

Special Issue on
Pharmacological Importance of the Mangroves

CALL FOR PAPERS

Mangrove forests are salt tolerant plant communities confined to coastal areas and occupy only 5% of the total forest areas of the world. The mangrove ecosystem is a hostile environment with fluctuating tidal and saline habitats and only a limited number of plant species can survive under such conditions. Nevertheless, these plants are valuable resources and provide economic and ecological benefits to coastal people. The marine environment offers an extremely rich resource for important compounds of structurally novel and biologically active metabolites. In this context, mangrove species growing in the intertidal regions of land and sea have been used for traditional medicine and other applications such as insecticides and pesticides. Mangroves growing in this hostile environment are biochemically unique, producing a wide array of natural products with unique bioactivity. They possess active metabolites with some novel chemical structures which belong to diverse chemical classes such as alkaloids, phenol, steroids, terpenoids, and tannins. In addition, mangrove plants are a selective environment for the proliferation of endophyte microorganisms due to the extreme conditions in which they live. These microorganisms produce a wide range of bioactive secondary metabolites, which gives them an important pharmacological value. For these reasons, the exploration and exploitation of the mangrove ecosystem embodies a great challenge which requires inputs from various scientific areas to align their marine chemical diversity with their therapeutic potential. Moreover, these hostile environments with unique bioactive potential are being neglected and unexplored. The current special issue aims to provide a platform for mangrove specialists and scientists to discuss recent findings in this area. We invite researchers to their original research articles as well as review articles to this special issue that focus on the role of mangroves as a source of natural bioactive compounds and progress made in natural-derived drugs discovery and developments in counteracting human diseases.

Potential topics include but are not limited to the following:

- ▶ Ethnomedicinal potential of mangrove plants
- ▶ Bioactive compounds from mangrove forests (plants and microorganism)
- ▶ Epigenetic changes induced by bioactive compounds from mangrove environment (plants and microorganism)
- ▶ Effect of natural compounds from mangrove environment (plants and microorganism) on neurological disorders
- ▶ Anticancer and antidiabetic potential of bioactive compounds from mangrove environment (plants and microorganism)
- ▶ Characterization of mangrove extracts with pharmaceutical activities
- ▶ Role of mangrove bioactive agents on natural drug development
- ▶ Pharmacological applications of metabolites of mangrove endophytes
- ▶ Tissue culture of pharmacologically important mangrove species
- ▶ Drug discovery from the mangroves

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/ecam/mebb/>.

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

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