

**GROWTH AND YIELD OF BONITA IPB AND PATRA 3 CAYENNE
PEPPER VARIETIES (*Capsicum frutescens* L.) WITH APPLICATION OF
PACLOBUTRAZOL**

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ABSTRACT

Cayenne pepper is a commodity that's popular with the public, but the production results are unstable due to poor flowering and fruiting. The production can be increased by using superior varieties and paclobutrazol. The research aims to obtain the optimum concentration of paclobutrazol on the growth and yield of cayenne pepper varieties Bonita IPB and Patra 3. The research method used split plot design using the RAKL model with 4 replications. The main plot are cayenne pepper varieties Bonita IPB and Patra 3. The sub plots are paclobutrazol concentrations of 0 ppm, 75 ppm, 150 ppm and 225 ppm. Data were analyzed using ANOVA followed by DMRT 5% and trend comparison. The results showed that there was an interaction between variety and paclobutrazol concentration on the number of leaves aged 56 DAP. Paclobutrazol concentrations of 75 ppm for the Bonita IPB variety and 0 ppm for the Patra 3 variety increased the number of leaves aged 56 DAP. Paclobutrazol concentrations of 75 and 150 ppm increased flowering age, fruit length, fruit diameter, and fruit weight per fruit. Based on orthogonal polynomial test, the paclobutrazol concentration range of 79.83 – 120.5 ppm is optimum for number of fruit per plant, fruit weight per plant, fruit weight per plot, and fruit weight per hectare, also accelerating harvest time. The Patra 3 variety of cayenne pepper was significantly larger in fruit length, fruit weight per plot, and fruit weight per hectare.

Keyword: Cayenne Pepper, *Varieties*, Paclobutrazol.