

**INDUCTION OF SOMATIC EMBRYOGENESIS FROM
COTYLEDON EXPLANTS OF CASHEW**

(Anacardium occidentale L.)

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ABSTRACT

This experiment was done to induce somatic embryos from *in vitro* cultured cotyledon explants of cashew (*Anacardium occidentale* L.). Various concentrations of clorox were used to select the most suitable concentration to sterilize the cotyledon explants. The results showed that 30% of clorox with 30 min immersion exhibited more survival rate (82%). Further experiment was carried out to select the suitable medium for the induction of somatic embryogenesis from *in vitro* cultured mature cotyledon explants. Performance on morphological response, nodule formation, root formation and embryogenic response were examined. More than 95% of explants showed morphological response among tested treatments. Nodule induction was observed in all treatments and higher percentage was noted in MS medium supplemented with 2 mg/l BAP. Both embryogenic and non embryogenic compact nodules were observed. The percentage of root formation was higher in MS medium contained 2 mg/l NAA + 2 mg/l Kin where longest roots were also observed. The medium contained 2 mg/l BAP showed higher percentage of somatic proembryos formation directly from cotyledon explant and indirectly from friable callus. The developed protocol will be a useful guide in the production of somatic embryos and the *in vitro* propagation of cashew.

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