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Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Foreword -- Preamble -- Preface -- Thanks -- Introduction -- 1. APPLYING AGROECOLOGICAL PRINCIPLES TO CROP PROTECTION -- Outlines of Agroecology -- Agroecology, a 21st century agricultural revolution? -- Agroecology seen by an evolutionist ecologist -- Can agronomy be merged into agroecology? -- Agroecology and frames of reference: an epistemological reading -- Evolution of crop protection -- A critical look through the eyes of a science historian of the development of crop protection -- Moving from integrated pest management to agroecological crop protection -- Agroecological crop protection: at the interface between agroecology, crop protection and biodiversity management -- Conclusion -- 2. APPLICATION TO VEGETABLE CROPS: THE GAMOUR EXPERIENCE -- 3. APPLICATION IN FRUIT CROPS: THE BIOPHYTO EXPERIENCE -- 4. FEEDBACK AND COMMON APPROACHES TO AGROECOLOGICAL CROP PROTECTION: FURTHER EXAMPLES -- Introduction -- Other experiences in vegetable farming -- Agroecological practices to manage soil-borne pathogens in greenhouse vegetable crops in France -- Agroecological management

of bacterial wilt of tomato in Martinique -- Other Experiments in Fruit Arboriculture -- Managing plant ground cover to control pests in apple orchards in France -- Agroecological Management of Mango Fruit Flies in Benin -- Experiences with other crops -- Agroecological management of banana pests in export crops in the Dominican Republic -- Agroecological management of insect pests of rainfed rice in Madagascar -- Approach to Biodiversity at the Agroecosystem Level. -Initiatives for Functional Biodiversity in Viticulture and Natural Pest Regulation Services -- Semi-natural habitats for functional biodiversity in France -- Design and Multicriteria Evaluation of Innovative Cropping Systems -- Rés0Pest: An experimental network of pesticide-free cropping systems -- Conclusion -- 5. AGROECOLOGICAL TRANSITION KEYS -- Introduction -- Choosing and adapting methods -- A synoptic view of the methods available to achieve ACP -- Basic pest control techniques -- Diagnoses in agricultural plots -- Experiments on cropping systems -- Modeling, an essential tool for ACP -- Creating and utilizing knowledge -- Functional Soil and Aerial Biodiversity -- Effects of agricultural practices on biotic stresses -- Organic farming as a prototype for the development of ACP -- Landscape ecology, approximation between agronomy and ecology -- Implementing and assessing practices -- Experimental systems and co-design -- Multi-criteria evaluation -- Mediation tools: support for implementation of ACP -- Tracking trajectories -- Training and knowledge transfer -- Teaching ACP -- New training methods: self-training and on-line learning -- Promotion and transfer through vocational training: CUQP ACP -- Concerted public strategies for the support and promotion of agroecology: the approach in Reunion -- The key to agroecological transition: farmers' testimonies -- Agroecology as seen by a farmer in Vendée -- Applied agroecology in a young tropical orchard -- Conclusion -- General conclusion: ACP, a Crop Protection policy for the Future -- Acronyms and abbreviations -- Bibliography -- List of authors.

Sommario/riassunto

How to reconcile crop protection against pests, diseases, weeds and the socio-economic, ecological, environmental and health sustainability of agroecosystems? Given the limitations of current practices, how to ensure the transition between the combination of protection techniques advocated up to now in the framework of the "Integrated Pest Management" and the development of an innovative agroecosystem management framework of the "Agroecological Crop Protection"? This is the purpose of this collective work. It is based on a review of the principles of agroecology applied to crop protection, a critical analysis of the evolution of the crop and the results of participatory experimences realized in farming systems in various agricultural situations. Generally, the book offers concrete recommendations for all temperate and tropical cropping systems, which are the keys to the agro-ecological transition. Intended for a wide audience, it provides both up-to-date information for professionals and teaching for students (agronomy, crop protection, biodiversity management, agroecology). The book is composed of a collection of contributions from a large group of 56 authors. The experience of these authors in the fields of research, teaching, training and transfer in the production environment and the rigor of their scientific approaches give depth and originality to this book which fills a gap in the literature on the subject.