

عنوان مقاله:

Effect of magnetic field on germination, the content of pigments and their precursors in *Anthemis gilanica*

محل انتشار:

بیستمین کنگره ملی و هشتمین کنگره بین‌المللی زیست‌شناسی ایران (سال: 1397)

تعداد صفحات اصل مقاله: 1

نویسندگان:

minoo nasiri - *Department of Plant Sciences, School of Biology, College of Science, University of Tehran, Iran*

vahid nikhnam - *Department of Plant Sciences, School of Biology, College of Science, University of Tehran, Iran*

halimeh hassanpour - *Aerospace Research Institute, Ministry of Science Research and Technology, Tehran*
۱۴۶۶۵-۸۳۴, Iran

خلاصه مقاله:

Anthemis gilanica, is a medicinal plant, belonging to the Asteraceae family, is distributed in the north of Iran. The magnetic field is one of the abiotic stresses that can affect the growth and development of living organisms. Today, much attention has been paid to the biological effects of these fields and is used as a technique in biological studies such as plant growth, germination percentage, and secondary metabolites changes. In this research, in order to study the leaching processes, *A. gilanica* seeds were placed in the Murashige and Skoog (MS) media under magnetic field intensities (0, 2, 4 and 6 millitesla) for one hour and after one month were harvested for physiological and biochemical analyzes. The results showed that the magnetic field in 4 millitesla resulted in a significant increase of chlorophyll a, b, total chlorophyll, magnesium protoporphyrin, protochlorophyllide, protoporphyrin ($P \leq 0.05$). Increasing the intensity of the magnetic field resulted in a significant increase in the germination percentage of the seeds compared to the control sample and the highest content of the pigments and precursors in the treatment were observed at 4 millitesla. It seems that magnetic field in proper intensity can be used as a suitable method for enhancing the germination and content of *A. gilanica* plant pigments

کلمات کلیدی:

Magnetic field, *Anthemis gilanica*, Germination, Pigments

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/850478>

