EFFECT OF EXOGENOUS APPLICATION OF REGULATOR ON BIOCHEMICAL CONTENT OF LEAF IN ROSA INDICA

Manoj Kumar Sharma and Y.S. Tomar

Department of Botany, J.V.College, Baraut

Abstract: Bio-chemical contents of leaf viz. chlorophyll a, chlorophyll b, reducing & non reducing sugar and protein reduced during the course of development. Exogenous application of Indole acetic acid (IAA), Gibberellic acid (GA₃), Cytokinens (KN) reduced the reduction of this content in attached and deattached condition while Abscisic acid (ABA) and Etheophon (ETH) enhance the reduction. Out of GA₃, IAA & KN, kinetin is the most effective retardant, while ETH, is highest promoter of applied regulator during the development, the reduction is either due to mobilization of these content to younger ones, reproductive parts or degradation by hydrolytic enzyme. Perhaps, KN, GA₃ and IAA delay the production of hydrolytic enzyme, where as ABA and ETH not only promote the production of hydrolytic enzyme but also reduced the production of growth promoter.

Key words: Abscission, Growth regulator, Rose, Senescence.

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