

***The Effect of Interaction BAP, NAA and Type of Explant
on Morphogenesis of Vanilla Explants (Vanilla Planifolia Andrews)
In Vitro***

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ABSTRACT

The purpose of this study was to determine the effect of the interaction of BAP, NAA and types of explants on the morphogenesis of vanilla explants (Vanilla planifolia Andrews) in vitro. This research was conducted in January – April 2022, using a factorial completely randomized design with 2 factors. The first factor is a combination of ZPT BAP and NAA which consists of 4 levels, namely A1: BAP 0.25 mg/L and NAA 0.5 mg/L, A2: BAP 0.5 mg/L and NAA 0.5 mg/L, A3 : BAP 0.75 mg/L and NAA 1 mg/L, A4 : BAP 1 mg/L and NAA 1 mg/L. The second factor is the type of explant section which consists of 2 levels, namely B1: book B2: leaf. Data analysis used ANOVA at the 5% level and if it showed a significant difference, it was continued with the BNJ further test (Honest Significant Difference). The parameters observed in this study included the percentage of contamination, the percentage of explants that formed callus, the time of shoot emergence and the number of shoots. The results of this study showed that the interaction of BAP 0.25 mg/L, NAA 0.5 mg/L, interaction BAP 0.5 mg/L, NAA 0.5 mg/L with the type of book explants showed a very significant effect on morphogenesis at emergence shoots and the number of shoots growing on vanilla explants in vitro.

Keywords: *Tissue culture, Vanilli, BAP, NAA*