**Reduced Tillage Project Verification Form**

Participant Name:\_\_\_\_Jason Turek \_\_\_\_\_ Farm Name: \_\_\_\_\_Turek Farms\_\_\_\_\_\_

Mailing Address: \_\_\_8558 State Route 90, King Ferry, NY 13081\_\_\_\_\_\_\_\_

Phone: \_\_\_\_\_\_315-246-2362\_\_\_\_\_\_ Email: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_Dec 2011\_

Years using RT: \_\_2\_\_ Total Veg. Acres: \_\_4000\_ RT Veg Acres: \_\_1000\_

Plan to expand vegetable acreage Reduced Tilled: YES \_\_\_ NO \_X\_\_

If yes, to how many acres: \_\_\_\_\_\_\_\_\_

Make/Model of Reduced Tillage Equipment Purchased/rented:

Estimated Costs:

|  |  |  |
| --- | --- | --- |
|  | **Costs per acre ($)** | |
| **Item** | **Conventional** | **Reduced Tillage** |
| Fuel for primary and secondary tillage | 1 more pass than DZT | 1 less pass than Conv |
| Labor for primary and secondary tillage | 1 more pass than DZT | 1 less pass than Conv |
| Equipment Costs for tillage | Unknown | Unknown |

Yield Estimates:

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | **Yield per acre ($)** | |
| **Crop** | ***P. capsici* present?** | **Conventional** | **Reduced Tillage** |
| Sweet corn, field corn, soy beans, sunflowers, vine crops | No | More uniform and higher yield than DZT | 10% lower than conv |
|  |  |  |  |

Benefits observed of reduced tillage system for vegetables:

Challenges or concerns of reduced tillage for vegetables:

Other comments:

This was Jason Turek’s second year conducting DZT using his own Blu-jet 16 row deep zone tiller with a 250-300 horsepower range tractor. He deep zone tilled 600 acres of some sweet corn, soy beans, sunflowers, vine crops and field corn his first year and increased the number to 1000 acres the second year. He conducted DZT on sweet corn but felt like this was a different kind of year with the weather being very hot and dry for much of the season. He observed that the strip tilled plots were much more variable than the conventional plots and did not yield as well. He added that the crops that were mature on time weren’t desirable because of a lack of uniformity. They would only harvest once, with maybe half of the heads being marketable. The conventionally tilled plots were substantially better. The spots that had a side by side comparison were accidentally plowed, but Jason reported that there was definitely a smaller percentage yield (~10% lower). No cover crops were grown for any of the plots. Jason’s farm soil is a silt loam and his tillage practices consist of plowing everything (DZT and Conventional) in the Fall and then disking twice in the Spring before planting. He would also disk once or twice before strip tilling in order to be able to plant in the soil. Jason has no real problems with *Phytophthora capsici* as they employ rotation schedules and grow mostly corn. He also noted that they had less rain this year than last year. In terms of weed pressure, Jason reported no observable differences as he was able to use the same herbicide program on both conventional and DZT and disk before strip tilling. Jason reported that DZT limits his options for planting. He has to often make changes to plots and move crops around once the time to plant arrives. He will not participating in a trial in 2012.