

ABSTRACT

Baihaqi, lukman. 2012. **The Effect of Compound Fertilizer NPK 32-10-10 in order for the Subculture Giant Moon Orchid Media (*Phalaenopsis gigantea*)**. Thesis. Biology Department, Faculty of Science and Technology, State Islamic University Maulana Malik Ibrahim Malang. Supervisor I: Dr. Evika Sandi Savitri M.P. Supervisor II: Umaiatus syarifah M.A

Keywords: Compound Fertilizer, subculture, *Phalaenopsis gigantea*.

Orchid *Phalaenopsis gigantea* is endemic on the island of Borneo orchids, so it is classified as rare and endangered orchids. Cultivation of orchid seeds do not like the seeds of plants in general, the seeds can be grown in vivo, orchid seeds are not equipped with the endosperm, therefore subculture cultivated orchids. Compound fertilizer is an alternative to face the problem of high cost of media subcultures. Compound fertilizer is the fertilizer that consists of more than one element of a macro. Compound fertilizer consisting of nitrogen, phosphorus and potassium.

The purpose of this study was to determine the effect of compound fertilizer NPK 32-10-10 against leaf length, leaf number, root length, number of roots, fresh weight and dry weight *Phalaenopsis gigantea* orchids. Concentrations used in this study is the concentration of 0.75 g / l, 1 g / l, 1.25 g / l, 1.5 g / l, 1.75 g / l, 2 g / l, 2.25 g / l, 2.5 g / l, 2.75 g / l, 3 g / l.

Based on the results of the best concentration NPK 32-10-10 to grow *Phalaenopsis gigantea* is 2.5gram/liter. At concentrations 2.5gram/liter, highest leaf length 7.375cm, the highest number of leaves is 3.75cm, the highest root length was 6.7 cm, the highest number of roots was 4.75 cm, the highest fresh weight and dry weight 0.95gram and 0.66 grams