

## ABSTRACT

Charles University in Prague

Faculty of pharmacy in Hradec Králové

Department of pharmacognosy

Student: Václav Předota

Supervisor: PharmDr. Marie Kašparová, PhD.

Title of diploma thesis: Plant tissue culture of *Juniperus virginiana*

The derivation of callus cultures from leaves of *Juniperus virginiana* (varieties Hetzii, Glauca and Grey Owl) and determination of their growth curves were studied in this work.

The cultures were cultivated at the temperature of 25 °C and light period of 16 hours light/8 hours dark on the Schenk and Hildebrandt medium with the addition of 3.0 mg.l<sup>-1</sup> α-NAA and 0.2 mg. l<sup>-1</sup> kinetin. It is clear from the growth curves, that all three varieties reached their maximum in growth on 35th day of the cultivation. The best results were achieved by variety Glauca.