

## **Effect of Boron and Calcium Fertilizer Application, Harvesting Dates and Storage Technique on Seed Quality and Yield of Peanut (*Arachis hypogaea L.*)**

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An experiment on the effect of boron and calcium fertilizer application and harvesting dates on peanut seed quality and yield was conducted at Horizon Farms and Chitedze Research Station, Lilongwe, Malawi in the 2020/2021 cropping season. In the field, boron and calcium was applied at the rate of 560g/ha and 200kg/ha, respectively. After a 4-month storage of peanuts in-shell or shelled, peanut seed quality was assessed under a screenhouse study at Bunda College, Lilongwe, Malawi. CG9 (ICGV-SM 08503) and Chitala (ICGV 99568) peanut varieties were used in the study.

The results showed that, the interaction between harvesting time and storage had an effect on germination percentage, seedling vigor and speed of germination of the two peanut varieties ( $P < 0.05$ ). The in-shell stored peanuts had higher seedling vigor, germination percentage and speed of germination as compared to the shelled peanut. Both boron and calcium fertilizer application had a significant effect on seedling vigor, germination percentage and speed of germination ( $P < 0.001$ ). Boron and calcium fertilizer application had an effect on grain yield of peanuts ( $P < 0.05$ ). Higher grain yields were observed in peanuts treated with boron and calcium than the untreated.