Effect of Boron and Calcium Application, Harvesting Dates on Seed Quality and Yield Components of Groundnuts (*Arachis Hypogaea* L.)

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The experiment to study the effects of boron and calcium fertilizer, harvesting dates on groundnut seed quality, and yield components has been established for the 2020/2021 copping season at two sites, Chitedze Research Station and Horizon Farms, Lilongwe, Malawi. CG9 (ICGV-SM 08503) and Chitala (ICGV 99568) varieties were planted. Boron and calcium fertilizers were applied at 560g/ha and 200kg/ha, respectively. The pH at Chitedze site was moderately acidic (5.3), boron was very low (0.41µg B/g), calcium was very high and organic matter was also very high (5.04%). The pH at Horizon site was almost neutral (6.0), boron was low (0.64µg B/g), calcium was very high and organic matter was medium (1.73%)

The performance of groundnut plants above ground shows a variation in plant growth responses to boron and calcium application as compared to the unfertilized groundnut. There is variation in terms of plant height and canopy width of groundnut in plots applied with boron only and with those applied with boron and calcium. At Chitedze site, application of calcium increased plant growth in CG9 variety compared to boron only or a combination of boron and calcium. Results on yield and yield components as affected by fertilizer inputs and implications of the findings are presented.