

## New Titles

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## VALUING FRUITS AND NUTS

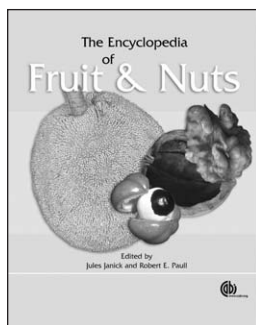
**The Encyclopedia of Fruits and Nuts.** Jules Janick and Robert E. Paull, eds. CABI, 2008. 976 pp., illus. \$390.00 (ISBN 9780851996387 cloth).

The title of this work might more accurately have been *The Encyclopedia of Economically Important Fruits and Nuts*, as it follows in a long tradition of summing the nature and cultivation of edible reproductive structures (e.g., Ochse 1927, Menninger 1977, Morton 1987, Cavalcante 1988, Waler and Sam 1999). Indeed, the title also leads to the expectation of a focus on angiosperms, but in fact a few gymnosperm “nuts” (*Pinus*) and fleshy seeds (*Ginkgo*, *Gnetum*, cycads) are also present.

Semantic quibbles aside, *The Encyclopedia of Fruits and Nuts* is a very broad and up-to-date summation of plant reproductive structures that are consumed by mankind. Editors Jules Janick and Robert E. Paull have assembled an international team of 129 experts who offer treatment of edible structures from 84 families and over 300 genera of seed plants. The book is organized alphabetically by family, then by genus with the family. Information on each genus is presented in a fairly consistent format: an introduction is followed by (a) a summation of world production, including volume and geographic location; (b) a summation of nutritional data and standard uses; (c) botany—a consideration of the systematics of the taxon, its morphology and growth habit, its ecology, its reproductive biology, and a detailed description of the fruit or nut; (d) horticulture—propagation, maintenance, pest management, harvesting, and postharvest treatment; and (e) literature cited. Because each entry is penned by a different author, the writing style is of uneven quality, but the consistent order of presentation helps ensure an acceptable degree of clarity.

In many cases, the individual entries provide excellent summaries, and one

would have to go to the cited primary literature to improve upon the depth of coverage. For example, the section on the Arecaceae extends to 82 pages and covers 25 genera and 28 species (3 of them—*Cocos*, *Elaeis*, and *Phoenix*—in great detail). Similarly, the Rosaceae are accorded 140 pages to cover 14 genera, with particular focus on *Prunus* (6 species plus a few varieties treated in 55 pages). In some other cases, the coverage is scant, as with Passifloraceae, for which only one species is treated in depth. Morton (1987), though dated in aspects of production and horticultural technique, offers better diversity. Similarly, the treatment of Lardizabalaceae touches on only *Akebia*, when in fact *Decaisnea*, *Holboellia*, and *Stauntonia* are also consumed.



Thus, while the generic coverage of significant edible fruits is excellent, it is not universal or definitive. By contrast, I believe the geographic scope to be excellent. Out of the 84 families covered, a somewhat arbitrary tabulation reveals that 36 possess a dominantly temperate distribution while 48 are of a dominantly tropical distribution, and certainly many unfamiliar taxa are summarized.

A word on the illustrations: The frontispiece offers a nice two-page, painted illustration of fruit morphological terms, which accompanies the glossary. In the book's center are 79 color photographs, none of which are particularly informative and many of which focus—and sometimes are out of focus—on flowers or plant habit rather than on fruits or seeds. Many of the generic descriptions are accompanied by a line drawing obtained from the primary literature; these are of variable quality and information content. There are no

keys. In short, this is not the book to grab when you are faced with an unknown fruit or seed. We still need a realization of the vision of Gaertner and Gaertner (1788–1791), who essayed to create an illustrated summation of the morphology of the fruits and seeds of the world. However, if you know the identity of the fruit of interest, this is a superb guide to its economic aspects.

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## NEW TITLES

**Astrobiology of Earth: The Emergence, Evolution, and Future of Life on a Planet in Turmoil.** Joseph Gale. Oxford University Press, 2009. 240 pp., illus. \$55.00 (ISBN 9780199205813 paper).

**Big Questions in Ecology and Evolution.** Thomas N. Sherratt and David M. Wilkinson. Oxford University Press, 2009. 336 pp., illus. \$45.00 (ISBN 9780199548613 paper).

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- Cognitive Biology: Evolutionary and Developmental Perspectives on Mind, Brain, and Behavior.** Luca Tommasi, Mary A. Peterson, and Lynn Nadel, eds. MIT Press, 2009. 352 pp., illus. \$50.00 (ISBN 9780262012935 cloth).
- Cold: Adventures in the World's Frozen Places.** Bill Streever. Little, Brown, 2009. 304 pp., illus. \$24.99 (ISBN 9780316042918 cloth).
- Cottonwood and the River of Time: On Trees, Evolution, and Society.** Reinhard F. Stettler. University of Washington Press, 2009. 288 pp., illus. \$24.95 (ISBN 9780295988801 paper).
- Darwin's Universe: Evolution from A to Z.** Richard Milner. University of California Press, 2009. 496 pp., illus. \$39.95 (ISBN 9780520243767 cloth).
- Eels at the Edge: Science, Status, and Conservation Concerns.** John M. Casselman and David K. Cairns, eds. American Fisheries Society, 2009. 486 pp., illus. \$69.00 (ISBN 9781888569964 cloth).
- Environmental Impact of Genetically Modified Crops.** Natalie Ferry and Angharad M. R. Gatehouse, eds. CABI, 2009. 432 pp., illus. \$190.00 (ISBN 9781845934095 cloth).
- Extinction in Our Times: Global Amphibian Decline.** James P. Collins and Martha L. Crump. Oxford University Press, 2009. 304 pp., illus. \$29.95 (ISBN 9780195316940 cloth).
- The Geographic Spread of Infectious Diseases: Models and Applications.** Lisa Sattenspiel. Princeton University Press, 2009. 304 pp., illus. \$49.50 (ISBN 9780691121321 cloth).
- The Great Experiment in Conservation: Voices from the Adirondack Park.** William F. Porter, Jon D. Erickson, and Ross S. Whaley, eds. Syracuse University Press, 2009. 640 pp., illus. \$45.00 (ISBN 9780815632313 cloth).
- A Guinea Pig's History of Biology.** Jim Endersby. Harvard University Press, 2009. 499 pp., illus. \$18.95 (ISBN 9780674032279 paper).
- Ingestion of Lead from Spent Ammunition: Implications for Wildlife and Humans.** The Peregrine Fund, 2009. 396 pp., illus. \$25.00 (ISBN 9780961983956 paper).
- Invasion Biology.** Mark A. Davis. Oxford University Press, 2009. 288 pp., illus. \$55.00 (ISBN 9780199218769 paper).
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- Manual of Leaf Architecture.** Beth Ellis, Douglas C. Daly, Leo J. Hickey, Kirk R. Johnson, John D. Mitchell, Peter Wilf, and Scott L. Wing. Cornell University Press, 2009. 196 pp., illus. \$29.95 (ISBN 9780801475184 paper).
- The Migration of Birds: Seasons on the Wing.** Janice M. Hughes. Firefly Books, 2009. 208 pp., illus. \$40.00 (ISBN 9781554074327 cloth).
- Notebooks from New Guinea: Fieldnotes of a Tropical Biologist.** Vojtech Novotny. Oxford University Press, 2009. 256 pp., illus. \$34.95 (ISBN 9780199561650 cloth).
- Oceanic Anglerfishes: Extraordinary Diversity in the Deep Sea.** Theodore W. Pietsch. University of California Press, 2009. 576 pp., illus. \$85.00 (ISBN 9780520255425 cloth).
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- The Rise of Amphibians: 365 Million Years of Evolution.** Robert Carroll. Johns Hopkins University Press, 2009. 392 pp., illus. \$65.00 (ISBN 9780801891403 cloth).
- Salt Marshes: A Natural and Unnatural History.** Judith S. Weis and Carol A. Butler. Rutgers University Press, 2009. 272 pp., illus. \$23.95 (ISBN 9780813545707 paper).
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- The Tangled Bank: An Introduction to Evolution.** Carl Zimmer. Roberts and Company, 2009. 394 pp., illus. \$59.95 (ISBN 9780981519470 cloth).
- The Tao of Chemistry and Life: A Scientific Journey.** Eugene H. Cordes. Oxford University Press, 2009. 432 pp., illus. \$59.95 (ISBN 9780195369632 cloth).