



Pharmacognosy Services Section Front Page

Pharmacognosy is defined as an applied science that deals with the biologic, biochemical, and economic features of natural drugs and their constituents. This area of study has metamorphosed from a descriptive botanical and mycological field to more of a biological and chemical focus within the last 50 years. Currently, pharmacognosy has embraced the study of compounds from plants, animals and microbes, of both terrestrial and marine origin, including phytotherapy and nutraceuticals recently. Naturally originated drugs have a persistent importance worldwide for treatment of several diseases. Pharmacognosy, is an old established pharmaceutical science which has played a diverse role in the discovery, characterisation, production and standardisation of important drugs.

The scope of pharmacognosy has expanded from the traditional morphological description of plants and other organisms, to encompass the molecular science to the exploration of naturally occurring bioactive compounds, their mode of action and, ultimately, their application in all economic and social activities. The search for new therapeutics was initially focused on plant species used in traditional medicine, but the development of specific and sensitive bioassays and efficient methodologies for the isolation and structure determination of bioactive constituents which have facilitated the high throughput screening of the huge molecular diversity found in plants, microorganisms and animals. The exploitation of bioactive products from nature as a source was very successful with hundreds of new drugs having been developed and marketed. Despite the wide-ranging importance of biodiversity components, the pledges enshrined in the Convention on Biological Biodiversity still await more effective implementation in the form of research programs and partnerships with biodiversity rich countries. currently the challenge faced by pharmacognosy is to establish integrative programs that focus on conservation, ecology, bioactivity, chemical analysis, organic synthesis and evolutionary studies in order to preserve, understand and exploit the full potential of biodiversity. over the last decade interest has increased in research and teaching as the public are turning towards herbal remedies for minor health problems, but several phytomedicines require further investigation for their clinical effectiveness, while others need to be thoroughly investigated for their potential health risks or interactions with prescription drugs.