**Abstract**

To develop conservation strategies for orchid species. Methods Seeds of *Acampae praemorsa* (Roxb.) Blatt. Mc Cann ( *A. praemorsa* ) were obtained from mature pods collected from Velliangiri hills and germinated on Murashige and Skoog (MS) medium supplemented with various concentration of Benzylaminopurine (BAP). Results Maximum seed germination (85%) was observed on MS media supplemented with 2 mg/L BAP. Seed germination percentage increased with increasing concentrations of BAP (0.5 mg/L to 2 mg/L), but 3 mg/L of BAP inhibited seed germination. Variations observed were significantly ( P ex vitro conditions. Conclusions In present study all the mycorrhizal seedlings survived, because orchid mycorrhizal fungi enhance growth of orchid plantlets and present study gives an effective protocol for seed germination and plantlet regeneration from immature seeds which can be used for establishing *A. praemorsa* populations in Velliangiri Hills and elsewhere.