

Identification of Best Exposure Timings of Sodium Hypochlorite in Surface Sterilization of Different Explants in *invitro* Propagation of *Annona muricata*

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Abstract: *The most crucial and delicate stage in plant tissue culture is the surface sterilization of the explant. An inappropriate concentration of sterilant may have deadly effects on explants by altering cell division and other metabolic processes that limit the growth and development of explants. Considering the explants observations and sterilization treatments of Sodium hypochlorite (4%), T₆ (7 min), T₇ (8 min) and T₈ (9 min) are selected for green nodal explants as highest response, least days for initiation of response, good health with less contamination and moderate survival of explants. Whereas, T₅ (6 min) T₆ (7 min) and T₇ (8 min) are selected for leaf with lower contamination with good health and survivability. Internode was not selected due to no response with higher contamination and less survivability. Brown nodal explants responded very less and less survivability with higher contamination as compared to other explants.*

Keywords: *Annona muricata*, Sodium hypochlorite, surface sterilization, invitro propagation

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