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Sustainable Agriculture:

An Update

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Prof. Saba Siddiqui
Dr. Deepti Srivastava



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SUSTAINABLE AGRICULTURE: AN UPDATE

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CHAPTER -5

Integrated Pest Management for Sustainable Agriculture

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ABSTRACT

Pest management strategies have shifted from the widespread use of pesticides to a holistic approach of Integrated Pest Management (IPM). Integrated pest management (IPM) is an important strategy for sustainable agriculture that provides a complete and environmentally conscious approach to pest control. Population-based pest management was first proposed by Geyer and Clark in 1961, who advocated a contemporary approach to integrated pest management that attempts to judiciously combine all available techniques and methods of pest control and minimize pesticide use and ecosystem disturbance. IPM practices involve multiple approaches to pest management, including cultural, mechanical, physical, biological, host plant resistance, and chemical approaches. Under an IPM program, cost savings and long-term sustainability are commensurate with environmental benefits, particularly the reduced use of pesticides and preservation of beneficial ecosystems.

Key words: IPM, pest control, agriculture, sustainability