ENHANCEMENT OF CALLUS MULTIPLICATION AND INDUCTION OF SPROUT FORMATION IN *ANTHURIUM ANDREANUM* LIND.

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Initiation and sprout formation of *A. andreanum* Lind. was done by Pierik. Since the callus obtained by this method was not sufficient, a study was made to get better results.

Callus initiation was effected in *A. andreanum* white form, orange form and red form on Pieriks medium (Pierik etal (1974) with 0.1 ppm 2, 4-dichlorophenozyacetic acid (2, 4-D) and 1 ppm Benzyl amino purine (BAP). Callus thus obtained was subcultured (Pierik 1976) with varying concentrations of 2, 4-D and BAP. The callus was then exposed to different physical conditions.

Effect of cytokinins on sprout formation from the callus was subsequentiy investigated. A suitable medium for root formation was also determined.

The explants produced callus within 42 days. Callus formation was fastest in *A. andreanum* white form. The best combination of hormones for subculturing was 0.5 ppm BAP and 0.02 ppm 2, 4-D. The physical condition that enhanced callus multiplication was, a period in darkness followed by light and then in darkness again, at a temperature around 25°C. Sprout and root formation was best in the medium for subculturing, supplemented with 2 ppm 2-isopentyl adenine (2 ip) and 1 ppm Indole -3- acetic acid (IAA) respectively.

The inadequacy of Peirik's method may by due to varietal differences in explants and/or lack of specified enviornmental conditions.

References :

1. Pierik, K. L. M., Steegmans, N. H. M. and Van der Meys, J. A. J., (1974) *Sciencia Horticulture*, 2: 193
2. Pierik, R. L. M., *Physiologia Plantarum*, 37: 80