

The Various Duties of a Research Assistant

Graduate Student Projects

There are usually 4 to 5 graduate students employed in the Small Fruit and Vegetable IPM laboratory during any given semester. In my tenure as a research assistant there, I assisted the other students with their work on the control of whiteflies and aphids in cucurbits, monitoring and control of flower thrips and blueberry gall midge in blueberries, monitoring and control of grape root borer, and control of twospotted spider mites (TSSM) in strawberries.

Teresia Nyoike, then a Masters student, worked on controlling aphids and whiteflies in zucchini squash using different mulches (white, reflective, and the living mulch buckwheat) in combination with Admire[®]. Effects on beneficial insects were also monitored. I assisted with pan trap, yellow sticky trap, in situ count, and leaf disc sampling both in the field and in the laboratory.

During my Masters and Research Assistantship, I learned many of the skills and techniques for sampling flower thrips from Dr. Alejandro Arevalo. He was then working on his dissertation research on the Ecology, monitoring, and control of flower thrips in blueberries in Florida and Georgia.

During my Research Assistantship and Ph.D. program, I aided Ph.D. student Craig Roubos with two projects. His main project involved blueberry gall midge monitoring and control. I assisted in collecting and dissecting blueberry buds. In his project on grape root borer monitoring and control, I helped with bucket trap sampling, applying the attract-and-kill Last Call[®], and applying insecticides via a soil drench.

During my Assistantship, I aided Masters student Aimee Fraulo with her research on TSSM in strawberries by helping to collect leaves and count mites.

Laboratory Projects

There were many projects conducted in the lab that were not related to a particular student's research. The main ones I was involved in as a research assistant were: helping with a grape field day, examining the effectiveness of insecticide treated spheres on Mediterranean fruit fly control, an insecticide efficacy trial for flea beetles on blueberries, and a preliminary study on insects present in blackberries in Florida.

The grape field day, put on by Florida A & M University, took place in Tallahassee, Florida in September. I helped to prepare a handout (listed under extension publications) and attended the field day with Dr. Liburd and the then Biological Scientist Jay Cee Turner.

A small scale field trial utilizing the insecticide treated spheres took place during my tenure as a research assistant. I helped to set out the spheres and the baited traps for the flies. I also aided with the statistical analysis.

During the final months of my assistantship, I helped to conduct an insecticide efficacy trial for flea beetle control in blueberries. I helped to apply the insecticides and examine the sampled leaves for flea beetle damage.

Another major project that I worked on during my Research Assistantship was a preliminary sample of insects in blackberries in Florida. I helped with yellow sticky trap sampling and to collect various plant parts for later sampling in the lab. Through a

technique developed by Jay Cee Turner, I removed the insects from the yellow sticky traps and put them in vials of 70% ethanol for later identification.

General Duties

I was also required to help with some general duties. I helped to maintain the greenhouse plants by watering and fertilizing them. General maintenance duties included keeping the greenhouses clean, weeding, cleaning used pots, disposing of dead or highly diseased plants, etc.

At the Citra Plant Science Research and Education Unit, pruning and weeding the grapes became a large part of my job during the summer. Harvesting blueberries was also a big job as was keeping them weeded.

As a research assistant, I also helped to maintain the big-eyed bug colony present in the laboratory.