SUMMARY

Khushoyin zamzami 0710420026-42. EFFECT OF NUMBER OF PLANT PER POLY BAG AND PRUNING ON GROWTH AND HARVESTING OF KYURI CUCUMBER (*Cucumis sativus* L.). Under the guidance of Dr. Ir. Nurul Aini, MS as main supervisor, Ir. Moch. Nawawi, MS as supervising companion.

Cucumber is a vegetable plant that is mostly consumed fresh fruit and processed. Cucumber fruit contains many of nutrients, vitamins and minerals, it make the demand for very large cucumber. One type of cucumber that have high economic value is Kyuri or Japanese cucumber (*Cucumis sativus* L.). As a commodity that has a high economic value necessary to obtain the proper cultivation of high production quality and have good quality. Green house cultivation is one of the alternatives. Green house cultivation strongly influenced by the quality and quantity of high yield per unit area. In the efforts to increase crop yields, population density and proper maintenance should be done. Maintenance activities and efforts to increase the production of cucumber important is pruning. Pruning stem shoots aims to inhibit the growth of vegetative plants continuously so that the resulting plants will assimilate more concentrated on the development of generative plants.

This research was conducted in the green house Training Center Singosari-Malang, with elevation 583 m above sea level. The study lasted for 45 days from May 2012 to June 2012. Material used is Kyuri cucumber seed varieties Roberto, soil, manure, fertilizer urea basis, Sp 36 and KCl. The instrument used is 10 kg poly bags, paper straw, plastic, hoe, trowel, measuring cups, rope stakes, bamboo stakes, analytical scales, meter, wet and dry bulb thermometer, calipers, lux meter, oven, scissors and paper plants label. The study was conducted using a simple randomized block design (RBD) with 10 treatments and repeated 3 times. So we get 30 units with 6 poly bags each unit test and it's obtain 180 polybags. The treatments were (P0) 1 per polybag plants and unpruning, (P1) 1 plant per polybag and pruning with leaving 8 pruning sections, (P2) 1 plant per polybag and pruning with leaving 10 sections, (P3) 1 plant per polybag and pruning with leaving 12 sections, (P4) 1 plant per polybag and pruning with leaving 14 sections, (P5) 2 plants per polybag and unpruning, (P6), 2 plants per polybag and pruning with leaving 8 sections, (P7) 2 plants per polybag and Pruning with leaving 10 sections, (P8) 2 plants per polybag and Pruning with leaving 12 sections, (P9) 2 plants per polybag and pruning with leaving 14 sections. Observations were conducted on the observation of growth and yield components of observation. Growth observations conducted destructive and non destructive. Data were analyzed using analysis of variance (F test) with a level of eror 5% to determine the effect of treatment, if there is a significantly different results followed by LSD at 5% error level.

The results showed that, the response of cucumber plants in the combined treatment of number of plants per polybag and pruning is diferent. In terms of quantity, pruning with leaving 12 sections and 1 plant per polybag (P3) resulted in higher fruit weight than other treatments. Pruning treatment with leaving 12 sections and 1 plant per polybag improve yield fruit weight of 32.13% compared to treatment without pruning. While in quality, 1 plant per polybag and unpruning (P0) produces fruit with best quality A grade between treatment with 1 plant per polybag another.