1. Record Nr. UNINA9910767517503321

Titolo	Sustainable Agriculture Reviews 34 : Date Palm for Food, Medicine and the Environment / / edited by Mu. Naushad, Eric Lichtfouse
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-030-11345-0
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (285 pages)
Collana	Sustainable Agriculture Reviews, , 2210-4429 ; ; 34
Disciplina	630 584.84
Soggetti	Agriculture Botany Pollution Plant Science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Preface -- Chapter 1 Date palm as a healthy food -- Chapter 2 Analysis of antioxidants and nutritional assessment of date palm fruits -- Chapter 3 Nutritional and therapeutic applications of date palm from date palm -- Chapter 4 Chemical Composition of Date Pits: Potential to Extract and Characterize the Lipid Fraction -- Chapter 5 Biogas production from date palm fruits -- Chapter 6 Valorization of waste date seeds for green carbon catalysts and biodiesel synthesis -- Chapter 7 Different extraction methods, physical properties and chemical composition of date seed oil -- Chapter 8 Production of glucose and lactic acid from cellulosic date palm wastes by enzymatic fermentation -- Chapter 9 Application of date-palm fibers for the wastewater treatment -- Chapter 10 Recent updates on heavy metal remediation using date stones (Phoenix dactylifera L.) - Date fruit processing industry waste -- Chapter 11 Removal of toxins from the environment using date palm seeds -- Chapter 12 Date palm based activatedcarbon for the efficient removal of organic dyes from aqueous environment -- Chapter 13 Date palm assisted nanocomposite materials for the removal of nitrate and phosphate from aqueous medium.

Sommario/riassunto	This book is the result of remarkable contribution from the experts of interdisciplinary fields of Science with comprehensive, in-depth and up-to-date research and reviews. It describes the applications of date palm for food, medicine and the environmental sectors. Date palm is one of the oldest cultivated trees and its fruit has been a dietary staple around the world for many centuries. Date pulps contain dietary fibers and easily digestible sugars (70%), mainly glucose, sucrose and fructose. They also contain vitamins like biotin, thiamine, riboflavin, ascorbic and folic acid that are important for our body. The date palm fruit has been used in folk remedies for the treatment of various infectious diseases, cancer and immuno-modulatory activity. Date stones and date palm leaves are freely and abundantly available biomass. Therefore, the renovation of agricultural biomass wastes into activated carbons for drinking water purification, wastewater treatment, treatment of dyes, andmetal-ions from aqueous solution would add value to agricultural commodities which offer a solution to environmental problems as well as reduce the cost of waste disposal.