Effect of crop load on nutrient status of starfruit cv. B10 under netted structure

ABSTRACT

The macronutrient status and the amount of nutrient removed from harvested fruits, pruned leaves and branches of starfruit of various crop loads grown under netted structure in MARDI Serdang, Selangor, was investigated. Only leaf N was significantly reduced with increase in crop load. The fruit and branch macronutrient concentrations were not influenced by the crop load. As crop load increased, the harvested fruit dry weight increased significantly ($p \leq 0.05$). The total dry weight of leaf and branch removed after harvest was not significantly influenced by the crop load. The amount of nutrient (N, P, K, Ca and Mg) removed by harvested fruits increased significantly ($p \leq 0.05$) with increase in crop load. However, the total amount of each nutrient removed after harvest (inclusive of harvested fruits, and pruned leaves and branches) were not significantly influenced by the crop load. This was due to the high vegetative growth of low crop load trees. The nutrient budget derived showed that the amount of fertilizer (720 g N: 735 g P2O5: 1 440 g K2O) provided to the plants were sufficient to support the various crop loads.

Keyword: Averrhoa carambola; Plant nutrient status; Crop load; Nutrient budget; Netted structure