IMPACT OF VARIOUS GROWTH REGULATORSON STEMNODE EXPLANTS OF *CucumisSativas.L*A MEDICINAL PLANT

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ABSTRACT

A method for regeneration of *CucumisSativasL* which includes a morphogenetic ally competent sell a suspension was needed to facilitate selection of stress – resistant variants and gene manipulation.It was further reported that Cytokinins bind to a specific receptor site in the cell to bring about organogenesis (Yamada *et. al*., 1972) The visual rating of callus development in the factorial comparing growth regulators revealed that all lines formed the greatest amount (70%) of callus when cultures of M.S media + 24-D(1.0 mg/1) + Kn (2.0 mg/1). Followed by Ms +2,4-D and Kn (1.0 mg/1 each) with 60% and M.S + 2,4-D(0.2 mg/1) + 2,4(0.3 mg/1) + Kn (1.0 mg/1). However all combinations tried were on par with each other.. Auxins were found to exert their hormonal action through their effects on the nucleic acids and protein metabolism. It was also found that auxins exert their effects, directly or indirectly on 'S' phase of DNA synthesis (Peaud – Lenoel, 1977). Cytokinins were found to influence cell growth by promoting nucleic acid metabolism and synthesis of specific proteins required for cell division. Impact of various growth regulators on tissue and isolated plant cells was studied by several workers and these substances were known to play an important role in cell metabolism, cell membrane synthesis (Cocking, 1978) beside growth and differentiation (Butenko, 1968; Stress, 1969), of these growth and have proved to be an essential supplement for establishing successful culture of plant tissues (Gautheret, 1959; Rao and Swamy, 1972).