

In vitro seed germination of *Coelogyne asperata* Lindl. (Orchidaceae)

ABSTRACT

A protocol for in vitro seed germination of *Coelogyne asperata* Lindl. has been established successfully. Immature seeds from 182 days old capsule were cultured on three different basal media; Murashige and Skoog (MS), Knudson C (KC), and Vacin and Went (VW) and maintained under continuous light at 25 ± 2 °C. After 30 days of culture (DAC), more than 90% of seeds were germinated on KC and VW media and about 84% of seeds germinated on MS medium. The incorporation of organic additives, including coconut water, potato homogenate and tomato juice each at 10% (v/v) in KC medium was tested to determine their effect on seed germination of *C. asperata*. The result revealed that KC basal medium alone without addition of organic additives promoted over 90% of seed germination at 30 DAC. Therefore, the protocol of using standard KC basal medium for *C. asperata* seeds germination could be suggested for mass propagation and conservation of this wild scented orchid.