

# University of Florida Field Day

## Southwest Florida Research and Education Center, Immokalee, Florida May 1, 2007

(Notes by Leon Lucas)

### **Dr. Pam Roberts, Plant Pathologist**

Dr. Roberts was out of the country and not available for the field day. Due to unfavorable weather for disease development, the tomato trials have very little disease in spite of making inoculations. The tomato disease trial has comparison applications of many products and rotations: Manzate/Copper/(Bravo rotated with Amistar), Maneb/Copper/(Ranman rotated with Bravo, Companioni, Serenade Max/Biotuune/Kocide, Serenade/Biotuune/Nutriphite, Sonata/Biotuune/Nutriphite, Manzate/Kocide/Oxidate, Manzate/Kocide/Caf-06, Penncozeb/Cuprofix/Actigard/Bravo, Ranman, Actigard/Bravo/Revus Top. The watermelon fungicide trials also have low disease. Products included in the watermelon trials include Pristine, Topsin, Previcur Flex, Bravo, Adament, Reason, Ranman, Companion, Serenade Max, Sonata, Curzate, CAF-06, Revus, Quadris and some experimental products.

Dr.'s Pam Roberts and Phil Stansly have a watermelon trial investigating watermelon vine decline. The watermelon blocks were laid out with one row of inoculated squash between every two rows of watermelons. Of the two rows of watermelons, one row was treated with insecticides while the other row was untreated. The objective was to show that controlling whiteflies would decrease vine decline. The whitefly adult counts early show the insecticide treatments greatly reduced the number of adults but later the vine decline is killing the plants. It does not appear the whitefly control was adequate to reduce disease. They are still collecting data but at best it looks like the treatments may have only delayed vine decline by one week.

### **Dr. Stansly, Entomologist**

Dr. Stansly discussed his tomato trial of insecticidal control of whiteflies. The trial was planted late and Admire was not applied until week 2. Whitefly pressure was high at the trial onset and TYLCV moved in rapidly across the entire plot. There is no significant difference between treatments and virus levels. There are differences in whitefly control. The best product so far has been Movento (3 applications) followed by the "grower standard"; both were better than Admire only. Another product was GWN-1078 (4 applications), which was not discussed. The "grower standard" was two endosulfan applications followed by Danitol/Malathion followed by Oberon and then Courier.

Dr. Stansly has a pepper trial for miticide control of broadmites. The grower standard was Agrimek at 10 oz. plus 3 qts. of stylet oil. One treatment was Courier which looked

much better than the control plot. Portal (use to be Fujimite) was clearly the best treatment.

In another trial by Dr. Stansly biological control of whiteflies in eggplant and pepper using a predatory mite, *Amblyseius swirskii* was evaluated. This is the same mite that provided good broadmite control last spring in pepper. There was only one release made this spring at one packet per plant (10 individual mites) on March 16. Oberon was applied twice, one and two weeks after the release. Top leaves of both eggplant and pepper were sampled weekly and mite/predators/whitefly eggs and nymphs were counted. Thus far the predatory mites have provided very good control of both broadmites and whiteflies.

**Dr. Sanjay Shukla, Soil Scientist**

Dr. Shukla has a pepper trial using lysimeters for water table monitoring and is collecting data on water use, recharge and run off. He is also monitoring nitrogen movement within the water movement. No data is available yet.

**Dr. Kelly Morgan, Soil Scientist**

Dr. Morgan discussed a tomato trial for controlled release nitrogen fertilizers. Last season's trial demonstrated that 100% controlled release nitrogen was not very effective. This season different percentages of control release nitrogen is under test.

Dr. Stansly and Gene McAvoy discussed a tomato variety trial of TYLCV resistance. Plants are not yet ready for harvest. The FL 47 and the HA3811 showed fairly severe TYLCV symptoms. Most of the other lines have fairly mild to no symptoms. Fruit set varied. The HA 3071 plum variety and the HA 3078, 3075 looked good.