

Rihlatin Nur Endi Rohmah. 170311100040. Effect of Composition of Organic Materials on Growth and Yield of Ciplukan (*Physalis angulata* L.) Plants. Supervised by: Ir. Sinar Suryawati, M.Si. and Dr. Agr. Eko Setiawan, SP., M. Si.

ABSTRACT

Ciplukan plant (*Physalis angulata* L.) is a medicinal plant that contains, among others, flavonoid glucosides and is widely used as a therapeutic agent for diabetes mellitus. Planting media is one of the factors that affect plant growth. The addition of organic matter in soil planting media can affect the availability of nutrients in the soil. This study aims to determine the effect of the composition of organic matter on the growth and yield of ciplukan (*Physalis angulata* L) plant. The study was conducted at the Green House, Faculty of Agriculture, Trunojoyo University, Madura using a completely randomized design consisting of 6 treatments for the composition of the growing media, namely T0 (Soil), T1 (Soil + Cow dung / 1:2), T2 (Soil + Kirinyuh Leaves / 1 :2), T3 (Soil + Manure + Kirinyuh Leaves / 1:1:1), T4 (Soil + Cow Manure + Husk Charcoal / 1:1:1), T5 (Soil + Husk Charcoal + Kirinyuh Leaves / 1:1:1). Based on the results of the study, it was known that the composition of the type of organic matter had a significant effect on all parameters, namely plant height, number of leaves, root length, total fruit number, total fruit weight, leaf area and total dry weight of ciplukan plants. The effect of the treatment of organic composition of cow dung, husk charcoal and soil in a ratio of 1:1:1 (T4) gave the best results on the growth and yield of ciplukan (*Physalis angulata* L.) plants compared to other treatments.

Keywords: Ciplukan (*Physalis angulata* L.), Cow Manure, Husk Charcoal, Kirinyuh Leaves.