

**ANNUAL PROGRESS REPORT
TO
NORTH CAROLINA PEANUT GROWERS ASSOCIATION, INC.**

TITLE: Offsetting the Cost of Greenhouse Use at NCSU
LEADER(S): Thomas G. Isleib and H. Thomas Stalker
DEPARTMENT(S): Crop and Soil Sciences

REPORT:

Dr. Isleib's greenhouse (C-105) and Dr. Stalker's (A-101 and A-102) were used for several purposes: (1) maintenance of South American wild diploid species that do not produce seeds and sterile species hybrids, (2) production of seedlings of seed-reproduced species bound for the regeneration nursery at the Sandhills Research Station near Jackson Springs in Moore County, (3) winter-time erection of a mist chamber in which to conduct tests of reaction to Sclerotinia blight and Southern stem rot (*Sclerotium rolfsii*) under controlled environmental conditions, (4) "tube" tests of Cyliandrocladium black rot (CBR caused by *C. parasiticum*) and damping-off fungi (*Aspergillus niger*, *Pythium myriotylum*, and *Rhizoctonia solani*) in plastic "Cone-tainers," and (4) hybridization of parents as part of the wild species and variety development programs.

The \$2,000 acquired from the NCPGA to pay per-square-foot charges were billed to the project and transferred to the greenhouse account.

IMPACT STATEMENT

The programs made crosses, tested disease reactions of germplasm, and maintained/increased seed and/or plants of peanut wild species. The impact of the program comes through the release of new varieties, all of which were initially hybridized in the greenhouse, and the majority of which now contain some small amount of wild species origin.