

IN VITRO CULTURE OF (*Artemisia aucheri* Boiss.) BY NODAL EXPLANTS

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INTRODUCTION: Dermaneh Kouhi (*Artemisia aucheri* Boiss) is an exclusive species of Iran and belonging to Asteraceae family, that has known as astringent, antiviral, soothes rheumatic pains. Propagation of this plant occur with prolonged dormancy seeds which has been effective in reducing the population, so tissue culture is effective method for propagation of *Artemisia*. Nin et al (1996) were reported The best organogenesis and callus induction in leaf explants of *Artemisia absinthium* was happened in medium containing 2/22 µm BA and 2/69 µm NAA.

MATERIAL AND METHODS: The first seeds were washed with distilled water and soaking in alcohol (96%) for 5 minutes. Then they were disinfected by 25% sodium hypochlorite for 5 min and then were washed with distilled water and cultured in half Murashig and Skoog medium. After 90 days were prepared nodals from explants of seeds and were cultured in DKW medium with different levels of BA (0, 0/1, 3/0 mg/l), NAA (0, 2/0, 5/0 mg/l) and GA₃ (0, 2, 4 mg/l) and after 60 days in explants were determined the number of shoots and roots and callus. This experiment was performed in form of randomized completely factorial design with three replicates and two explants in each repetition.

RESULTS AND DISCUSSION: Results showed that medium with the interaction between 3/0 mg/l BA and 5/0 mg/l NAA was effective in shooting (16/50 per each explants) that showed a significant at level of 5% with control but with some of the treatments showed not significant differences among the 3/0 mg/l BA and 2 mg/l GA₃. Also medium containing 2/0 mg/l NAA was effective in rooting (2 per each explants) that was significant at the 5% level with other treatments. Most of callus induction was observed in medium with interaction between 3/0 mg/l BA and 5/0 mg/l NAA. Chen et al (2009) were reported maximum rooting of *Artemisia annua* was happened on MS medium with 0/05 mg/l NAA. Aslam et al (2006) MS medium containing NAA were effected on rooting of *Artemisia scoparia* that corresponded with the results of this study. Interaction of auxin and cytokinin, which can lead to the callogenesis. Nin et al (1996) were suggested MS medium with 2/22 µm BA and 2/69 µm NAA in callogenesis of leaf and internode explants of *Artemisia absinthium* is useful that is according to our results.

Keywords: Dermaneh, Nodal, DKW, In vitro.