1. Record Nr. UNINA9910298421303321

Titolo	Anticancer plants: Properties and Application : Volume 1 / / edited by Mohd Sayeed Akhtar, Mallappa Kumara Swamy
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2018
ISBN	981-10-8548-X
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (582 pages)
Disciplina	615.321
Soggetti	Plant physiology Agriculture Proteomics Plant genetics Cancer - Research Plant Physiology Plant Genetics and Genomics Cancer Research
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Current practices and awareness of anticancer plants in the traditional healthcare system -- Phytochemical and biological properties of Lippia gracilis -- Use of Indian indigenous fruits in cancer prevention and treatment -- Potentiality of anticancer plant derived compounds of North-East India -- Plant-derived compounds in cancer therapy: Traditions of past and drugs of future -- Anticancer plant molecules for Improvement of immune system -- Fermented food derived bioactives compounds with anti-carcinogenic properties: Fermented Royal jelly as a novel source for compounds with health benefits -- Mass spectrometry based techniques for assessment of pharmacological responses of ayurvedic drugs -- Assessment of anticancer properties of betelvine -- Analysis of patents filed for the herbal therapeutics against cancer -- Appraisal of medicinal plants with anticancer properties in South America -- Scientific validation of the usefulness of Withania somnifera Dunal in the prevention and treatment of cancer -- Anticancer potential of mangrove plants:

Neglected plant species of the marine ecosystem -- Piper betel Linn. in cancer: Past, Present and Future -- Anticancer properties of curcumin and its efficacy for treating central nervous system neoplasms -- Vitamin E: The Nature’s Gift to Fight Cancer -- Use of plant secondary metabolites as nutraceuticals for treatment and management of cancer: Approaches and challenges -- Usefulness of Ocimum sanctum Linn. in cancer prevention: An Update -- Phytochemicals with anticancer potential: Methods of extraction, basic structure and chemotherapeutic action -- Anticancer plants and their conservation strategies -- Anticancer plants: Chemistry, pharmacology and potential applications -- Botany, chemistry and pharmaceutical significance of Sida cordifolia- A Traditional medicinal plant -- Anticancer properties of natural compounds on prostate cancer -- Phytochemicals against cancer stem cells.

Sommario/riassunto

Cancer is one of the leading death cause of human population increasingly seen in recent times. Plants have been used for medicinal purposes since immemorial times. Though, several synthetic medicines are useful in treating cancer, they are inefficient and unsafe. However, plants have proved to be useful in cancer cure. Moreover, natural compounds from plants and their derivatives are safe and effective in treatment and management of several cancer types. The anticancer plants such as Catharanthus roseus, Podophyllum peltatum, Taxus brevifolia, Camptotheca acuminate, Andrographis paniculata, Crateva nurvala, Croton tonkinensis, Oplopanax horridus etc., are important source of chemotherapeutic compounds. These plants have proven their significance in the treatment of cancer and various other infectious diseases. Nowadays, several well-known anticancer compounds such as taxol, podophyllotoxins, camptothecin, vinblastine, vincristine, homoharringtonine etc. have been isolated and purified from these medicinal plants. Many of them are used effectively to combat cancer and other related diseases. The herbal medicine and their products are the most suitable and safe to be used as an alternative medicine. Based on their traditional uses and experimental evidences, the anticancer products or compounds are isolated or extracted from the medicinally important plants. Many of these anticancer plants have become endangered due to ruthless harvesting in nature. Hence, there is a need to conserve these species and to propagate them in large scale using plant tissue culture. Alternatively, plant cell tissue and organ culture biotechnology can be adopted to produce these anticancer compounds without cultivation. The proper knowledge and exploration of these isolated molecules or products could provide an alternative source to reduce cancer risk, anti-tumorigenic properties, and suppression of carcinogen activities. Anticancer plants: Volume 1, Properties and Application is a very timely effort in this direction. Discussing the various types of anticancer plants as a source of curative agent, their pharmacological and neutraceutical properties, cryo-preservations and recent trends to understand the basic cause and consequences involved in the diseases diagnosis. We acknowledge the publisher, Springer for their continuous inspiration and valuable suggestions to improvise the content of this book. We further extend our heartfelt gratitude to all our book contributors for their support, and assistance to complete this assignment. I am sure that these books will benefit the scientific communities including academics, pharmaceuticals, nutraceuticals and medical practitioners. .