

# Weed Control

## *Sustainability, Hazards, and Risks in Cropping Systems Worldwide*

**Nicholas E. Korres**

University of Arkansas, Fayetteville, USA

**Nilda R. Burgos**

University of Arkansas, Fayetteville, USA

**Stephen O. Duke**

USDA, Agricultural Research Service, Oxford, USA

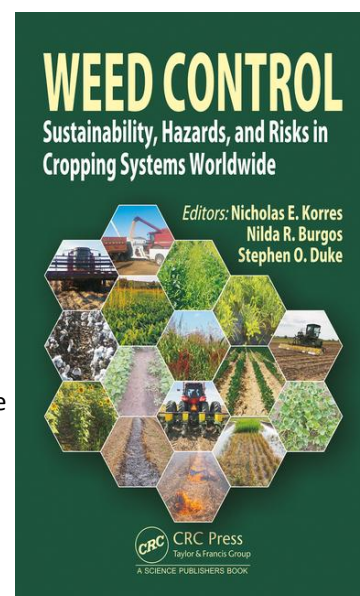
This book focuses on management strategies that respect human life and the environment and secure safe food production. This book, provides new insights for scholars, researchers, students, extension specialists and consultants in weed science, agronomy, horticulture and viticulture, agroecologists, environmental scientists and landscape managers.

### KEY FEATURES

- Updates knowledge on weed management
- Provides information on herbicide potential harmful effects on human and various ecosystems
- Expands information on weed control in major crops worldwide
- Contributes to sustainable food production
- Highlights the importance of integrated weed control methods
- Covers a wide range of cropping systems worldwide

### SELECTED CONTENTS

PART 1: WEED SCIENCE-SUSTAINABILITY, HAZARDS AND RISKS. Sustainable agriculture and integrated weed management. Effects of Herbicides on Humans. Effects of Weed Management on Soil Ecosystems. Effects of Herbicides on Freshwater Ecosystems. Direct and Indirect Effects of Herbicides on Insects. Evolution of Herbicide-Resistant Weeds. Microbial Herbicides. Natural Product-Based Chemical Herbicides. Allelopathy for Sustainable Weed Management. Genetically Engineered Herbicide-Tolerant Crops and Sustainable Weed Management. PART 2: SUSTAINABLE WEED CONTROL IN CROPS AND CROPPING SYSTEMS. Sustainable Weed Control in Small Grain Cereals (Wheat/Barley). Sustainable Weed Control in Maize. Grain Sorghum. Sustainable Weed Control in Rice. Sustainable weed control in soybean. Sustainable Weed Control in Cotton. Sustainable Weed Control in Oilseed Rape. Sustainable Weed Management in Peanut. Sustainable Weed Control in Tobacco. Sustainable Weed Control in Strawberry. Sustainable Weed Control in Vegetables. Sustainable Weed Control in Coffee. Advances in Weed Management in Tea. Weed Management in Sugarcane. Sustainable Weed Control in Pineapple. Sustainable Weed Control in Natural Rubber. Sustainable Weed Control in Orchards. Sustainable Weed Control in Vineyards. Sustainable Potato Weed Management. Sustainable Weed Control in Sugarbeet. Sweet Potato: Important Weeds and Sustainable Weed Management. Sustainable Weed Control with Aromatic Plants and Essential Oils. Issues and Sustainability in Grassland Weed Control. Organic Farming and Sustainable Weed



Catalog no. K30255

December 2018, 575 pp.

ISBN: 978-1-4987-8746-8

~~\$229.95 / £146.00~~

**\$183.96 / £116.80**

**SAVE 20% when you order online and enter Promo Code SCI19**

**FREE standard shipping when you order online.**

[www.crcpress.com](http://www.crcpress.com)

e-mail: [orders@crcpress.com](mailto:orders@crcpress.com)

1-800-634-7064 • 1-561-994-0555 • +44 (0) 1235 400 524



CRC Press  
Taylor & Francis Group