B228

Acclimatization of Cryptocoryne beckettii produced in tissue culture

Different factors such as , potting media, rooting status, different environments and light levels which affect the survival and growth during acclimatization of *Cryptocoryne beckettii* were studied.

Four-week-old *in vitro* rooted and non-rooted plantlets were used for the experiment. Two types of potting media, such as 1:1:1 mixture of topsoil: sand: compost and coir chips were tested on growth and survival of in vitro produced shoots. Higher survival of shoots was observed in 1:1:1 mixture (71.02%) than coir chips (56.35%). Rooted shoots were shown higher survival rate (87.5%) than un-rooted shoots (41.25%). Survival rates between two light intensities i.e 1500 lux and 6000 lux were 85% and 91.5% respectively. The highest survival rate under the high light intensity was from the polythene propagator where as in low light condition survival rate was higher in submerged condition.

Growth parameters, such a number of leaves, width of the widest leaf and length of the longest leaf were highest in rooted plants potted in 1:1:1 mixture, raised under high light intensity in polythene propagator with fertilizer application. The plants grown in a soil mixture under "polythene cover propagator" with fertilizer treatment reached the marketable level within 12 weeks.