

3rd Symposium of Young Researchers on Pharmacognosy



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BOOK OF ABSTRACTS



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The optimization of pyrolysis reactions and GC fatty acid profiling of hemp oils

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Pyrolysis studies provide a good way of detecting newly formed chemical compounds. Recently electronic cigarettes have become popular that may contain cannabidiol (CBD). In connection with our cannabinoid research and based on our previous findings, we continued to perform pyrolysis studies on a bigger scale. In a sealed metal chamber, we established proper physico-chemical parameters for pyrolysis to be carried out. The results were then analysed by UHPLC [1].

Fatty acid profiles can be used as markers for the identification of vegetable oils. Products that contain oils are often adulterated by various abundantly available other sources like sunflower seed oil or olive oil. Performing GC analysis would allow us to verify product authenticity in a reliable and simple way. Commercially purchasable products would be analysed mainly focusing on CBD products. Authentic hemp oil is rich in linoleic acid and linolenic acid. It also contains a significant amount of oleic acid concentration. The aim of our project is to characterize the fatty acid profiles of commercial hemp seed oils and to identify potentially adulterated products.

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References

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