## **Cucumber Beetle vs. Tedesco**

Angela Tedesco's

Turtle Farm, near Granger, feeds CSA members in the Des Moines area. She produces abundant vegetable crops - and usually a good crop of cucumber beetles. Angela writes: "This cucumber beetle trial was an attempt



to increase survivability and therefore production of curcubits that often succumb from being eaten at emergence or from disease spread by the beetles feeding on the plant. Cucumber beetles did not appear for this planting at emergence, so most of the mortality appeared to be from disease. Part of the initial plan was to use an attractant to divert the beetles from the plants. Keeping a stock of the attractant (bitter melon) for use in traps became impractical, and attempting to grow it within the plots did not work this year. Therefore this trial became a comparison of growing methods of two varieties of summer squash." <u>Table 5</u> and Figure 3 show the results of the experiment.

Three methods of planting were compared: direct seeding into the garden; direct seeding under row covers, and planting in the greenhouse (followed by transplanting to the garden two weeks later). Two squash varieties, Seneca and Costata, were included. As Angela writes: "The variety Seneca is considered susceptible to cucumber beetle, and the variety Costata is considered somewhat resistant to cucumber beetle." But "Costata is not considered as prolific a producer as Seneca." The figure shows that, while Costata was a better overall producer, Seneca excelled where it was protected by row covers. The greatest benefit of the covers came in the first week of harvest, when the covers probably provided an early-season greenhouse effect.

The table confirms that the method of planting significantly affected the size of the crop for the first three weeks of harvest. After the third week, however, it was variety that most strongly determined the harvest. "Since survival was better in the 'Costata' than the 'Seneca', production was better in the 'Costata' than the 'Seneca'. This is confirmed by the fact that the weekly production was not different in the early weeks, before 'Seneca' lack of survival became more pronounced."

"I do successive plantings," writes Angela. "Regardless of the method or variety, all squash had died by approximately 5 weeks after production began, giving a good idea of when to start more successions of squash. In a different year when the cucumber beetles are present at planting, I suspect that (transplanting from the greenhouse) would have fared better."