

STUDY REGARDING THE HEIGHT OF POTATO PLANTS DEVELOPED IN VARIOUS CULTURE SYSTEMS AND DIFFERENT SUBSTRATES

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Abstract

This paper presents 2 research studies. First one is about influence of culture system and variety on potato plants height, a bifactorial experience, 5 x 4 type and followed the effect of experimental factor a, culture system (without automation on perlite substrate; NFT system; Wilma system, aeroponic system; classic system: on classic substrate: peat and perlite) and the experimental factor b, the variety. Second study is about the influence of cultivation substrate (inorganic substrate, without substrate -in aeroponic culture, classical substrate -peat and perlite) and the variety on the height of the potato plants (also, a bifactorial experience). In both studies' variety factor b, had 4 graduations: Azaria, Brașovia, Cosiana and Cezarina. From the first study it emerged that the best plant height values were obtained in the aeroponic system (no type of substrate), followed by the NFT system, and low values presented the plants developed in the conventional system. From second study best development of the plants was observed in the aeroponic culture (no substrate) and on the last place is classical substrate. Regarding the variety, the best results were obtained for Brașovia variety in both studies.

Key words: potato, culture system, substrate, plants height.