

Author's Accepted Manuscript

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PII: S0039-9140(17)30699-9
DOI: <http://dx.doi.org/10.1016/j.talanta.2017.06.070>
Reference: TAL17689

To appear in: *Talanta*

Received date: 30 March 2017
Revised date: 20 June 2017
Accepted date: 24 June 2017

Cite this article as: Maciej Strzemeski, Magdalena Wójciak-Kosior, Ireneusz Sowa, Monika Agacka-Mołdoch, Piotr Drączkowski, Dariusz Matosiuk, Łukasz Kurach, Ryszard Kocjan and Sławomir Dresler, Application of Raman spectroscopy for direct analysis of *Carlina acanthifolia* subsp. *utzka* root essential oil, *Talanta*, <http://dx.doi.org/10.1016/j.talanta.2017.06.070>

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Application of Raman spectroscopy for direct analysis of *Carlina****acanthifolia* subsp. *utzka* root essential oil**

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Abstract

Carlina genus plants e.g. *Carlina acanthifolia* subsp. *utzka* have been still used in folk medicine of many European countries and its biological activity is mostly associated with root essential oils.

In the present paper, Raman spectroscopy (RS) was applied for the first time for evaluation of essential oil distribution in root of *C. acanthifolia* subsp. *utzka* and identification of root structures containing the essential oil. Furthermore, RS technique was applied to assess

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