The Effect of Giving ZPT 2.4 D and BAP on Induction Sorghum callus (Sorghum bicolor L.) Supervised by Rudi Wardana S. Pd. M. Si.

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ABSTRACT

Sorghum (Sorghum bicolor L.) is one of the most important cereal crops that has the potential to be developed. This research was conducted at the Jember State Polytechnic in September - January 2023. The research design used was a factorial Completely Randomized Design (CRD) with 2 factors, namely ZPT 2.4 D and BAP. The 2.4 D ZPT treatment consisted of 2 levels, namely 1 mg/l and 2 mg/l. while ZPT BAP has 4 levels including 1 mg/l, 1.5 mg/l, 2 mg/l and 2.5 mg/l. The results showed that the combination treatment ZPT 2.4 D and BAP differed significantly in the early appearance of callus with an average appearance (6.00) days after initiation (HSI) at a concentration of 2.4 D 2 mg/l + 1.5 mg/l BAP. While the callus diameter variable with an average (6.33) at a concentration of 2.4 D 2 mg/l + 2.5 mg/l BAP and the callus texture variable produces callus with a crumb texture at a concentration of 2.4 D 2 mg/l + 1.5 mg/l BAP and compact texture at a concentration of 2.4 D 1 mg/l + 2.5 mg/l BAP.

Keywords : Appears callus, Callus diameter, Callus texture.