

## ABSTRAK

Nurul Fajri Widiyasri, (2021). “Pengaruh Aplikasi Isolat *Trichoderma* spp. Terhadap Perkecambahan Benih Padi Sawah (*Oryza sativa* L. var. *Cisokan balang*)”.

Konsumsi padi di Indonesia setiap tahunnya meningkat tetapi produksi padi di Indonesia masih sangatlah rendah, oleh karena itu pemerinah merencanakan pertanian organik yang berjuan untuk meningkatkan produksi padi, salah satu upaya peningkatan produksi dengan pertanian organik dengan melakukan *biofertilizer*. *Biofertilizer* merupakan upaya peningkatan pertumbuhan tanaman dengan bantuan *Plant Growth Promoting Fungi* (PGPF). Jamur yang termasuk kedalam PGPF diantaranya adalah *Trichoderma*. *Trichoderma* merupakan salah satu jamur yang banyak diteliti belakangan ini, hal ini dikarenakan *Trichoderma* mampu membantu memacu pertumbuhan tanaman dengan menghasilkan ZPT berupa IAA, gibberalin dan sitokinin yang secara langsung memacu pertumbuhan tanaman yang dapat ditemui di tanah hutan maupun tanah pertanian.

Penelitian ini merupakan penelitian eksperimen dengan menggunakan Rancangan Acak Lengkap (RAL) dengan 6 perlakuan dan 3 ulangan. 6 perlakuan terdiri dari 5 perlakuan dengan aplikasi *Trichoderma* spp. dari 5 rizosfer padi dan 1 perlakuan untuk kontrol (tanpa aplikasi *Trichoderma* spp.). Data hasil pengamatan dianalisis dengan uji ANOVA dan bila hasil di peroleh menunjukkan beda nyata maka akan di lanjutkan menggunakan uji lanjut DMRT pada taraf nyata 5%.

Hasil dari penelitian ini menunjukkan bahwa aplikasi isolat *Trichoderma* spp. terhadap persentase perkecambahan benih padi sawah (*Oryza sativa* L. var. *Cisokan balang*) tidak memberikan pengaruh nyata terhadap pertumbuhan benih padi dengan parameter persentase perkecambahan, kecepatan perkecambahan dan indeks vigor benih padi sawah var. *Cisokan balang*.

Kata Kunci : *Biofertilize*, *Cisokan balang*, Padi, *Trichoderma*, ZPT.

## ABSTRACT

Nurul Fajri Widiyasri, (2021). " Effect of Isolat *Trichoderma* spp. Application to the Germination of Rice Plant (*Oryza sativa* L. var. *Cisokan balang*) "

Rice consumption in Indonesia is increasing every year, but rice production in Indonesia is still very low, therefore the government is planning organic farming which aims to increase rice production, one of the efforts to increase production by using organic farming by implementing biofertilizers. Biofertilizer is an effort to increase plant growth with the help of Plant Growth Promoting Fungi (PGPF). Fungi that are included in PGPF include *Trichoderma*. *Trichoderma* is one of the most studied fungi recently, this is because *Trichoderma* is able to help spur plant growth by producing ZPT in the form of IAA, gibberalin and cytokinins which directly stimulate plant growth which can be found in forest and agricultural soils.

This research is an experimental research using a completely randomized design (CRD) with 6 treatments and 3 replications. 6 treatments consisted of 5 treatments with the application of *Trichoderma spp.* of 5 rice rhizosphere and 1 treatment for control (without *Trichoderma spp.* application). The data from the observations were analyzed by using the ANOVA test and if the results obtained showed a significant difference, then it would be continued using the DMRT further test at the 5% real level.

The results of this study indicate that the application of *Trichoderma spp.* the percentage of lowland rice seed germination (*Oryza sativa* L. var. *Cisokan balang*) did not have a significant effect on the growth of rice seeds with the parameters of the percentage of germination, germination speed and vigor index of lowland rice seeds var. *Cisokan Balang*.

Key word : *Biofertilize*, *Cisokan balang*, *Rice*, *Trichoderma*, *ZPT*.