

## SHOOT PROLIFERATION OF PAPAWE THROUGH TISSUE CULTURE

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Propagation of papaw (*Carica papaya*) results in very wide variation in the genetic characteristics of plants.

The clonal propagation via initiation of the axillary buds *in vitro*, is considered the most reliable method of producing millions of clones from a few ideal plants (1,2).

Apical shoots and axillary buds from papaya seedling and selected field grown plants were taken as explants. Eight to ten minute dip in 20% clorox solution containing 0.1% surfactant 'N' was found to be the most effective surface disinfection method for field grown plants. Out of various media tested the following was the most effective in bringing about 5 fold proliferation of the shoots every two weeks.

Murashige and Skoog minimum Organics (MS) containing 500mg/l casein hydrolyzate, 20% coconut water, 0.9% agar, supplemented with 0.15  $\mu$ M indolebutyric acid, and 1.5  $\mu$ M benzyladenine.

Separated shoots grew best in the following medium, re-establish apical dominance before transferring to a rooting medium.

MS containing 0.9% agar, supplemented with 0.5  $\mu$ M Naphthaleneacetic acid.

Shoots were incubated in the above two media to obtain fast proliferation of shoots.

## References

- Litz, R.E. (1985) Handbook of Plant Cell Culture, Macmillan Publishing Company, 349-368  
Rajeevan, M.S., Pandey, R.M. (1983) Acta horticulturae 131-139

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