

# Economic Botany

## INDEXES TO VOLUMES 1–50 1947–1996

**Part 1. AUTHOR/TITLE INDEX**

**Part 2. CHRONOLOGICAL INDEX**

**Part 3. SUBJECT INDEX**

**Lawrence Kaplan, General Editor  
Micki Taylor, Indexing Consultant  
John W. Thieret, Associate Editor**

### CONTRIBUTORS

**Bradley C. Bennett  
Jan Heatley  
Emily Kaplan  
Sandi Frank  
Susan Frayman**



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## INDEX TO VOLUMES 1–50, 1947–1996

The first cumulative index of *Economic Botany* was a chronological listing of titles, “The First Decade, Articles and Abstracts in *Economic Botany*, Volumes 1–10” which appeared in 10:393–399. A twenty-year index was prepared by Biological Abstracts at the request of the Society for Economic Botany and published for the society by The New York Botanical Garden in 1967. The twenty-year index was based upon significant words from the titles of articles and upon taxonomic names extracted from the text of articles.

The INDEX TO VOLUMES 1–50, comprises three parts:

Part 1. The AUTHOR/TITLE INDEX is arranged by the first significant word of article titles, and by author names. Each author of articles having more than one is listed separately. The complete set of authors for any article is listed with the title. The AUTHOR/TITLE INDEX was prepared, directly from journal issues and from the computerized indexes of the last six volumes by Sandi Frank, former Managing Editor of *Economic Botany* and Director of Scientific Publications of The New York Botanical Garden.

Part 2. The CHRONOLOGICAL INDEX lists the articles in each volume and serves both as a reference for the SUBJECT INDEX and as historical guide to changing interests in the field of economic botany. Gaps in pagination are book reviews, announcements or other items that were not included in the SUBJECT INDEX. The CHRONOLOGICAL INDEX was extracted from the AUTHOR/TITLE INDEX.

Part 3. Entries in the SUBJECT INDEX are followed by volume number in bold print, then page number. Page numbers refer to articles in which a subject entry occurs, not to the number of occurrences or the extent of coverage. For example, the name of the medlar, *Mespilus germanica*, is referenced in four volumes, **20** 138, **29** 351, **40** 403, and **43** 328. Turning to the CHRONOLOGICAL INDEX for each reference, the titles of articles reveal that **20** 138 is concerned with the protein and oil content of the seeds along with the seeds of hundreds of other species, **29** 351 refers to its place among introductions into early New England, **40** 403 treats

its appearance with other domesticates in sixteenth-nineteenth century paintings, and **43** 328 refers to a lengthy article entirely devoted to the medlar. Some categories, for example, gums, oilseed, and waxes, are cross indexed with species names.

Annual indexes of the first 50 volumes varied in their content and format. Some included only genus names and some volumes were not indexed at all. Because of these and other variations, the pages of most of volumes prior to 1980 were reviewed and items to be included were marked and then typed into a word processing application. In many instances, entire pages and tables were scanned and the resulting copy was inserted into the word processing application. Common names and other terms in *Economic Botany* have varied over the years, and an attempt has been made in the index to bring about some uniformity in order to reduce the number of separate entries, for example, chickpeas not chick peas or chick-peas and oilseed, not oil seed. So much variation was encountered in the terminology of some categories, especially diseases and disorders, that many potential entries were excluded. The Latin names of many species have been changed during the period spanned by volumes 1–50 and some of these changes are recognized in the index, but the index is not intended to be authoritative in nomenclature.

The completed word processing compilation for each of the 50 volumes, was turned over to Micki Taylor who combined the volumes and reorganized the text into a preliminary alphabetical index using indexing software. At this stage numerous errors and variants in plant names and other entries, the application of italics, upper/lowercase letters, and the like were recognized and corrected. Original journal articles, typing, and scanning were fruitful sources of errors. The organized copy produced by the indexing program was converted into a word processing application and edited for errors and inconsistencies.

Many references were consulted in editing the subject index, however, the General Editor is responsible for all errors. Those references most often used in editing the subject index are:

## ECONOMIC BOTANY

- Australian National Botanic Gardens, Canberra, Australian Plant Names Index, [www.anbg.gov.au/anbg/names.html](http://www.anbg.gov.au/anbg/names.html)
- Gray Herbarium, Harvard University, Gray Card Index, [www.herbaria.harvard.edu/data/Gray](http://www.herbaria.harvard.edu/data/Gray)
- Jain, S. K. 1991. *Dictionary of Indian Folk Medicine and Ethnobotany*, DEEP Publications, New Delhi.
- Mabberley, D. J. 1989. *The Plant-Book*, Cambridge University Press, Cambridge.
- Uphof, J. C. 1959. *Dictionary of Economic Plants*, H. R. Engelmann (J. Cramer), Hafner Publishing Co., New York.
- USDA, NRCS 1999. The PLANTS database (<http://plants.usda.gov/plants>). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.
- Webster's Third New International Dictionary*. 1993. Philip Grove, ed. G. & C. Merriam & Co. Springfield, MA
- Willis, J. C. 1951. *A Dictionary of Flowering Plants and Ferns*, sixth edition, Cambridge University Press, Cambridge.

LAWRENCE KAPLAN, General Editor

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