

**Pre-soak technique using BAP or ethephon to break dormancy in black galingale
(*Kaempferia parviflora*)**

ABSTRACT

Kaempferia parviflora (KP) plants undergo a period of dormancy after senescence of above ground parts at the end of a planting cycle. A study was conducted to determine the optimum concentration of 6-benzylaminopurine (BAP) and ethephon to break the dormancy of KP rhizomes using a pre-soak technique. Five levels of BAP 50, 100, 150, 200 and 250 mg L⁻¹ and five levels of Ethephon 150, 300, 450, 600 and 750 mg L⁻¹ was used. Results showed that 150 mg L⁻¹ BAP gave early sprouting, higher sprouting percentage and significantly more buds per rhizome compared to other treatments. 750 mg L⁻¹ ethephon had early sprouting, higher sprouting percentage and more number of buds for each rhizome but no significant difference was observed among treatments. In conclusion, 150 mg L⁻¹ BAP and 750 mg L⁻¹ ethephon are optimum concentrations to promote dormancy breaking in *K. parviflora*.

Keyword: Black galingale; *Kaempferia parviflora*; Dormancy breaking; 6-benzylaminopurine; Ethephon