

**ESTABLISHMENT OF A RAPID *IN VITRO* PROPAGATION SYSTEM
FOR *ALOCASIA LONGILOBA* MIQ. 'WATSONIANA'**

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Abstract

A mass propagation protocol was established for *Alocasia longiloba* 'Watsoniana' via induction of multiple shoot formation using rhizomatous buds as explants. Aseptic bud explants could be established using a double-stage Clorox® disinfection technique. Multiple shoots were induced from the aseptic bud explants on Murashige and Skoog medium supplemented with 2.0 mg l⁻¹ BA and 0.5 mg l⁻¹ IBA, selected as the shoot proliferation medium. When the shoot explants were divided longitudinally into halves and cultured into liquid proliferation medium using the shake flask system, a total of 10 to 12 buds were produced from each whole shoot within four weeks as compared to non-divided shoot explants which produced only 3-4 buds within the same duration. All micro-shoots with at least 2 cm in length produced roots when cultured on MS medium supplemented with 0.5 mg l⁻¹ IBA.

Key words: *Alocasia longiloba* 'Watsoniana', conservation, endemic, multiple shoots, shoot proliferation

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