

Special Issue on Phytochemistry, Ethnopharmacology, and Bioavailability of Medicinal Plants 2023

Medicinal plants have been used since ancient times around the world to treat a wide range of ailments, diseases, and wounds. They are part of the socio-cultural legacy of different countries, evidenced by the ethnobotanical information showed in their pharmacopeias. Medicinal plants are a rich source of phytochemicals and natural compounds such as alkaloids, terpenes, glucosinolates, phenolic compounds, and flavonoids. In this sense, phytochemicals isolated from medicinal plants have been a source of currently commercial drugs and are continuously studied for this purpose.

Due to economic restraints, medicinal plants are still used by many people worldwide, especially in low- and middle-income countries with or without medical surveillance. Some issues arise with the widespread use of medicinal plants, such as the fact only a few plant species have been scientifically evaluated. Furthermore, due to the lack of studies, we still have no safety and efficacy data of many species of medicinal plants. Thus, more research is still needed to evaluate the biopharmaceutical potential of these plant species. Many phytochemicals are known for their antioxidant properties related to their chemical structure and known for their potential bioactive activities in the prevention and potential treatment of many infectious and noncommunicable diseases. These bioactive properties are linked to the interaction of phytochemicals with various molecular targets affecting signalling pathways within cells in numerous ways. As a result, identifying the phytochemicals found in medicinal plants and evaluating their toxicity, mechanisms of action, and bioavailability is of great interest in the pharmaceutical and industrial sectors. These studies can result in the discovery or formulation of a new drug and concomitant preservation interest of medicinal plants in danger due to habitat reduction.

Therefore, this Special Issue aims to call for original research and review articles regarding the phytochemical, ethnopharmacological, and bioavailability research of medicinal plants used around the world.

Potential topics include but are not limited to the following:

- Identification and characterization of phytochemicals from medicinal plants used around the world
- Chemical structure-biological activity relationship
- Bioaccessibility studies of phytochemicals from medicinal plants used around the world
- Bioavailability studies of phytochemicals from medicinal plants used around the world
- Bioactive properties of phytochemicals from medicinal plants against noncommunicable diseases
- Bioactive properties of phytochemicals from medicinal plants against infectious diseases
- Medicinal plant Phytochemistry and their uses in nanotechnology
- Medicinal plant bioactive compounds-based nanomaterials and their applications in biomedicine

Authors can submit their manuscripts through the Manuscript Tracking System at https://review.wiley.com/submit?specialIssue=201490.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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