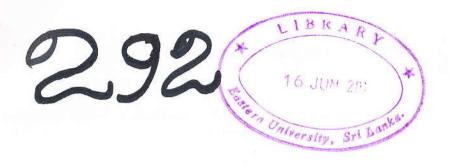
## INDUCTION OF SOMATIC EMBRYOGENESIS FROM COTYLEDON EXPLANTS OF CASHEW

(Anacardium occidentale L.)



BY

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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 expalnts. 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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