

# Accepted Manuscript

Biorefining of buckwheat (*Fagopyrum esculentum*) hulls by using supercritical fluid, Soxhlet, pressurized liquid and enzyme-assisted extraction methods

Ignas Mackèla, Tomas Andriekus, Petras Rimantas Venskutonis



PII: S0260-8774(17)30184-X  
DOI: 10.1016/j.jfoodeng.2017.04.029  
Reference: JFOE 8865  
To appear in: *Journal of Food Engineering*  
Received Date: 14 September 2016  
Revised Date: 03 February 2017  
Accepted Date: 24 April 2017

Please cite this article as: Ignas Mackèla, Tomas Andriekus, Petras Rimantas Venskutonis, Biorefining of buckwheat (*Fagopyrum esculentum*) hulls by using supercritical fluid, Soxhlet, pressurized liquid and enzyme-assisted extraction methods, *Journal of Food Engineering* (2017), doi: 10.1016/j.jfoodeng.2017.04.029

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

**Highlights**

- Multistep biorefining processes were developed and tested for buckwheat hulls
- Supercritical carbon dioxide extraction for lipophilic fraction was optimized
- Pressurized liquid extraction with higher polarity solvents used for phenolics
- Enzyme assisted extraction increase soluble extracts from hulls and residues
- Buckwheat hull extracts showed strong antioxidant activity in various assays

Download English Version:

<https://daneshyari.com/en/article/4908915>

Download Persian Version:

<https://daneshyari.com/article/4908915>

[Daneshyari.com](https://daneshyari.com)