

**RESPON PERTUMBUHAN DAN HASIL BEBERAPA VARIETAS
TANAMAN JAGUNG MANIS (*Zea mays saccharata* Sturt.) TERHADAP
DOSIS PEMBERIAN PUPUK NPK**

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ABSTRAK

Produktivitas jagung manis di Indonesia masih belum memenuhi kebutuhan pasar. Upaya meningkatkan produktivitas jagung manis dengan cara pemilihan varietas unggul dan penggunaan dosis pupuk yang sesuai. Penelitian bertujuan mengetahui respon pertumbuhan dan hasil beberapa varietas jagung manis terhadap dosis pupuk NPK. Penelitian dilaksanakan di lahan daerah Purbalingga, Jawa Tengah pada bulan Juni-Agustus 2025. Percobaan lapangan dengan Rancangan Acak Kelompok Lengkap (RAKL) Faktorial yang terdiri dari 2 faktor, faktor I : Varietas Talenta, Bonanza dan Golden Boy. Faktor II : Pupuk NPK 16-16-16 dengan dosis 250, 300 dan 350 kg/ha Data dianalisis menggunakan *Analysis of Varian* (ANOVA) dan *Duncan' Multiple Range Test* pada taraf 5% dilanjutkan dengan uji *Trend Comparasion*. Hasil penelitian menunjukkan adanya interaksi antara perlakuan varietas tanaman jagung manis dan dosis pupuk NPK 16-16-16. Perlakuan terbaik varietas talenta pada dosis NPK 300 kg/ha, varietas bonanza pada dosis NPK 300 kg/ha, varietas golden boy pada dosis NPK 300 kg/ha terdapat pada parameter bobot tongkol berkelobot per tanaman, bobot tongkol tanpa kelobot per tanaman, dan bobot ekonomis tongkol. Varietas Bonanza nyata lebih baik pada tinggi tanaman, umur berbunga, bobot tongkol, dan kadar gula. Dosis pupuk NPK 16-16-16 terbaik sebesar 300 kg/ha pada hasil panen tanaman jagung manis.

Kata kunci: jagung manis, pertumbuhan dan hasil, varietas, NPK.

Response of Growth and Yield of Various Varieties of Sweet Corn (*Zea mays saccharata* Sturt.) to Dosage of NPK Fertilizer

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ABSTRACT

The productivity of sweet corn in Indonesia has not yet met market demand. Efforts to increase sweet corn productivity can be achieved through the selection of superior varieties and the application of appropriate fertilizer dosages. This study aimed to determine the growth and yield responses of several sweet corn varieties to different NPK fertilizer doses. The research was conducted in agricultural fields in Purbalingga, Central Java, from June to August 2025. The field experiment employed a factorial Randomized Complete Block Design (RCBD) consisting of two factors. The first factor was sweet corn varieties, namely Talenta, Bonanza, and Golden Boy. The second factor was NPK 16-16-16 fertilizer applied at rates of 250, 300, and 350 kg/ha. Data were analyzed using Analysis of Variance (ANOVA) followed by Duncan's Multiple Range Test (DMRT) at the 5% significance level and continued with trend comparison analysis. The results showed a significant interaction between sweet corn varieties and NPK 16-16-16 fertilizer doses. The best treatment for the Talenta, Bonanza, and Golden Boy varieties was obtained at an NPK dose of 300 kg/ha, as indicated by husked ear weight per plant, dehusked ear weight per plant, and economic ear weight. The Bonanza variety performed significantly better in terms of plant height, flowering time, ear weight, and sugar content. The optimal dose of NPK 16-16-16 fertilizer for sweet corn yield was 300 kg/ha.

Keyword: sweet corn, growth dan yield, varieties, NPK fertilizer.