

ABSTRACT

An experiment at Egerton University in Kenya studied effects of vermicomposts and bioslurry on growth, yield and postharvest quality in statice. Three vermicomposts prepared from Kitchen waste (V1), mowed lawn grass (V2) and Weed biomass (V3) were mixed at a rate of 40% by volume with garden soil and tested against the untreated control (V0). Bioslurry from a digester at Tatton Agricultural Park in the university was applied at 7.8 tons/ha (B1) alongside untreated control (B0). The results showed significant differences at $P \leq 0.05$ between treatments, where vermicomposts and bioslurry were separately applied compared to the controls. V1 and B1 had the most stems per plant (22.9, 26.0) and (18.7, 19.8) compared to the control (15.2, 18.1) in season 1 and 2 respectively. The number of stems per plant increased to 26.3 in season 1 and 27 in season 2 in the plots treated with both Kitchen waste vermicompost and bioslurry (V1 \times B1). The flower stem lengths were higher under V1 treatment (80.9 and 95.8) cm but similar to V3 which recorded 78.9 and 92.2 cm in season 1 and 2 respectively. In season 1 and 2 respectively, bioslurry treatment (B1) recorded flower stem length of 80.0 and 92.8 cm, compared to the control (53.4 and 64.7 cm). Combined treatment V1 \times B1 increased flower stem lengths to 104.1 and 121.1 cm in season 1 and 2 respectively. In season 1 and 2 respectively, V3 \times B1 had the longest vase life (22.2 and 22.9 days) when compared to V1 \times B1, V2 \times B1, V1, V2, V3 and B1 (15.4 to 20.1 days) but all exceeded the untreated plots (11.2 and 12.2 days).

Key words: Statice, bioslurry, vermicompost, growth, postharvest.