

***Induction of Micro Tuber of Potato (*Solanum tuberosum* L.)
Granola Flower Variety with the Addition of BAP and Paclobutrazol
in Growth Medium In Vitro***

Supervised by Rudi Wardana, S.Pd., M.Si

Fitri Devyanthi Putri Abdillah

*Food Crop Production Technology Study Program
Departement of Agriculture Production*

ABSTRACT

*Potatoes (*Solanum tuberosum* L.) are tuberous plants that contain high levels of carbohydrates, making them a suitable substitute for rice, which is commonly consumed by the population. The Granola Kembang potato variety is known as one of the superior varieties with high potential for in vitro propagation. The objective of this study was to analyse the effect of BAP and Paclobutrazol concentrations in inducing microtubers of the Granola Kembang potato variety. This study was conducted at the Tissue Culture Laboratory of the Jember State Polytechnic from July to October 2025. The research design used a factorial RAL consisting of two factors. The first factor was the BAP concentration, consisting of 1 ppm, 2 ppm, and 3 ppm, while the second factor was the Paclobutrazol concentration, consisting of 0.2 ppm, 0.4 ppm, and 0.6 ppm. The results showed that the interaction between BAP and PBZ was not significantly different in all observation parameters. The treatment of 1 ppm BAP was significantly different in terms of micro tuber diameter (1.96 cm), 0.2 ppm PBZ was significantly different in terms of the number of leaves (7.44 leaves), and 0.6 ppm PBZ was significantly different in terms of the number of roots (8 roots).*

Keywords: *BAP ; Granola flower var. ; Micro tubers; PBZ*