GROWTH RESPONSE AND YIELD OF SEVERAL MELON VARIETIES (*Cucumis melo* L.) ON DIFFERENT TYPES OF PRUNING SHOOTS IN SUBSTRATE HYDROPONIC SYSTEMS

By: Fatimah Nur Azizah
Supervised by: Bambang Supriyanta

ABSTRACK

Increasing melon production can be done by using superior varieties and improving the cultivation system. Pruning shoots aims to reduce the competition for photosynthesis results between leaves and fruits. This study aims to obtain the interaction between varieties and proper pruning of shoots in melon plants using a substrate hydroponic system. This study is a field study with 2-factor Factorial using a Complete Random Design (CRD) with 3 replicates. Factor 1 is varieties, consisting of the UPNVY2 Meldo variety, the Taj Mahal variety, the Sweet D25 variety, the Golden Apollo variety, the Alisha variety, and the Langkawi Golden variety. Factor 2 is the pruning of shoots consisting of pruning the shoots of segments 18 and 22. Morphological observation data used descriptive analysis and quantitative data used multi-range analysis (ANOVA), followed by the Duncan multiple range test at a significance level of 5%. The results showed the best results in the combination of pruning the shoots of interstitial 22 and the Alisha variety on the parameters of fruit weight, fruit diameter, and fruit sweetness.

Keywords: *shoot pruning, melon, substrate hydroponics*