ESTABLISHING A METHOD FOR THE MASS PROPAGATION OF *Piper guineense* (Schumach) VIA TISSUE CULTURE

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ABSTRACT

*Piper guineense (*Schumach) has great potentials for economic exploration because of the proven use of its medicinal content in human health. The plant material is usually obtained from thick forests by women who have to walk long distances in the bush to reach it. A technique that improves its propagation and domestication, such as tissue culture, becomes necessary. This study was therefore initiated to develop a method for the mass propagation of *Piper guineense* seedlings using in vitro regeneration. Plants react differently to media concentrations and constituents for their in vitro regeneration. Comparative growth of *Piper guneensee* inoculated on Murashige and Skoog(MS) medium supplemented with some growth regulators were investigated. Mature nodes were collected from the medicinal garden of National Centre for Genetic Resources and Biotechnology (NACGRAB) Ibadan. Nodes of the species were inoculated onto MS media. The MS media was supplemented with the following concentrations of growth regulators 0.25, 0.50, 0.75, 1.0mg/l. BAP, the same concentration for KIN and 0.05mg/l of NAA for all replicate. After two weeks of inoculation it was observed that, the plant let with BAP 0.50mg/l +NAA 0.05mg/l were found contamination-free and sprouted, while other treatments showed contamination including control. Furthermore, after 7 days the sprouted, plantlets with treatment of BAP 0.50mg/l +NAA 0.05mg/l were also contaminated, thereby yielding no positive result. Many repeats of the experiment also yielded contaminated products.

It is therefore recommended that antibiotics should play an important role in the culture medium
for *P*. *guineense* in order to eliminate deep tissue contaminants