ROOT GROWTH RESPONSE OF ROBUSTA COFFEE SEEDS (Coffea canephora) NITROGEN FERTILIZER WITH VARIOUS FERTIGATE DOSAGE

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ABSTRACT

This research is about the growth of Robusta coffee seedlings. The purpose of this research is to find out the response of the roots of Robusta coffee seedlings from cuttings to the application of nitrogen fertilizers with various doses given by fertigation. Completely Randomized Design (CRD) factorial with 2 factors. The first factor is the provision of nitrogen which consists of 2 levels, namely N1 (Urea Fertilizer) and N2 (ZA Fertilizer) the second factor is the dose of fertigation fertilizer which consists of 4 levels, namely D1 (2 g + 1 l/ 2 days once / evaporation), D2 (4 gr + 1 l / 2 days), D3 (6 gr + 1 l / 2 days / 2 days) evaporation), D4 (8 gr + 1 l / 2 days once / evaporation) was used in this study. The results of the analysis using ANOVA on the root length parameters yielded highly significant differences and the wet weight parameters of the roots yielded significant differences while the parameters of the number of roots, root volume, shoot wet weight, crown dry weight, root dry weight, and crown/root ratio yielded no significant differences.

Keywords : Nitrogen Fertilizer, Robusta Coffee (Coffea canephora), Root Growth, Fertigation.