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Explant for *in vitro* establishment of soursop (*Annona muricata* L.)

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Abstract

The micro-propagation of tropical and subtropical fruit trees through nodal segments permits the clonal propagation of selected individuals. This research was conducted with the purpose of determining the effect of explant type in the *in vitro* establishment of *Annona muricata* L. Shoot tips and segments with nodal positions 3, 4, 5, 6, 7, 8 & 9 counting from the apex to the base of the branches (NP3, NP4, NP5, NP6, NP7, NP8 & NP9 respectively) were used in this case. The statistical design was completely random with split-plot design, with 3 replications of 10 explants each. The variables measured were percentage of fungi contamination (FP), percentage of bacterial contamination (BP), combined or total contamination (TP), oxidation (BP), shoot production (SP) and viability (VP). Results indicated that FP was higher on the nodal positions farther from the apex of the branches as compared to BP for which the percentages increased as they were neared the apex : PN3, PN4 and PN5 ($P<0.01$). The percentage of shoot production (SP) was higher on PN3 and PN4, which occurred t 28 days of culture. Nodal segments with positions 3 and 4 favored *in vitro* establishment of *Annona muricata* L.

Key words : *Annona muricata*, contamination, browning, shoot production, viability, nodal position, shoot tip.

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