

## INTISARI

Padi (*Oryza sativa* L.) merupakan salah satu sumber pangan utama bagi manusia, namun saat ini produktivitas tanaman padi dibatasi oleh adanya cekaman kekeringan. Salah satu upaya untuk mengatasi rendahnya produktivitas tanaman padi akibat cekaman kekeringan adalah dengan pemberian mikoriza. Penelitian ini bertujuan untuk mengetahui pengaruh mikoriza dan interval waktu penyiraman terhadap pertumbuhan dan hasil tanaman padi. Penelitian dilaksanakan dengan menggunakan Rancangan Petak Terbagi (*Split plot*) yang terdiri atas dua faktor yakni mikoriza dan interval waktu penyiraman. Taraf perlakuan mikoriza terdiri atas tiga taraf yaitu tanpa aplikasi cendawan mikoriza arbuskular/kontrol ( $M_0$ ), aplikasi cendawan mikoriza arbuskular dengan dosis 5g ( $M_1$ ) aplikasi cendawan mikoriza arbuskular dengan dosis 15g ( $M_2$ ) sedangkan interval waktu penyiraman terdiri atas tiga taraf yaitu disiram setiap 2 hari sekali (P0), disiram 4 hari sekali (P1), dan disiram 6 hari sekali (P2). Hasil penelitian menunjukkan bahwa aplikasi inokulan mikoriza secara nyata mampu meningkatkan kadar air nisbi, panjang akar, volume akar, umur berbunga, luas daun, bobot kering akar, bobot kering daun, bobot kering batang, bobot kering gabah, nisbah luas daun, bobot daun khas, laju asimilasi bersih, laju pertumbuhan tanaman, jumlah malai, panjang malai, jumlah gabah per malai, bobot 1000 butir, bobot gabah per rumpun. Peningkatan interval waktu penyiraman berpengaruh nyata dengan menurunkan kadar lengas, kadar air nisbi, umur berbunga, luas daun, bobot kering daun, bobot kering batang, bobot kering gabah, bobot daun khas, laju asimilasi bersih, nisbah akar tajuk, indeks panen, jumlah malai, jumlah gabah per malai, bobot 1000 butir, bobot gabah per rumpun.

Kata Kunci: Cendawan Mikoriza Arbuskular, Kekeringan, Padi.

## ABSTRACT

Rice (*Oryza sativa* L.) is one of the main sources of food for humans, but currently the productivity of rice plants is limited by drought stress. One of the efforts to overcome the low productivity of rice plants due to drought stress is by giving mycorrhiza. This study aims to determine the effect of mycorrhiza and watering time intervals on the growth and yield of rice plants. The study was carried out using a Split Plot Design which consisted of two factors, namely mycorrhizae and watering time intervals. The levels of mycorrhizal treatment consisted of three levels, namely without application of arbuscular mycorrhizal fungi/control (M0), application of arbuscular mycorrhizal fungi with a dose of 5g (M1) application of arbuscular mycorrhizal fungi with a dose of 15g (M2) while the watering time interval consisted of three levels, namely watering every Once every 2 days (P0), watered every 4 days (P1), and watered once every 6 days (P2). The results showed that the application of mycorrhizal inoculants significantly relative water content, root length, root volume, flowering age, leaf area, root dry weight, leaf dry weight, stem dry weight, grain dry weight, leaf area ratio, typical leaf weight, net assimilation rate, plant growth rate, number of panicles, length of panicles, number of grains per panicle, weight of 1000 grains, grain weight per hill. Increasing watering time intervals had a significant effect by reducing moisture content, relative water content, age of flowering, leaf area, leaf dry weight, stem dry weight, grain dry weight, typical leaf weight, net assimilation rate, shoot root ratio, harvest index, number of panicles. , number of grain per panicle, weight of 1000 grains, weight of grain per clump.

Keywords: Arbuscular Mycorrhizal Fungi, Drought, Rice