

**Efektivitas Proporsi Pupuk Kandang Sapi Dan Pupuk Anorganik Terhadap Produksi Dan Mutu Benih Jagung Hibrida (*Zea mays* L.) Kode PX03** *The Effectiveness of Cow Manure and Inorganic Fertilizer Proportions on Hybrid Corn (*Zea mays* L.) Seed Production and Quality Code PX03.* Supervision by: **Elly Daru Ika Wilujeng, S.P, M.Si.**

**Muhammad Rizal Yusvian**  
**Study Program of Seed Production Technique**  
**Majoring of Agricultural Production**  
Program Studi Teknik Produksi Benih  
Jurusan Produksi Pertanian

**ABSTRACT**

*Maize is one of Indonesia's leading and strategic commodities, widely utilized for food, animal feed, and seed industry purposes. This study aimed to determine the effect of the proportion of cattle manure and inorganic fertilizer on the production and quality of hybrid maize seeds PX03 at the stock seed level. The research was conducted from July 2025 to January 2026 at the Agricultural Field on Brawijaya Street, Pontang Village, Ambulu District, Jember Regency, East Java, and in the greenhouse of the Plant Laboratory, Soil Laboratory, and Seed Processing Laboratory of Politeknik Negeri Jember. The study employed a non-factorial randomized design consisting of six treatments: B0 (100% inorganic fertilizer), B1 (80% inorganic + 20% organic), B2 (60% inorganic + 40% organic), B3 (40% inorganic + 60% organic), B4 (20% inorganic + 80% organic), and B5 (100% organic fertilizer). Data were analyzed using analysis of variance (ANOVA) followed by the Honestly Significant Difference (HSD) test at the 5% level. The results showed that the proportion of cattle manure and inorganic fertilizer had a significant effect on plant height, leaf length, leaf width, number of ears per plant, and ear length. Treatment B2 resulted in the highest plant height (77,25 cm). Treatment B2 produced the best results for number of leaves (8,59 strands), and number of ears per plant (1.34). The highest ear length was obtained in treatment B2 (14.88 cm), which was significantly different from the other treatments.*

**Keywords:** *hybrid maize, cattle manure, inorganic fertilizer, seed production, PX03*