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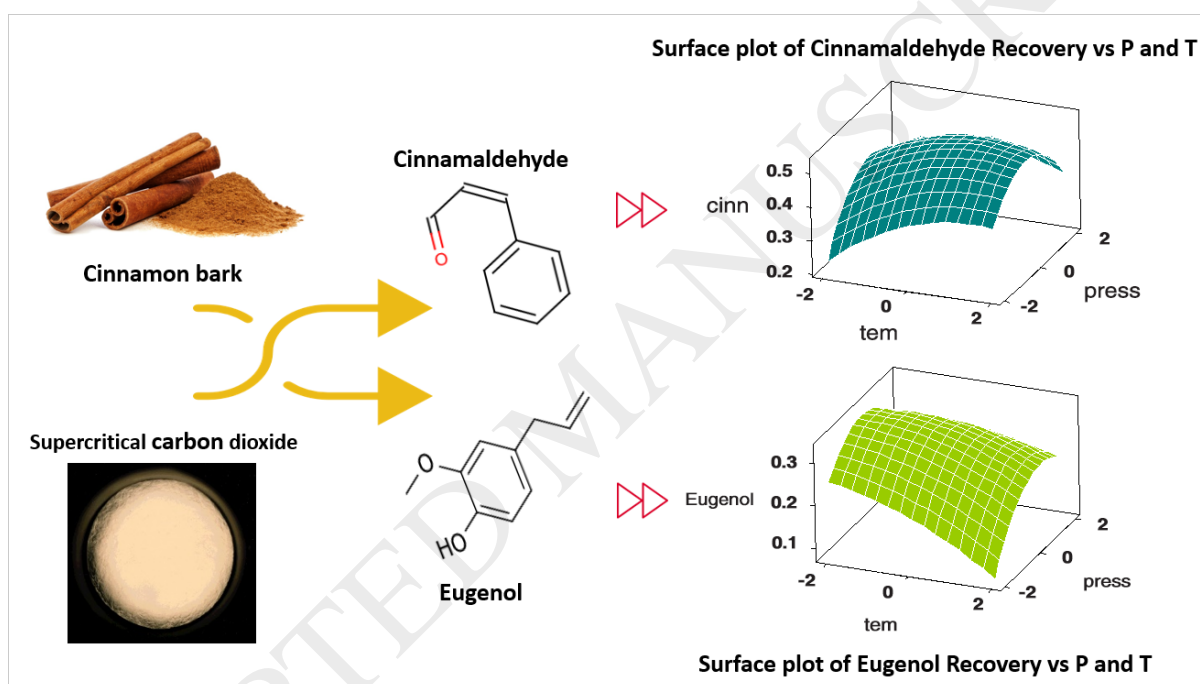
Supercritical CO₂ Extraction of Cinnamaldehyde and Eugenol from Cinnamon Bark: Optimization of Operating Conditions via Response Surface Methodology

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Graphical abstract



Highlights:

- Cinnamaldehyde and eugenol are extracted from cinnamon bark by SC-CO₂.
- The extracted samples are analyzed by gas chromatography (GC).
- Response surface methodology is applied to optimize the extraction variables.
- 54.7% cinnamaldehyde recovery was done at 20.3 MPa, 68.2 °C, 1.8 mL/min, 95.7 min.
- 38.4% eugenol recovery was done at 20.7 MPa, 42.04 °C, 2.3 mL/min and 118 min.

Abstract

Cinnamaldehyde and eugenol were extracted by supercritical carbon dioxide. The results of cinnamaldehyde and eugenol recovery indicated that the data sufficiently fitted into a second-

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