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To: Dr. Randy Luttrell
Research Leader
USDA, ARS, SIMRU

From: Julian Beamon
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Hello, my name is Julian Beamon. I am a junior at Mississippi State University majoring in Pest Management. I am a Biological Science Aid and I've been employed with the Southern Insect Management Research Unit since the summer of 2009. I assist Entomologist Larry Adams and Biological Science technician Chris Johnson in multiple tasks in finding economically feasible ways to control insects of sweetpotatoes in the Mississippi Delta and Hill Section.

Since I've been employed with SIMRU I have learned to identify pest of sweetpotatoes and methods of sampling for them. I have learned the proper way to measure and apply chemicals on field plots. I have had the pleasure of being apart of the second year trial of using the bait traps. Being able to identify Zea and Vir moth has made my understanding of BT resistant clearer. Being involved in the National Sweetpotato Variety Trial has increased my knowledge of the many different sweetpotato varieties.

The Southern Insect Management Research Unit is expected to improve the safety and efficiency of pest control for cotton, maize, soybean, sweetpotato and other row crops. SIMRU plans to develop sustainable, cost efficient, environmentally safe pest control methods for U. S. southern row crops.

From May 2003 to June 2005 a “Sweetpotato Yield Reduction Caused by Reniform Nematode in the Mississippi Delta” was conducted in Stoneville MS. The Study was conducted to determine the effect of variable reniform nematode population on sweetpotato production. There were populations of nematodes in the area where all plots were planted. In the three years there was no detection of nematode physical damage to the harvested storage roots when comparing the treated and untreated plots. Therefore, a potential concern for sweetpotato production in soils with uniformly high populations of reniform nematodes is that the damage may go unnoticed. The results indicated that, under high reniform nematode population densities, the population of nematicides before planting is critical to optimize yield of U. S. #1 sweetpotatoes.