

Project No.7: Quantification of BVOCs emissions

L. Macálková



evropský
sociální
fond v ČR



EVROPSKÁ UNIE



MINISTERSTVO ŠKOLSTVÍ,
MLÁDEŽE A TĚLOVÝCHOVY



OP Vzdělávání
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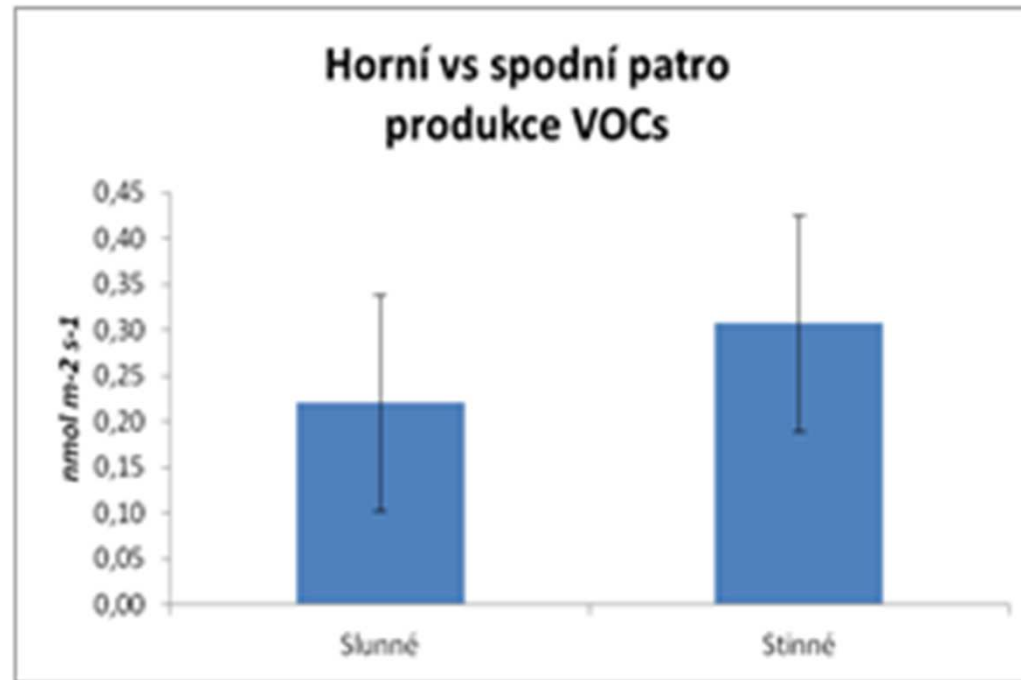
INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

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Material and methods

- in this project we have analyzed chromatograms obtained in Project no. 6
- sun and shade needles of Norway spruce were studied
- Blanks (traps with air which was not influenced by spruce shoot – empty chamber) were also analyzed for the background level of BVOCs
- company software was used to quantify the amounts of BVOCs

Result



total amount of emitted BVOCs under standard conditions (30°C, 1000 $\mu\text{mol m}^{-2} \text{s}^{-1}$) in sun and shade shoots

Conclusions

- spruce is a low emitter of BVOCs as compared for example to poplar (topol) or beech (buk)
- we expected that sun needles will emit more BVOCs as compared to shade needles
- surprisingly we observed the opposite story
- it could be explained as
 - shade needles were not enough shade (see chlorophyll story – project no. 4) or
 - we made a discovery 😊