ABSTRAK

Pakcoy *(Brassica rapa* L.*)* adalah jenis sayuran yang banyak di gemari. Pakcoy banyak mengandung vitamin dan kadar mineral yang tinggi. pakcoy juga mengandung banyak gizi diantaranya protein, lemak nabati, karbohidrat, serat, kalsium, Magnesium, sodium, vitamin A dan vitamin C. Saat ini pemupukan ramah lingkungan dan aman bagi kesehatan melalui sistem organik sangat dianjurkan, yaitu dengan menggunakan pupuk organik. Limbah ternak yang dapat digunakan sebagai pupuk antara lain sisa makanan maggot dan limbah kotoran ayam. Pupuk limbah maggot memiliki unsur nitrogen yang berfungsi menyusun protein, asam amino, dan klorofil. Pupuk kandang mempunyai fungsi yang penting dalam menggemburkan lapisan tanah (*Topsoil*), meningkatkan jasad renik, mempertinggi daya resap air dan daya simpan air serta dapat meningkatkan kesuburan tanah. Penelitian ini dilakukan pada bulan Maret-Mei 2023 Bertempatan di *GreenHouse*, Prodi Biologi, Fakultas Sains dan Teknologi, Universitas PGRI Adi Buana Surabaya Dengan metode penelitian Rancangan Acak Lengkap (RAL), yang terdiri dari 6 perlakuan dan 5 ulangan yakni, P1 POC limbah maggot (100%), P2 POC limbah maggot & POC kotoran ayam (70%:30%), P3 POC limbah maggot & POC kotoran ayam (50%:50%), P4 POC limbah maggot & POC kotoran ayam (30%:70%), P5 POC kotoran ayam (100%), P6 NPK (100%). Parameter pertumbuhan yang diamati adalah tinggi tanaman, jumlah daun dan berat basah. Pada penelitian ini disimpulkan bahwa pemberian perlakuan POC berpengaruh terhadap pertumbuhan tanaman Pakcoy. Perlakuan P5 memberikan hasil panen paling baik diantara perlakuan laiinya meliputi faktor pertambahan tinggi tanaman, jumlah daun dan berat basah tanaman pasca panen.

Kata kunci: Limbah maggot, Kotoran ayam, Pakcoy, Pupuk organik cair.

ABSTRACT

Pakcoy (Brassica rapa L.) is a type of vegetable that is much loved. Pakcoy contains many vitamins and high mineral levels. pakcoy also contains many nutrients including protein, vegetable fat, carbohydrates, fiber, calcium, magnesium, sodium, vitamin A and vitamin C. Currently, environmentally friendly and safe fertilization through organic systems is highly recommended, namely using organic fertilizers. Currently, environmentally friendly and safe fertilization for health through organic systems is highly recommended, namely by using organic fertilizers. Livestock waste that can be used as fertilizer includes maggot food waste and chicken manure waste. Maggot waste fertilizer has nitrogen elements that function to form proteins, amino acids, and chlorophyll. Manure has an important function in loosening the soil layer (Topsoil), increasing microorganisms, increasing water absorption and water storage capacity and can increase soil fertility. This research was conducted in March-May 2023 Located in GreenHouse, Biology Study Program, Faculty of Science and Technology, PGRI Adi Buana University Surabaya With the research method of Completely Randomized Design (RAL), which consists of 6 treatments and 5 replicates namely, P1 POC maggot waste (100%), P2 POC maggot waste & POC chicken manure (70%: 30%), P3 POC maggot waste & POC chicken manure (50%: 50%), P4 POC maggot waste & POC chicken manure (30%: 70%), P5 POC chicken manure (100%), P6 NPK (100%). The growth parameters observed were plant height, number of leaves and wet weight. In this study, it was concluded that the provision of POC treatment affected plant growth.

Keywords: Maggot waste, Chicken manure, Pakcoy, Liquid organic fertilizer.