**Tables 10 and 11 for 2013 FINAL SARE REPORT – June 15, 2014**

Mario Miranda Sazo – CCE Lake Ontario Fruit Program

**ONE12-165: “Measuring and Extending the Benefits of Orchard Mechanization through On-Farm Research and Demonstration Plots in Western NY”**

Table 10. Comparison of cash expenses without discounting for 3 jobs performed by hand labor in a mature Tall Spindle apple system when using an orchard platform versus ladders.

|  |  |  |  |
| --- | --- | --- | --- |
| **Tall Spindle Comparison** | **Annual Cost (mature planting)** | | **Labor Savings (3 uses)**  **($dollars)** |
| **With Platform ($dollars)** | **With Ladder ($dollars)** |
| Dormant Pruning (30% time saving efficiency) | 238 | 340 | 102 |
| Hand thinning (40% time saving efficiency) | 211 | 351 | 140 |
| Trellis Wire Installation (15-20% time saving efficiency) | 128 | 173 | 45 |
| Total Annual Cost (3 jobs) | 577 | 864 | 287 |
| Accumulated cost Year 2-Year20 | 7,801 | 9,765 | 1,964 |

Table 11. Long term orchard profitability of a Tall Spindle orchard using an orchard platform versus the use of ladders for 3 orchard jobs performed by hand labor.

|  |  |  |  |
| --- | --- | --- | --- |
| Net Present Value at the end of… | Net Present Value of Accumulated Profit @6% discount ($/acre) | | |
| With Platform ($dollars) | With Ladders ($dollars) | NPV increase ($dollars) |
| 10 years | 1,897 | 1,405 | 492 |
| 15 years | 13,882 | 13,026 | 856 |
| 20 years | 22,837 | 21,710 | 1,127 |