

Uji Ketepatan Waktu dan Jumlah Defoliiasi Daun pada Tanaman Betina terhadap Produksi dan Mutu Benih Jagung (*Zea mays* L.) Hibrida
*(Test of Timeliness and Amount of Leaf Defoliation on Female Plants on Production and Quality of Hybrid Seed Corn (*Zea mays* L.))* Supervisor: Dwi Rahmawati, SP, MP.

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ABSTRACT

One of the efforts that can be used to increase hybrid seed production is by using environmental manipulation techniques. This study aims to determine the effect of defoliation time and the amount of leaf defoliation on female plants on the production and quality of hybrid corn seeds. The research was conducted from September 2022 to February 2023 in the Jember State Polytechnic seed production area. The study used a randomized block design (RBD) with 4 replications. Observational data were then analyzed using annova and DMRT level 5% follow-up test. The first factor was defoliation time (D) with 3 levels, namely defoliation at 70 DAP (D1), defoliation at 77 DAP (D2) and defoliation at 84 DAP (D3). The second factor was the number of leaf defoliation with two levels, namely, defoliation left 4 leaves under the cob (P1) and defoliation left 2 leaves under the cob (P2). The results showed that the defoliation time treatment had a significant effect on the parameters of the weight of 100 seeds, germination and growth speed. Treatment of the amount of leaf defoliation also gave significant results on the parameter weight of 100 seeds and germination power. Meanwhile, the interaction between defoliation time and the amount of leaf defoliation had no significant effect on all research parameters. Defoliation at 77 DAP (D2) gave the best results at 100 seed weight 27.51 gram, seed germination rate 97.94% and growth rate 20.54%. while defoliation leaving 4 leaves under the cob gave the best results at 100 seed weight 27.39 grams and germination rate 97.71%.

Key word: *hybird seed corn, time of defoliation, leaf defoliation*