

ABSTRACT

There is yawning variation in yield of storage roots and vines of sweet potato (*Ipomoea batatas*) among farmers due to use of different cutting positions and pruning of vines at different levels. This study was carried out to establish the cutting position and the vine pruning level that give the best yield of both the storage roots and vines. The study was conducted in a 3x3 factorial arrangement in Randomized Complete Block Design (RCBD) with three replications. Treatments included cutting position at three levels (apical cutting, middle cutting and basal cutting) and pruning at three levels, 0%, 25% and 50% respectively. Pruning was done 50 days after planting. And storage root harvesting was done 100 days after planting. The two measurements were summed up to give the total vine weight. Storage root length, diameter and weight were measured at 100 DAP. Storage root length indicated significant difference ($P < 0.05$) only among cutting positions with highest mean length (16.20 cm) obtained from apical cutting and the lowest (11.98 cm) from basal cutting. Storage root diameter, storage root weight and vine weight indicated significant interaction ($P < 0.05$) of cutting position and vine pruning level. Highest mean root diameter and root weight were obtained from middle cutting and 25% vine pruning level, with the lowest being obtained from basal cutting and 50% vine pruning level. Highest vine weight was recorded from middle cutting and 50% vine pruning level, with the lowest being recorded from basal cutting and 0% vine pruning level. Both middle and apical stem cuttings can be recommended for higher storage root and vine yield. Vine pruning at 25% can be adopted for higher storage root yield while pruning at 50% can be suggested for higher vine yield.