

INTISARI

Penelitian ini bertujuan untuk mengkaji pengaruh berbagai varietas dan macam pengairan terhadap pertumbuhan, hasil dan fisiologi tanaman padi. Penelitian ini dilaksanakan di lahan percobaan Universitas Muhammadiyah Yogyakarta pada bulan Agustus-Desember 2018.

Penelitian ini dilakukan di lahan dengan rancangan faktorial 2x4 strip-plot yang disusun dalam Rancangan Acak Kelompok Lengkap dengan 3 ulangan sehingga didapatkan 24 unit penelitian. Faktor I terdiri dari 2 aras, yaitu A1 (pengairan berselang) dan A2 (pengairan terus-menerus). Faktor II terdiri dari 4 aras, yaitu varietas IR-64 (VIR), varietas Mentik Wangi (VMW), varietas Cianjur (VCI), dan varietas Segara Anak (VSA). Parameter yang diamati tinggi tanaman, jumlah anakan, bobot berangkasan segar dan bobot berangkasan kering tanaman, luas daun, panjang akar, bobot gabah/rumpu, bobot 1000 butir, hasil gabah per hektar, laju pertumbuhan tanaman, laju pertumbuhan relatif, laju asimilasi bersih, dan bobot daun khas.

Hasil penelitian menunjukkan bahwa perlakuan varietas berpengaruh terhadap tinggi tanaman, bobot berangkasan segar dan bobot berangkasan kering. Padi varietas mentik wangi memberikan pengaruh terhadap tinggi tanaman. Padi varietas Cianjur memberikan pengaruh terhadap bobot berangkasan segar dan bobot berangkasan kering tanaman. Pada hasil padi dapat dilihat dari bobot gabah/rumpun dan panjang malai, yaitu varietas Cianjur. Pada fisiologi tidak memberikan pengaruh terhadap varietas. Perlakuan pengairan menunjukkan pengaruh terhadap bobot berangkasan segar dan bobot berangkasan kering tanaman, sedangkan fisiologi dan hasil tidak berpengaruh. Pada parameter panjang malai dan bobot gabah/rumpun terjadi interaksi antara varietas dan pengairan. Perlakuan pengairan SRI dengan varietas Cianjur menunjukkan pengaruh nyata lebih tinggi dibandingkan dengan varietas Mentik Wangi, Segara Anak, dan IR64.

Kata kunci: Varietas Lokal, Varietas Unggul, dan Pengairan berselang

ABSTRACT

This study aims to learn the effect of various varieties and types of irrigation on growth, yield and physiology of rice plants. This research was carried out on the experimental field of Muhammadiyah University of Yogyakarta in August-December 2018.

This research was carried out in a field with a 2x4 factorial strip-plot design arranged in a Completely Block Randomized Design with 3 replications so that 24 research units were collected. Factor I consists of 2 levels, namely A1 (intermittent irrigation) and A2 (continuous irrigation). Factor II consisted of 4 levels, namely IR-64 (VIR), Mentik Wangi (VMW), Cianjur (VCI), and Segara Anak (VSA) varieties. Parameters observed were plant height, number of tillers, fresh weighted weights and dry weighted weights, leaf area, root length, grain weight, 1000 grain weight, grain yield per hectare, crop growth rate, relative growth rate, net assimilation rate, and specific leaf weights.

The results showed that the treatment of varieties affected plant height, fresh weighted weight and dry weight. Rice from mentik fragrant varieties had an influence on plant height. Cianjur variety rice has an influence on fresh weighted weight and dry weight of plant weight. The yield of rice can be seen from the weight of grain / clump and panicle length, namely the Cianjur variety. In physiology there is no effect on varieties. The irrigation treatment showed an effect on fresh weighted weight and dry weighted plant weight, while the physiology and yield had no effect. In the parameters of panicle length and grain / clump weight there is an interaction between varieties and irrigation. The treatment of SRI irrigation with the Cianjur variety showed a significantly higher effect than the Mentik Wangi variety, Segara Anak, and IR64.

Keywords: Local Varieties, Superior Varieties, and Intermittent Irrigation