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P.011. Chemical composition of *Morchella esculenta* (L.) Pers. from Portugal and Serbia: A comparative study based on chromatographic techniques

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Morchella esculenta (L.) Pers. (morel) is one of the most highly prized edible mushrooms in the world, revealing also interesting medicinal properties [1]. In the present work a comparative study on the chemical composition (nutritional value, primary and secondary metabolites) of two samples from different countries, Portugal (SP) and Serbia (SS), was performed based on chromatographic techniques [2]. Carbohydrates were the most abundant macronutrients, followed by proteins and ash. Fat contents were low and similar in both samples. The energetic contribution of SS was slightly higher due to the higher contribution of carbohydrates. Regarding sugars (analysed by HPLC-RI), mannitol and trehalose were found in both samples, but fructose was only found in SP. Polyunsaturated fatty acids (determined by GC-FID) predominated over monounsaturated and saturated fatty acids. Linoleic, oleic and palmitic acids were abundant in both samples, but only SS gave considerable amounts of α -linolenic acid. Concerning tocopherols (analysed by HPLC-fluorescence), the α -, γ - and δ -tocopherols were also quantified in both samples; β - and α -tocopherols were observed in higher levels in SS. Oxalic and fumaric acids (determined by HPLC-DAD) were in both samples; malic acid was found in SP, while quinic and citric acids were observed in SS. Finally, protocatechuic and *p*-hydroxybenzoic acids were found in both samples, but *p*-coumaric acid was quantified in SP. As far as we know, this is the first study on chemical composition of morel samples from Portugal and Serbia.

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