GROWTH AND YIELD RESPONSE OF PAKCOY PLANTS (Brassica rapa L.) TO VARIOUS TYPES OF PLANT MEDIA AND APPLICATION OF Trichoderma harzianum FUNGUS

By: Fikri Fachrezi

Supervised by : Ami Suryawati and Oktavia S. Padmini

ABSTRACT

The productivity of the pakeov plant can be increased through the selection of planting media and the application of Trichoderma sp. Application of Trichoderma sp. is a function to control pathogens in the soil and the addition of a mixture of other planting media, which is husk charcoal and cocopeat which are useful for helping plant root systems to increase plant growth. This research was conducted at the UPN Veterans Experimental Garden in Yogyakarta, Wedomartani Village, Ngemplak, Sleman Yogyakarta in June-July 2023. The design used was Rancangan Acak Kelompok Lengkap (RAKL) which consisted of 2 factors repeated 3 times. The first factor is the planting medium which consists of three levels, including; planting medium soil+husk charcoal (1:1), planting medium soil+cocopeat (1:1) and planting medium soil+husk charcoal+cocopeat (1:1:1). The second factor is the dose of Trichoderma sp which consists of three levels, which are; Trichoderma sp 10 g/plant, Trichoderma sp 20 g/plant and Trichoderma sp 30 g/plant). Data analysis in the study was an analysis of variance (ANOVA) followed by a different test using the Duncan Multiple Range Test (DMRT) with a significance level of 5%. The results of this study indicate there is an interaction effect of the type of planting media treatment and the dose of Trichoderma harzianum sp. on the parameters of fresh weight, dry weight and root crown ratio. The best interaction between the growing media and Trichoderma harzianum was found in the combination of soil+husk+cocopeat at a dose of 20 g/plant of Trichoderma harzianum. The best planting medium for the growth and yield of pakcoy is soil+husk charcoal+cocopeat, while the best dose of Trichoderma harzianum for the growth and yield of pakcoy is 20 g/plant.

Keywords: pakcoy, planting media, *Trichoderma harzianum*