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Antibacterial and Antihypertensive Activity OF Callus from Muskmelon (*Cucumis Melo* L.)

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The callus of *Cucumis melo L*. (Muskmelon *var. glamour*) was studied to identify the polyphenols that have possible antihypertensive and antibacterial activity. The callus was grinded and extracted by solvent extraction. Total polyphenols were quantified using modified method of Folin-Ciocalteu and total flavonoid was quantified by modified method of Aluminium chloride complex formation. The antibacterial activity was tested against Gram-positive and Gram-negative human pathogenic bacteria using disk diffusion method and the Minimum Inhibitory Concentration (MIC) was also determined. The antihypertensive property was tested with ACE Kit. The phytohormone combination for callus induction was better when the concentration of auxin is higher than the concentration of cytokinin. Different phytohormone combination treated in media for callus induction gave different effect to the production of polyphenols of plant. The callus's polyphenols analyzed in GC/MS indicated some polyphenols compounds that possessed antihypertensive property and involved against pathogenic bacteria.

Keywords: Cucumis melo, callus culture, Antibacterial, Antihypertensive activity.