Record Nr.	UNINA9910418325903321
Titolo	Emerging research in alternative crops / / Abdelaziz Hirich, Redouane Choukr-Allah, Ragab Ragab, editors
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2020] ©2020
ISBN	3-319-90472-8
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (XII, 376 p. 137 illus., 94 illus. in color.)
Collana	Environment & Policy ; ; Volume 58
Disciplina	333.7966
Soggetti	New crops
	Alternative agriculture
	Cropping systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	The Contribution of Alternative Crops to Food Security in Marginal Environments Grain Legumes May Enhance High-Quality Food Production in Europe Hypersaline Water for Alternative Crop Irrigation in Iran. Amending Soil Health to Improve Productivity of Alternate Crops in Marginal Sandy Soils of the UAE The Extraordinary Salt Tolerance of Quinoa. Cultivation of Quinoa (Chenopodium quinoa) in Desert Ecoregion Phenotyping the Combined Effect of Heat and Water Stress on Quinoa Root and Shoot Relation of the Quinoa and Forage Plants in Salt-Affected Clay Soil Cañahua (Chenopodium pallidicaule): A Promising New Crop for Arid Area Response of Amaranthus sp. to Salinity Stress: A Review Tef (Eragrostis tef): A Superfood Grain from Ethiopia with Great Potential as an Alternative Crop for Marginal Environments Safflower: A Multipurpose Crop for the Marginal Lands Jatropha Plantation in Oman Crop Potential of Six Salicornia bigelovii Populations Under Two Salinity Water Treatments Cultivated in a Desert Environment: A Field Study The Potential of Cactus Pear (Opuntia ficus-indica (L.) Mill.) as Food and Forage Crop Replacement of Saffron (Crocus sativus L.) with Poppy (Papaver somniferum L.) and Its Socioeconomic Impact in Afghanistan.
Sommario/riassunto	This book provides case studies on cultivating alternative crops and

1.

presents new cropping systems in many regions of the world. It focusses on new emerging research topics aiming to study all aspects of adaptation under several stresses including agricultural, environmental, biological and socioeconomic issues. The book also provides operational and practical solutions for scientists, producers, technology developers and managers to succeed the cultivation of new alternative crops and, consequently, to achieve food security. Many regions in the world are suffering from water scarcity, soil and water salinization and climate change. These conditions make it difficult to achieve food security by cultivating conventional crops. A renaissance of interest for producing alternative crops under water scarcity and water salinization has been, therefore, implemented primarily among small-scale producers, researchers and academics. The use of alternative crops (quinoa, amaranth, legume crops, halophytes, ...etc.) may provide some environmental benefits such as valorization of saltaffected soils, reduced pesticide application, enhanced soil and water quality and promotion of wildlife diversity. This also may provide some economic benefits such as providing the opportunity for producers to take advantage of new markets and premium prices, spreading the economic risk and strengthening local economies and communities. Furthermore, alternative crops are often rich in proteins and minerals, and even some of them are Gluten free (quinoa). This reflects their importance to achieve food security in quantity and quality scale. The year 2013 was exceptional for alternative crops as it was the international year of guinoa celebrated by Food and Agriculture Organization (FAO). This reflects the importance of research conducted on guinoa and other alternative crops in many regions of the world.