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Biotic Elicitation of the Explant Culture of *Trifolium pratense* L.

Summary

The paper examined the effect of four concentrations of jasmonic acid on the production of flavonoids and isoflavonoids by the *Trifolium pratense* L. suspension and callus culture (variety DO-8).

The cultures were cultivated in the Gamborg nutrient media with the addition of 2 mg.l⁻¹ of 2,4-dichlorophenoxyacetic acid and 2 mg.l⁻¹ of 6-benzylaminopurine, at the temperature of 25 °C, 16-hr light/ 8-hr dark period. The elicited and the inspection samples underwent the photometric determination of flavonoids in accordance with the Czech Pharmacopoeia 2005 and the determination of isoflavonoids via the HPLC method. The results show that the optimal effect of jasmonic acid on the production of flavonoids and isoflavonoids was manifested after a 6-hour application of a concentration of 500 µmol.