In vitro Induction of Buds in a Moss *Octoblepharum albidum* Hedw.

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ABSTRACT

In vitro induction of protonemal buds and gametophore development in an epiphytically growing moss *Octoblepharum albidum* has been carried out for the first time by inoculating spores into a range of inorganic media supplemented with and without sucrose. Presence of sucrose in the medium was found obligatory for the bud induction and gametophore development. Synergistic effect of auxin and cytokinin stimulated the bud induction rapidly and also increase in number. Half strength Knop's macronutrient + Nitsch trace elements with 10 ppm ferric citrate + 1% sucrose + 5 μ M BAP + 2.5 μ M NAA was found to be the most suitable media combination for bud induction.

Key words: Auxin, cytokinin, epiphytic moss, *Octoblepharum albidum* Hedw., protonemal buds, spores

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