

Chapter 15

Plant Secondary Metabolites: Their Impact on Human Health Within the Context of Harnessing NanoOmics and Nanozymes

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ABSTRACT

Secondary metabolites produced by plants are particular to their species or genus and do not contribute to the basic processes of growth, development, and reproduction. These compounds play a key role as feed deterrents against herbivores, protectants from microbial infection, abiotic stresses, UV-protectants, pollinators attractants, antioxidants, and signalling molecules. Based on their chemical structures and production routes, secondary metabolites may be further classified across several classes. Alkaloids, terpenes, and phenolic chemicals make up the largest and most common group. The importance of secondary metabolites found in plants for human nutrition has grown to be an important interesting research area. Secondary metabolites are used by people as medicine to cure illnesses and infections, flavourings, and pesticides in the recent past. Therefore, an overview of plants is provided in this chapter including secondary metabolites and how these compounds are relevant to human health.

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