

RINGKASAN

Beras hitam merupakan tanaman pangan fungsional yang mengandung banyak manfaat, diantaranya yaitu mencegah diabetes, penyakit jantung dan memperlambat penuaan. Dikarenakan manfaatnya yang beragam, beras hitam pun memiliki nilai ekonomis yang cukup tinggi, oleh karena itu perlu dilakukan penelitian dalam budidaya beras hitam agar dapat memberikan hasil yang tinggi. Penelitian ini bertujuan untuk mengetahui pengaruh jenis pupuk organik terhadap karakter fisiologis dan hasil tanaman padi hitam, mengetahui pengaruh jumlah bibit per lubang tanam terhadap karakter fisiologis dan hasil tanaman padi hitam dan mengetahui adanya interaksi antara pengaruh jenis pupuk organik dan jumlah bibit per lubang tanam terhadap karakter fisiologis dan hasil tanaman padi hitam.

Penelitian dilaksanakan di lahan sawah di Desa Karanglewas Kidul, Kecamatan Karanglewas, Kabupaten Banyumas, Jawa Tengah pada bulan April sampai September 2016. Ketinggian tempat sekitar 93 meter di atas permukaan laut. Penelitian ini menggunakan Rancangan Petak Terbagi dengan petak utama berupa tiga jenis pupuk organik yaitu pupuk kandang ayam, pupuk kandang kambing dan pupuk kandang sapi dan anak petak berupa jumlah bibit per lubang tanam dengan tiga taraf yaitu satu bibit per lubang tanam, dua bibit per lubang tanam dan tiga bibit per lubang tanam dengan tiga ulangan pada setiap kombinasi perlakuan. Variabel yang diamati pada penelitian ini terbagi atas variabel vegetatif dan variabel hasil yaitu laju pertumbuhan relatif, laju asimilasi bersih, indeks luas daun, kandungan antosianin, kandungan amilum, kandungan Thiamin Hidroklorida dan bobot gabah per hektar.

Hasil penelitian menunjukkan bahwa jenis pupuk organik mempengaruhi variabel kandungan klorofil, amilum, antosianin dan thiamin hidroklorida serta mempengaruhi bobot gabah per hektar, jumlah bibit per lubang tanam mempengaruhi variabel laju pertumbuhan tanaman, indeks luas daun, kandungan antosianin, amilum, dan thiamin hidroklorida, tidak adanya interaksi antara pengaruh jenis pupuk organik dan jumlah bibit per lubang tanam terhadap karakter fisiologis dan hasil tanaman padi hitam.

SUMMARY

Black rice are one of the functional food that has many advantage like, prevent diabetes, heart attack and can work as well as anti aging. Due to its various benefits, the price of black rice become valued, therefore it is necessary to do some research about black rice cultivation in order to provide a high yield. This research aims to know the effect of type of organic fertilizers on the physiological character and yield of black rice, know the effect of number of seedling each planting hole on the physiological and yield of black rice, know the interaction between type of organic fertilizers and number of seedling each planting hole on the physiological and yield of black rice.

The research was conduct in rice field on Karanglewas Kidul village, Karanglewas district, Banyumas, Central java started at April until September 2016. The altitude are about 93 metres above sea level. This research used a Split Plot design, the main plot are three type of organic fertilizers which is chicken manure fertilizer, goat manure fertilizer and cow manure fertilizer, the sub plot are three number of seedling each planting hole which is one seed each hole, two seed each hole and three seed each hole with 3 replies each treatment combination. The observed variable on this research are divided into two kinds, which is vegetative and yield variable i.e.crops growth rate, net assimilation rate, leaf area index, chlorophyll content, anthocyanin content, amyllum content, Thiamine hydrochloride content and grain weight per hectare.

The result of the research are type of organic fertilizers have effect on variable chlorophyll content, amyllum, anthocyanin, thiamine hydrochloride content and grain weight per hectare, number of seedling each planting hole have significant effect crop growth rate, leaf area index, anthocyanin content, amyllum content and thiamine hydrochloride content, there are no interaction between type of organic fertilizers and number of seedling each planting hole on physiological character and yield of black rice.