

## Optimising functional properties and chemical composition of *Pinus halepensis* Mill. Seeds protein concentrates

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### Description

Vegetable proteins are widely used in many food formulations due to their physico-chemical properties, low cost and availability. The main objective of this work is to study the chemical composition and properties of a protein concentrate of *Pinus halepensis*. Mill seeds (PHPC) and mainly to optimize the effect of pH, NaCl concentration and phosphate buffer (PB) molarity on functional properties (solubility, emulsifying activity index (EAI) and foaming capacity (FC)) of this concentrate by response surface methodology (RSM). The chemical composition was determined in terms of proteins, sugars, lipids, ash and moisture. The physico-chemical characteristics were studied by their water and oil holding capacity (OHC, WHC) and their surface hydrophobicity (SH). Finally, the functional properties of PHPC were studied in terms of solubility, EAI, FC, minimum gelling concentration (MGC) and finally heat coagulability (HC ...