Effects of Hormones in Media Subculture Shoots to the Height of Plantlet Paprika (Capsicum Annum Var Grossum L.) In Vitro

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Abstract

Culture is one of the methods for propagation of plant in order to have more production in a shorter time. Paprika (Capsicum annum Var Grossum L.) is a plant that needed mass production due to the limitation of plants. The price of seed plant is expensive and in order to have mass production, the tissue culture method is helping the farmers to produce more plants. The plant is derived from eggplant or Solanaceae that tastes sweet and slightly spicy. Paprika has many benefits such as flavoring or cooking ingredients, it is also used as a food coloring agent. It contains carotene and is a good source of vitamin C. This study was conducted to determine the effect of hormones on subculture medium shoots to the height of planlets paprika (Capsicum annum var Grossum L.) in vitro using spider red star variety of paprika. There were two different hormones used in this research, namely Giberellin, and Naphtalene Acetic Acid. We also studied the effect of the Combination of the two hormones, with one control sample without hormone. The results revealed that the effect of Giberellin hormone with 4 ppm dose showed the best results, with a height mean of 2.09 cm.

Keywords: tissue culture, hormones, paprika