

Comparing GA-06G to other Cultivars for physiological trait relationships for seed germination, vigor, stand establishment, & production - T.L. Grey – UGA

Previous research documented the tremendous impact of maturity on peanut grown for next year's seed supply, not only on germination and emergence, but also on subsequent life history traits and physiological performance of peanut during the entire cropping season. It has also shown that immature seed of some peanut cultivars show subsequent plant growth and development delays and that some cultivars are more affected by seed immaturity than others. Results from previous research has identified that late season seed maturity affects harvesting quality of seed. Developing a baseline for establishing why GA-06G has robust seed vigor and consistent performance each year by looking at additional physiological traits will assist in understanding why there is a generational continuity from one season to the next season for this cultivar, the standard for over 12 years. Having baseline information about GA-06G with respect to other cultivars including high oleic cultivars such as GA16HO, will allow us to establish the seed vigor and physiological information that can be correlated. The objective of this project was to evaluate GA-06G to other cultivars seed lots produced from grower fields to determine if a generational impact of seed vigor and physiological traits can be demonstrated.