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Acetylated ferulenol-oxy-ferulenol as a proposed marker for fresh Ferula toxicity: A metabolomic approach

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Toxicity of fresh *Ferula communis* (Apiaceae) among cattle in north Jordan is a recently reported problem. *Ferula* toxicity ferulosis is still ambiguous and not fully understood. Metabolomic approach was applied in the present study to address this problem. Metabonomics based on Attenuated Total Reflectance/Fourier Transformed-Infrared (ATR/FT-IR) results showed that chloroform extract of fresh *F. communis* had constituents significantly different than those detected in dried plants. Additionally, metabolomics based on HPLC analysis revealed a chromatographic peak with higher concentration in fresh samples. Based on the mass fragments (620, 549, 371 and 274) m/z and neutral losses of acetyl groups (549-505) m/z and (505-461) m/z, this compound was identified as acetylated ferulenol-oxy-ferulenol (AFOF).

Biography

Alzweiri Muhammed has completed his PhD from Strathclyde University. He started his clinical metabonomics research in Strathclyde University under the supervision of Dr Dave Watson and continued with relevant research. He has published more than 30 papers in reputed journals and has been serving as a Referee for group of journals.

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