

RINGKASAN

Padi sebagai bahan pangan pokok masyarakat Indonesia perlu ditingkatkan produksinya sejalan dengan terus meningkatnya pertumbuhan penduduk. Salah satu upaya untuk meningkatkan produksi padi adalah dengan penggunaan varietas unggul dan teknik budidaya yang tepat. Padi sawah protein tinggi telah berhasil dilepas oleh Fakultas Pertanian Universitas Jenderal Soedirman pada tahun 2020 yang diberi nama Padi Inpago Unsoed Protani. Selain itu, penerapan teknologi budidaya seperti jajar legowo, minapadi, dan sistem salibu juga dapat mengoptimalkan hasil lahan melalui peningkatan efisiensi ruang tanam, pemanfaatan sumber daya, dan panen berganda dari satu kali penanaman.

Penelitian ini bertujuan untuk mengetahui tanggap varietas Protani terhadap variasi jajar legowo pada sistem minapadi salibu. Penelitian ini dilaksanakan di Minapadi Technopark, Desa Panembangan, Kecamatan Cilongok, Kabupaten Banyumas yang berlangsung dari bulan Agustus-November 2024. Perlakuan yang diuji adalah model jajar legowo yang terdiri dari jajar legowo 2:1, jajar legowo 3:1, jajar legowo 4:1, dan jajar legowo 5:1. Penelitian dilaksanakan secara eksperimen menggunakan rancangan acak kelompok (RAK) petak tersarang dengan 4 perlakuan dan diulang 6 kali, sehingga diperoleh 24 petak percobaan. Masing-masing petak percobaan memiliki luas 6 x 4 m. data penelitian dianalisis menggunakan sidik ragam pada taraf 5%. Apabila terdapat beda nyata dilanjutkan dengan uji DMRT (*Duncan Multiple Range Test*) pada taraf 5%.

Hasil penelitian menunjukkan bahwa varietas Protani memberikan tanggap pertumbuhan yang berbeda pada variasi jajar legowo, berdasarkan pada tinggi tanaman, jumlah anakan total, dan jumlah anakan produktif dimana perlakuan terbaik pada jajar legowo 2:1. Hasil varietas Protani tidak berbeda antar variasi jajar legowo. Laju pertumbuhan tinggi tanaman tertinggi diperoleh pada jajar legowo 2:1, sedangkan laju pertumbuhan anakan dan laju pertumbuhan tinggi tunas diperoleh pada jajar legowo 3:1. Sementara itu, pertumbuhan salibu terbaik dihasilkan oleh jajar legowo 3:1.

Kata kunci: Protani, jajar legowo, minapadi, salibu

SUMMARY

Rice as a staple food for the Indonesian people needs to be increased in line with the increasing population growth. One effort to increase rice production is by using superior varieties and proper cultivation techniques. High protein lowland rice has been successfully released by the Faculty of Agriculture, Jenderal Soedirman University in 2020, which was named Padi Inpago Unsoed Protani. In addition, the application of cultivation technologies such as jajar legowo, minapadi, and Salibu systems can also optimize land yields by increasing the efficiency of planting space, resource utilization, and multiple harvests from one planting.

This study aims to determine the response of Protani varieties to variations in jajar legowo in the Salibu rice farming system. This study was conducted in Minapadi Technopark, Panembangan Village, Cilongok District, Banyumas Regency which will take place from August-November 2024. The treatments tested were the legowo row model consisting of 2:1 legowo row, 3:1 legowo row, 4:1 legowo row, and 5:1 legowo row. The research was conducted experimentally using a randomized block design (RAK) nested plots with 4 treatments and repeated 6 times, so that 24 experimental plots were obtained. Each experimental plot has an area of 6 x 4 m. The research data were analyzed using analysis of variance at the 5% level. If there is a significant difference, it is continued with the DMRT test (Duncan Multiple Range Test) at the 5% level.

The results showed that Protani varieties gave different growth responses to the legowo row variation, based on plant height, total number of tillers, and number of productive tillers where the best treatment was in the legowo row 2:1. The results of Protani varieties did not differ between legowo row variations. The highest plant height growth rate was obtained in the 2:1 row arrangement, while the tiller growth rate and shoot height growth rate were obtained in the 3:1 row arrangement. Meanwhile, the best cross growth was produced by the 3:1 row arrangement.

Keywords: Protani, jajar legowo, minapadi, Salibu