



MICROPROPAGATION OF DAMASK ROSE (*Rosa damascena*)

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ABSTRACT

This study aimed to establishing a protocol for producing *in-vitro* plants of *Rosa Damascene*. The culture was conducted at the Commission of Biotechnology in Damascus. Four types of explants were cultured on MS medium and some factors affecting culture were examined. The results showed that no viruses were observed, the lateral buds were superior over other explants, then the

lateral microcuttings, after that, the apical microcuttings, and, finally, the shoot tips. The highest multiplication rate was observed at the hormonal combinations of (benzyl adenine BA 3mg/l with indole-3-acetic acid IAA 0.1 mg/l), and the highest elongation average were observed at (IAA 0.1 mg/l with BA 2-6mg/l) or (indole-3-butyric acid (IBA) 0.1 with (BA) 5-6 mg/l). The transferring was positively effective. The highest rooting percentage was observed when naphthalene acetic acid NAA or IBA were used. (Berlite: peatmoss, 1:1) was the best growing medium for hardening.