

## عنوان مقاله:

.Effects of Plant Growth Regulators and Explant on Callus Induction in Cuminum cyminum L

## محل انتشار:

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## نویسندگان:

Nastaran Kazemi - *Department of Medicinal Plants, Institute of Higher Education, Jihad-e-Daneshgahi, Kermanshah Unit, Iran*

Danial Kahrizi - *Agronomy and Plant Breeding Department, Razi University, Kermanshah, Iran*

Mohsen Mansouri - *Medical Biology Research Center, Kermanshah University of Medical Sciences, Kermanshah, Iran*

## خلاصه مقاله:

Cumin (*Cuminum cyminum* L.) as a member of the Apiaceae family is one of the most important medicinal plants in Iran. The purpose of this study is to evaluate the effect of plant growth regulators and explant type on callus induction in cumin. For this purpose the cumin seeds (Kuhbanan accession) were disinfected with sodium hypochlorite and alcohol and cultured on MS basal medium. Leaf and hypocotyl explants were prepared from sterile seedlings and used to produce callus on MS medium containing 0.0, 0.5, 1.0 and 2.0 mg/l NAA with 0.0 and 0.5 mg/l BAP. The experimental was as completely randomized factorial design with three replications. The results of callus induction showed that the explants type, hormone, and their interactions have non-significant effects on the callus induction percentage. Also, explants showed significant effect on callus growth rate (CGR). However hormones and hormone-explant interactions did not have a significant effect on CGR. The results showed that the medium containing 1 mg/l NAA and 0.5 mg/l BAP was known as the best callus growth rate medium for cumin (0.238 mm/d). Comparing the mean interactions of the explants in hormone on CGR showed that 0.5 mg/l of NAA + 0.5 mg/l of BA in leaf explant .(has the highest effect (0.248 mm/d

## کلمات کلیدی:

*Cuminum cyminum*, callus Induction, medicinal plants, explants

## لینک ثابت مقاله در پایگاه سیویلیکا:

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