D–04: Propagation of *Coscinium fenestratum* (Colebr.) through tissue culture - a preliminary study

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Coscinium fenestratum (Colebr.) (Weniwel) is a medicinal plant. Due to low natural regeneration and excessive use by the community, it is in danger of extinction. Therefore, tissue culture techniques to propagate *Coscinium fenestratum* were investigated.

Axillary buds were induced *in situ* by decapitating the mother plant, Both induced and uninduced axillary buds were cultured in different media. Shoots were elongated from induced axillary buds in growth regulator free Murashige and Skoog (MS) and Campbell and Durzan (CD) medium supplemented with 1.5 mg/l NAA + 0.1 mg/l IBA in a growth chamber at 25 ± 1°C in continuous light. No shoot elongation was observed from uninduced axillary buds.

Mature embryos taken from seeds were cultured in both MS and CD medium with different growth regulator combinations. They were cultured with or without cotyledonary parts attached to the embryo. Shoots were induced in growth regulator free MS medium. Root initiation was observed in the presence of 0.5 mg/l NAA + 0.1 mg/l IBA while the increase of NAA upto the level of 2.5 mg/l induced callus. There was no significant effect of the presence or absence of cotyledons on shoot, root or callus induction.

Immature embryos cultured in both MS and CD liquid media were incubated in continuous dark at 25 ± 1°C. Very low rate of callus induction was observed from immature embryos cultured in liquid MS medium.

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