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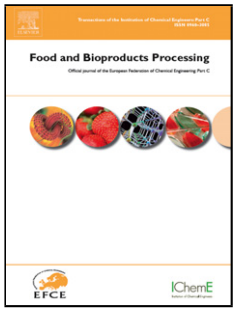

Title: Optimized microwave-assisted extraction of phenolic compounds from *Scirpus holoschoenus* and its antipseudomonal efficacy, alone or in combination with *Thymus fontanesii* essential oil and lactic acid.

Authors: Saliha Oussaid, Khodir Madani, Karim Houali, Manuel Rendueles, Mario Diaz

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Optimized microwave-assisted extraction of phenolic compounds from *Scirpus holoschoenus* and its antipseudomonal efficacy, alone or in combination with *Thymus fontanesii* essential oil and lactic acid.

Oussaid Saliha [a, b], Madani Khodir[a], Houali Karim[b], Rendueles Manuel[c], Diaz Mario[c]*

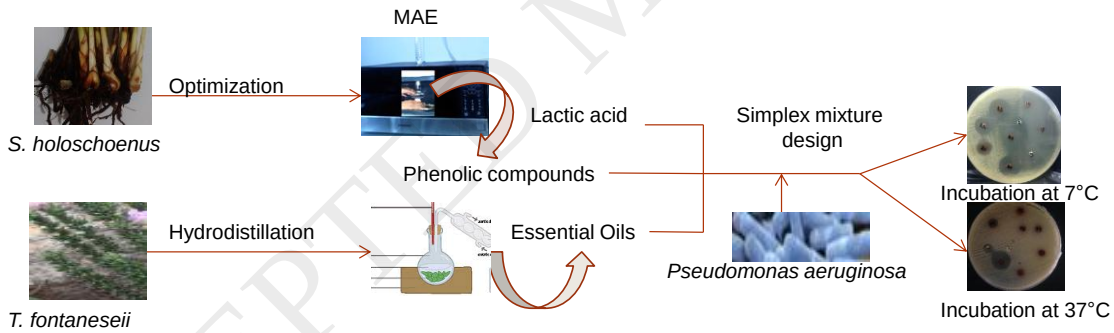
[a]Laboratoire de Biomathématiques, Biophysique, Biochimie et Scientométrie, Faculté des Sciences de la Nature et de la Vie, Université de Bejaia, 06000 Bejaia, Algeria

[b]Laboratory Analytical Biochemistry & Biotechnology Research (LABAB), Faculty of Biological Sciences and Agricultural Sciences, Mouloud Mammeri University of Tizi-Ouzou, Tizi Ouzou, Algeria

[c]Department of Chemical Engineering and Environmental Technology, University of Oviedo, C/Julián Clavería s/n, 33071 Oviedo, Spain.

(*)Corresponding author. Tel: 0034-985103439
E-mail addresses: mariodiaz@uniovi.es

Graphical abstract



Highlights

- Response surface methodology was used for microwave extraction of TPC from *S. holoschoenus.*
- The optimal extraction conditions were found to be 56% acetone, 600 w and 69 s.
- Only ethyl acetate fraction from the phenolic extract showed antipseudomonal effect.
- A mixture of ethyl acetate fraction and EO of *T. fontaneseii* gave the highest activity.
- The antibacterial effect was most important at low temperature.