

Developing clonal propagation technique for conservation of endangered medicinal plant *Dioscorea deltoidea* Wall

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ABSTRACT : The present study was conducted to standardize the propagation protocol for *Dioscorea deltoidea* Wall during the year 2008 in polybags under shade net in Completely Randomized Design (CRD) with seven treatments and three replications. Rhizome cuttings of 2-3 cm length were treated with six (6) concentrations of NAA and IBA (i.e; NAA 20ppm, NAA 30ppm, IBA 20ppm, IBA 30ppm, NAA 10ppm+IBA 10ppm, NAA 15ppm+IBA 15ppm) and control (distilled water) for 12 hours. In general, IBA at 30ppm resulted in early sprouting (14.43 days), maximum sprouting percentage (93.33%), early root emergence (12.37days), maximum rooting percentage (89.33%), maximum number of secondary roots (40.60), longest root (34.07cm), maximum root diameter (1.27mm) and root propensity (4.00), followed by NAA+IBA while as, control recorded delayed sprouting and rooting.

Key Words: NAA, IBA, *Dioscorea deltoidea*, rhizome, sprouting, rooting.