INDUKSI KALUS DARI EKSPLAN BIJI IMMATURE KEPEL (Stelechocarpus burahol (Bl.) Hook.f. & Th.) SECARA IN VITRO

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Abstract	Endosperm in immature seeds of S. burahol can be used as explants for callus induction which is triploid. The aim of the study was to induce callus from immature seed explants of S. burahol on Murashige & Skoog media with NAA and picloram concentration treatments. The research was carried out from April to October 2021 at the Tissue Culture Laboratory at KBTPH Salaman and the Faculty of Agriculture, Tidar University. The first study used two-factor RAL, the first factor: the concentration of NAA (N0, N2, N4, N6, N8, N10 mg/L). The second factor: seed diameter (D1 = 0.3 cm, D2 = 0.6 cm, D3 = 0.9 cm). Research II used RAL, the single factor was picloram concentration (P0; P0,5; P1; P2; P4; P8 mg/L). Research I. Explants stretched at 3 days after planting and produced 6 callus from 1 week after planting (weeks after planting). Three callus were formed in treatment N4D1 and one callus each in treatment N0D3, N4D3 and N6D12. Callus textured crumbs and compact. Callus color is white, transparent white, and greenish yellow. One liver and cotyledon somatic embryos were found in the N2D1 treatment. In the second study produced 17 callus. At 0.5 Picloram; 1; 2 mg/L produced compact and crumb callus, callus color was white and transparent. At 4 and 8 mg/L picloram produced a white compact callus. The success of callus induction is still small, so it is necessary to continue the use of types and concentrations of auxins and cytokinins and younger explants of immature seeds. The higher number of callus can be analyzed for ploidy level so that triploid plant material can be produced
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Author	Dr Ir NOOR FARID, M.Si