

Accepted Manuscript

Searching for new sources of innovative products for the food industry within halophyte aromatic plants: *In vitro* antioxidant activity and phenolic and mineral contents of infusions and decoctions of *Crithmum maritimum* L.

Catarina Guerreiro Pereira, Luísa Barreira, Nuno da Rosa Neng, José Manuel Florêncio Nogueira, Cátia Marques, Tamára F. Santos, João Varela, Luísa Custódio

PII: S0278-6915(17)30187-4

DOI: [10.1016/j.fct.2017.04.018](https://doi.org/10.1016/j.fct.2017.04.018)

Reference: FCT 9003

To appear in: *Food and Chemical Toxicology*

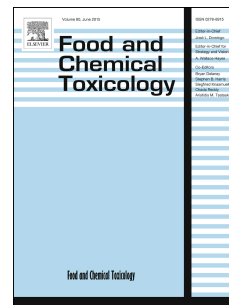
Received Date: 21 March 2017

Revised Date: 11 April 2017

Accepted Date: 13 April 2017

Please cite this article as: Pereira, C.G., Barreira, Luí., da Rosa Neng, N., Nogueira, José.Manuel.Florê., Marques, Cá., Santos, Tamá.F., Varela, Joã., Custódio, Luí., Searching for new sources of innovative products for the food industry within halophyte aromatic plants: *In vitro* antioxidant activity and phenolic and mineral contents of infusions and decoctions of *Crithmum maritimum* L., *Food and Chemical Toxicology* (2017), doi: 10.1016/j.fct.2017.04.018.

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.



Searching for new sources of innovative products for the food industry within halophyte aromatic plants: *In vitro* antioxidant activity and phenolic and mineral contents of infusions and decoctions of *Crithmum maritimum* L.

Catarina Guerreiro Pereira^a, Luísa Barreira^a, Nuno da Rosa Neng^b, José Manuel Florêncio Nogueira^b, Cátia Marques^a, Tamára F. Santos^a, João Varela^a, Luísa Custódio^{a*}

^aCentre of Marine Sciences, University of Algarve, Faculty of Sciences and Technology, Ed. 7, Campus of Gambelas, 8005-139 Faro, Portugal. Emails: cagpereira@ualg.pt, lbarreir@ualg.pt, catiaf_marques@hotmail.com, tamarafilipasantos@gmail.com, jvarela@ualg.pt

^bDepartamento de Química e Bioquímica, Faculdade de Ciências, Universidade de Lisboa, Campo Grande, Ed. C8, 5º piso, 1749-016 Lisboa, Portugal. Emails: ndneng@fc.ul.pt, jmnogueira@fc.ul.pt

***Corresponding author: Luísa Custódio**, Centre of Marine Sciences, University of Algarve, Faculty of Sciences and Technology, Ed. 7, Campus of Gambelas, 8005-139 Faro, Portugal. Telephone: +351 289 800900 ext. 7385. E-mail: lcustodio@ualg.pt

Running Title: Antioxidant and chemical characterization of sea fennel

Abbreviations: ABTS: 2,2'-azino-bis(3-ethylbenzothiazoline-6-sulfonic acid); ANOVA: one-way analysis of variance; BHT: butylated hydroxytoluene; CA: coumaric acid; CAE: caffeic acid equivalents; CCA: copper chelating activity; CE: catechin equivalents; CGA: chlorogenic acid; CTC: condensed tannin content; DMACA: 4-dimethylaminocinnamaldehyde; DPPH: 1,1-diphenyl-2-picrylhydrazyl; DW: dry weight; FA: ferulic acid; FRAP: ferric reducing antioxidant power; GAE: gallic acid equivalents; HAD: Hydroxycinnamic acid derivatives; HepG2: human hepatocellular carcinoma cells; HNO₃: nitric acid; ICA: iron chelating activity; LOQ: limit of quantitation; MP-AES: Microwave Plasma-Atomic Emission Spectrometer; MTT: 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide; N9: murine microglia cells; NCGA: neochlorogenic acid; NO: nitric oxide; QE: quercetin equivalents; RE: rutin equivalents; ROS: reactive oxygen species; RSA: radical scavenging activity; S17: murine bone marrow stromal cells; SD: standard deviation; SH-SY5Y: human neuroblastoma cells; TFC: total flavonoid content; TPC: total polyphenolic content.

Download English Version:

<https://daneshyari.com/en/article/5559939>

Download Persian Version:

<https://daneshyari.com/article/5559939>

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