**Pengaruh Umur Aplikasi Paclobutrazol dan Dosis Pupuk Boron Terhadap Produksi dan Mutu Benih Jagung Manis (Zea mays saccharata Sturt)** (Effect of Paclobutrazol Application Time and Boron Fertilizer Dosage on Production and Quality of Sweet Corn Seed (Zea mays saccharata Sturt) Advicer Common : Ir. Moch Bintoro, M.P and Oktavianus Wawan D. S., S.P

> Afrida Nawang Wulan Study Program Of Seed Production Technique Departement Of Agricultural Production Program Studi Teknik Produksi Benih Jurusan Produksi Pertanian

## ABSTRACT

To inhibit the vegetative growth of maize plants, especially the height of the plants so that the plants do not fall easily, namely the application of paclobutrazol. In addition, increasing sweet corn production can also be done by managing pollen to ensure the availability of pollen and the success of pollination by giving boron elements (Lordkaew et al., 2011). The research was conducted on the land owned by PT. Wira Agro Nusantara Sejahtera which is located in the village of Jl. Papaya, Lamong, Pare, Kediri for 4 months starting from November 2020 to February 2021. This research was conducted using a Factorial Randomized Block Design (RBD) consisting of 2 factors. The first factor is the application time of paclobutrazol (U) which consists of 2 levels, namely U1: 30 day after plant (DAP) and U2: 40 DAP. The second factor is the dose of boron fertilizer (B) consisting of 3 levels, namely B0: 0 kg / ha, B1: 10 kg / ha, and B2: 15 kg / ha. The results showed that the application time of paclobutrazol did not affect almost all parameters, except on plant height and weight of 1000 seeds. Meanwhile, the boron dose showed a very significant effect on all production parameters, but did not have a significant effect on the germination rate and growth speed of sweet corn seeds. The interaction between paclobutrazol application time and boron dose did not significantly affect all parameters, except for the weight parameter of 1000 seeds. Dose of boron as much as 15 kg / ha gave the best effect on cob length, cob diameter, cob weight, seed weight per cob, number of seeds per cob, 1000 grain weight, and sweet corn seed production per hectare. Although not significantly from those fertilized with boron at 10 kg /ha.

Key Words : application time of paclobutrazol, boron fertilizer, sweet corn