Abstracts

FOR

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Phytochemicals in Medicine and Food

(5-ISPMF)

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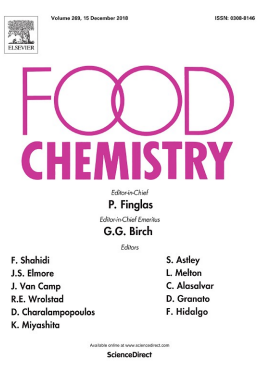

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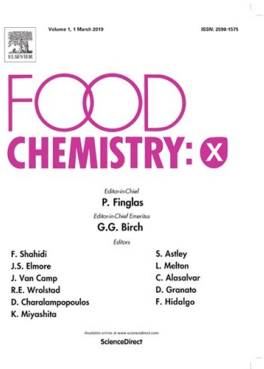

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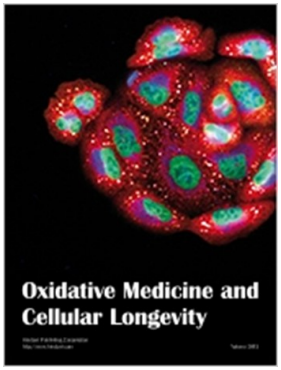

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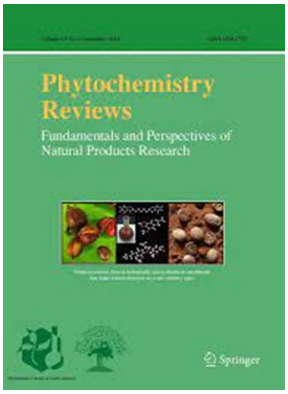

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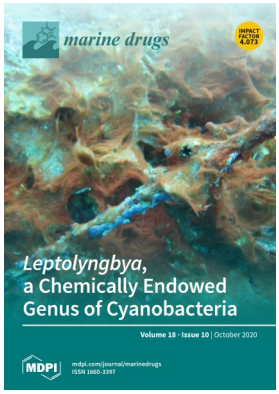

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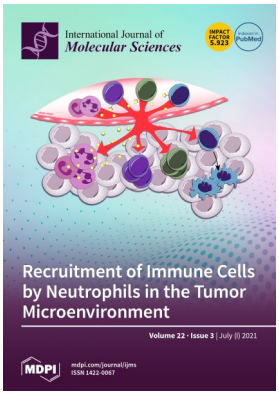

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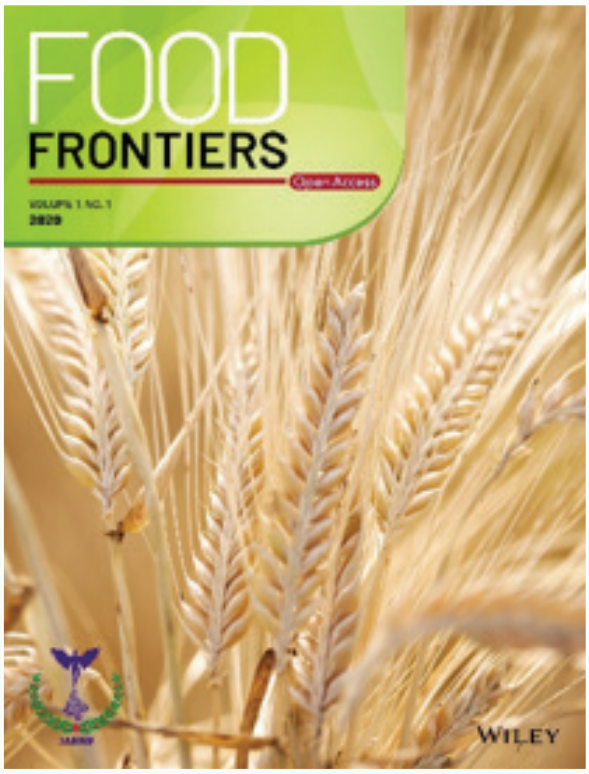

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PP15: Biological activities of selected plants of Rosaceae family employed in traditional remedies

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During human history, people have searched plant species to heal their diseases, elaborating different traditional remedies. Nowadays, numerous scientific studies have demonstrated the beneficial biological properties of several plants including species of Rosaceae familywhich appears in various ethnobotanical studies as one of the most used plants in traditional medicine *Crataegus monogyna* Jacq., *Geum urbanum* (L.) and *Potentilla erecta* (L.) Raeusch. are some plants of this family that have been employed in several traditional remedies, but their use is still limited nowadays [1]. The objective of this study was to different biological properties of these species, to potentiate their possible use in several biobased industrial applications. Antioxidant activity was evaluated by different *in vitro* assays: DPPH radical scavenging assay, TBARS, OXHLIA and reducing power. Anti-inflammatory activity was assessed by the inhibition of inflammation on RAW264.7 murine macrophages. Finally, antitumor activity was tested against four tumour cell lines: MCF-7, CaCo, AGS and NCI-H460. The results showed that all plant extracts had antioxidant effects in the selected assays, especially *G. urbanum* and *P. erecta.* Aditionally, *P. erecta* presented the best anti-inflammatory effect, with EC_{50} of 50 µg/mL extract. Finally, all the species presented cytotoxic effect against the cell lines, being *P. erecta* the most effective, with GI_{50} ranging from 13 to 61 µg/mL of extract. Considering these results, the three species showed promising potential as therapeutic alternatives based on the observed bioactive properties and can be utilised in food, cosmetic and pharmaceutical formulations.

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1. Garcia-Oliveira P, Fraga-Corral M, Pereira AG, et al. Food Chemistry, 2020, 330, 127197.

PP16: The use of camellias as potential antioxidant agents