**Registration of Lutescent-Leaf Peanut Genetic Stock**

Lutescent-Leaf peanut (*Arachis hypogaea* L. subsp. *hypogaea* var. *hypogaea*) genetic stock (Reg. no. GS-9, PI 641768) was released by the Georgia Agricultural Experiment Stations in 2005. It originated as an off-type plant in the F9 advanced Georgia peanut breeding line, GA 931307. Neither parent ['Georgia Runner' (Branch, 1991) × ‘Southern Runner’ (Gorbet et al., 1987)], early segregating progenies, or previous years of testing GA 931307 showed this distinct leaf characteristic. So, it is assumed that Lutescent-Leaf arose as a spontaneous mutation.

Lutescent-Leaf has an unusually bright yellow leaf color. It differs from other chlorophyll-deficient mutants in that Lutescent-Leaf fully develops to maturity under direct sunlight. Lutescent-Leaf is readily apparent at the early seedling stage. Younger age leaves and plants are more pronounced than older leaves and plants for the bright yellow color, which is opposite from the aureus mutant.

Lutescent-Leaf has a runner growth habit and medium maturity with nodules present on the roots, which distinguishes it from the yellowish leaves caused by non-nodulation mutants. It also has a tan testa color, large seed weight (about 85 g 100−1 seed), and an oleic (C18:1) to linoleic (C18:2) fatty acid oil ratio of 1.7 to 1.

Crosses involving the Lutescent-Leaf mutant were made both within subspecies *hypogaea* and between subspecies *hypogaea* and *fastigiata* to determine its inheritance (Branch, 2001). Two complementary recessive genes, designated *lut1* and *lut2*, were found controlling the Lutescent-Leaf trait. No maternal or cytoplasmic effects were detected from reciprocal crosses.

Geneticists or breeders can use this genetic stock as an unusual leaf marker in linkage or other genetic studies. Limited quantities of seed are available. Lutescent-Leaf peanut genetic stock on written request from the corresponding author for the first 5 yr. Recipients are asked to make appropriate recognition of the source of the genetic stock if it is used in the development of a new cultivar, germplasm, parental line, or another genetic stock.

**References**

