Effect of Boron, Calcium and Zinc Nutrition on Growth, Yield and its Attributes in Groundnut (*Arachis hypogaea* L.) under Costal Sandy Soils

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ABSTRACT

Two field experiments were conducted at Agricultural Research Station farm, Darsi, Prakasam District, A.P. to assess the effect of Boron, Calcium and Zinc nutrition on growth, yield and its attributes in groundnut under costal sandy soils in Prakasam district of Andhra Pradesh during 2018-19 and 2019-20. Pooled analysis of the experimental results that idicated there was significant difference among treatments except in plant height and number of branches per plant. The scrutiny of data on leaf area pertaining to the treatment T6 (RDF+Basal dose of Borax & $ZnSO_4$ and placement of Gypsum) significantly increased over other treatments during flowering (55%). The groundnut plants treated with RDF + Basal (Borax + $ZnSO_4$) + Gypsum at 35 DAS (T6) recorded significantly higher dry matter production (58.4 g/plant) over other treatments. The treatment with RDF + Basal (Borax + ZnSO4)+ Gypsum at 35 DAS (T6) produced significantly higher kernel yield (871.9 kg/ha). Results of this experiment suggested that basal application of RDF + (Borax + $ZnSO_4$) along with Gypsum placement at 35 DAS resulted in higher growth and yield of groundnut cv. TAG 24 during kharif season in the coastal sandy soils of Prakasam District of Andhra Pradesh state. Finally these findings will help our farmers to adopt location specific Integrated Nutrient Management practices which will be synchronized with crop demand and also will reduce the cost of production.

Keywords: *Boron, Calcium, Sandy soil and Zinc.*