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2004FLORIDA AGRICULTURAL EXPERIMENT STATION
INSTITUTE OF FOOD AND AGRICULTURAL SCIENCES¹Check-OFF Funds - Reports

UNIT: North Florida Research and Education Center-Marianna

DATE: 1/10/05

RESEARCHER(S):

Ann Blount (Forage Extension Specialist, Univ. of FL, Marianna)
Richard Sprenkel (State Extension Entomologist, Univ. of FL)
Carlye Baker (Plant Virologist, Florida State Division of Plant Industry, Gainesville)

Cooperators:

Clyde Smith (multi-county IPM specialist, Marianna)
Douglas Mayo (Jackson County Extension, Livestock Specialist)

TITLE: Evaluation of Peanut Stunt Virus (PSV) on perennial and cultivated peanuts in Florida

OBJECTIVES:

1. Assessment of the distribution, severity, and host range of PSV on cultivated peanut (*Arachis hypogaea*), perennial peanut (*Arachis glabrata*), and weed species (beggarweed, *Desmodium* spp.; white clover, *Trifolium repens*, etc.)
2. Identify potential insect vectors on known hosts of PSV
3. Develop and deliver extension information on issues related to PSV

METHODS:

Systematic sampling of perennial peanut sites were made in Florida, south Alabama and south Georgia to test for PSV infection on suspect *A. hypogaea* and *A. glabrata* plantings. All samples were submitted to the Florida Division of Plant Industry for analysis. Aphid samples were collected at all sites where insect vector was found to identify vector species. Weed host identification and verification for positive PSV was made at several sampled sites. A field day to discuss disease, vector relationship and management was held.

²RESULTS AND CONCLUSIONS:

To date 124 perennial peanut field samples and 3 suspect cultivated peanut samples have been tested for the presence of PSV. Perennial peanut varieties infected with PSV were evaluated for yield, nutrient composition and stand health following specific management techniques to minimize the impact of the virus. Richard Sprenkel visited the Florida Division of Plant Industry and became familiarized with aphid vectors of PSV. A North Florida Perennial Peanut Field Day was held 6 Oct. 2004 at the NFFREC-Marianna and extension information concerning PSV was shared with concerned peanut producers. Additionally, forage specialists and plant pathologists at the University of Georgia, Auburn University and Texas A&M University were updated on current information related to the virus. We plan to continue monitoring perennial and cultivated peanut stands in 2005.