Evaluating Emergence of Spanish Peanut (*Arachis hypogaea* L.) for Organic Peanut Production

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Organic peanut production is centered in West Texas with some estimates indicating that as much as 98% of all organic peanuts in the U.S. are being produced in the region. Organic producers face limited options for control of several key production issues. A major area of concern is seedling emergence and seedling vigor issues. Many factors can play a role in stand establishment; however, this research was to specifically determine the extent that variety can play a role in seedling emergence and seedling vigor and stand establishment. The lack of the ability to use commercial seed treatments in organic production systems often results in poor germination and stand establishment. The Texas A&M AgriLife Research Peanut Breeding Program initiated a preliminary evaluation of current breeding lines in the 2019 season to see if differences could be observed between breeding lines based on stand count. Seven breeding lines and three commercially available checks were tested at Stephenville, Tx. under organic production practices with no pre-emergence herbicides being applied. Plots were planted on 7/28/19. Each entry was replicated 3 times and was tested with and without the commercially available seed treatment Trilex Star®. Plots were arranged in a randomized complete block and stand counts were taken at 7, 14, 21 and 28 days. Differences were observed based on date of stand counts, whether the breeding line was treated or not and between entries. The data will be presented. These results will be expanded on and used to establish the development of breeding lines specifically suited for the unique needs of organic peanut producers.