Induksi Pertumbuhan *Protocorm Like Body* Anggrek (*Vanda Tessellata 'blue'*) Secara In Vitro Dengan Penambahan ZPT NAA (Induction of (*Vanda Tessellata 'blue'*) Orchid Growth In Vitro With the Addition of ZPT NAA) *Supervisor*: Dr. Netty Ermawati, SP.

Alifah Agus Putri

Study Program of Seed Production Technique
Department of Agricultural Production
Program Studi Teknik Produksi Benih
Jurusan Produksi Pertanian

ABSTRACT

Orchids are ornamental flower plants that are widespread throughout Indonesia with around 5000 species. Orchid production in Indonesia in 2015-2019 experienced instability. Therefore, an appropriate, efficient and fast propagation method is needed such as tissue culture that can produce uniform seeds in large quantities. The purpose of this study was to determine various levels of NAA concentration on induction of PLB growth in Vanda orchids in vitro. The research was carried out in the laboratory of CV. Handoyo Budi Orchids Malang, the research was carried out in January - April 2022. Using a non-factorial Completely Randomized Design (CRD) with 6 replications. The concentration of NAA application was divided into 4 concentration levels, namely N0 (without NAA or control hormones), N1 (1 ppm), N2 (1.5 ppm) and N3 (2 ppm). The data were analyzed using the F test (ANOVA) and continued with the 5% BNT test. The results showed that the addition of NAA had a very significant effect on the parameters of the number of shoots, number of leaves and plant height. The NAA treatment with a concentration of 2 ppm gave a very significant effect on the parameters of the number of shoots (7,33 shoots), number of leaves (11.61 strands) and shoots height (4,83 cm).

Keywords: PLB growth induction, Vanda orchid, concentration level of NAA