

Terpinen-4-ol is Overproduced in Tissue Cultures of *Alpinia zerumbet* (Pers.) Burtt et Smith by Induction of Methyl Jasmonate

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SUMMARY. *Alpinia zerumbet* (Zingiberaceae) presents a high medicinal value, in part by its production of volatile compounds. Organogenic *in vitro* cultures of *A. zerumbet* were treated with the elicitor methyl jasmonate (MeJA), a natural volatile signaling molecule in biotic and abiotic stress, and the effect was evaluated on the *in vitro* production of volatiles. Leaves of plantlets were subjected to simultaneous distillation-extraction (SDE), and sabinene, β -pinene, 1,8 cineole and terpinen-4-ol were the main volatiles detected. However, after exposure to a solution of MeJA for 3 and 10 days, terpinen-4-ol showed a remarkable increase, corresponding to 18.01 and 14.75 %, respectively, when compared to control with ethanol. In contrast, exposure of plantlets to the addition of ethanol induced levels of sabinene and 1,8 cineole higher than those produced by MeJA.

KEY WORDS: Elicitation, Micropropagation, volatile compounds, Zingiberaceae.

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