable**

Insterus^{Hz} can be used in resistance suppression programs



Projected number of Bt resistant larvae in a mixed Bt resistant/susceptible population after 3 generations (100 days) with and without Insterus^{Hz} treatment

Safe, Targeted Control

- No effects on humans or non-targets/beneficials
- Host-specific, no residues, non-GMO
- Under review by EPA, registration anticipated Jan 2026

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