## SUN GRANT POPULUS FEEDSTOCK PROGRAM

## **Randall J. Rousseau**<sup>1</sup>

## <sup>1</sup>Department of Forestry, Mississippi State University, Mississippi State, MS

The focus of the project is to develop clones of either *Populus* species or hybrids for the Southeast, Pacific Northwest, Midwest, and North-Central United States. The initial step was to establish a series of consolidated clone trials where each of the four cooperators, which included ArborGen, GreenWood Resources, University of Minnesota, and Mississippi State University, provided 20 clones. This test series were established in 2010 and 2011 at five locations. The clones contributed by the University of Minnesota were primarily recently developed P. deltoides x P. nigra (DN) hybrids. The hybrid clones provided by GreenWood Resources incorporated a variety of species combinations including P. trichocarpa x P. deltoides (TD), P. trichocarpa x P. nigra (TN), P. deltoides x P. maximowiczii (DM). The ArborGen clones were primarily *P. deltoides*, but also included three TD hybrids. Mississippi State provided all *P*. *deltoides* clones. Growth and disease ratings are the two traits that will be examined prior to more intensive testing. Breeding began in 2011 and is aimed at producing both intra- and interspecific hybrids for use on more marginal sites. The parents selected for the initial stages of breeding include more recent P. deltoides and P. nigra selections. Other efforts in 2010 and 2011 include a P. nigra clone test, an open-pollinated P. deltoides progeny test and a series of permanent growth and yield plots. Future plans call for additional clonal screening trials, intensive clonal tests, and an increased emphasis on breeding efforts.