

## MINERAL AND ORGANIC FERTILIZERS IMPACT' ON THE GROWTH OF *OCIMUM GRATISSIMUM* L. PRODUCED IN ABOMEY-CALAVI IN SOUTHERN BENIN

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### ABSTRACT

Market gardening is practiced in all regions of Benin and is made up of traditional crops including *Ocimum gratissimum* L., and on the other hand leafy vegetables and other exotic crops. This study conducted in the municipality of Abomey-Calavi aims to evaluate different doses of fertilizers for the sustainable production of this traditional vegetable which, due to its characteristics, is appreciated by the populations. Following a field survey, an experiment was conducted in a completely randomized Fisher device in two repetitions on two varieties of *Ocimum gratissimum*. Four treatments were applied through the use of organics fertilizer (compost Or, Super Gro, neem meal AgroBio) and NPK 20-20-20 foliar fertilizer as mineral. Five variables such as leaf length, stem length, leaf diameter, stem diameter and number of leaves were measured. The analysis of the different variables allow to observe that the compost Or at a dose of 20 T/ha has a significant effect on the length of the stem and the number of leaves. On the other hand, with the treatment made up of super Gro at a rate of 9 g for 16 L of water, the plants developed more than with the gold compost (18.5g) + meal (45.2g) and NPK treatments in a dilution 9 g for 05 L of water ; but less developed than plants treated with Compost Gold. Control plants that received no treatment showed the smallest measurements of leaf length, leaf diameter, stem diameter, stem length and number of leaves; compared to other treatments.

**KEYWORDS:** Growth, Fertilizer, *Ocimum Gratissimum* L., Treatment, Vegetable

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