THE EFFECT OF CONCENTRATION AND INTERVAL GIVING OF GROWTH REGULATORY SUBSTANCE GIBERELLIN (GA3) ON THE GROWTH OF SUGARCANE BUD CHIPS (Saccharum officinarum L.) VARIETY PS 881

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This study aims to determine the effect of concentration and interval of giving of growth regulator gibberellins (GA3) on growth of sugarcane bud chips (Saccharum officinarum L.) PS 881 variety. This research was conducted in January – April 2022 at Pusat Penelitian Perkebunan Gula Indonesia (P3GI), Pasuruan City. This study used a factorial randomized block design (RAK) with the first factor being the concentration of gibberellins growth regulators and the second factor being the interval of giving of growth regulators, there were 16 treatment combinations and 3 replications. The concentration factor of gibberellins growth regulator consists of 4, that is 0 ppm, 30 ppm, 60 ppm and 90 ppm. The interval factor for gibberellin giving consisted of 3, that is 7 days, 14 days, 21 days and 28 days. The research data were analyzed using the F test with a level of 5% and 1%. If the results are significantly different, a further test is carried out using the BNJ (Real Honest Difference). This study gave significantly different results on stem diameter, and number of leaves, as well as significantly different results on the number of tillers.

Keywords: Sugarcane, Giberellin, Bud Chip