World Academy of Science, Engineering and Technology International Journal of Agricultural and Biosystems Engineering Vol:11, No:01, 2017

In vitro Clonal Multiplication and Acclimatization of Large Cardamom (Amomum subulatum Roxb.)

Authors: Krishna Poudel, Tahar Katuwal, Sujan Karki

Abstract : A rapid propagation and acclimatization method of large cardamom was optimized in this study. Sprouted rhizome buds were collected. The excised rhizome bud explants were cultured on semi solid culture media. The explants were cultured on Murashige and Skoog's (MS) medium supplemented with different concentration and combinations of BAP (6-Benzyl-aminopurine) and IBA (Indole-3-butyric acid) for shoot and root induction. Explants cultured on MS basal medium supplemented with 1.0 mg/l BAP + 0.5 gm/l IBA showed the highest rate of shoot multiplication. In vitro shoots were rooted on to the half-strength MS basal media supplemented with 0.5 mg/l IBA. Rooted shoots were transplanted in the screen house for hardening process. These hardened plants were subsequently shifted into the netted nursery for further multiplication process.

Keywords: concentration, explants, hardening, rhizome

Conference Title: ICAB 2017: International Conference on Agriculture and Biotechnology

Conference Location : Sydney, Australia **Conference Dates :** January 26-27, 2017