

## Bringing Organic Sweet Corn Back to Long Island

Eve and Chris Walbrecht from Garden of Eve Organic Farm experimented with pheromone trapping and fertilizers to grow organic corn.

SARE Grant [FNE04-534](#)

### READY TO EXPLORE

Eve and Chris Walbrecht from Garden of Eve Organic Farm, started farming in 2001 on their 80-acre Long Island property, and in 2004 they were cultivating 5-8 of the acres to satiate their 150+ member community-



shared agriculture, sell to their farm stand and farmers' markets, keep 200 laying hens, and grow flowers, in addition to raising a son and daughter, and the farm has grown since. These new farmers have had their plates full as they dig their hands in soil to tend for over 75 varieties of vegetables, yet maintained vivacity for experimentation. "We're always willing to try something once," described Eve. And



with that notion, the Walbrechts were ready to attempt growing organic sweet corn in 2004, when very few farmers in Long Island did so, given European corn borer moth and corn earworm pest problems and issues with providing the fast-growing crop enough nutrients. The farmers sought funding through a SARE grant to assist them with the organic corn endeavor and were ready to test what fruits could come from their labor.

### COMBATNG THE PESTS AND FEEDIN' THE CORN

Eve and Chris set out to deter the European corn borer moth and corn earworm from pestering their 4 plantings of organic sweet corn. They chose Silver Queen white and Quickie bicolor sweet corn and directly seeded the corn in the warm late-May soil. The couple selected Entrust pest deterrent, which was said by their technical advisor, Dan Gilrhein, Extension Entomologist for Cornell Cooperative Extension at the Long Island Horticulture Research and Extension Center, to perform better than *Bacillus thuringiensis* (Bt). Entrust is made through the fermentation of living organisms and will kill pests upon ingestion or contact, while Bt is made from bacterium that produce toxic proteins and kills upon ingestion only. Entrust was mixed with organic corn oil and the Walbrechts hoped to use the "Zea Later" oil applicator from Johnny's seeds but unfortunately discovered it was sold out, "guess it is popular!" they exclaimed. As a replacement, a backpack sprayer was used.

To address the issue of nutrient deficiency, the farm selected an Organic Materials Review Institute (OMRI) –certified powdered fertilizer from the organic fertilizer producer company, Fertrell. Fowl friends also helped with fertilizer, as the Walbrechts used their composted chicken manure on the crop as well.

Chris monitored the crop for pests using methods that Dan had showed. Dan helped set up pheromone traps with pheromone lures to attract the pests and therefore help determine the level of threat to the crop and the timing of appropriate responses.

### TASTE THE SWEETNESS

Growing the corn proved to be challenging, but not quite as hard as the Walbrechts had expected. The pheromone traps were helpful in showing Chris when the corn borers were present and therefore spraying was needed. The corn plantings proved to be successful as damage was low early in the season, at approximately 20%. Damage increased with the later



plantings, however, overall the Walbrechts and their customers were pleased with the results. The corn was distributed in their CSA and customers loved the corn. Corn is a vegetable with which they are very familiar, know how to cook and “their kids liked it.”

Since the first trial year of growing corn, the Walbrechts have continued to grow the crop and actually expanded it. They have experimented with more effective fertilizers, natural predators against the corn borer moth like bats and barn owls, and a tractor mounted sprayer, which is more efficient than the backpack sprayer. As Chris and Eve brought organic corn to Long Island, they shared their knowledge on the crop with other farmers during a field day in 2005. With the barbecue grill going, the Walbrechts told farmers about the techniques they used for this well-received crop. Since then, most other farmers began including corn in their CSA. And the customers keep eating up the sweetness.

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