

عنوان مقاله:

COMPARISON OF PHYSIOLOGICAL AND BIOCHEMICAL RESPONDS BETWEEN TWO VARIETIES OF
Glycyrrhiza glabra TO MOLYBDENUM AND SALICYLIC ACID

محل انتشار:

دوفصلنامه رستنیها، دوره 9، شماره 1 (سال: 1387)

تعداد صفحات اصل مقاله: 11

نویسندگان:

فرانسواز برنارد - *Science Branch, Department of Biology, Shahid Beheshti University, Tehran, Iran*

مونا نوری - *Science Branch, Department of Biology, Shahid Beheshti University, Tehran, Iran* E-mail: m_1981_n@yahoo.com

زهرا مهرابی کوشکی - *Science Branch, Department of Biology, Shahid Beheshti University, Tehran, Iran*

حسین شاکر بازارنو - *Science Branch, Department of Biology, Shahid Beheshti University, Tehran, Iran*

خلاصه مقاله:

To investigate responses of *Glycyrrhiza glabra* var. *glabra* and *G. glabra* var. *glandulifera* to molybdenum and salicylic acid, we measured four stress biochemical parameters: anthocyanin, nitric acid, glycyrrhizic acid and peroxidase activity in callus tissues. Callus tissues obtained from seedlings root cultures were treated by 60 mg. l⁻¹ molybdenum and 5 μM salicylic acid alone or together for two weeks. Anthocyanin content enhanced in all treatments in *glabra* but it decreased in *glandulifera*. Molybdenum and salicylic acid had enhanced the level of nitric oxide production in both varieties. Peroxidase activity and glycyrrhizic acid were only affected by salicylic acid. An enhancement in glycyrrhizic acid level observed in treatments containing salicylic acid. The effects of salicylic acid on peroxidase activity were particularly interesting as they were completely opposite between two cases of varieties: enhanced effect for *glabra* and inhibitory effect for *glandulifera*. Significant differences in monitored parameters between two varieties and different responses to new conditions may confer to these varieties specific tolerance defence mechanism.

کلمات کلیدی:

Nitric oxid, Anthocyanin, peroxidase

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1542874>

