ABSTRACT

Kinanggi, Rohaini 2012. Effect of Concentration and Long Immersion in Water Young Coconut Seed Germination Of Canarys (Canarium indicum L.). Thesis, Department of Biology Faculty of Science and Technology State Islamic University (UIN) Maulana Malik Ibrahim Malang.

Promotor : (I) Dwi Suheriyanto, M.P. (II) A. Nasichuddin, M.A.

Canary plant breeding can be done using the seeds. The difficulty of canary seed germination is caused by obstruction of the emergence of seed germination by a thick skin and hard. Efforts to break the dormancy of seeds of canary with a natural plant hormone found in coconut water such as cytokinin, gibberellin and auxin. This study aims to determine the effect of concentration of coconut water on seed germination of canary, the effect of immersion time in a young coconut water on seed germination of canary and interaction effects of concentration and immersion time in a young coconut water on seed germination of canary.

The research was carried out breeding CV.Taidu Century hall-Alor-NTT in October-November 2011. The design of the study is a randomized block design with 2 factors and 3 replications (first factor is the concentration of coconut water include, 100%, 80%, 60%, 40%, 20% and 0% and the second factor is the long immersion in water of young coconut covers, 24 h, 48 h and 72 h), with the parameters observed germination percentage, germination rate and length hipokotil. Data were analyzed by analysis of variance and to determine the best treatment tested the Duncan Multiple Range Test (DMRT) with a significant level of 5%.

The results of this study showed no effect of concentration of coconut water on seed germination canary and also no interaction effect of concentration and immersion time in a young coconut water on seed germination of canary. However, there is the influence of immersion time in a young coconut water on seed germination of canary. While the most effective treatment is the treatment time of 48 hours of immersion can improve seed germination of canary on all parameters of the observations.

Key words: concentration, immersion time, young coconut water, germination, canary seed