

Oyem, I. M. (2011). Relationship between Mycorrhizal infection ratings and chlorophyll A content of root segments of cassava clones (TMS 30572 and 20555) grown in Bentex T – T-treated soil. *The Pacific Journal of Science and Technology*, 12(2):426-432.

Abstract:

Two clones of cassava (TMS 30572 and 30555) were grown in varying levels/litres of bentex T-treated soil. Mycorrhizal infection ratings and chlorophyll a content of cassava clones were studied. The level of root colonization by vesicular-arbuscularmycorrhizal (VAM) fungi affected the chlorophyll content of the test plant. The unamended soil (control) had the highest VAM fungi root colonization (84 %). Chlorophyll content was least at this treatment (91.1 $\mu\text{g}/\text{mm}^2$) and highest at the 50 $\mu\text{g}/\text{g}$ soil treatment (133.9 $\mu\text{g}/\text{g}$). The relationship between mycorrhizal infection ratings and the chlorophyll content of the plant was correlated ($r=0.425$) in TMS 30572 and in TMS 30555 ($r = 0.647$). The test parameters had minimal variation ($p>0.05$) between treatments in both clones of the plant. However, clonal differences were observed in the level of root colonization by VAM fungi. The relevance of these results in the management and growth of crops is discussed.

Keywords: Cassava, VAM fungi infection, chlorophyll content, Bentex T, soil treatment.