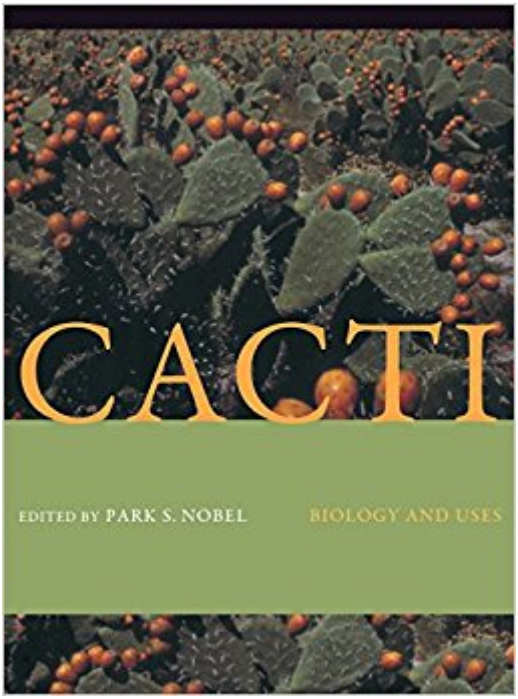
Cacti: Biology And Uses



Synopsis

The Cactaceae family, with about sixteen hundred species, is cultivated worldwide for fruits, forage, fodder, and even as a vegetable. Cacti are recognized for their attractive flowers, special stem shapes, and ability to tolerate drought. Because of their efficient use of water and other adaptations, biological and agronomic interest in cacti has soared. These fascinating plants also have much to teach us about biodiversity and conservation. Yet a current, synthetic, wide-ranging reference on cacti has not been available until now. This comprehensive book, compiled by a well-known cactus biologist, includes authoritative, up-to-date chapters by thirty-five contributors from around the world on topics ranging from evolution to biotechnology. It is the first book of its kind to compile information on cactus biology, ecology, and uses in one convenient place.The first half of the book provides a thorough overview of cactus biology and morphology and discusses the environmental and conservation issues that affect the plants. It includes a discussion of the evolution of the family, paying particular attention to new genetic and molecular approaches. The second half of the book focuses on the practical concerns of cultivating cacti, such as pest control and diseases, horticultural and forage applications, and techniques for agronomy. Other chapters cover the different markets for cacti and products that are made from them.This unique volume will be a reliable and informative reference for ecologists and environmentalists, agriculturists, plant biologists, and anyone seriously interested in these remarkable plants.

Book Information

Hardcover: 290 pages

Publisher: University of California Press; 1st edition (July 10, 2002)

Language: English

ISBN-10: 0520231570

ISBN-13: 978-0520231573

Product Dimensions: 8.5 x 1 x 11 inches

Shipping Weight: 2.2 pounds (View shipping rates and policies)

Average Customer Review: 4.0 out of 5 stars 3 customer reviews

Best Sellers Rank: #2,048,040 in Books (See Top 100 in Books) #102 inÃ Â Books > Science & Math > Biological Sciences > Plants > Cacti & Succulents #3372 inÃ Â Books > Science & Math > Biological Sciences > Botany #47398 inÃ Â Books > Science & Math > Nature & Ecology

Customer Reviews

"There is nothing in the world like this book. It should be in every library and on the bookshelves of

all those interested in cacti. The book will be an important resource for plant physiology, agronomy, and horticulture classes at both the undergraduate and graduate level."-Bruce Smith, Brigham Young University

"There is nothing in the world like this book. It should be in every library and on the bookshelves of all those interested in cacti. The book will be an important resource for plant physiology, agronomy, and horticulture classes at both the undergraduate and graduate level."—Bruce Smith, Brigham Young University"Cacti: Biology and Uses is a landmark publication of one of the world's most unique group of plants. Park Nobel, a leading authority on succulent plants, has assembled a collection of contributions that spans a wide range of issues extending from basic systematics, anatomy, physiology and ecology to considerations of conservation and human uses of this diverse group of plants. This nicely-produced and well-illustrated volume provides a resource that will be of great use to a wide range of scientists, practitioners, and enthusiasts of this plant group."—Harold Mooney, Paul S. Achilles Professor of Environmental Biology, Stanford University

It's a good book. Great information of cacti, how they grow, ect. Also has a great practical uses section. Some of the language in the first seven chapters or so is a bit technical for non-botanist folk (like me!)- but with a little bit of work the book is very understandable. Overall the book provides a great view of where Cacti stand as an edible food crop on both local and world wide scales, and presents some of the difficulties with marketing this drought resistant (yet tasty) crop. For anyone interested in sustainable agriculture in the Southwest or desert countries it is a great source of background information.

I chose this reading so that I could design a research project on opuntia ficus indica. I liked the information that comes from around the world, it was however repetitive about some information.

This is an advanced book, with plenty of black and white photos, but no color photos. This book consists of fifteen review chapters written by established experts and new contributors. The book description states that Cacti: Biology and Uses is the first book of its kind to compile information on cactus biology, ecology and uses.Because this book covers a wide variety of topics, such as biology, morphology, conservation, pollination, and pest control, the writing is quite advanced in several different subject areas. For example, a physiologist may totally understand the chapter on

shoot anatomy and morphology (Chapter 2), but may have less understanding of the chapter about breeding and biotechnology (Chapter 15). In Chapter 10 alone (Cactus Pear Fruit Production) a reader finds economic content with a supply and demand analysis and agronomic content with fertilizer and irrigation information. This seems to validate the book's description as a compilation of cacti information.As previously mentioned, Cacti: Biology and Uses does not have any color photos, but it does have many, quality black and white photos, as well as many tables and figures. A basic table of contents is printed in the front, and then, each chapter begins with a more detailed table of contents. Each chapter ends with a conclusion and an extensive list of literature cited. An index, with some "See" and "See also" references, is provided in the back.This is a high quality book who are interested in the biology, ecology or uses of a unique family of plants.