EFFECT OF COCONUT WATER AND THE ALTERNATIVE INNOVATION MEDIA TOWARDS SWEET BASIL (Ocimum basilicum) PLANT GROWTH DEVELOPMENT

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ABSTRACT

EFFECT OF COCONUT WATER AND THE ALTERNATIVE INNOVATION MEDIA TOWARDS SWEET BASIL (Ocimum basilicum) PLANT GROWTH AND DEVELOPMENT

A procedure has been developed to create a plant tissue culture media by using alternative materials that are easily available such as household sugar, household agar, and young coconut water to replace laboratory media. household sugar was used to replace carbon source laboratory sucrose. For household agar, it was used to replace laboratory agar meanwhile young coconut water act as plant growth regulator that contain cytokinin, auxin, minerals and vitamins. The stem length, root length and shoot number were observed. There are three different concentrations of coconut water used which are 50ml/L, 100 ml/L and 250ml/L. The result shows that 250ml/L has the best result concentration for the growth of sweet basil seed which shown the longest length on stem, root and shoot number.