

**THE EFFECT OF DEPTH, WIDTH AND FERTILIZER ON THE ESTABLISHMENT  
AND GROWTH OF *Moringa oleifera* (Lam) SEEDLINGS**

**BY**

**ALONGE OLUMIDE OLUWATOSIN**

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**DEPARTMENT OF FORESTRY AND WILDLIFE MANAGEMENT,  
COLLEGE OF ENVIRONMENTAL RESOURCES MANAGEMENT,  
FEDERAL UNIVERSITY OF AGRICULTURE, ABEOKUTA, OGUN STATE,  
NIGERIA**

**SUPERVISOR: PROFESSOR. A.M ADURADOLA**

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## ABSTRACT

This experiment investigated the effects of depth of planting hole, width of planting hole and fertilizer on the growth and establishment of *Moringa oleifera* (Lam). Seedlings of *Moringa oleifera* were subjected to three different levels of planting depth (10cm, 15cm, and 20cm) and, two different levels of width (10cm and 15cm). The fertilizer applications were at two levels which are organic fertilizer and control. The results showed that seedlings planted with organic fertilizer, planting width of 10cm, depth of 10cm ( F<sub>1</sub>W<sub>1</sub>D<sub>1</sub>) produce the best height (38.3cm), collar diameter (0.40mm), fresh weight (12g) and absolute growth rate (1.63) at eight weeks on the field. The study also shows that the treatment that were subjected to organic fertilizer, planting width of 15cm and depth of 10cm produce the highest leaves (11.5 leaves) and dry weight (2.5g). Seedlings that were subjected to organic fertilizer, planting width of 10cm, and depth of 15cm produce the highest relative growth rate (0.22), while seedlings that were subjected to organic fertilizer, planting width of 15cm, and depth of 15cm produce the highest net assimilation rate (0.018). However, it was observed that the above named treatments positively enhanced the growth and development of *Moringa oleifera* seedlings.