GROWTH OF SHOTS AND ROOTS OF ASOKA FLOWER (Ixora coccinea L. var. dwarf red) STICKS IN SOAKING ONION EXTRACT AND PLANTING MEDIA COMPOSITION

By: Sari Patmawati

Supervised by: Tuti Setyaningrum dan Darban Haryanto

ABSTRACT

Asoka flower cuttings have quite bright economic prospects, but propagation by cuttings still has problems with root formation. The research aims to determine the effect of giving shallot extract and the composition of the planting medium on the growth of Ashoka flower cuttings. The research was conducted in Mulyodadi Village, Kapanewon Bambanglipuro, Bantul Regency, Special Region of Yogyakarta in April - May 2024. The research used a field experiment arranged using a Complete Randomized Block Design (RAKL) factorial method (3x3)+1 control. Factor I is the concentration of shallot extract which consists of 3 levels, namely 70%, 80%, and 90%. Factor II is the composition of the soil planting medium + goat manure + husk charcoal which consists of three levels, namely (2:1:1), (1:2:1), and (1:1:2). Control without administration of shallot extract and soil growing media. Data were analyzed using ANOVA at α=5% level and further tested using the DMRT test at 5% level. To differentiate control from treatment, use the Orthogonal Contrast Test. The research results showed significant differences between the control and the combination of treatments in the parameters of percentage of sprouted cuttings, shoot length, number of leaves, and number of roots. The concentration of shallot extract had no significant effect on all observed parameters. The planting media composition 2:1:1 (M1) gave the best results in the parameters of number of shoots, shoot length, and number of leaves.

Key words: *Cuttings, Shallot Extract, Planting Media, Asoka Flowers.*