Book Reviews


This fun and lively handbook is the answer to many of your pepper identification questions. As the author of the famous reference Peppers the Domesticated Capsicums and considered by many to be the queen of chile aficionados, Jean Andrews comes uniquely qualified to write this book.

The pocket primer is intended for pepper hobbyists to horticulturists to the most devoted chile head. This book is mostly about identifying the different domesticated peppers and covers some detail on many pepper problems involving peppers.

The book is not a cookbook and contains no recipes. However, it would also be great value to the capiscum-cooking enthusiasts. Clear information on pepper identification, suitable cooking substitutes, and seed sources for their favorite recipes are presented.

The book is structured into ten chapters, two glossaries and information on seed sources. Initial chapters contain brief but thorough discussions on nomenclature, history, morphology, and capiscum species identification key. Additional chapters offer practical advice about the main reason we love peppers—eating them! She gives clear and concise advice on storing, drying, growing, and harvesting peppers.

The largest chapter and truly the raison d'être for this book is the thorough pictorial and written description of 45 different pepper types within 5 different species of capsicums. Andrews has drawn from her extensive experience and love of capsicums to provide detailed and insightful information for each of the 45 types.

Sorted in alphabetical order by common name, each pepper type includes a rich color photograph in the fresh and/or dried state depending on how the pepper is consumed. Each description includes information on size, color, fruit shape, flesh type, pungency, substitutes (for cooking), other names, sources, uses, and remarks.

In addition to the wonderful photographs of the different pepper types, there is an illustrated glossary with sharply lined drawings that are helpful in more clearly defining the names and parts of the pepper fruit.

As a reasonably priced paperback, this book is a must buy or a nice gift for people who work with or worship the multitude of different pepper types used domestically.

William H. McCarthy
Sakata Seed America, Inc.
Fort Myers, Fla.


If you are in need of a coffee table book filled with pictures of yard sized natural landscapes almost equally divided between northeastern seaboard and west-southwestern states, this is a satisfying, potential candidate. If you actually want to try to recreate one of these landscapes or another of your choosing in your own backyard, then this book is for you.

In a tour-de-force of stand-alone photographs and text, the father and son authors, both mathematicians by trade and training, call for a transformation of conventional landscape design to one which emulates the master designer and soothes the soul.

Through numerous examples we are tempted and persuaded to define and decipher exactly what makes a natural landscape so compelling to our senses. Whether your favorite be forest, meadow, alpine, pond, waterfall, wetland, dryland, desert, or tropics, you will find it photographed and discussed. Seemingly all natural landscape types are covered from seas to shining sea and from the highest elevations to one actually below sea level. Leaving no turn unstoned and adding several new gardening styles in the process, the authors cover even lichen and moss gardens.

There is no major emphasis on using strictly native plants to achieve the desired effect, since it is understood that attempts to grow moss and lichens in a dry climate or dogwoods and rhododendrons in an alkaline soil is destined for failure. Offered instead are alternative plants such as Sedum and Sagina for moss and Arctostaphylos, Thymus, and Cerastium for lichens.

Rock, stone and boulder in nature and in the homelandscape figure prominently and are likened to the best that the sculptors Brancusi, Hepworth, and Moore have to offer. Alternatives are here too offered as the real thing can be quite costly. Several examples of faux-rock are presented, one with a tree growing out of a wall.

In Redwood National Park, a giant landscape filled with giant plants, the authors choose to highlight a cameo scene where Sedum spathulifolium takes center stage. In other Zen-like scenes, elderberry blossoms fall on red sandstone and bright fall-colored leaves softly embracing autumn's muted finale are celebrated as much as crashing waterfalls and stark, cactus-filled desert scenes.

Scattered throughout are scenes of a variety of public and private gardens that best emulate the book's theme, culminating with a chapter on Japanese gardens—the supreme example of being able to evoke large moods in small space.

Only a plantsman would find details out of place. Some of the dwarf conifers pictured are merely young; the limber pines described appear...
The call for walking more softly on the earth in all things is met quite admirably with this treatment of gardening. If hard-edged, linear-thinking mathematicians can do it, then so can horticulturists.

Jim Borland
Denver, Colo.


This is Volume V of a six-part series that describes the species within the subtribe Laeliinae of the Orchidaceae family. These orchids are commonly referred to as the Cattleya alliance. Volume I of this series describes the Cattleya species; Volume II the Ladia species; Volume III the Schomburgkia, Sophronitis, and other South American Genera; and Volume IV the Bahamian and Caribbean species. This volume covers the genera Brassavola, Encyclia, Alamania, Arpophyllum, Artorima, Barkeria, Caularhizon, Dimeranda, Euchile, Hageatera, H. exixa, H. malapotamalum, Miroyccylis, Nageliea, and Rhychnodalia species from Central America and Mexico.

The book is formatted such that each genus is introduced with an illustrated historical perspective that is followed by a key to the species. After the species key, a detailed description of each species is given. The description of each species is followed by its common name followed by the country of origin, scientific name with reference to the original description and list of synonyms. The text is not written using complex botanical terms but in a less obfuscating manner still giving the diagnostic features of the species, as well as interesting anecdotal accounts and cultural information. Another important feature is that several of the species descriptions have reference to an American Orchid Society (AOS) award. This reference is very valuable, for each AOS award has a description that is published and is widely available. These descriptions are botanical in nature and have complete floral measurements and photographs. It would have been nice to have AOS award references for more species.

There are 95 color photographs that cover all the genera. Photographs are of very high quality and in most cases show the diagnostic features of the species. Photographs of all the Barkeria species are most enlightening. These very showy species are seldom seen and this is the first time I have seen pictures of all the species in one place.

Nearly all of the species descriptions are adequate for distinguishing them within the genera. The only exceptions are the Encyclia species. The genus Encyclia has always confused me. Many of the species look very similar and are distinguished by subtle differences in the structure of the lip. In this volume, a large figure showing the flattened lip configuration is provided. This figure is helpful; however, the few Encyclia species I tried to match to the figure were intermediate and could not be matched to a single species. The only other comprehensive treatment of Encyclia is an out-of-print book by Dressler and Pollard published in 1976 by the Asociacion Mexicana de Orquideologia. This book was also not of much help to me in the identification of my Encyclia species.

In this volume, Withner proposes a new genus—Euchile (Dressler and Pollard) Withner—for two species (E. mariae and E. citrina) previously placed in the genus Encyclia. These species were previously placed within the section Euchile (Dressler and Pollard) of the subgenus Osmophytum (Lindley) of the genus Encyclia. These species have the same unique leaf and column structures and are clearly different from the typical Encyclia.

My only criticism of the book is that the common name is used as the title for each species description and the scientific name is placed in smaller print within the text. This makes it difficult to use the species key, which does not list common names. The author addressed this criticism in the preface of this volume. He wrote: "In reading reviews of this set of volumes are current, the theme has been the question of why I have bothered with a common name for all the species. It is a practice in the nineteenth century and before, and if nothing more, often acquaints the reader with the meaning of the Latin or Greek species epithet."

Despite this criticism, I highly recommend this book. Unlike most taxonomic treatments, I enjoyed reading this book. This series of volumes has already made an important impact on orchid taxonomy and I look forward to reading the last volume in this series.

R.J. Griesbach
Floral and Nursery Plant Research
U.S. National Arboretum
USDA-ARS
Beltsville, Md.


To paraphrase from the introduction: "The lure of the beauty of tropical landscapes is the stuff that dreams are made of." While Robert Riffle may wax poetic about plants with a tropical look, it soon becomes obvious that he is truly enamored with his subject. Formerly a manager of a nursery specializing in tropical plants, Riffle has served as a consultant on various online garden- ing forums, and briefly pursued studies in botany at the University of Texas, Austin. His book is compelling because of his almost contagious enthusiasm for dramatic, exotic tropical plants. Focusing on plants that are conspicuous, generally evergreen, and "definitely including palms," he keys in on plants with exceptional foliage characteristics. Flowering is a secondary concern, because the year round beauty of the plants is his primary interest and often flowering is too ephemeral. The driving force behind the book is his conviction that the tropical look is not an advantage of even in tropical climates. He stresses that selected plants should be considered not only in tropical areas but also for northern climates in conservatories, greenhouses and interiorscapes.

HortTechnology • April-June 1999 9(2)
Riffle describes in some detail his criteria for the plants he classifies as having a tropical look. He explains that while the tropics are confined to the latitude 23 degrees 27 minutes north and south of the equator, this doesn't account for temperatures at higher altitudes which clearly will not support plants which cannot withstand a freeze. He enunciates his definition that tropical plants are plants that will not survive a freeze. However, his definition of the tropical look excludes many true tropical plants from his book. For example, he rationalizes that orchids are only of exceptional beauty when in flower and are rather uninspiring the rest of the time. So orchids, and several other tropical plants, do not make an appearance in his tropical look encyclopedia.

The main body of Riffle's book is the encyclopedia listing of nearly 2000 exotic plants. He chooses each species based on scientific name, common name, plant family, and requirements for light, water, soil and propagation. This is followed by excellent descriptions of plant dimensions and form, textural qualities of foliage and bark, anatomical details on leaf shape and flower form, branching attributes, special cultural considerations, as well as triggering mechanisms for flowering and deciduousness. The strength of the encyclopedia is the inclusion of Riffle's editorial and personal experiences with each species. His colorful, detailed, and often flamboyant descriptions make reading his book a charming experience. Additionally, 409 superb color plates reinforce plants that he paints in the mind's 'eye'.

Therowning touch are the 22 landscapelists that provide guidance in using the tropical look plants found in the encyclopedia. Nearly 30 pages of lists include topics such as invasives; hedge and screening plants; bamboo and large grasses; fast-growing plants; fragrant plants; poisonous plants; shade-tolerant plants; succulent and cactusy-looking plants; aquatic, bog and marsh plants; and erosion-controlling plants.

Although written for the layman, this book is of value to the professional horticulturist as well. It would enhance any horticulturist's library shelf.
question that besides their traditional culinary and/or medicinal properties, a large number of herbs also have excellent ornamental qualities. The recognition and promotion of herbs as valuable ornamentals by a few pioneering herb growers is then well deserved.

The objective of this book is precisely to demonstrate gardeners and landscapers that most herbs are not only good foliage plants but also as ornamental plants with beautiful flowers and excellent decorative attributes, which can be exploited to advantage in landscaping. The plant descriptions presented in this book show that the author is an experienced herb grower. As she herself puts it: "Over a period of more than twenty-five years, my garden, indeed much of the farmland landscape, became a laboratory for testing flowering herbs of all types for their ornamental value." Her motivation to write this book then comes from many years of observing, studying and testing herbs not only for their traditional culinary/medicinal value but also for their potential as ornamental plants.

Herbs in Bloom is divided into three chapters. The first chapter, Growing Flowering Herbs, is a very brief chapter on how to sow, propagate, transplant, and maintain the plants. The second chapter, Landscaping with Flowering Herbs, is also a very brief chapter on the different landscape possibilities for ornamental herbs, such as accent, bed or border, container, edge and hedge, ground cover, naturalized herb, and rockwork. The author describes these terms and gives the common and scientific name of herbs that would accommodate best to these landscape uses. The third and last chapter, Plant Portraits from A to Z, takes about 80% of the book. This chapter is comprised of brief descriptions of 82 herb species (2 to 5 pages each) with ornamental value, which were selected as all time favorites after the thorough review of classic herbal literature and consultation of leading nurseries and professional herb growers. Each plant portrait starts with a brief quote from observations made on the plant by one of many past and present herb growers’ writers. Then, in a recipe format, it gives the scientific name, family, common name(s), growing cycle, site and soil requirements, hardiness, landscape use, height, flower characteristics, and blooming season of the ornamental herb being described. The main part of the portrait is a condensed description of the herb where only the most essential is discussed. In the words of the author: "Each portrait includes the most vital information about each plant to show at a glance its characteristics and uses as an ornamental herb." These characteristics and uses may include origin, morphological description, environmental requirements, industrial uses, curative properties, recipes, landscape applications, description of new cultivars, etc. Some of the portraits have at the end very brief descriptions of related plants of interest; that is, plants of the same genus but different species that have also good potential as ornamentals.

The book has three appendices. Appendix I cross-references the common name with the scientific name of the herbs. Appendix II groups the plants by season, according to the time of full bloom. And Appendix III gives the name and address of retail seed and plant companies.

A major accomplishment of this book is its photographs. They are abundant, of excellent quality and well placed throughout the book. The photographs are also a perfect and essential complement to the narrative. What can not be described with words is said through the photographs. The pictures allow the reader to grasp the whole beauty of the ornamental herbs portrayed. The listing of the plants in the index by scientific name and in the appendix I by common name is a plus because it facilitates the finding in the body of the book of an specific herb known only by its common name. While it is arguable whether a few of the plants included in the book are truly herbs (for example roses and carnations), most in the list were selected and are among the most promising ornamentals. The most valuable part in the plant portraits is the short paragraph on the qualities and possibilities of the herbs as ornamentals. In these paragraphs the author explains the best ways to exploit the ornamental qualities of the herbs in the arrangement of a garden. These brief paragraphs are a condensation of many years of observation, testing, and study. This book will be valuable to herb growers, gardeners and ornamental horticulturists interested in exploring new possibilities in the designing and arrangement of gardens. It will be also very informative to landscapers looking for novelty and diversity.

Mario R. Morales
Purdue University
West Lafayette, Ind.


Considering the breadth of information incorporated within Arboriculture Integrated Management of Landscape Trees, Shrubs, and Vines, the volume is a bargain at the suggested list price. As a comprehensive overview of arboriculture, the book successfully integrates cultural aspects of tree establishment, maintenance, and management. Substantially reorganized and updated, the third edition of Harris’ text includes sections of additional detail in the treatment of topics such as hazard tree management, plant health care, special planting situations and water quality issues, using the expertise of new coauthors N. Elda Matheny and James Clark.

The text is well organized. The chapters follow a logical format that can be easily tailored to various curricula. Each chapter is clearly organized for the reader with a structured hierarchy of headings and subheadings. Boldface print highlights important points within sections making the book amenable to student reading needs. Graphics are positioned to clearly demonstrate key points of practice as discussed in the text.

Arboriculture... is an excellent core text to be used in concert with other course-specific books. Many topics are objectively presented, often pointing up contradictory opinions and explaining the information in a logical conceptual framework. The book does rely on tree species references to illustrate points, so knowledge of plant material is a distinct advantage and necessary to fully appreciate the text. Texts on specific topics such as climbing, rigging, or
canopy training may be necessary to 
flush out areas of emphasis within a 
given course format. Arboriculture... 
addresses basic concepts and tech-
niques to provide background for be-
inning students while providing de-
tailed documentation and sources 
of information for more advanced stu-
dents and practitioners.

As a practitioner reference, the 
text organization is a major strength. 
The table of contents is very direct in 
locating specific topics. The index is a 
pleasure, with boldface type cross-
referencing extensive glossary and 
graphics within the text. The compre-
prehensive bibliographic format is un-
changed. Given that text citations are 
extensive, the bibliographic format 
certainly works if one is flipping back 
and forth from the text; however, 
further organization in terms of sub-
ject headings might be useful.

The expense to update the older 
volume is easily justified. Even with 
changes, such as the consolidation of 
four pest and disease chapters into one 
chapter and comprehensive table, fa-
miliar illustrations are recognizable from 
the many dog-eared copies which have 
established this text as a must for any 
practitioner’s library. West Coast read-
ers will appreciate the change to the 
Sunset climate zone system from the 
USDA hardiness map. It is important 
to appreciate the Sunset system, given 
retail labeling and interstate commerce 
of west coast nursery producers. Howe-
ever, the map on the inside cover is too 
small for usage and may not be as 
practical as other systems for practitio-
ners in other parts of the country. Foldouts 
of both systems might be better.

The book is a solid volume and the 
new formatting is certainly a positive 
change. Any reader who will be dealing 
with trees in the landscape should seri-
ously consider this text. Some graphics, 
such as the integration of growth over 
time or radiation conditions for frost 
might need to be revised for improved 
clarity. The next printing may wish to 
correct the few miscues in the text, such 
as the fragment on p. 274. This new 
volume is center left on my high usage 
bookshelf with good reason.

JASON GRABOSKY
Dept. of Floriculture
Cornell University
Ithaca, N.Y.

Floriculture: Principles and Species.
John M. Dole and Harold F. Wilkins.
Saddle River, New Jersey 07458. 613 
p. $88.00, hardcover. ISBN 0-13-
374703-4.

This book is a new, up-to-date 
textbook for classroom or reference use. It 
covers more than 90 floricultural crops in an easy-to-read format. 
The book is divided into three sections: 
plus an index. There are 32 small 
color plates inside the front and back 
covers and more than 400 figures 
(black and white photographs, graphs, 
tables, and linedrawings).

Part I consists of 11 subjects, divided 
as chapters, of importance to floricultural 
crop producers. The subjects covered 
include: propagation, temperature, 
light, water, nutrition, media, 
plant growth regulation, pest manage-
ment, postharvest, greenhouse construction 
and operations, marketing, 
and business management. This 
is an important section as the funda-
mentals of growing any crop are dis-
cussed here. The text for each topic is 
documented by graphs and extensive 
tables and each chapter brings a lot of 
important information together in one 
area. All chapters contain good breadth 
of subject material though some have 
more depth than others. The authors’ 
overall goal of providing general pro-
duction information, however, is 
achieved.

Part II consists of specific floricultural 
crops, which include cut 
flower, potted, annual, perennial, 
foliage, and carnivorous plants, alpha-
betized by genus. Though all available 
crops are not covered in each genus, 
the authors have made timely choices 
for the species mentioned.

Consistency of presentation of 
material is a key component for an 
good student text or reference book. In this 
book, each crop is treated as the same. 
19 topics are consistently covered. 
These topics are introduction, culti-
vation, propagation, flowering control 
and dormancy, temperature, light, 
water, carbon dioxide, nutrition, media, 
humidity, light control, spacing, pinching 
and disbudding, support, schedule and 
timing, insects, diseases, physiological 
 disorders, and postharvest. Each topic 
is still listed even if there is little avail-
able information or it is not cultural 
requirement for that crop. The mate-
rial presented under each topic is clear 
and concise. Thank to the US 
Current Status section in each 
textbook an international flavor, 
as well as a historical perspective, is 
offered. For each crop, there 
is enough information for students to 
create crop growth and production 
schedules. However, the authors note 
that the text may only be example of cultural methods 
that work.

A bibliography concludes each 
crop section. The breadth of years of 
literature cited, 1930s onward, of the 
bibliographies is impressive as 
well as important historically. Literature 
is cited from trade magazines, 
books, and scientific articles. However, 
it is unclear how citations were selected 
for inclusion as some are from books 
which the authors consulted and then 
cited for one crop, are not cited for 
the similar crop also covered in that book.

For some reason an astute reader is not 
aware that Chrysanthemum is no longer 
the genus for mums, this is easily 
resolved by using the index. This in-
dex is very complete as it includes 
key phrases as well as keywords, common 
names and scientific names for dis-
ease as well as plants. Indices are 
very important for soon after a course is 
over a book is only as good or useful as 
its index!

This is currently the most compre-
sensive book available on floricultural 
crops and their production and 
the obvious choice for those teaching 
floriculture crop production and 
industrial crop course(s). However, the cost 
($88) may cause a problem for stu-
dents at schools which teach combi-
nation courses such as greenhouse 
management and crop production as 
the general information sections in 
Part I are not detailed enough to 
supplant another textbook. Additionally, 
using a portion of this book for 
such courses may be a limited option, 
but one to be explored, as there is a 
hearty warning by the publisher that 
“no part of this book may be repro-
duced, in any form or by any means, 
without permission in writing from 
the publisher.”

ELLEN T. PAPAROZZI
University of Nebraska 
Lincoln
This book provides an overview of postharvest physiology and technology of horticultural perishables in a clear and succinct style. The fourth edition has been expanded to include ornamentals (cut flowers and foliage) and updated information on fruits and vegetables since the third edition was published in 1989. An eight-page section of colored photographs (examples of physiological disorders, postharvest diseases, and banana and tomato ripeness stages) has been added and many illustrations have been redrawn. The clarity of the black and white photographs and charts need improvement in future printings.

The book is organized into 13 chapters followed by 4 appendices (abbreviations, plant names, temperature and humidity measurement, and gas analysis) and a subject index. Each chapter has a list of references for further reading (with emphasis on the Australian literature). The introduction (Chapter 1) includes a discussion of the importance of fruits and vegetables as food, horticultural production statistics, need for postharvest technology, and extent of postharvest losses. Structure, chemical composition, and nutritional value of fruit and vegetables are covered in Chapter 2. The third chapter provides a comprehensive but succinct synopsis of postharvest physiology and biochemistry of horticultural crops.

Chapter 4 is focused on the effects of temperature and methods of cooling and other temperature management procedures. Basic principles of water loss and humidity along with factors affecting water loss and control strategies are presented in Chapter 5. The effects of atmospheric modification (carbon dioxide, oxygen, and ethylene concentrations) on postharvest life of horticultural perishables are summarized in Chapter 6. Chapter 7 on storage technology includes methods of storage, design and construction of cool and CA stores, and management of produce storage.

Chapter 8 deals with physiological disorders with emphasis on chilling injury and mineral deficiency disorders. Microorganisms causing postharvest wastage and control methods are discussed in Chapter 9 (Pathology). Chapter 10 on evaluation and management of quality covers quality criteria, postharvest factors influencing quality, determination of maturity, and management of quality.

Chapter 11 on preparation for market presents a brief overview of all the operations involved, including harvesting, postharvest treatments, irradiation, and disinfection. Packaging methods and their impact on mechanical damage of produce are discussed in Chapter 12. Chapter 13 includes several tables summarizing storage recommendations for various fruits and vegetables and ornamentals.

This book is suitable for use as a textbook for an introductory course on postharvest biology and technology of horticultural perishables for students of food, horticultural, and plant sciences. We also recommend it to all those involved in the fresh produce industry worldwide.

Adel A. Kader and Deidre M. Holcroft
University of California Davis


This handy-sized book has chapters that focus on general information on tomato, plant characteristics and physiology, fruit characteristics, plant nutrition, field production in soil, greenhouse production, seed and seedling production, and pest identification and control. The information presented is well documented with an extensive reference section and an additional list of books and videos that contain tomato information. There is also a glossary of some terms used in the text, a summary of essential inorganic elements as they apply to tomato culture, and a summary of tomato plant physiological and production characteristics. Finally, all of this information is referenced in a useful index.

Tomato Plant Culture focuses on significant advances made since 1986 when the last major book on tomato was published. According to the cover description, this book provides comprehensive information about tomato plant culture and fruit production that is beneficial to plant scientists and commercial field and greenhouse growers as well as the home gardener. As one might suspect, it is a formidable task to combine all of the features necessary to satisfy the informational needs of this diverse audience in one small volume.

There is a profusion of information on sometopics. For example, three tables are provided on the nutritional composition of tomatoes as reported from as many sources. The values, except for an error in the Vitamin A content in one of the tables, are similar enough so it would have been sufficient to include only one of the three tables. Another case in point is found in the chapter on greenhouse tomato production where results of three surveys report acreage devoted to greenhouse tomato cultivation to be either 8, 30, or 20 acres in California; 0, 0, or 70 acres in Arkansas; and 69, 94, or 150 acres in Colorado. Which is correct? Or, even close to the actual area?

The author chose to use the units in the original research rather than convert to English units (best for the grower and home gardener) or SI units (best for the scientist). So, the following situation arises, "According to Papadopoulos (1991), the optimum space per plant is 0.35 to 0.40 m² planted in double rows at 80-cm spacings with 1.2 m between the double rows. Snyder (1997a) suggests 4 ft² per plant for a population of 10,000 plants/acre. The arrangement is double rows - 4 ft apart with 14 to 16 inches between plants in the row." Fortunately, my metric conversion calculator came to the rescue so I could determine that 0.4 m² = 4 ft² and that 1.2 m = 4 ft, but 80 cm = 31 inches, not 14 to 16 inches. This situation again suggests the difficulty of writing for a very broad audience.

Certainly, Tomato Plant Culture will be a useful addition to the libraries of those interested in this universally important vegetable. But one should not expect it to fulfill all of the informational requirements of the scientist, the practitioner, or the hobbyist.

Donald N. Maynard
University of Florida
Bradenton
The best design ideas for landscape design Discover how to make beautiful landscape design for your garden or backyard here! The landscape design of a homestead land or a private courtyard it is not just the ability to transform the area around the house, it is the art of creating beauty and harmony of your with the surrounding nature. Only at first glance, everything is simple one planted a few fruit-bearing trees in the area, a couple of bushes near the entrance, planted the flower bed and covered with a lawn the rest of the space.