

In 2022 Pulaski county conducted the 2<sup>nd</sup> year of a multi-year peanut micronutrient trial to assess Zumsil (24% solution of monosilicic acid) when applied foliarly.

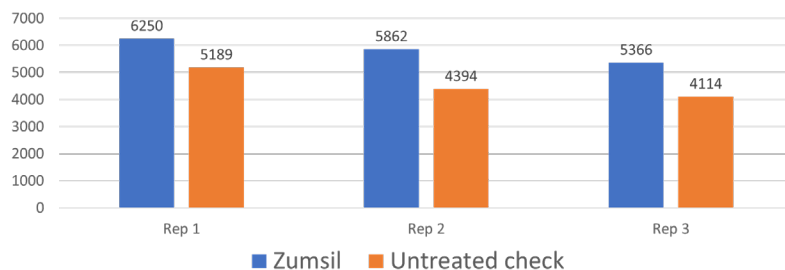
As Peanut growers face rising input costs, they look for ways to improve or maintain yield while reducing expenses. There are many unproven products such as alternative fertilizers which promise yield increases without data to back those claims. Without replicated data, our producers are forced to make decisions on inputs without all the relevant information. Data for the use of Zumsil (24% solution of monosilicic acid) on peanuts does not exist. A small research sprayer was used to apply 2 applications of Zumsil at 1 quart per acre on irrigated 06G peanuts. (152" boom, 19" nozzle spacing, 15 GPA, 5 MPH, and 60psi)

Applications were made on June 21 (35dap) and August 1 (76dap). Replications were dug on October 3 and harvested on October 7. After harvest, each replication was weighed and row length was measured to calculate yield per acre. The trial was replicated on small research plots at the Tifton RDC pivot using a backpack sprayer.

While the on-farm trial showed a statistically significant yield increase, the small plot trial at the RDC did not. Conflicting datasets lead us to believe that there may be a benefit to Zumsil in peanut in certain conditions, but additional research must be conducted to confirm this, and to determine what those conditions are. On farm plots were rated for disease prior to harvest. There was no discernable difference in disease pressure in treated vs. untreated.

Further research will be conducted to see if the results of this trial can be replicated. The scope of future trials should be expanded to irrigated vs. non-irrigated, high-yield environments vs. poor-yield environments, etc... Additional research will be conducted to determine if other factors such as temperature, water availability, soil fertility, etc... also play a role in the effectiveness of Zumsil on peanut yields.

2022 Pulaski Co. Zumsil Trial



2022 RDC Pivot Small Plot Zumsil Trial

