

ABSTRAK

M. Tegar Wiratama (1810311017) “**Respon Pertumbuhan Dan Produksi Berbagai Varietas Tanaman Pakcoy (*Brassica rapa L.*) Terhadap Pemberian Konsentrasi Zat Pengatur Tumbuh Alami (Air Kelapa) Pada Sistem Rakit Apung**”, Dosen Pembimbing Utama Ir. Bejo Suroso, MP., Dosen Pembimbing Anggota Ir. Insan Wijaya, MP.

Penelitian ini bertujuan untuk mengetahui: 1). Pengaruh konsentrasi zpt alami terhadap pertumbuhan dan produksi tanaman pakcoy (*Brassica rapa L.*). 2). Respon pertumbuhan dan produksi berbagai varietas tanaman pakcoy (*Brassica rapa L.*) pada sistem rakit apung. 3). Interaksi antara berbagai varietas dan konsentrasi zpt alami terhadap pertumbuhan dan produksi tanaman pakcoy (*Brassica rapa L.*).

Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) *Split Plot* (petak terbagi) dari dua factor (3x3). Dua faktor tersebut yaitu konsentrasi ZPT alami (air kelapa) (sebagai petak utama) (Z) dalam 3 taraf, yaitu : Z1 = 75 ml/L, Z2 = 150 ml/L, Z3 = 225 ml/L dan varietas pakcoy (sebagai anak petak) (V) dalam 3 taraf, yaitu V1 = *Green* pakcoy, V2 = *White* pakcoy, V3 = *Brisk Green* pakcoy.

Hasil penelitian menunjukkan bahwa perlakuan konsentrasi zpt alami (air kelapa) 75 ml/L berpengaruh nyata terhadap pertumbuhan dan hasil produksi tanaman pakcoy pada variabel pengamatan tinggi tanaman, jumlah daun, panjang daun, lebar daun, panjang akar, berat segar tanaman persampel, dan berat segar tanaman perplot. Perlakuan varietas *White* pakcoy berpengaruh nyata terhadap pertumbuhan dan produksi tanaman pada variabel pengamatan tinggi tanaman, jumlah daun, panjang daun, lebar daun, berat segar tanaman persampel, dan berat segar tanaman perplot. Interaksi antara konsentrasi zpt alami (air kelapa) 75 ml/L dengan *White* pakcoy berpengaruh nyata terhadap pertumbuhan dan produksi tanaman pada variabel pengamatan jumlah daun 45 hst, berat segar tanaman per sampel, dan berat segar tanaman per plot.

Kata kunci : Zpt alami (air kelapa), Pakcoy (*Brassica rapa L.*), Sistem Rakit Apung.

ABSTRACT

*M. Tegar Wiratama (1810311017) "Growth and Production Responses of Various Pakcoy Plant Varieties (*Brassica rapa* L.) Regarding the Concentration of Natural Growth Regulators (Coconut Water) in the Floating Raft System", Main Supervisor Ir. Bejo Suroso, MP., Member Supervisor Ir. Insan Wijaya, MP.*

*This study aims to determine: 1). The effect of natural zpt concentration on the growth and production of pakcoy plants (*Brassica rapa* L.). 2). Growth and production response of various varieties of pakcoy plants (*Brassica rapa* L.) on floating raft systems. 3). Interaction between different varieties and natural zpt concentrations against the growth and production of pakcoy plants (*Brassica rapa* L.).*

This study used a Complete Randomized Design (RAL) Split Plot (split plot) of two factors (3x3). The two factors are the concentration of natural ZPT (coconut water) (as the main plot) (Z) in 3 levels, namely: Z1 = 75 ml / L, Z2 = 150 ml / L, Z3 = 225 ml / L and pakcoy varieties (as child plots) (V) in 3 levels, namely V1 = Green pakcoy, V2 = White pakcoy, V3 = Brisk Green pakcoy.

The results showed that the treatment of natural zpt concentration (coconut water) of 75 ml / L had a significant effect on the growth and production yield of pakcoy plants on the variables of observing plant height, number of leaves, leaf length, leaf width, root length, fresh weight of the perampel plant, and fresh weight of the perplot plant. White pakcoy variety treatment had a marked effect on plant growth and production on the observed variables of plant height, number of leaves, leaf length, leaf width, fresh weight of the perampel plant, and fresh weight of the perplot plant. The interaction between the natural zpt concentration (coconut water) of 75 ml/L with White pakcoy had a marked effect on plant growth and production on the observed variables of 45 hst leaf count, plant fresh weight per sample, and plant fresh weight per plot.

Keywords : *Natural zpt (coconut water), Pakcoy (*Brassica rapa* L.), Floating Raft System.*