

2013 Sweetpotato Variety Trials

Bailey Tubertini

USDA-ARS, Southern Insect Management Research Unit

Introduction

One study that has been a staple in our unit (SIMRU), is the sweet potato variety trials. For a number of years now our unit has conducted research on different varieties of sweetpotatoes from North Carolina, Louisiana, and Mississippi. The primary focus for this research is to discover if any variety produces a higher yield or shows a greater resistance to insects than the varieties currently used by commercial farmers.



Photographs show variety trials in Mound Bayou, MS.

Materials and Methods

The variety trial has many characteristics that differ from the rest of our sweetpotato studies. It is a much smaller and more precise study of each individual variety. We use two row skips and 25 foot plots to ensure we get accurate data specific to each type of sweet potato. We use the transplanting method to implement each variety and use a sweep net to gather our data on insect which falls in line with the rest of our sweetpotato research. Weed management is also universal throughout our studies due to sweetpotatoes' susceptibility to herbicides, which means any broad-leafed weed must be pulled by hand.

Summary

The results and findings are submitted to the National Sweetpotato Collaborators Group each year. This is a group of researchers located throughout the country that our results can be compared to. These groups compare the yield of each variety, types of fertilizer used, plot size, and amount of irrigation used in each study. I believe the variety study is one of our most important studies because if we can find a specific variety that shows a significant increase in yield in specific areas, we can suggest that particular variety be used by commercial farmers to increase their output and profits.

References

Calyor, A., D. Picha, K. Piecota. 2013. National Sweetpotato Collaborators Group Progress Report, 2012. www.sweetpotatoes.org

Acknowledgements

I would like to thank Larry Adams and Chris Johnson for assisting me with this project.