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383

TITLE: Enhancing Research and Extension Efforts in Peanut Through On-Farm Testing and Field Tours

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Research was initiated at three on-farm sites and at three research stations during 2006 in North Carolina to evaluate the effect of various production and pest management practices on peanut yield and quality. Experiments were conducted in Bertie (Peanut Belt Research Station), Columbus (Border Belt Tobacco Station), Edgecombe (Upper Coastal Plain Research Station), and in grower fields in Bertie, Duplin, and Sampson counties. Pest management trials evaluating the impact of variety selection, fumigation for CBR, planting pattern (twin row versus single rows), and leaf spot spray programs (calendar versus weather-based advisories) were conducted at one on-farm site in Bertie County and in three separate fields at the Peanut Belt Research Station. Trials also included comparisons of runner, virginia, and spanish market types with two digging dates.

Results indicate that spraying fungicides for foliar disease using weather advisories continues to be as effective as spraying bi-weekly. Variety reaction to CBR, Sclerotinia Blight, and tomato spotted wilt reinforced previous findings. The enhancer FirstUp did not affect peanut response to the in-furrow inoculant Lift. Additionally, the fungicide Abound (azoxystrobin), the insecticide Admire, and the fertilizer Asset RTU did not affect inoculation of peanut or pod yield when the commercial inoculant Lift was applied in the seed furrow. The fungicide Headline (pyraclostrobin) continues to show problems when applied with Lift.

Pod yield of the runner market types Georgia Green, Georgia OR1, Georgia OC2, Georgia O3L, and Virugard were comparable to yields of standard virginia market types. The varieties Tamspan 90 and Olin generally yielded less than the other varieties.

A field tour was held in early June at the Peanut Belt and Upper Coastal Plain Research Stations to observe a variety of weed management and production trials. Plot tour locations also included on-farm tests in Duplin and Sampson Counties. A variety of fellow research and extension colleagues, farmers, and agribusiness personnel participated in the plot tour. Results from these trials and experiences during 2006 will be presented at production meetings, included in popular press articles, and presented at scientific meetings.

IMPACT STATEMENT:

Results from these activities resulted in continued development of a research base needed to address key production and pest management issues associated with peanut production in all regions of North Carolina. Field tours allowed dissemination of information to appropriate clientele and resulted in excellent interaction among components of the peanut industry.