

The Encyclopedia of Fruits and Nuts

Author: Tiffney, Bruce H.

Source: BioScience, 59(8) : 716

Published By: American Institute of Biological Sciences

URL: <https://doi.org/10.1525/bio.2009.59.8.19>

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

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).

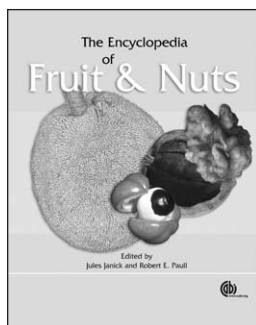
The title of this work might more accurately have been *The Encyclopedia of Economically Important Fruits and Nuts*, as it follows in a long tradition of summing the nature and cultivation of edible reproductive structures (e.g., Ochse 1927, Menninger 1977, Morton 1987, Cavalcante 1988, Waler and Sam 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

doi:10.1525/bio.2009.59.8.19

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.

BRUCE H. TIFFNEY
Bruce H. Tiffney (Bruce.Tiffney@ccs.ucsb.edu) is dean of the College of Creative Studies and a professor in the Department of Earth Science, University of California, Santa Barbara.

References cited

- Cavalcante PB. 1988. Frutas Comestíveis da Amazônia. 4th ed. Museo Paranense Emílio Goeldi.
Gaertner J, Gaertner CF. 1788–1791. De Fructibus et Seminibus Plantarum. Accedunt seminum centuriae quinque priores cum tabulis aeneis LXXIX. Typis Academiae Carolinae (vol. 1); Wilhelm Heinrich Schramm (vol. 2).
Menninger EA. 1977. Edible Nuts of the World. Horticultural Books.
Morton JF. 1987. Fruits of Warm Climates. Self-published.
Ochse JJ. 1927. Indische Vruchten. Volkslectuur, Weltevreden, serie 758, Buitenzorg.
Waler A, Sam C. 1999. Fruits d'oceanie. Editions de l'Institut de Recherche pour le Developpement.

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).

doi:10.1525/bio.2009.59.8.20