Faculty of Agricultural Sciences

Department of Crop and Soil Sciences

EFFECT OF TIMING OF CLAY LOAM EARTHING ON GROUNDNUT VEGETATIVE GROWTH AND YIELD PARAMETERS

SIMBARASHE SIBANDA

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SUPERVISOR: MR M. MOYO

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ABSTRACT

The experiment was conducted during 2016/17 cropping season at Madlelenyoni village in ward 5 of Umguza District under Matabeleland North Province which is under Agro-ecological Region IV in Zimbabwe. The area is characterized by deep well drained clay loam soils receiving mean annual rainfall of 550 mm. The experiment was carried out to investigate on the effect of timing of earthing on groundnut vegetative growth and yield parameters. The RCBD experimental design was used and the slope being the blocking factor. There were two blocks and four different treatments which were; earthing up before flowering (30 DAP), earthing up at flowering (60 DAP), earthing up after flowering (90 DAP) and the control treatment where earthing up was not done. The treatments were replicated four times in each block thereby making a total of 32 experimental units. The results revealed that there was no significant difference in groundnut yield (P>0.05) over the control due to timing of earthing on Natal common variety. The results also showed that timing of earthing had a significant influence on the vegetative growth of Natal common groundnut variety (P<0.05) as 60 DAP and 90 DAP treatments increased vegetative growth while 30 DAP treatment reduced vegetative growth over the control unearthed treatment. The number of pods per plant was also significantly affected (P<0.01) and only 60 DAP treatment had higher number of pods compared to the control while all other treatments had lower number of pods compared to the control. It is concluded that earthing up procedure is not recommended on Natal common variety.