Pengaruh Perbedaan Ukuran Benih Abnormal Terhadap Perkecambahan dan Pertumbuhan Bibit Tiga Varietas Kopi Arabika (*Coffea arabica* L.). *(The Effect of Differences in Abnormal Bean Size on Germination and Seedling Growth of Three Arabica Coffee Varieties). Supervised by:* Dr. Ir. Suharjono, MP *and* Ari Wibowo, SP., M.Sc

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ABSTRACT

This study aims to determine the effect of differences in the size of abnormal beans and Arabica coffee varieties. This research was conducted at the Kaliwining Greenhouse Garden, Indonesian Coffee and Cocoa Research Institute, from November 2021 to February 2022. This study used a Completely Randomized Block Design with 2 factors and 4 replications. The first factor is the difference in the size of abnormal beans which consists of 3 levels, namely normal beans as control (U0), abnormal large coffee beans (U1) and abnormal small coffee beans (U2). The second factor is Arabica coffee varieties that use 3 varieties, namely Gayo 1, Gayo 2 and P88. The results of the data were analyzed by the F test (ANOVA) and continued with the 5% DMRT test. The results showed that the treatment of abnormal seed size had a very significant effect on germination, simultaneous growth and stem diameter. Significant effect on growth speed, weight of wet stover and weight of dry stover. The treatment of Arabica coffee varieties had a very significant effect on the speed of growth, the weight of the wet stover and the weight of the dry stover. Significant effect on stem diameter and root length. The interaction between abnormal coffee bean size and Arabica coffee varieties had a very significant effect on the number of leaves 4.40 leaves, dry stover weight 1.25 grams and dry stover weight 0.44 grams. Significant effect on root length 15.13 cm.

Keywords*: Coffee, Abnormal size of coffee beans, Arabica coffee varieties*