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Editorial

Active Role of Secondary Metabolites in Pharmacology

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Secondary metabolites have played an important role in possessing various biological effects, which included antibiotic, antifungal and antiviral [1,2]. They provide basic knowledge of scientific use of herbs in the traditional medicine in many of the prehistoric communities [3]. These metabolites protect plants from various pathogens [4]. Some of the example for secondary metabolites are toxins, gibberellins, alkaloids and antibiotics [5]. Plant chemistry has an important role in therapeutic uses of herbs [6]. A virtuous knowledge about various chemical composition of plants will leads to better understanding of its possible medicinal value [7]. Contemporary chemistry plays primary role in basic life functions such as respiration, cell division, growth, storage and reproduction [8]. They include the components of processes such as Krebs or citric acid cycle, glycolysis, photosynthesis and associated pathways [9,10].

Secondary metabolites serve:

- As a competitive weapon against plants, insects, bacteria, fungi, amoebae and large animals
- As a metal transporting agent
- As an agent for symbiosis between nematodes, insects, microbes, plants and higher animals
- As a sexual hormone
- As a differentiation effector

In modern medicine, many lead compounds are formed for the production of medications for treating various diseases from cancer up to migraine.

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