

**PENGARUH KOMBINASI PUPUK KANDANG KAMBING DAN FUNGI
MIKORIZA ARBUSKULAR (FMA) TERHADAP PERTUMBUHAN DAN
HASIL TANAMAN JAGUNG MANIS (*Zea mays saccharata* S.)**

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ABSTRAK

Jagung manis merupakan jenis jagung yang sudah dikembangkan di Indonesia, karena rasanya yang manis serta memiliki kandungan gizi yang tinggi. Produktivitas jagung manis di Indonesia masih rendah yaitu 8 t/ha. Upaya peningkatan produktivitas jagung manis dapat dilakukan salah satunya dengan pemupukan, baik secara organik maupun anorganik. Penelitian bertujuan untuk mengetahui kombinasi dosis pupuk kandang kambing dan pupuk hayati fungi mikoriza arbuskular yang berpengaruh paling baik terhadap pertumbuhan dan hasil tanaman jagung manis (*Zea mays saccharata* Strut.). Penelitian dilaksanakan pada bulan Juni sampai September 2024 bertempat di Mulyasari, Kota Tasikmalaya. Penelitian menggunakan Rancangan Acak Kelompok (RAK) yang terdiri dari 6 kombinasi perlakuan yaitu A (kontrol), B (pukan 20 t/ha), C (pukan 10 t/ha + mikoriza 12 g/lubang tanam), D (pukan 15 t/ha + mikoriza 10 g/lubang tanam), E (pukan 20 t/ha + mikoriza 8 g/lubang tanam), F (pukan 25 t/ha + mikoriza 6 g/lubang tanam). Setiap perlakuan diulang 4 kali. Hasil penelitian menunjukkan bahwa kombinasi dosis pupuk kandang kambing dan FMA berpengaruh terhadap pertumbuhan tinggi tanaman 49 hari setelah tanam, luas daun, panjang tongkol, diameter tongkol, bobot tongkol berkelobot dan bobot tongkol tanpa kelobot per tanaman serta bobot tongkol berkelobot dan tanpa kelobot per petak lebih tinggi dibandingkan dengan tanpa pemberian kombinasi pupuk kandang kambing dan mikoriza. Pemberian pukan kambing 20 t/ha + mikoriza 8 g/lubang tanam menghasilkan pengaruh terbaik terhadap pertumbuhan dan hasil tanaman jagung manis (*Zea mays saccharata* Strut.).

Kata kunci : jagung manis, mikoriza, pupuk kandang kambing, pupuk organik

**THE EFFECT OF GOAT MANURE AND FUNGI MYCORRHIZA
ARBUSCULAR (FMA) COMBINATION ON THE GROWTH AND YIELD
OF SWEET CORN (*Zea mays saccharata* S.)**

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ABSTRACT

Sweet corn is a type of corn that has been developed in Indonesia because of its sweet taste and high nutritional content. Sweet corn productivity in Indonesia is still low, ranging from 8 t/ha. Efforts to increase sweet corn productivity can be done, among other things, through fertilization, both organic and inorganic. This study aims to determine the optimal combination of goat manure fertilizer and arbuscular mycorrhizal fungal biofertilizer that has the most significant effect on the growth and yield of sweet corn (*Zea mays saccharata* Strut.). The study was conducted from June to September 2024 in Mulyasari, Tasikmalaya City. The study used a Randomized Block Design (RBD) consisting of six treatment combinations: A (control), B (manure 20 t/ha), C (manure 10 t/ha + mycorrhiza 12 g/planting hole), D (15 t/ha manure + 10 g/planting hole mycorrhiza), E (20 t/ha manure + 8 g/planting hole mycorrhiza), and F (25 t/ha manure + 6 g/planting hole mycorrhiza). Each treatment was replicated four times. The results of the study showed that the combination of goat manure and FMA doses had a significant effect on plant height 49 days after planting, leaf area, cob length, cob diameter, cob weight with husk, and cob weight without husk per plant, as well as cob weight with and without husk per plot, compared to without the application of goat manure and mycorrhiza. The application of 20 t/ha of goat manure + 8 g/planting hole of mycorrhiza produced the best effect on the growth and yield of sweet corn (*Zea mays saccharata* Strut.).

Keywords: sweet corn, mycorrhiza, goat manure, organic fertilizer