

Itsna Imroatus Sholihah Ramadani 210311100142. Respon Pertumbuhan Dan Hasil Tanaman *Baby Corn* Jagung Manis (*Zea mays saccharata* L.) Terhadap Variasi Pemberian Pembenh Tanah Pada Media Tanam. Pembimbing **Dr. Agr. Eko Setiawan, S.P., M.Si** dan **Ir. Slamet Supriyadi, M.Si.**

ABSTRAK

Pemberian pembenh tanah (*soil conditioner*) mampu memperbaiki kualitas tanah dan menambah ketersediaan unsur hara dalam budidaya *baby corn* jagung manis. Tujuan dari penelitian ini yaitu untuk mengetahui respon pertumbuhan dan hasil tanaman *baby corn* jagung manis (*Zea mays saccharata* L.) terhadap pemberian variasi pembenh tanah pada media tanam. Penelitian ini dilakukan di Lahan Percoobaan Agroekoteknologi Universitas Trunojoyo Madura pada bulan April-Juni. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) non factorial Perlakuan P0 (kontrol), P1 (arang sekam 100 g), P2 (arang sekam 100 g +abu tebu 200 g), P3 (abu tebu 200 g), P4 (silika ekstrak abu ampas tebu 50 g), P5 (pupuk kandang sapi 100 g), dan P6 (pupuk kandang sapi 100g+abu ampas tebu 200 g). Hasil penelitian menunjukkan bahwa variasi pemberian pembenh tanah berpengaruh nyata terhadap sifat tanah (bobot isi tanah, porositas, kandungan C-organik), pertumbuhan (Panjang tanaman dan umur berbunga), hasil (panjang tongkol tanpa kelobot, bobot tongkol dengan kelobot dan tanpa kelobot dan diameter tongkol tanpa kelobot). Perlakuan P2 cenderung memberikan hasil terbaik pada parameter hasil.

Kata kunci: *baby corn*, Sifat fisik tanah, abu ampas tebu, silika

Itsna Imroatus Sholihah Ramadani 210311100142. Growth And Yield Response of Sweet Corn (*Zea mays saccharata* L.) To Variations in Soil Conditioner Application in Planting Media. Pembimbing **Dr. Agr. Eko Setiawan, S.P., M.Si** and **Ir. Slamet Supriyadi, M.Si.**

ABSTRACT

Baby sweet corn cultivation requires a fertile growing medium. Such conditions could be achieved by application of soil conditioners that can improve soil quality and the availability of nutrients for plant. The purpose of this study was to determine the response of growth and yield of sweet corn baby corn plants (*Zea mays saccharata* L.) to the provision of variations in soil conditioners in the planting medium. This study was conducted at the Agroecotechnology Experimental Field of Trunojoyo University, Madura from April-June 2024. The experiment in this study was arranged on a non-factorial Completely Randomized Design (CRD), consisting of seven treatments, namely P0 (control), P1 (100 g rice husk charcoal), P2 (100 g rice husk charcoal + 200 g sugar cane ash), P3 (200 g sugar cane ash), P4 (50 g of silica extract from sugar cane), P5 (100 g cow manure), and P6 (100 g cow manure + 200 g sugar cane ash). The results showed that application of different soil conditioners significantly affected soil properties (soil bulk density, porosity, C-organic content), growth (plant length and flowering age), and yield (cob length without husk, cob weight with husk and without husk, cob diameter without husk). Among the treatments, P2 tended to provide the best results in terms of yield parameters.

Keywords: baby corn, physical properties of soil, bagasse ash, silica