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Kinetics of essential oil extraction from castor seeds and macadamia nuts

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Macadamia nuts and castor seeds are some of the popular sources of essential oils. Oil extraction from these two natural products can be effected by both cold pressing and solvent extraction or a combination of the above. In this work both raw materials, extraction mechanisms and kinetics of essential oils production from their seeds using different techniques will be discussed. The kinetics of essential oil extraction from castor seeds and macadamia nuts would be affected by different factors (size of the seeds/nuts, hardness, integrity of the seeds/nuts, temperature, pressure and concentration of the extraction medium). Data collected during the oil extraction process are discussed in the light of existing kinetics models. Whether first order or not argumentation will be made.

Apply to be considered for a student award (Yes / No)?

No

Level for award (Hons, MSc, PhD, N/A)?

N/A

Main supervisor (name and email) and his / her institution

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Would you like to submit a short paper for the Conference Proceedings (Yes / No)?

Full

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