

## Industrial hemp – healing instead of intoxication! A real all-rounder among useful plants

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### Status

Completed

### Duration

04.2018-09.2018

### Description

Due to the prohibition of cultivation in many European countries for years, the medicinal potential of hemp (*Cannabis sativa* L.) could not be fully researched and used. The antispasmodic and analgesic effect is attributed to the secondary metabolites, the cannabinoids, which are found in the hemp plant. The project does not focus on the psychoactive THC ( $\Delta^9$ -tetrahydrocannabinol), but on the medical potential of cannabidiol (CBD). Since the amendment of the law in March 2017, the demand for cannabis-based drugs has been continuously increasing. Since indoor cultivation is enormously cost-intensive, the project is investigating the extraction of raw materials from cannabis varieties (THC content  $<0.2\%$ ), which have a higher yield through better land use. The current cultivation system refers exclusively to grain and fibre production. In order to guarantee an increase of valuable ingredients, an adapted system has to be developed. For a variety selection, hemp varieties (Ferimon, Fédora 17, Santhica 27, USO 31, Féline 32, Futura 75 und Finola) were cultivated in the field. It can be expected that the cannabinoid contents will vary between the harvesting organs as well as over the vegetation period. The sample cuts were made at the leaf, bud and flowering stage. The plants were divided into four fractions: stem, bud/flower, leaf). Fresh (FM) and dry matter (TM) of each fraction was recorded. In order to determine variety-specific growth differences, the height of the plants and the BBCH stage were assessed weekly from sowing (25.04.18). The dried plant material was analysed in the laboratory for cannabinoid content.



### Involved persons

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