proceedings

Abstract

Fatty Acid Profile of Hemp Sprouts †

Nataša Đerić Ilić *, Slađana Rakita, Marina Đerić, Milana Matić, Alena Stupar, Milica Pojić and Aleksandra Mišan

Institute of Food Technology, University of Novi Sad, 21000 Novi Sad, Serbia; sladjana.rakita@fins.uns.ac.rs (S.R.); marina.djeric@fins.uns.ac.rs (M.Đ.); milana.rosul@fins.uns.ac.rs (M.M.); alena.stupar@fins.uns.ac.rs (A.S.); milica.pojic@fins.uns.ac.rs (M.P.); aleksandra.misan@fins.uns.ac.rs (A.M.)

* Correspondence: natasa.djeric@fins.uns.ac.rs

† Presented at the 14th European Nutrition Conference FENS 2023, Belgrade, Serbia, 14–17 November 2023.

Abstract: Industrial hemp (*Cannabis sativa*) is used in various industries, such as food, animal feed, paper, textile, biofuel, etc. Hemp seeds intended for food production should not contain tetrahydrocannabinol (THC) level above 0.3%, according to Serbian legislation. Hemp seeds and their processed products, such as oil and flour, have high nutritional quality in terms of lipids, proteins, fiber, minerals, and plant secondary metabolites. The interest of society in healthy eating is rising constantly. Advice on the selection of foods which promote health includes functional food, such as sprouted seeds. Since hemp seed is rich in phytochemicals, it is assumed that their sprouts will be more nutrient-dense. Although sprouted seeds of many crops, such as legumes, cereals, pseudo-cereals, oilseeds, and vegetables are included in a healthy diet, hemp seed sprouting is barely studied. Therefore, the aim of this research was to determine the fatty acid profile of hemp sprouts harvested after seven days of germination which are ready for consumption. The majority of fatty acids in sprouts are polyunsaturated fatty acids (67.7%) comprising linoleic and α-linolenic acids. Sprouts are less abundant in oleic acid, monounsaturated fatty acid (10.5%), followed by saturated fatty acids (21.8%), with the highest content in palmitic acid. As it was expected, the fatty acid composition of seeds and sprouts is similar.

Keywords: functional food; sprouts; *Cannabis sativa*; industrial hemp; fatty acids

Citation: Đerić Ilić, N.; Rakita, S.; Đerić, M.; Matić, M.; Stupar, A.; Pojić, M.; Mišan, A. Fatty Acid Profile of Hemp Sprouts. *Proceedings* **2023**, *91*, 284. https://doi.org/10.3390/proceedings2023091284

Academic Editors: Sladjana Sobajic and Philip Calder

Published: 6 February 2024

Author Contributions: Conceptualization, A.M. and M.P.; methodology, S.R.; software, M.P. and M.Đ.; validation, N.Đ.I., M.M. and A.S.; formal analysis, N.Đ.I.; investigation, N.Đ.I.; resources, S.R. and N.Đ.I.; data curation, A.S.; writing—original draft preparation, N.Đ.I.; writing—review and editing, N.Đ.I. and A.S.; visualization, N.Đ.I. and M.Đ.; supervision, A.S.; project administration, A.S. and N.Đ.I.; funding acquisition, N.Đ.I. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded by the Ministry of Science, Technological Development and Innovation of the Republic of Serbia under the Agreements on the Implementation and Financing of Research (nos. 451-03-47/2023-01/200222).

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: The raw data supporting the conclusions of this article will be made available by the authors on request.

Conflicts of Interest: The authors declare no conflicts of interest.