Special Issue

Chemical Compositions and Biological Activities of Essential Oils

Message from the Guest Editors

Over the past years, interest in botanical insecticides has increased as a result of environmental concerns and insect populations becoming resistant to conventional chemicals. To defend themselves against herbivores and pathogens, plants naturally release a variety of volatiles including various alcohols, terpenes, and aromatic compounds. Essential oils from different plant species possess ovicidal, larvicidal, and repellent properties against various insect species and are regarded as environmentally compatible pesticides. In spite of the widespread recognition that plant essential oils and/or their constituents are reported as safe products for users and the environment, few pest control products based on plant essential oils have appeared in the market place. This Special Issue will publish contributions on aspects of essential oils as natural insecticides, as well as the development of new systems (i.e., polymers entrapping EOs) that can inhibit the growth and infection of crops by phytopathogens. Reviews, original research, and articles that make substantial advances within this field are invited to contribute to this editorial project.

Guest Editors

Dr. Carmen Formisano

Prof. Dr. Vincenzo De Feo

Dr. Filomena Nazzaro

Deadline for manuscript submissions

closed (24 December 2020)



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Message from the Editor-in-Chief

As the premier open access journal dedicated to molecular chemistry, now in its 29th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts, and novel materials. Pushing the boundaries of the discipline, we invite papers on all major fields of molecular chemistry and multidisciplinary topics bridging chemistry with biology, physics, and materials science, as well as timely reviews and topical issues on cutting-edge fields in all of these areas.

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