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The Effects of IBA and BAP on In Vitro Shoot Production of Almond (Amygdalus communis L.)

of

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Keywords Authors Abstract: In this study the possibilities of in vitro vegatitive propagation of almond (Amygdalus communis L.) cv. Texas and cv. Nonpareil by shoot-tip culture were investigated. Different levels of IBA (0.0, 0.1 and 0.5 mg/l) and BAP (0.0, 0.5, 1.0, 2.0 and 3.0 mg/l) were tested by observing shoot development and growth during three successive stages, namely initiation, transplantation and multiplication. During the initiation stage, hormone-free medium or medium with low IBA (0.1 mg/l) only seemed favourable for shoot growth. During both the transplantation and multiplication stages, the combination of 0.1 mg/l IBA and 1.0 mg/l BAP was found to be the most effective in terms of new shoot production and shoot growth rate. In general, BAP was shown to be essential for shoot development during the last two stages but high levels (2.0 or 3.0 mg/l BAP) caused vitrification and callus formation which subsequently reduced the viability of the shoots.



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<u>Key Words:</u> Almond, tissue culture, micropropagation, shoot-tip culture.

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