

**EFFECT OF COMBINATION DOSES OF MYCORRHIZA AND
PHOSPHATE FERTILIZER ON GROWTH AND YIELD OF
CAULIFLOWER (*Brassica oleracea* var. *botrytis* L.)**

**By: Jinny Aulia Rahmadini
Supervised by: Endah Budi Irawati and Tutut Wirawati**

ABSTRACT

Cauliflower is one of the vegetables that is in demand by the public because it contains high minerals. The production of flower cabbage still cannot meet the needs so efforts are needed to increase its production. The purpose of this study was to determine the best dose of mycorrhiza and phosphate fertilizer for flower cabbage plants. This study used a completely randomized design (CRD) with a single factor consisting of 7 treatments, whitout mycorrhiza + 250 kg/ha phosphate fertilizer, 5 g/plant mycorrhiza + 187.5 kg/ha phosphate fertilizer, 5 g/plant mycorrhiza + 125 kg/ha phosphate fertilizer, 10 g/plant mycorrhiza + 187. 5 kg/ha phosphate fertilizer, 10 g/plant mycorrhiza + 125 kg/ha phosphate fertilizer, 15 g/plant mycorrhiza + 187.5 kg/ha phosphate fertilizer, and 15 g/plant mycorrhiza + 125 kg/ha phosphate fertilizer. Observation data were analyzed with Analysis of Variance (ANOVA) 5% and DMRT at 5% level. The results showed that the combination of doses of 15 g/plant mycorrhiza and 187.5 kg/ha phosphate fertilizer significantly showed better in the parameters of plant height and number of leaves at 21 HST, 28 HST, and 35 HST, stem diameter at 28 HST and 35 HST, root volume, flower circumference, flower and leaf weight per plant, flower weight without leaves per plant, and harvest index.

Keywords: *cauliflower, mycorrhiza, phosphate fertilizer*