

## Effect of fertilizer types on the growth and yield of two cabbage varieties.

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### ABSTRACT

*Objectives:* To determine the effect of fertilizer types on the growth and yield of two cabbage (*Brassica oleracea* L.) varieties.

*Methodology and results:* The treatments involved 8 fertilizer types (NPK, neem, alesinloye organomineral, sunshine organomineral, sunshine organic, cassava peel compost, alesinloye organic and pacesetter organomineral fertilizers) applied at two rates (0 and 60kg/ha) each to two cabbage varieties (Copenhagen market and F1 milor). The treatments were laid out in randomized complete block design fitted into split plot with variety as the main plot factor and fertilizer types as sub plot factor, replicated three times. Data were collected on growth parameters and yield attributes of cabbage. The growth parameters and yield attributes were significantly influenced by fertilizer types and variety. At 12 weeks after sowing, Copenhagen market had higher mean number of leaves (17.50), taller plant height (7.39cm) and better yield attributes over F1 milor. The highest growth parameters (number of leaves and plant height) were obtained from plant that received cassava peel compost in Copenhagen while NPK and neem produced the best in F1 milor. Organomineral fertilizers (sunshine, aleshinloye and



pacesetter) gave the highest head length, diameter, and marketable yield in both varieties. The highest yield (34.8 t/ha) was recorded from plants treated with sunshine fortified fertilizer while control gave the least (14.8 t/ha).

*Conclusion and application of findings:* Organomineral fertilizers (pacesetter followed by sunshine and alesinloye), compared with NPK (15:15:15) enhanced optimum yield of cabbage varieties. Copenhagen market produced better head yield than F1 milor with or without fertilizer therefore can be recommended as the better variety among the two in Ogbomoso, South West Nigeria.

**Keyword:** *Brassica oleracea L, organomineral, mineral, organic, head yield*

