SEEDS GERMINATION AND GROWTH . ADVENTITIOUS BUDDING deliciosa) IN VITRO FROM SHOOTS AND CALLUS OF KIWIFRUIT (Actinidia

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ABSTRACT

This study was conducted at the laboratory of Plant Tissue and Cell Culture. Department of Horticulture. College of Agriculture. Diyala University. The objective of this study was to show the effects of GA₃. kinetin and magnetic field on seeds germination and growth of kiwifruit var. Bruno . In the first experiment . MS media supplemented with various concentrations of GA₃ (0 . 0.2 . 1 and 3 mg/l) . in the second exp. the medium was supplemented with kinetin (0 . 4 . 6 and 8 mg/l). In the third exp. magnetic field 200 MT was applied to seeds for (0 . 24 and 96 h). The results showed that GA₃ decrease seeds germination . however 0.2 and 1 mg/l initiation callus about 10% . 2^{ed} exp. showed that MS medium free from kinetin gave the best results in germination of seeds . shoots and roots length and leaves number. Seeds applied to magnetic field for 96h showed an increase in shoots number (4 shoots/plant) as compared with 2 shoots for the control . Initiation of buds and shoots formation from callus and plantlets cultured on MS

medium supplemented with BA and IBA.

Key words : in vitro. kinetin . gibberellin. magnetic field . kiwi.