



In Vitro Callus Induction in Various Seedling Explants of *Haplophyllum Virgatum* Var. *Virgatum*

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The genus *Haplophyllum* (Rutaceae) grows naturally around the Mediterranean section of Europe and in Western Asia up to Siberia and have about 70 species worldwide. Iran with 26 *Haplophyllum* species out of which 14 are endemic, has the highest number of this genus and can be considered as a center of speciation of this genus. The common Persian name of the genus is "Sodaby". Many species of this genus are used in traditional medicine for the treatment of herpes, warts, stomachache, erysipelas, toothache, skin diseases and in the treatment of testicular cancer. The presence of essential oils, alkaloids, fixed oils, coumarins, sterols, flavonoids and lignans have been reported from different species of the genus. Callus induction in different seedling explants (leaf, shoot and root) by two plant growth regulators (PGRs) were investigated here. *H. virgatum* seeds were surface sterilized and germinated on B5 medium. Explants were obtained from *in vitro* grown up seedlings after 40 days and the gained explants cultured in B5 medium supplemented with kinetin (0.1, 0.2 and 0.5 mg/L) in combination with NAA (1 and 2 mg/L) then incubated in darkness at 25°C. Different callus induction percentages were observed in all employed PGR treatments in all cultured explants after two months. This is the first report of *in vitro* culture of *H. virgatum* var. *virgatum* as an Iranian endemic plant.

References

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بیستین



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سمیه ترابی، فرح کریمی، مرتضی یوسف زاده

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