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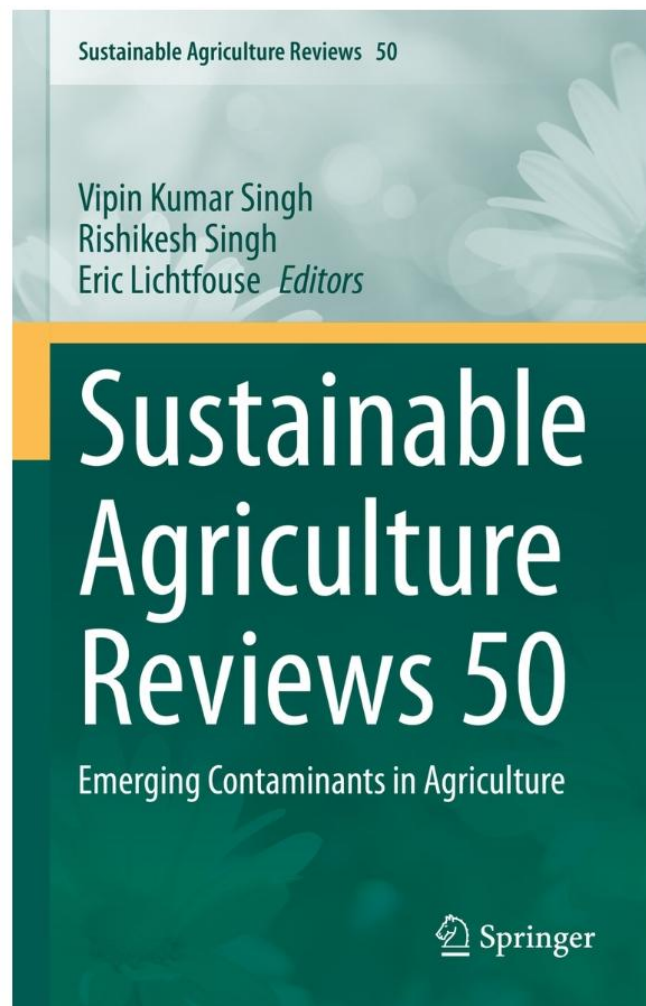
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Sustainable Agriculture Reviews

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Emerging Contaminants in Agriculture

von Kumar Singh, Vipin (Hrsg.) | Singh,
Rishikesh (Hrsg.) | Lichtfouse, Eric (Hrsg.)



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Chapter 14

Non-Judicious Use of Pesticides Indicating Potential Threat to Sustainable Agriculture



Ajay Kumar Mishra, Rahul Arya, Rakhi Tyagi, Dipti Grover,
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Abstract Worldwide, pesticides have proved to be a boon for the farmers by increasing agricultural yield and providing innumerable benefits to society directly and indirectly. For instance, India witnessed the green revolution during the 1960s that redefined the low input to high input more intense agriculture system that contributed to transforming Indian agriculture from food-deficit to food-surplus nation. Nevertheless, the issue of hazards posed by pesticides to human health and the environment cannot be ignored. Non-judicious overuse of pesticides is acting as the source of emerging contaminants in agro-ecosystems. It has been linked to a wide range of human health hazards, ranging from short-term impacts such as headaches and nausea to chronic impacts like cancer, reproductive disorders, and endocrine disruption. Moreover, contamination of air, water and soil that end up adversely affecting the survival of other organisms such as non-targeted plants, birds, and aquatic flora and fauna has also been reported.

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