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## PHENOLIC AND VITAMIN COMPOSITION OF ALGERIAN OLIVE MILL WASTEWATER ACCORDING TO OLIVE VARIETY AND EXTRACTION PROCESS

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Olive oil production yields a considerable amount of wastewater, a powerful pollutant that is currently discarded but could be considered as a potential source of valuable natural products due to its content in phenolic compounds and other natural antioxidants. The aim of this work was to explore the variability in olive mill wastewater composition from Algerian olive oil mills considering extraction processes (traditional discontinuous press vs. 3-phases centrifugal system) and olive varieties (Azerraj, Sigoise, Chemlal). Whereas pH, dry or organic matter content didn't vary, there was a significant difference in ash content according to extraction process and olive variety. Carotenoid content was 2.2-fold higher with 3-phases than with press systems whereas tocopherol content was not significantly different. Among the phenolic compounds quantified, tyrosol was usually the most abundant whereas oleuropein concentrations were highly variable. Differences in phenolic compound concentrations were more pronounced between olive varieties than between processes.

## **Biography**

Moufida has completed his PhD at the age of 44 years from Constantine University. She is a professor at the same university. She has published 5 papers in reputed journals-

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