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| Descrizione fisica      | 1 online resource (XII, 577 p. 127 illus., 84 illus. in color.)   |
| Disciplina              | 572.572   |
| Soggetti                | Plant biochemistry<br>Plant physiology<br>Proteins<br>Plant anatomy<br>Plant development<br>Plant Biochemistry<br>Plant Physiology<br>Receptors<br>Plant Anatomy/Development  |
| Lingua di pubblicazione | Inglese   |
| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |
| Sommario/riassunto      | Phytochemistry is the branch of science that deals with the study of plant-derived chemicals or compounds, which are also known as phytochemicals or plant-derived secondary metabolites. Plants are known to produce phytochemicals that are essential for their growth and reproduction, as they protect them from insects, pathogens, and herbivores. Some of the major groups of plant-derived secondary metabolites are phenolics, flavonoids, terpenoids, alkaloids, tannin etc. Plant-derived phytochemicals are pharmacologically active and have the potential to cure various human diseases and disorders. Natural plant products have been known for their medicinal properties for untold years, and form the basis of several medicinal systems such as Chinese, Unani, and Ayurvedic Medicine. This book offers an essential |

introduction to phytochemicals and their synthetic analogues. It discusses various *in silico* approaches used to identify pharmacologically active phytochemicals and their biological activities, as well as *in vitro* and *in vivo* models/assays that have been utilized for the pharmacological profiling of plant-derived products to combat cancer, diabetes, cardiovascular diseases and neurological disorders. The intended audience includes upper-level undergraduate and graduate students; researchers and scientists from the pharmaceutical/food chemistry/nutrition sciences/biochemistry, and clinical biochemistry fields; and medical students. Sharing the latest findings, the book will familiarize these readers with the concepts, chemistry, and tremendous potential of phytochemistry.

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