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The Influence of Elicitation on the Production of Suspension Culture of *Trifolium pratense* L.

Summary

The paper examined the effect of four concentrations of cadmium chloride on the production of flavonoids and isoflavonoids by the *Trifolium pratense* L. suspension culture (variety DO-9 and SPRINT).

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 flavonoids via the HPLC method. The results show that the optimal effect of cadmium chloride on the production of flavonoids and isoflavonoids was manifested after a 168-hour application of a concentration 0,1 μmol (variety DO-9) and after 6-hour application (variety SPRINT).