



Region of bunch pruning influenced the bunch and fruit physical traits of 'PITA 24' plantain (*Musa AAB*) hybrid.

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ABSTRACT

Objective: Achieving maximum uniformity of fruit size within a banana or plantain bunch is highly important and has commercial implications. In bananas, distal fruits which often do not reach commercial size constitute a loss through respiration and redistribution of dry matter with no commercial value. This study aimed at promoting uniformity in fruit size and quality within a bunch through pruning at opposite ends of a developing infructescence.

Methodology and results: Treatments comprised of proximal pruning (PP), distal pruning (DP), pruning at both ends of the bunch (BE) and a no-prune control. These were evaluated in randomized complete blocks of four replicates. Two nodal clusters (hands) were severed from the developing bunch as soon as the last female hand opened. Male bud was removed in all the pruned bunches. Data were collected at harvest on bunch weight, hand and fruit count, bunch-fill index and number of properly-filled fruits per bunch. Others were harvest index, fruit weight, length and girth, pulp dry matter content and



fruit edible proportion. Results showed a non-significant difference in bunch weight between the treatments, although fruit and bunch yield drastically reduced in the proximally pruned bunches. Bunch and fruit metric traits were similar and superior in bunches pruned at the distal (DP) and both ends (BE) of the bunch. Bunches pruned at both ends also produced fairly uniform fruits.

Conclusion and application of findings: Our results revealed that an improvement in fruit yield and quality could be achieved through selective removal of some distal fruits with the terminal bud, but a complementary excision of some proximal fruits is necessary when uniformity of fruits is desired.

Key words: Bunch yield, fruit quality, bunch pruning, plantain.

