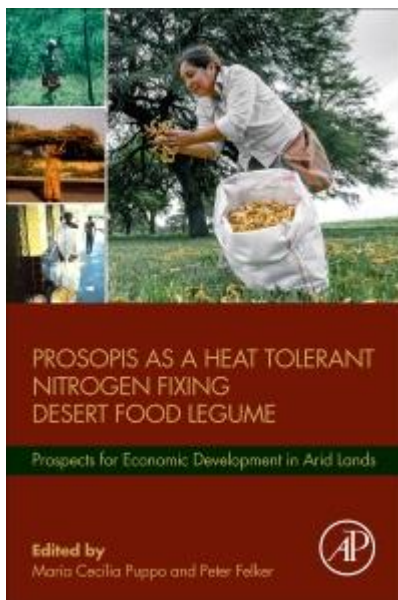




Prosopis as a Heat Tolerant Nitrogen Fixing Desert Food Legume

1st Edition

Prospects for Economic Development in Arid Lands

Editors: Maria Cecilia Puppo Peter Felker

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Description

Prosopis describes the enormous historical importance of these trees as a human food source and reviews the contemporary food science of the fruit derived from these trees. As well, this treatise reviews the native genetic resources of this genus on 4 continents and classical genetic and horticultural techniques that could help stabilize the environment and alleviate human suffering on some of the world's most destitute agro-ecosystems. This book is an essential read for researchers interested in forestry and plant science, environmental science, and functional foods.

The legume family (Fabaceae) contains many genera and species that through their nitrogen fixing process provide high protein food and feed for humans and animals. As evidenced by its presence in Death Valley, California, which holds the record for the highest temperatures in the world, these types of plants can thrive in extreme environments.

Key Features

- Edited by the world's leading experts on Prosopis species with globally recognized contributors

- Covers the different perspectives surrounding the advantages and disadvantages of planting different *Prosopis* species
- Discusses the applications of *Prosopis* species, including how the fruits of this tree can be used as a raw food material

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About the Editors

Maria Cecilia Puppo

She has experience in the characterization of food components, mainly in proteins and carbohydrates, and in the study of the physicochemical changes of these components during food processing for obtaining gels, emulsions and different food matrices. In more recent years, she has carried out an in-depth study of the main components present in the pod and seeds of the American carob bean from different *Prosopis* species, and the analysis of the performance of these flours in the physicochemical, sensory and nutritional quality of baked foods containing *Prosopis* flour as food ingredients.

Affiliations and Expertise

Vice Director, CIDCA, Argentina; Professor; Department of Agricultural and Forestry Sciences, National University of La Plata (UNLP), Argentina; Principle Investigator of CONICET (the National Council of Scientific and Technical Research), Argentina

Peter Felker

He has dedicated his entire life to the investigation of the environmental conditions for the cultivation of *Prosopis* and the morphological and chemical characterization of the different fruits. In collaboration with Dr. Andrew Paterson of the Plant Mapping Laboratory at the University of Georgia he was also instrumental in getting the first genomic sequence of *Prosopis*.

Affiliations and Expertise

World Leader in the study of different varieties of Prosopis, in Latin America (Argentina, Peru, among others), USA, India and Africa