



Molecular Biology Field Has Become an Extremely Important Area for Medicinal Plant Drug Discovery

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Received date: November 05, 2021; Accepted date: November 19, 2021; Published date: November 26, 2021

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Introduction

"Pharmacognosy" derives from 2 Greek words, "pharmakon" or drug, and "gnosis" or data. Whereas representing a classical field of science, Pharmacognosy has undergone important amendment in recent years and nowadays represents an extremely knowledge domain science that is one among 5 major areas of pharmaceutical education. analysis issues in pharmacognosy embody studies within the areas of photochemistry, microorganism chemistry, biogenesis, biotransformation, chemotaxonomy, and different biological and chemical sciences.

Vincristine is usually recommended for acute leukemia in childhood advanced stages of Hodgkin's lymphoma, little cell respiratory organ, cervical, and carcinoma. The preceding medication came into use through the screening analysis of various healthful plants, as a result of they showed little aspect and harmful effects, were profitable, and possessed sensible rapport. A racemic mixture ($\pm 1:1$) of harringtonine and homo harringtonine isolated from gymnosperm genus fortunei (Cephalotaxaceae) has been used well in China for the treatment of acute chronic myelogenous leukaemia and myelogenous leukaemia.

Most of the countries in South-East Asia Region of the United Nations agency (World Health Organization) have a heritage of ancient drugs system. The word pharmacognosy consists of 2 Greek words, that mean drug and data. during this field of science, investigator deals with the secondary metabolites found in several plants, animals, and microorganism natural sources, as an example, plant leaves, seeds, fruits, stem, roots, rhizosphere, herbs, spices, fungus, algae, corals, star fishes, jelly fishes, sponges, holothurian, ocean urchins, sea weeds, snakes venom, frogs skin, cockroaches, and lots of a lot of. Per the recent United Nations agency report, concerning eightieth of world population continues to be exploitation natural product for his or her primary attention desires. Pharmacognosy will offer safe and effective medication together with fashionable drugs system.

Its scope includes the study of the physical, chemical, organic chemistry and biological properties of medication, drug substances, or potential medication or drug substances of natural origin moreover

Because the hunt for new medication from natural sources. The yankee Society of Pharmacognosy (ASP) defines it as "the study of the physical, chemical, organic chemistry and biological properties of medication, drug substances, or potential medication or drug substances of natural origin moreover because the hunt for new medication from totally different natural sources". Pharmacognosy is that the study of medicines or crude medication made from natural sources like plants, microbes, and animals. It includes analysis of their biological, chemical, organic chemistry, and physical properties. Pharmacognosy has perpetually been a field of multidisciplinary science, and through the growth of the orbit of this space, photochemistry, phytomedicine, and phytochemical analysis became vital elements of this field.

Molecular biology field has become an especially vital space for healthful plant drug discovery analysis through the determination and application of convenient screening assays directed physiologically connected molecular targets, and fashionable pharmacognosy encapsulates all of those relevant new analysis areas into a definite knowledge domain natural product science.

Typically, such work is initiated once a given crude drug formulation (typically ready by solvent extraction of the natural material) is deemed "active" during an explicit *in vitro* assay. If the end-goal of the work hand is to spot that one(s) of the scores or many compounds square measure accountable for the determined *in vitro* activity, the trail thereto finish is fairly simple.

A typical protocol to isolate a pure agent from natural origin is bioassay-guided fractionation, which means bit-by-bit separation of extracted elements supported variations in their chemistry properties, and assessing the biological activity, followed by next spherical of separation and assaying. It's believed that the physical body finds plant-derived medicines easier to simply accept thanks to the actual fact that they exist in nature and aren't artificial. Concerning twenty fifth of prescription medicines within the USA square measure believed to own an energetic ingredient from a natural supply. In developing countries, it's calculable that concerning eightieth of their populations think about ancient medicines made up of plants and herbs.