Hello my name is Chris Morris. Throughout the course of this summer I provided my supervisor and crew with help in the field of pest control of sweetpotatoes. Here at SIMRU (Southern Insect Management Research Unit) our goal is to provide research on various crops and the pests that interfere with crop yield in order to help the United States better feed our people. At SIMRU, "We provide leadership on food, agriculture, natural resources, and related issues based on sound public policy, the best available science, and efficient management." We strive daily to uphold this mission statement and work toward our goal.

My job entails many tasks in the field with the crop and also others in and around the central station. Since the mid 1990's our unit has been checking moth traps. Once a week we check moth traps on five various locations in and around Stoneville. At each location there are two traps, one for Zea moths, and one for Virescent moths. In order to trap these moths we use pheromones that attract and keep the different moths separate in the traps. We count the moths and report the numbers to our supervisor. The purpose of this is to see the effects on BT and non BT cotton and corn. BT cotton and corn is genetically engineered to produce the toxin Bacillus Thuringiensis which upon ingestion kills Zea and Virescent larvae.

Also we started a corn rotation trial that we will be conducting for the next three years. In the corn we placed pit fall traps to attempt to catch wire worms. I read a journal called *Seed Bait For Soil Insects* and this is what we based our traps off of. These wire worms are larvae for one of sweetpotatoes most destructive pests, click beetles.

Also here at SIMRU our crew performs weekly insect counts on the seven different plots we have here on site and in Mound Bayou. We have been taught to

identify many insects in the mature and immature stages of development. We do checks in 6 different plots around the station: corn rotation, cages, Mound Bayou, variety, nematode variety, and nematode. We identify and count: twelve spot beetles, sugar cane beetles, click beetles, leaf hoppers, alfalfa hoppers, lep larvae, stink bugs, tortoise beetles and many more that are more uncommon. We also keep a rough estimate on the beneficial we find in the plots. Beneficial consist of ants, lady bugs, plant bugs, and parasitic wasps. We then report our findings to our supervisor. Our checks are essential to this unit because it is crucial to determine the threshold level of the insects in order to know when to spray the plots with insecticide before too much damage is done to the plants.