

## EFFECTS OF FERTILIZER TYPE ON PERFORMANCE OF MELON IN A MAIZE-MELON INTERCROP

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### ABSTRACT

Two Field experiments were conducted at Ibadan, Nigeria between March, 1995 and July, 1996 to assess the effects of organic and inorganic fertilizers on the growth and yield of melon in a maize melon intercrop. Organic fertilizer was an equal mixture of domestic waste collected from a composed refuse dumping site and stale cow dung applied at 10 t ha<sup>-1</sup> while inorganic fertilizer was 150kg N supplied as Urea and 50 kgP as Single Super phosphate fertilizer ha<sup>-1</sup>. The mixture of organic and inorganic fertilizer treatment was 5t ha<sup>-1</sup> organic manure and 75 kg N + 25 kg Pha<sup>-1</sup>. Organic manure application gave yields that were not significantly higher than from the untreated plants, while inorganic fertilization gave significantly higher yields. Complementary application of organic and inorganic fertilizers also gave yields that were comparable to that from inorganic fertilizer application. 265 kg ha<sup>-1</sup> and 296 kg ha<sup>-1</sup> were realized from application of organic and inorganic fertilizer in the first and second year, respectively. 254 kg ha<sup>-1</sup> and 297 kg ha<sup>-1</sup> were realized from sole inorganic fertilizer application in the first and second year, respectively. A complementary application of organic and inorganic fertilizers can be employed to cultivate melon in intercrop with maize. It reduces the rates of application of either the fertilizers and so, lessens the hardship and problems of sole application rates.

**Keywords:** Organic manure, Inorganic fertilizer, Fertilizer mixture, Melon.