## Evaluation of a Pesticide Rotation Program for Pickleworm Suppression Poamoho Research Station <br> August 2005

No Yield Data: Fields badly affected by gummy stem blight and disease

## TREATMENTS:

- Treatment 1: Green
- Intrepid / Success/ Intrepid / Baythroid 2E / Pounce
- Treatment 2: Yellow
- Success / Intrepid / Success / Lannate (In place of Decis)/ Asana
- Untreated Check: Orange


| Yellow 3 | Orange 3 | Green 3 |
| :---: | :---: | :---: |
| Orange 2 | Green 2 | Yellow 2 |
| Green 1 | Yellow 1 | Orange 1 |


| 10/13/2005 |  | Pickleworm | FF |  | Sampled | PW | FF | PW \% | FF \% |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Yellow | 1 | 0 | 0 | 20 | 0 | 0 | 5.0 | 3.3 |  |
| Yellow | 2 | 1 | 1 | 20 | 0.05 | 0.05 |  |  |  |
| Yellow | 3 | 2 | 1 | 20 | 0.1 | 0.05 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Green | 1 | 1 | 0 | 20 | 0.05 | 0 | 3.3 | $\mathbf{0 . 0}$ |  |
| Green | 2 | 1 | 0 | 20 | 0.05 | 0 |  |  |  |
| Green | 3 | 0 | 0 | 20 | 0 | 0 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Orange | 1 | 20 | 1 | 20 | 1 | 0.05 | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 . 0}$ |  |
| Orange | 2 | 20 | 2 | 20 | 1 | 0.1 |  |  |  |
| Orange | 3 | 20 | 3 | 20 | 1 | 0.15 |  |  |  |

This MAY be the last complete count data we can get from the field because the lowest section of the field may all be dead by next week due to gummy stem blight. Those plots would be Rep I A; Rep II C; and Rep III B.

Many of the plants in the middle (Rep I B; Rep II A and Rep III C) may also have lots of plants dead.

Generally, the highest section of our field (Rep I C; Rep II B and Rep III A) have the better vegetation.

| 10/5/2005 |  | Pickleworm | FF |  | Sampled | PW | FF | PW \% | FF \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Green | 1 | 0 |  | 3 | 20 | 0 | 0.15 | 5.0 | 8.3 |
| Green | 2 | 3 |  | 2 | 20 | 0.15 | 0.1 |  |  |
| Green | 3 | 0 |  | 0 | 20 | 0 | 0 |  |  |
| Yellow | 1 | 1 |  | 0 | 20 | 0.05 | 0 | 11.7 | 5.0 |
| Yellow | 2 | 1 |  | 2 | 20 | 0.05 | 0.1 |  |  |
| Yellow | 3 | 5 |  | 1 | 20 | 0.25 | 0.05 |  |  |
| Orange | 1 | 15 |  | 4 | 20 | 0.75 | 0.2 | 85.0 | 20.0 |
| Orange | 2 | 19 |  | 4 | 20 | 0.95 | 0.2 |  |  |
| Orange | 3 | 17 |  | 4 | 20 | 0.85 | 0.2 |  |  |

Oct. 11 insecticide application will be our last, it appears that harvest should begin about Oct. 25 ( 2 weeks after last insecticide application).

The controls (treatment C, orange), may not have enough fruits to take data because we have been removing them and few new fruits have been setting. The apple of Peru (weed) really grows fast, too many may be taller than the melon next week.

Noticed more and more "soil rot" melons, it may severely reduce the number of fruits we harvest by Oct. 25.

| 9/28/2005 | Pickleworm |  |  |  | FF | Sampled |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Green | 1 | 2 | 1 | 20 | 0.1 | 0.05 | 15.0 | 8.3 |  |
| Green | 2 | 3 | 2 | 20 | 0.15 | 0.1 |  |  |  |
| Green | 3 | 4 | 2 | 20 | 0.2 | 0.1 |  |  |  |


| Yellow | 1 | 2 | 0 | 20 | 0.1 | 0 | 18.3 | 10.0 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Yellow | 2 | 5 | 4 | 20 | 0.25 | 0.2 |  |  |
| Yellow | 3 | 4 | 2 | 20 | 0.2 | 0.1 |  |  |


| Orange | 1 | 12 | 3 | 20 | 0.6 | 0.15 | 76.7 | 20.0 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Orange | 2 | 17 | 4 | 20 | 0.85 | 0.2 |  |  |
| Orange | 3 | 17 | 5 | 20 | 0.85 | 0.25 |  |  |

Evaluated 20 fruits in the middle two rows. Removed infected fruits in plot. Damage very high in control plots. Mostly young caterpillars found in fruits. GF120 applied.

| 9/22/2005 |  | Pickleworm | FF |  | Sampled | PW | FF | PW \% | FF \% |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Yellow | 1 | 1 |  | 1 | 20 | 0.05 | 0.05 | 6.7 | 6.7 |
| Yellow | 2 | 3 |  | 2 | 20 | 0.15 | 0.1 |  |  |
| Yellow | 3 | 0 | 1 | 20 | 0 | 0.05 |  |  |  |
| Green | 1 | 1 | 1 | 20 | 0.05 | 0.05 | 10.0 | 5.0 |  |
| Green | 2 | 3 | 1 | 20 | 0.15 | 0.05 |  |  |  |
| Green | 3 | 2 | 1 | 20 | 0.1 | 0.05 |  |  |  |
| Orange | 1 | 8 | 1 | 20 | 0.4 | 0.05 | 38.3 | 3.3 |  |
| Orange | 2 | 8 | 0 | 20 | 0.4 | 0 |  |  |  |
| Orange | 3 | 7 | 1 | 20 | 0.35 | 0.05 |  |  |  |

Observations on 9/22/05: Seems like the orange(control) treatment had a higher rate of damage of $38.3 \%$, in comparison to the green and yellow treatments. The treatment of Success followed by Intrepid seemed to have slightly better control ( $6.7 \%$ damage) than vice versa ( $10 \%$ damage).Low fruit fly damage.

Evaluated 20 fruits (golfball size and bigger) in the middle two rows. Pickleworm damage seems to be located on the underside, near the soil level.

