

Impact of In-Furrow Fertilizers on Peanut Germination in Multiple Locations

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Uniform stands are important to reduce disease risk and sustain high yield potential in peanut production. In an effort to achieve this desired start to the growing season, industry has begun to recommend at plant in-furrow fertilizers with minimal research available to support their recommendations. Riser products applied in-furrow were evaluated on peanut seed germination in a greenhouse trial in Tift County, Georgia, two on-farm trials in Worth County, Georgia and multiple states across the peanut belt. States included Florida, Alabama, South Carolina, North Carolina, and Virginia. The effects of Riser (7-17-3+micronutrients) at rates of 4.7, 9.4, 18.7, 28.1 l/ha and a non-treated check were evaluated on seed germination. Treatment responses were assessed at 6, 8, 10, 12, and 14 days after planting in most trials. Germination percentage was higher in the untreated check and the 4.7 and 9.4 l/ha rate of Riser. In-furrow application of Riser at 18.7 and 28.1 l/ha reduced emergence from 6-14 days after planting. Similar results were observed in the two on-farm trials as well as the other states where the two highest rates of fertilizer significantly reduced emergence rates compared to the untreated control from 10-15 days after planting. In all experiments, Riser reduced the rate of emergence for majority of the rates and final plant stands at the rate of 18.7 and 28.1 liters per hectare compared to the untreated check.