EFFECT OF ABSCISIC ACID(ABA) ON THE PRODUCTION OF SOME SECONDARY METABOLITES FROM CALLUS OF CATHARANTHUS ROSEUS L.G.DON IN VITRO

Ekhlas Meteab Ahmed Al-Zuhairi

** Ayad Assi Obaid

Researcher

Assistant Prof

Horticulture department -College of Agriculture-University of Diyala -Iraq

Abstract

A study on the effect of ABA callus induction of *Catharanthus roseus* to produce of Some Secondary metabolites from callus was achieved by culturing coleoptiles of the plant on Murashing and Skoog (MS) medium supplemented with 0.5 mg .l⁻¹ and 2.0 mg.l⁻¹ NAA which is the best medium to maintain callus. Different levels of ABA(ABA,0.0,2.0,4.0mg.l⁻¹)were added to this medium. The results showed that the control Treatment gave the highest quantity of Vindoline, Catharanthine, Vincristine and Vinblastine which reached 45.90, 28.89, 107.26 and 139.89 ug.ml⁻¹ fresh weight of callus, Respectively .According to these results, The addition of ABA did not affect in the increase of the studied Secondary metabolites production.

Key Word: Catharanthus roseus, in vitro, Secondary metabolites, ABA

^{*} part of M.SC. thesis for the first author.