

1. Record Nr.	UNINA9910366647903321
Titolo	Controlled Release of Pesticides for Sustainable Agriculture / / edited by Rakhimol K. R., Sabu Thomas, Tatiana Volova, Jayachandran K
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
ISBN	3-030-23396-0
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (268 pages)
Disciplina	363.738498
Soggetti	Sustainability Agriculture Polymers
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Conventional methods of pesticide application in agricultural field and fate of the pesticides in the environment and human health -- Methods for determination of pesticides and fate of pesticides in the fields -- Chemistry and toxicology behind insecticides and herbicides -- Controlled Release Pesticides as a route to Sustainable Crop production -- Manufacturing of slow- and controlled-release Pesticides -- Characteristics and types of slow/ controlled release of pesticides -- Advanced Controlled Nanopesticide Delivery Systems for Managing Insect Pests -- Polymer Formulations for Pesticide Release -- Molecularly Imprinted Sensors for Detecting Controlled Release of Pesticides -- Controlled Release Herbicides and Allelopathy as Sustainable Alternatives in Crop Production -- Controlled release of plant hormones for modifying crop yield.
Sommario/riassunto	This book presents an introduction to the concept and need of sustainable agriculture, the mechanisms of conventional and controlled release of pesticides, herbicides and plant hormones. It also contains the carriers which supply controlled release including polymers and nanoparticles. A full chapter is devoted to the theory and simulation aspects.