1. Record Nr. UNINA9910767506703321 Titolo Sustainable agriculture reviews . Volume 13 / / Eric Lichtfouse, editor Heidelberg, Germany:,: Springer,, 2014 Pubbl/distr/stampa **ISBN** 3-319-00915-X Edizione [1st ed. 2014.] 1 online resource (v, 315 pages): illustrations (some color), maps Descrizione fisica (some color) Sustainable Agriculture Reviews, , 2210-4410 ; ; 13 Collana Disciplina 570 Soggetti Sustainable agriculture Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali "ISSN: 2210-4410." Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Leaf-cutting ants, biology and control -- Impact of pesticide productivity on food security -- Farmland birds and arable farming, a meta-analysis -- Phytoremediation, transgenic plants and microbes --Management of pathogens of stored cereal grains -- Allelopathy for pest control -- Rice bed planting and foliar fertilization -- Integrated nutrient management and postharvest of crops -- Intercropping taro and bambara groundnut -- Land productivity and food security in Zhangjiagang, China. Sommario/riassunto Sustainable agriculture is a rapidly growing field aiming at producing food and energy in a sustainable way for humans and their children. Sustainable agriculture is a discipline that addresses current issues such as climate change, increasing food and fuel prices, poor-nation starvation, rich-nation obesity, water pollution, soil erosion, fertility loss, pest control, and biodiversity depletion. Novel, environmentallyfriendly solutions are proposed based on integrated knowledge from sciences as diverse as agronomy, soil science, molecular biology, chemistry, toxicology, ecology, economy, and social sciences. Indeed, sustainable agriculture decipher mechanisms of processes that occur from the molecular level to the farming system to the global level at time scales ranging from seconds to centuries. For that, scientists use the system approach that involves studying components and interactions of a whole system to address scientific, economic and

social issues. In that respect, sustainable agriculture is not a classical,

narrow science. Instead of solving problems using the classical

painkiller approach that treats only negative impacts, sustainable agriculture treats problem sources. Because most actual society issues are now intertwined, global, and fast-developing, sustainable agriculture will bring solutions to build a safer world. This book series gathers review articles that analyze current agricultural issues and knowledge, then propose alternative solutions. It will therefore help all scientists, decision-makers, professors, farmers and politicians who wish to build a safe agriculture, energy and food system for future generations.