

***The Effect of Rice Husk as an Additional Media in Soilless Cultivation of
Red Rice and Black Rice***

Supervised by Tirto Wahyu Widodo, S.P.,M.P.

Aprilia Meli Susanti

Study Program of Food Crop Production Technology

Department of Agricultural Production

ABSTRACT

The Indonesian people's need for highly nutritious rice is being hampered by reduced land area and soil degradation over time. Therefore functional rice cultivation which utilizes limited land resources such as urban farming and soilless media needs to be encouraged. This study aimed to examine the effect of the application of soilless media consisting of water and rice husks with different ratios on the growth and production of two functional rice varieties. This experiment was designed using a completely randomized design (CRD) with two factors and three replications. The first factor is soilless media (water mixed with rice husks) within five ratio levels namely 6:1, 8:1, 10:1, 12:1, and 14:1. The second factor is the rice variety namely Watu dodol (black rice) and Merah A2 (red rice). Parameters observed consisted of plant height, number of productive tillers, panicle length, root length, number of full grains per panicle, number of grains per panicle, grain weight per clump, and weight of 1,000 grains. Significantly, the combination of soilless media 12:1 and the Watu dodol variety showed the highest number of full grains per panicle (188 grains) and the number of grains per panicle (216,17 grains). Individually, the Watu dodol variety showed the best response on plant height (82,18 cm), panicle length (24,86 cm), number of full grains per panicle (205,67 grains), number of grains per panicle (231,5 grains), and grain weight per clump (47,31 g).

Keywords: *soilless media, black rice, red rice, rice husk*