

Genotype Difference of Plant Regeneration from Dormant Bud Culture in *Colocasia esculenta* Schott.

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Abstract

This study was conducted to obtain the basic breeding information of *Colocasia esculenta* Schott. Effect of supplemental plant growth regulators and genotype difference were investigated on dormant bud tissue for proliferation. The plant regeneration ratio, plant height and root length were the best upon mixed treatment of 0.8mg/L IAA and 2.0mg/L zeatin. Both leaf weight and root weight were heavy upon culture in a dark condition. The leaf and root weights were heaviest in 6% sucrose concentrations. In several collected area the heaviest one was Binnangxin and then in the order of Suwon, Wanju and Puan. Genotype differences of tuber diameter and tuber weight were found in Suwon. Tuber weight was found in the order of Suwon (862mg) > Wanju (723mg) > Puan (649mg) > Binnangxin (424mg).