ABSTRACT

EFFECT OF VARIETY NAPHTHALENE ACETIC ACID CONCENTRATE AND NUMBER OF GRAIN ON STEK TO GROWTH OF TINY STEM STEK ON CASSAVA (Manihot esculenta Crantz)

by
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The demand of cassava’s seed with conventional method get the barrier on the fulfill of cassava’s seed’s demand with numerous number, and the semi-conventional method with tiny stem stek need to be developed. Tiny stem stek’s method could help to increase of cassava’s seed because the number of grain that used in stek is fewer. In order to optimalize the growth of tiny stem stek on cassava needs an application with auxins on that stek.

This research has a function to know about effect of variant naphthalene acetic acid concentrate and the number of grain to rooting system and the bud of tiny stem stek on cassava. This research was held in botanical observatory in Agriculture Faculty on University of Lampung started from March to April 2012. This research used complete factorial random design with two treatment. The first factor was the application of naphthalene acetic acid with four level, 0 ppm, 500 ppm, 1000 ppm and 2000 ppm, the second factor was the number of grain in stek, one grain stek, two grain and three grain. The result of research showed that NAA gave the real effect on the average of bud’s length on stek, number of grain, number of leaves, number of root, length of root, wet weight of bud, wet weight of root, dry weight of bud, dry weight of root, but it wasn’t give the real effect to number of tiny stem stek of cassava. The number of grain on stek gave the real effect on number of root, number of bud, number of grain number of leaves, wet weight bud and wet weight root but wasn’t give real effect on bud’s length and root’s length on cassava’s stek. Interaction between aplication of NAA and number of grain on stek gave real effect on root’s number, bud’s length, grain’s number, root’s length and wet weight of bud, but there was no interaction to bud’s length, leaves’s number, wet weight of root, dry weight of bud and dry weight of root on tiny stem stek in cassava.

Key words: tiny stem stek, grain’s number, NAA, cassava