ABSTRACT

The experiment to study the effect of Indoleacetic acid (IAA) and kinetin on vanilla (Vanilla planifolia) tissue culture derived from micro shoot's node had been conducted at Tissue culture Laboratory of Indonesian Coffee and Cocoa Research Institute from May to June 2004. The concentration of IAA and Kinetin were 0; 0.25; 0.5; 0.75; 1 ppm. Those plant growth regulator were added to modified MS medium. The experimental result was analyzed by Non parametric test with Kruskal-Wallis.

The results showed that the best treatment for shoot proliferation and shoot elongation was obtained from treatment with 0 ppm IAA and 0.75 ppm kinetin. It produced 1.63 new shoot each explant and the mean of its length was 1.01 cm, whereas the best treatment for root proliferation and root length was obtained from treatment with 0.5 ppm IAA and 0 ppm kinetin. It produced 0.8 root for each explant and its length was 0.66 cm for each root.

Key words: Vanilla planifolia, node, tissue culture, indoleacetic acid, kinetin.