

## Future Projects of Plant Natural Product Chemistry

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The Journal of Natural Products Chemistry and Research will present contributions discussing multi-trophic interactions, focusing on interactions between plants, herbivores and natural enemies of herbivores, as well as plants and their pollinators. These relationships are mediated by plant chemistry, and many examples of plant defenses and their effects on specialist and generalist herbivores demonstrate the evolutionary importance of a vast diversity of secondary compounds.

Natural Products Chemistry and Research includes the Topics which will highlight novel work at the chemical and ecological level as well as present reviews of this rich topic. This collection of papers should become an important resource for chemical ecologists by synthesizing information, presenting provocative new work and suggesting challenging topics for future research in the field. We welcome studies focusing on:

- Plant chemicals mediating and conferring specificity to plant-insect relationships
- Biosynthesis and roles of plant organic compounds in multitrophic interactions
- Mechanisms of detoxification of plant compounds in specialist and generalist insects and effects on higher trophic levels

Some of the innovative research topics by the Eminent authors in our Journal are

Chuanshan et al. describes Design, Synthesis and Characterization of Novel Curcumin Derivatives which explains about the Curcumin is a substance in turmeric. It's an active compound from natural plant *Curcuma longa* L which is widely used as an herbal medicine in Asian countries. The anti-inflammatory, antioxidant and anticancer properties that slow down the spread of cancer, makes chemotherapy more effective and protect healthy cells from damage by radiation therapy. However, it's poor water, plasma solubility and bioavailability for human absorption. To overcome these problems, structural modification is attracting scientist's attention.

Suliman et al. describes In vitro Anti-microbial Activity and Wound Healing Evaluation of Acacia Gum Arabia Aqueous Cream which explains about the topical treatment with Acacia gum cream showed significant healing effect on excision wounds

and demonstrated an important role in the inflammation process by increasing antioxidant enzyme activities, thereby accelerating the wound healing process and reducing tissue injury.

Fors et al. describes Triterpenic Glycosidic Component Isolated from the Holothurian *Holothuria Florida* Inhabiting the Cuban Archipelago which explains about the A triterpene glycoside fraction was isolated from methanolic extract of *Holothuria florida* inhabiting in shallow waters of the south-western marine insular platform of Cuba archipelago. Methods: The fraction was separated chromatographically on Amberlite and was isolated a triterpene glycoside. Its structure has been deduced, in a preliminary study, from spectral analysis (NMR, FTIR) and chemical evidence (chromogenic reactions).

Martin et al. describes Natural and Synthetic Derivatives of the Steroidal Glycoalkaloids of *Solanum* Genus and Biological Activity which explains the Steroidal alkaloids are secondary metabolites mainly isolated from species of Solanaceae and Liliaceae families that occurs mostly as glycoalkaloids. chaconine, solanine, solamargine and solasonine are among the steroidal glycoalkaloids commonly isolated from *Solanum* species. A number of investigations have demonstrated that steroidal glycoalkaloids exhibit a variety of biological and pharmacological activities such as antitumor, teratogenic, antifungal, antiviral, among others. However, these are toxic to many organisms and are generally considered to be defensive allelochemicals. To date, over 200 alkaloids have been isolated from many *Solanum* species, all of these possess the C27 cholestane skeleton and have been divided into five structural types; solanidine, spirosolanes, solacongestidine, solanocapsine, and jurbidine. In this regard, the steroidal C27 solasodine type alkaloids are considered as significant target of synthetic derivatives and have been investigated for more than 10 years in order to obtain new physiologically active steroids. It is important to state that the wide range of biological activities and the low amount available from natural sources, make relevant to obtained these metabolites by synthetic pathway.

All the above mentioned articles are innovative and have a broad scope throughout the world. Natural Products Chemistry and

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