

## ABSTRACT

The wood apple (*Limonia acidissima* L.) is a tropical fruit plant that is included in the horticultural plant group. The problem with the development of the wood apple is slow growth, the germination of conventional seeds is difficult to grow, and it is often accompanied by rotten seeds. Tissue culture techniques can be a solution for plants that are starting to be rare and difficult to reproduce conventionally. This study is aimed at obtaining the best concentrations of BAP and NAA in the propagation of wood apple plants *in vitro*. This study used a two-factor Completely Randomize Design (CRD) with 10 replicates of the combination treatments. The first factor is the BAP concentration, consisting of 3 levels: B0 (0 ppm), B1 (1 ppm), and B2 (2 ppm). The results showed that the treatment of BAP concentrations had an effect on the subculture of wood apple *in vitro* on the living percentage variables 7 and 8 WAP, the growth percentages of the shoots 3, 4, and 5 WAP, the number of shoots 2–8 WAP, and the amount of roots. The best treatment is obtained with a BAP treatment of 1 ppm. NAA concentration treatment affects the living percentage variable age 3 WAP, the 4 and 5 WAP shoot growth percentages, and the number of shoots at 5 WAP. The best treatment is NAA at 0 ppm. There was an interaction between the treatment of BAP and NAA concentrations on the living percentage variable at 4–8 WAP, the time of growth of the shoots, the number of shoots at 4 and 5 WAP, the height of the buds, and the amount of leaves at 7 and 8 WAP.

*Keywords: Auxin, Concentration, Cytokinin, Tissue culture*