The Application of Two Steps Culture in Agarwood, Aquilaria malaccensis, In Vitro Culture Improves Microshoots Induction and Development

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Abstract	Agarwood (Aquilaria malaccensis) is an important species with high economic value and has many benefits, which led to an overexploitation in its natural habitat.Ã‚Â An effort to both provides sufficient seedling for agarwood cultivation and conservation is therefore much needed. This study has been carried out with a view to determine the effect of media types and BAP concentrations in two steps cultivation system on agarwood microshoot induction. This was a two stage-experiments i.e., microshoots induction and optimizing shoot development. Ã‚Â The research results showed that the interaction between different media type and BAP concentrations had no significant effect on agarwood microshoot induction.Ã‚Â Subsequent culture on MS media without any BAP addition showed that explant derived from MS medium solidified with 2.5 gr. L-1 Phytagel produced 2.36 Ã‚Â± 0.48 shoots/explant and 3.69 Ã‚Â± 1.16 leaves/explant.Ã‚Â In addition, explant derived from culture on MS medium supplemented with 4 Ã‚ÂµM BAP produced 2.28 Ã‚Â± 0.61 shoots/explant. This is for the first time the application of two steps culture system for Agarwood (Aquilaria malaccensis) has been deployed and how the habituation phenomenon is handled.
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