

ABSTRAK

Helva Aprillia Putri Hadiani. 2026. Efektivitas *Trichoderma* sp. Sebagai Biofertilizer Terhadap Pertumbuhan dan Hasil Tanaman Cabai Rawit (*Capsicum frutescens*). Di bawah bimbingan Efrin Firmansyah dan Jajang Supriatna.

Trichoderma sp. merupakan fungi dari kelompok *Plant Growth Promoting Fungi* (PGPF) yang berperan dalam merangsang pertumbuhan tanaman serta mendegradasi bahan organik. Penelitian ini bertujuan untuk mengetahui efektivitas dan menentukan satu dosis terbaik *Trichoderma* sp. dalam meningkatkan pertumbuhan dan hasil tanaman cabai rawit. Penelitian akan dilaksanakan di Paratag Farm, Kecamatan Cilengkrang, Kabupaten Bandung Barat dari bulan Februari 2026 - Agustus 2026. Metode yang digunakan adalah Rancangan Acak Kelompok (RAK) dengan 6 taraf perlakuan, 3 unit, dan 4 ulangan, sehingga diperoleh 72 unit percobaan. Data kemudian dianalisis menggunakan analisis sidik ragam (ANOVA), dan apabila hasilnya berbeda nyata, dilanjutkan dengan uji Duncan (DMRT) pada taraf 5%. Hasil penelitian menunjukkan bahwa belum ditemukan dosis perlakuan yang mampu meningkatkan tinggi tanaman (cm), jumlah daun (helai), jumlah bunga (tangkai), jumlah buah (buah), bobot basah buah (g), dan indeks panen (%).

Kata kunci: *Biofertilizer*, Cabai rawit, Hasil, Pertumbuhan, *Trichoderma* sp.

ABSTRACT

Helva Aprillia Putri Hadiani. 2026. The Effectiveness of *Trichoderma* sp. as a Biofertilizer on the Growth and Yield of Bird's Eye Chili (*Capsicum frutescens*). Under the supervision of Efrin Firmansyah and Jajang Supriatna.

Trichoderma sp. is a fungal species classified within the Plant Growth-Promoting Fungi (PGPF) group, functioning as a biofertilizer by facilitating the decomposition of soil organic matter and promoting plant growth. This research seeks to evaluate the effectiveness of *Trichoderma* sp. and to determine the optimal dosage for improving the growth and yield of bird's eye chili plants. The study was carried out at Paratag Farm, Cilengkrang Subdistrict, West Bandung Regency, over the period of February to August 2026. A Randomized Block Design (RBD) was employed, comprising six treatment levels, three blocks, and four replications, yielding a total of 72 experimental units. The collected data were subjected to analysis of variance (ANOVA), followed by Duncan's Multiple Range Test (DMRT) at the 5% significance level in cases where significant differences were detected. Findings from the study revealed that none of the tested treatment doses significantly increased plant height (cm), leaf number (sheets), flower number (stems), fruit number (fruits), fresh fruit weight (g), or harvest index (%).

Keywords: Biofertilizer, Bird's eye chili, Yield, Growth, *Trichoderma* sp.

