

Impact of different phytohormones on the morphology of *Cannabis sativa* L.

Status

Completed

Duration

09.2018-03.2019

Description

The aim of this Master thesis was to investigate the effect of different phytohormones (auxin, cytokinin and a mixture of both) on morphological characteristics of two phytocannabinoid-rich (PCR) *Cannabis sativa* L. genotypes (KANADA, FED). The plants were decapitated prior to hormonal treatment and sprayed with synthetic plant growth regulators (PGR), called 1-naphthaleneacetic acid (NAA), 6-benzylaminopurine (BAP) and a 1:1 mixture of both. Impact on plant height, axillary branching, and their average number of internodes was observed. All PGR treatments resulted in a reduction of the total plant height, reduced length of axillary side branches and a reduced number of internodes per side branch. The use of PGR offers the possibility to modulate the plant architecture of *C. sativa* plants to compact plants with a small habitus, to improve space use for indoor cultivation. The impact on biomass yield and cannabinoid content should be proven in further studies.



Involved persons

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