Record Nr. UNINA9910461104803321 Biodiversity in agriculture: domestication, evolution, and sustainability **Titolo** // edited by Paul Gepts [and others] [[electronic resource]] Pubbl/distr/stampa Cambridge:,: Cambridge University Press,, 2008 **ISBN** 1-139-23417-X 1-107-22487-X 1-280-56896-8 9786613598561 1-139-23266-5 1-139-01951-1 1-139-23043-3 1-139-22899-4 1-139-23190-1 1-139-23344-0 Descrizione fisica 1 online resource (xxiv, 606 pages) : digital, PDF file(s) Disciplina 631.5/8 Soggetti Agrobiodiversity Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Title from publisher's bibliographic system (viewed on 05 Oct 2015). Note generali Nota di contenuto The local origins of domestication / Jared Diamond -- Early steps in agricultural domestication / Robert Bettinger -- Evolution of agroecosystems: biodiversity, origins and differential development / David R. Harris -- From foraging to farming in western and eastern Asia 151 / Ofer Bar-Yosef -- Predomestic cultivation during the late Pleistocene and Early Holocene in the northern Levant / George Willcox -- New archaeobotanical information on plant domestication from macroremains: tracking the evolution of domestication syndrome traits / Dorian Q. Fuller -- New archaeobotanical information on early cultivation and plant domestication involving microplant remains / Dolores R. Piperno -- How and why did agriculture spread? / Peter Bellwood -- California Indian proto-agriculture: its characterization and legacy / Kat Anderson and Eric Wohlgemuth -- Domestication of

animals and impacts on humans / Thomas Famula -- Pathways to animal domestication / Melinda A. Zeder -- Genetics of animal domestication / Leif Andersson -- Genome-wide approaches for the study of dog domestication / Bridgett M. vonHoldt, Melissa M. Gray, and Robert K. Wayne -- Malaria and rickets represent selective forces for the convergent evolution of adult lactase persistence / Loren Cordain, Mathew S. Hickley, and Kami Kim -- Issues in plant domestication / Paul Gepts -- The dynamics of rice domestication: a balance between gene flow and genetic isolation / Susan R. McCouch [and others] -- Domestication of lima beans: a new look at an old problem / M.I. Chacon S. [and others] -- Genetic characterization of cassava (Manihot esculenta Crantz) and yam (Dioscorea trifida L.) landraces in swidden agriculture systems in Brazil / Elizabeth A. Veasey [and others] -- Pigeonpea: from an orphan to a leader in food legumes / C.L. Laxmipathi Gowda [and others] -- Traditional management of biodiversity / Stephen Brush -- Ecological approaches to crop domestication / D.B. McKey [and others] -- Agrobiodiversity shifts on three continents since Vavilov and Harlan: assessing causes, processes and implications for food security / Gary Paul Nabhan [and others] --Indigenous peoples conserving, managing, and creating biodiversity / Jan Salick -- Land architecture in the Maya lowlands: implications for sustainability / B.L. Turner II and Deborah Lawrence -- Agrobiodiversity and water resources in agricultural landscape evolution (Andean Valley irrigation, Bolivia, 1986 to 2008) / Karl S. Zimmerer -- Uses of biodiversity and new and future domestications / Patrick McGuire and Calvin Qualset -- Participatory domestication of indigenous fruit and nut trees: new crops for sustainable agriculture in developing countries / Roger R.B. Leakey -- The introduction and dispersal of Vitis vinifera into California: a case study of the interaction of man, plants, economics, and environment / James Lapsley -- Genetic resources of yeast and other micro-organisms / Charles W. Bamforth -- Biodiversity of native bees and crop pollination with emphasis on California / Robbin W. Thorp -- Aquaculture, the next wave of domestication / Dennis Hedgecock -- Genetic sustainability and biodiversity: challenges to the California dairy industry / Juan F. Medrano.

Sommario/riassunto

The introduction of plant and animal agriculture represents one of the most important milestones in human evolution. It contributed to the development of cities, alphabets, new technologies, and ultimately to civilizations, but it has also presented a threat to both human health and the environment. Bringing together research from a range of fields including anthropology, archaeology, ecology, economics, entomology, ethnobiology, genetics and geography, this book addresses key questions relating to agriculture. Why did agriculture develop and where did it originate? What are the patterns of domestication for plants and animals? How did agroecosystems originate and spread from their locations of origin? Exploring the cultural aspects of the development of agricultural ecosystems, the book also highlights how these topics can be applied to our understanding of contemporary agriculture, its long-term sustainability, the co-existence of agriculture and the environment, and the development of new crops and varieties.