

IMPACT OF INSTANTANEOUS CONTROLLED PRESSURE PROP (DIC) TECHNOLOGY ON EXTRACTION OF TOTAL PHENOLS OF MOROCCAN *SALVIA OFFICINALIS*

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ABSTRACT:

The main objective of this study was to intensify the extraction of total phenols from *Salvia officinalis* L. using instant controlled pressure drop (DIC) as a texturing pretreatment. The effect of solvent type on Total Phenolic Content (TPC) was also studied. TPC was determined using spectrophotometric Folin-Ciocalteu method and external calibration with Gallic acid. The obtained results showed that water was the most efficient solvent to extract total phenols from *Salvia officinalis* L. Moreover, texturing and expansion by DIC pretreatment had a great impact on polyphenol yields and revealed greater extraction kinetics. Likewise, drying kinetics of DIC-treated sage was enhanced compared to the raw material. DIC-assisted extraction can be considered as a promising technology to use in the case of the Moroccan *Salvia officinalis* L. as an important Mediterranean source of natural phenols.