

Seeding Rate as Affected by Planting Date for Three Peanut Cultivars

R.S. TUBBS*, and W.S. MONFORT, Crop and Soil Sciences Department, University of Georgia, Tifton, GA 31793.

Peanut (*Arachis hypogaea* L.) responds in different ways to various management practices. Two highly influential factors include seeding rate and planting date. Early planting is more heavily dependent on soil temperature and slows emergence, and is more susceptible to tomato spotted wilt virus (TSWV) compared to later planting, although late planting can result in the crop not reaching full maturity. Denser seeding rates typically result in reduction in TSWV incidence compared to sparser seeding rates, but it is more expensive to plant more seed. However, there are not studies that test seeding rates in interaction with planting date. Since seeding rate recommendations vary for single and twin row patterns, each were used as separate trials. Experiments were conducted in Tifton, GA from 2018-2020 to evaluate seeding rates of approximately 16.4, 19.7, 22.5, and 26.2 seed/m at different planting dates. In 2018, three planting dates were used (early May, mid May, and early June). In 2019 and 2020, an earlier planting date was added (mid April), as well as the three dates from the first test. Three cultivars were used in all tests (Georgia-06G, TifNV-HiOL, FloRun™ 331). A split plot design was used with planting date as the main treatment effect, and a split involving a two-factor factorial of seeding rate and cultivar. In all years, yield was maximized at the early May planting