

Establishment of an efficient protocorm-like body proliferation system in *Ionopsis utricularioides*

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Abstract:

Ionopsis utricularioides, an Oncidium alliance, has long lasting flower and may have the potential as potted-plant in the flower market. As the pollination is not very easy, the need to establish a rapid and stable in vitro micropropagation is important. This report describe the development of plantlet regeneration through protocorm-like bodies (PLBs) derived from flower stalk node cultures. The induced PLBs were cultured on Murashige and Skoog (MS) medium supplemented with different concentrations of 6-benzylaminopurine (BAP) and α -naphthaleneacetic acid (NAA). The result showed that MS medium with 0-2.0 mg L⁻¹ BAP and 0.1-1.0 mg L⁻¹ NAA could efficiently induce and proliferate of PLBs. Increasing the concentration of NAA decreased the proliferation of PLBs. Besides, different salt strength of either solid or liquid MS medium was compared for PLBs proliferation. The result showed that 1/2 strength MS with both solid and liquid media were more effective on PLBs proliferation

Keywords: *Ionopsis utricularioides*, protocorm-like bodies, MS medium, proliferation