



President's Message



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Pharmacognosy has been mentioned as “science of natural products in drug discovery”. Traditional medicine, which is sometimes referred to as herbal medicines form an important part of pharmacognosy. Traditional medicines are medicines used by human beings since their advent, and initially through memorization and oral passage from generation to generation and later following the discovery of writing, through written form has survived and still practiced in most countries of the world. Traditional medicines and the plants used in such medicines have formed the basis for discovery of many modern drugs. Contrary to notions of some modern scientists, a number of these traditional medicinal systems have developed in an orderly manner to form a regulated system of medicine, which is not too different from conventional medicines. As the name implies, the mainstay of herbal medicines is herbs or plants. Most herbs in traditional/herbal medicines are not cultivated but collected from the wild. Traditional practitioners say that when cultivated, medicinal plants lose a lot of their ‘strengths’ or efficacies. That is possible. Plants produce secondary metabolites and these phytochemicals are produced more so under stressful conditions like drought or pest attacks. These secondary metabolites with their diverse pharmacological activities form the sources of many modern drugs like artemisinin, digoxin, aspirin, morphine, and reserpine, to name only a few. When cultivated, due to less stressful conditions of growth, it is conceivable that cultivated medicinal plants may produce less secondary metabolites and so may lose a part of their ‘strength’. The major question that we have to address today is with the rapid disappearance of wild plants along with emergence of new diseases and drug-resistant vectors, how are we going to solve our disease problems? There is no sense in touting the phrase ‘that science will solve the problem’. Science did not solve the problem with bare hands; natural products played the major part in helping scientists to discover the correct answer to the manifold diseases of the ‘modern’ age. It is said in a report published in Nature that since 1900, three species of seed-bearing plants are disappearing each year, which is 500 times the normal rate. And when plants go, so goes the eco system with the disappearance of insect and animal species, which also plays a part in the discovery of new drugs. For instance, melittin has been isolated from bees, and alloferon from blowflies. Many life-saving therapeutics have been developed from snake venoms. There is possibly still a small window where we can raise our voices and demand that this destruction of rainforests and mass extinction of species be stopped. If industrial greed, which is in reality fueled by our own greed and demands, cannot be controlled, then we can look at a future, the harbinger of which can be observed in the heat wave and forest fires of North America, Russia and other parts of the world. And then it will be too late to blame ourselves.