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#### *About the Institute*

The Hunt Institute for Botanical Documentation, a research division of Carnegie Mellon University, specializes in the history of botany and all aspects of plant science and serves the international scientific community through research and documentation. To this end, the Institute acquires and maintains authoritative collections of books, plant images, manuscripts, portraits and data files, and provides publications and other modes of information service. The Institute meets the reference needs of botanists, biologists, historians, conservationists, librarians, bibliographers and the public at large, especially those concerned with any aspect of the North American flora.

Hunt Institute was dedicated in 1961 as the Rachel McMasters Miller Hunt Botanical Library, an international center for bibliographical research and service in the interests of botany and horticulture, as well as a center for the study of all aspects of the history of the plant sciences. By 1971 the Library's activities had so diversified that the name was changed to Hunt Institute for Botanical Documentation. Growth in collections and research projects led to the establishment of four programmatic departments: Archives, Art, Bibliography and the Library.

The Society for

Journal: ECONOMIC BOTANY



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Northern Kentucky University  
Highland Heights, KY 41076  
November 27, 1978

Dr. Bernard Lowy  
Louisiana State University  
Baton Rouge, Louisiana 70803

Dear Dr. Lowy:

I have received your review of La Batata (Camote). Estudio de la planta y su producción comercial. Thank you for preparing it for ECONOMIC BOTANY.

Cordially,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/mlc

*The Society for*

Journal: ECONOMIC BOTANY



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Northern Kentucky University  
Highland Heights, KY 41076  
November 13, 1978

Dr. B. Lowy  
Department of Botany  
Louisiana State University  
Baton Rouge, LA 70803

Dear Dr. Lowy:

I have received your review of Mushroom Poisoning: Diagnosis and Treatment. Thank you for preparing it for ECONOMIC BOTANY.

Cordially,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/cjs

*The Society for*



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

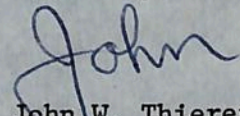
Northern Kentucky University  
Highland Heights, KY 41076  
November 6, 1978

Dr. B. Lowy  
Department of Botany  
Louisiana State University  
Baton Rouge, Louisiana 70803

Dear Dr. Lowy:

I have received your review of Teonanácatl. Hallucinogenic mushrooms of North America. Thank you for preparing it for ECONOMIC BOTANY.

Cordially,

  
John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/pf

The Society for

Journal: ECONOMIC BOTANY



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Northern Kentucky University  
Highland Heights, Ky. 41076  
October 12, 1978

Dr. B. Lowy  
Department of Botany  
Louisiana State University  
Baton Rouge, Louisiana 70803

Dear Bernard:

I am sending the following book for review for ECONOMIC BOTANY:

Teonanácatl. Hallucinogenic Mushrooms of North America.  
Edited by Jonathan Ott and Jeremy Bigwood. 175 pp.  
illus. Madrona Publishers, Seattle, 1978. \$8.95  
(paper); \$14.50 (cloth).

Your review will be due on 15 December 1978.

I hope you enjoy this opusculum.

Best wishes.

Cordially,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/cjs

*The Society for*

Journal: ECONOMIC BOTANY



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Northern Kentucky University  
Highland Heights, KY 41076  
August 29, 1978

Dr. Bernard Lowy  
Department of Botany  
Louisiana State University  
Baton Rouge, LA 70803

Dear Dr. Lowy:

I have received your reviews of Biotechnology and Fungal Differentiation, Food and Beverage Mycology, and The Filamentous Fungi. Thank you for preparing them for ECONOMIC BOTANY.

Cordially,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/mlc



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Northern Kentucky University  
Highland Heights, KY 41076  
July 21, 1978

Dr. Bernard Lowy  
Department of Botany  
Louisiana State University  
Baton Rouge, LA 70803

Dear Bernard:

I am sending the following three books to you for review for ECONOMIC BOTANY.

- ✓ The Filamentous Fungi. Volume III. Developmental Mycology. Edited by John E. Smith and David R. Berry. 464 pp. illus. Halsted Press, John Wiley and Sons, New York, 1978. Price?
- ✓ Biotechnology and Fungal Differentiation. Edited by J. Meyrath and J. D. Bu'lock. 229 pp. illus. Academic Press, New York, 1977. \$13.65.
- ✓ Food and Beverage Mycology. Larry R. Beuchat. 527 pp. illus. AVI Publishing Company, Westport, Connecticut, 1978. \$24.00.

I leave the length of the reviews up to you. Also the deadline for each.

Many thanks.

Cordially,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/jw

LSU



LOUISIANA STATE UNIVERSITY  
AND AGRICULTURAL AND MECHANICAL COLLEGE  
BATON ROUGE, LOUISIANA 70803

College of Arts and Sciences  
Department of Botany

22-VIII-1978

John,

A trisome tilogy is enclosed. If you  
can stifle yours on there, its more than  
I could do.

Yours,

Bevard

The Society for

Journal: ECONOMIC BOTANY



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Northern Kentucky University  
Highland Heights, KY 41076  
July 20, 1978

Dr. Bernard Lowy  
College of Arts and Sciences  
Department of Botany  
Louisiana State University  
Baton Rouge, LA 70803

Dear Bernard:

I have received your review of The Road to Eleusis. Thank you for preparing it for ECONOMIC BOTANY.

Cordially,

*John*

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/jw

Your review will be sent  
separately to NYBG with the  
request that it be published in  
the next issue of EB.  
"palimpsest" & "hierophant," no less!

17 - VII - 1978

College of Arts and Sciences  
Department of Botany

LOUISIANA STATE UNIVERSITY  
AND AGRICULTURAL AND MECHANICAL COLLEGE  
BATON ROUGE, LOUISIANA 70803



Dear John,

I have just returned from a very fruitful  
trip to Guatemala/Mexico. One of my first orders of  
business was to complete the ordered review for  
you on the relation of certain ancient Croce Myrtaceae.

A more modern mystery, or yet unworked, is why  
it generally takes longer than the normal publication  
period in Worm papers for a review to appear in  
print. I am especially interested in having this one  
come out before its pages yellow. Three others are  
currently in press in Evon. Bot. but I would  
like to ask that this one be given priority, if  
possible, for the next issue.

With best regards,

as ever

Arnold

The Society for

Journal: ECONOMIC BOTANY



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Northern Kentucky University  
Highland Heights, KY 41076  
June 2, 1978

Dr. Bernard Lowy  
Department of Botany  
Louisiana State University  
Baton Rouge, LA 70803

Dear Bernard:

I am sending the following book for review:

The Road to Eleusis. Unveiling the Secret of the Mysteries.  
R. Gordon Wasson, Carl A. P. Ruck, and Albert Hoffman.  
126 pp. illus. Harcourt Brace Jovanovich, New York,  
1978. \$4.95 (paper), \$12.95 (cloth).

Your review should not exceed about 200 words long. It will be  
due on 1 September 1978. The review copy is yours to keep.

Best wishes.

Cordially,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/jw

John Thuret phoned on 25-V-'78 to tell  
me about "The Mystery of Eleusis" by Wasson, Ruck  
and Hoffman. — Again on 21-VII-'78 to  
thank me for what he considers to be the  
best review I have written. Also he has 3  
new books to send me for review.

*The Society for*



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Northern Kentucky University  
Highland Heights, KY 41076  
May 3, 1978

Dr. Bernard Lowy  
Louisiana State University  
Baton Rouge, Louisiana 70803

Dear Dr. Lowy:

I have received your review of The Biology of Symbiotic Fungi.  
Thank you for preparing it for ECONOMIC BOTANY.

Cordially,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/mlc

*The Society for*



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Journal: ECONOMIC BOTANY

Northern Kentucky University  
Highland Heights, KY 41076  
April 18, 1978

Dr. Bernard Lowy  
Botany  
Louisiana State University  
Baton Rouge, LA 70803

Dear Bernard:

I have received your review of Fungi, Man and His Environment.  
Thank you for preparing it for ECONOMIC BOTANY.

Cordially,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/jw

The Society for

Journal: ECONOMIC BOTANY



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Northern Kentucky University  
Highland Heights, KY 41076  
February 8, 1978

Dr. B. Lowy  
Department of Botany  
Louisiana State University  
Baton Rouge, LA 70803

Dear Bernard:

I forgot to record the date of The Mushroom Stones of Mesoamerica.  
And you forgot to include the date in your review.

Please jot down, below, the date in question and return this sheet  
to me.

Many thanks.

Cordially,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

1977

JWT/jw

The Society for

Journal: ECONOMIC BOTANY



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Northern Kentucky University  
Highland Heights, KY 41076  
January 31, 1978

Dr. Bernard Lowy  
College of Arts and Sciences  
Department of Botany  
Louisiana State University  
Baton Rouge, Louisiana 70803

Dear Bernard:

I have received your review of The Mushroom Stones of Mesoamerica. Thank you for preparing it for ECONOMIC BOTANY.

Cordially,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/pf

From your note, I thought you were going to be a real tiger in your review. But no, you were a pussycat.

# LSU



LOUISIANA STATE UNIVERSITY  
AND AGRICULTURAL AND MECHANICAL COLLEGE  
BATON ROUGE, LOUISIANA 70803

College of Arts and Sciences  
Department of Botany

6-II-1975

Dear John,

Quite apart from the species of *Felina*  
that may be involved, I considered my little  
piece an exercise in restraint. The brevity of  
the paper did not warrant retaliatory ani-  
madversions from a reviewer who could justly be  
accused of having conflicting if not ulterior  
motives — that is my story — and I'm stuck  
with it.

Sincerely,

Bernard



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Northern Kentucky University  
Highland Heights, KY 41076  
January 19, 1978

Dr. Bernard Lowy  
Botany  
Louisiana State University  
Baton Rouge, Louisiana 70803

Dear Bernard:

Thank you for your review of Toxic and Hallucinogenic Mushroom Poisoning. A beautiful production, as I expected. You and Jim Pringle (Hamilton, Ontario) remain my most literate reviewers.

Almost certainly you will not be vexed with me for sending you the following item for review.

<sup>CR</sup>  
The Mushroom Stone of Mesoamerica. Karl Herbert Mayer.  
46 pp. illus. Arcoma Books, Ramona, California  
92065. \$4.95.

I cannot figure out if this booklet is an English translation of the article that originally appeared in Archiv für Volkerkunde or if the original article was in English. The booklet is described, on the back of the title page, as having been "Reprinted" from the Archiv. I suspect, though, that the booklet is the first English translation of Mayer's article--and that the publisher does not know what "reprinted" means.

The booklet is quite interesting. I note that Bernard Lowy's name is frequently, therein, taken in vain.

Best wishes.

Cordially,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/jw

# LSU



LOUISIANA STATE UNIVERSITY  
AND AGRICULTURAL AND MECHANICAL COLLEGE  
BATON ROUGE, LOUISIANA 70803

College of Arts and Sciences  
Department of Botany

January 24, 1978

Dear John:

Yes, Mayer seems to have a few animadversions to relate, but he also includes a few positive observations about BL which could not have entirely escaped your notice. That he has worse things to say about Furst, Coe, Robertson and others does not mitigate the force of a few comments directed against me, sometimes without justification. For example, on p. 35 he has some very misleading information about me. He says "Lowy had to admit..." (see enclosed) This is nonsense. It was I who first reported Amanita muscaria from Guatemala and unambiguously stated that the Quiche in the area regarded it as toxic! Mayer also deletes any reference to one of my most important finds, namely, that the word "kakuljá" which is often repeated in the "Popol Vuh" refers both to the god of the thunderbolt and to Amanita muscaria. This makes his reference to the "Popol Vuh" (p. 32) outdated. The best he can do is to cite a 1944 author's fairly inconsequential reference to mushrooms. He has deleted a very important piece of evidence of mine which shows just the contrary of what he had intended to prove! Neither do I think that Mayer can substantiate his claim (p. 32) that previous "attempts have been made to prove" that mushrooms are represented in the Maya Codices. What attempts and by whom? Well, these are a few of the points that I think I can justly make.

It will be your decision whether or not you think that I have been sufficiently objective in writing the enclosed review.

as ever,

A handwritten signature in cursive script, appearing to read "B. Lowy".

B. Lowy

loaned to John 8-IV-78

Northern Kentucky University  
Highland Heights, KY 41076  
April 4, 1978

Publicity Department  
Wiley-Interscience  
a division of John Wiley & Sons, Inc.  
One Wiley Drive  
Somerset, NJ 08873

Dear Sirs:

I should like to request, for ECONOMIC BOTANY, a review copy of the following book.

The Biology of Symbiotic Fungi. Roderic Cooke.

This publication certainly should be called to the attention of the international and interdisciplinary audience reached by our journal.

The book may be sent directly to the following person, who has agreed to prepare the review for us.

Dr. B. Lowy  
Department of Botany  
Louisiana State University  
Baton Rouge, LA 70803

In turn, ECONOMIC BOTANY will send to you the usual copies of the published review.

Thank you for your help in our efforts to keep the review section in our journal one of the most inclusive in botany and to bring important books such as The Biology of Symbiotic Fungi to the notice of our readers.

Cordially,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/jw

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DR B LOWY  
DEPARTMENT OF BOTANY  
LOUISIANA STATE UNIV  
BATON ROUGE LA 70803

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Northern Kentucky University  
Highland Heights, KY 41076  
December 20, 1977

Publicity Department  
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A Division of Litton  
Educational Publishing, Inc.  
Litton Industires  
450 West 33rd Street  
New York, New York 10001

Dear Sirs:

I should like to request, for ECONOMIC BOTANY, a review copy of the following book.

✓ Toxic and Hallucinogenic Mushroom Poisoning: A Handbook for Physicians and Mushroom Hunters. Gary Lincoff and D. H. Mitchel, M.D.

This publication certainly should be called to the attention of the international and interdisciplinary audience reached by our journal.

The book may be sent directly to the following person, who has agreed to prepare the review for us.

Dr. B. Lowy  
Department of Botany  
Louisiana State University  
Baton Rouge, LA 70803

In turn, ECONOMIC BOTANY will send to you the usual copies of the published review.

Thank you for your help in our efforts to keep the review section in our journal one of the most inclusive in botany and to bring important books such as Toxic and Hallucinogenic Mushroom Poisoning: A Handbook for Physicians and Mushroom Hunters to the notice of our readers.

Cordially yours,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/jw

The Society for



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Northern Kentucky University  
Highland Heights, KY 41076  
October 10, 1977

Dr. B. Lowy  
Department of Botany  
Louisiana State University  
Baton Rouge, Louisiana 70803

Dear Bernard:

I have received your review of Higher Basidiomycetes of the Steppe Zone of the Ukraine. Thank you for preparing it for ECONOMIC BOTANY.

Cordially,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/jw



STRATTON INTERCONTINENTAL MEDICAL BOOK CORPORATION

MEDICAL AND SCIENTIFIC PUBLISHERS

381 Park Avenue South  
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Office of the President

April 28, 1977

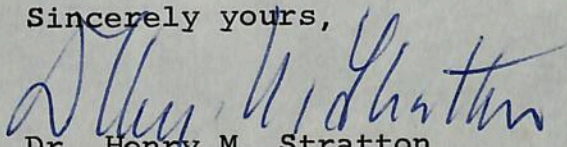
Dr. B. Lowy  
Mycol. Herb. Botany Dept.  
Louisiana State Univ.  
Baton Rouge, LA 70803

Dear Dr. Lowy:

John W. Thieret's letter of April 26 was brought to my attention and I gave instructions to our Order Department and Accounting Department to cancel our charge of \$11.25, Invoice #48781. Attached you will find Credit #ICR 3011.

I am looking forward to receiving the review in **ECONOMIC BOTANY**.

Sincerely yours,

  
Dr. Henry M. Stratton  
President

HMS/mk  
encl.

cc/Ms. Cutler  
Ms. Eisen

**I M B**

Intercontinental Medical Book Corporation

Publishers and Booksellers

381 Park Avenue South, New York 16, N. Y.

No. **ICR 3011**

CREDIT TO

DATE April 28, 1977 mk

D. B. Lowy  
 Mycol. Herb. Botany Dept.  
 Louisiana State Univ.  
 Baton Rouge, LA 70803

YOUR ORDER  
 of 3/77 per B. Kendrick  
 OUR INVOICE NO.  
 48781

QUANTITY	DESCRIPTION	PRICE	TOTAL
1	MUELLER: Mycology	10.50	
	P/H	<u>.75</u>	
	CREDIT		<u>\$11.25</u> =====

The Society for

Journal: ECONOMIC BOTANY



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Box 277  
Northern Kentucky University  
Highland Heights, KY 41076  
April 25, 1977

Dr. Bernard Lowy  
Louisiana State University  
Baton Rouge, LA 70803

Dear Dr. Lowy:

I have received your review of Mycology. An Outline for Science and Medical Students. Thank you for preparing it for ECONOMIC BOTANY.

Cordially,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/pem

April 26, 1977

Stratton  
Intercontinental Medical Book Corporation  
381 Park Avenue South  
New York, NY 10016

Dear Sirs:

Dr. B. Lowy, to whom the enclosed bill was sent, has written a review of Mueller that will be published in ECONOMIC BOTANY. Perhaps the charges should be cancelled in return for the review? Oh yes, Dr. Lowy's review was quite a favorable one!

Yours truly,

John W. Thieret  
Review Editor

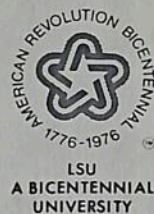
JWT:mas

Enclosure

LOUISIANA STATE UNIVERSITY  
AND AGRICULTURAL AND MECHANICAL COLLEGE

BATON ROUGE · LOUISIANA · 70803

College of Arts and Sciences



DEPARTMENT OF BOTANY

21-IV-1977

Dear John:

If you are wondering whether I am establishing a new trend by sending you a review before you have requested it from the publisher, well ..... perhaps.

I ordered the book from the bookseller-publisher whose address (and bill) are enclosed. Would you write them your magic note which results (or has until now resulted) in the cancellation of my debt? Or doesn't the magic work in reverse? Grrrrrrrrrrrrrrrr

Yrrrrrrrrrrrs,

*Permanard*

*The Society for*

Journal: ECONOMIC BOTANY



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Box 277  
Northern Kentucky University  
Highland Heights, KY 41076  
July 6, 1976

Dr. Bernard Lowy  
Department of Botany  
Life Sciences Building  
Louisiana State University  
Baton Rouge, LA 70803

Dear Bernard:

Without first asking your leave I am sending the following book for review for ECONOMIC BOTANY.

Hallucinogens and Culture, Peter T. Furst. 194 pp. illus. Chandler & Sharp Publishers, San Francisco, 1976. Price?

You may, of course, keep the review copy. Your review, due no later than 1 October 1976, should not exceed about 300 words in length.

Best wishes.

Cordially,

*John W. Thieret  
dlc*

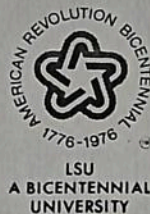
John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/dlc

LOUISIANA STATE UNIVERSITY  
AND AGRICULTURAL AND MECHANICAL COLLEGE

BATON ROUGE · LOUISIANA · 70803

College of Arts and Sciences



DEPARTMENT OF BOTANY

28-VII-1976

Dear John,

When I returned from Guatemala recently, I found your note about Furst's book. Thanks for sending it to me. Enclosed is my review with the request that you withdraw my earlier and by now forgotten review of Wm. A. Emboden's "Narcotic Plants." I have incorporated a paragraph from that report into my present one, where it seems equally pertinent.

Last year, after a sojourn in the tropics, I feel more strongly about eventually living there. Unfortunately, this still seems to be a distant dream.

Best regards, as ever,

Samuel

May 3, 1976

Dr. John W. Thieret  
Box 277  
Northern Kentucky State College  
Highland Heights, KY 41076

Dear John:

You may wonder why it is taking me much longer than usual to send you a review of Ainsworth's "Introduction to the history of mycology." It is simply that the publisher has not yet sent me a copy of the book. Is a reminder in order ?

I presume that like ourselves you are about to finish this semester's work and are now ready for some <sup>more</sup> "R & R". Mine will take the form of more mycologizing in Mexico and Guatemala. I expect that the aftermath of the Guatemalan earthquake will still be very evident in the back country.

Saludos,

Bernard Lowy

19 February 1976

Dear Dr. Lowy,

I enclose xerox proofs of your review, which is about to appear in ECONOMIC BOTANY. It would be very good of you to proof it for us and return it with your corrections. Our proof-reading here has become fairly heavy, and if typo's have to turn up in our book, the last place I would like to see them would be in the Book Reviews. So your help is appreciated.

I enclose a reprint form in the event you might wish to obtain reprints.

Thank you.

Sincerely yours,

*Joe Sutton*

Managing Editor  
for ECONOMIC BOTANY

JGS:jgs

# ECONOMIC BOTANY

## Instructions Regarding Proofs, Page Charges and Reprint Orders

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*The Society for*

Journal: ECONOMIC BOTANY



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Box 277  
Northern Kentucky State College  
Highland Heights, KY 41076  
January 6, 1976

Dr. Bernard Lowy  
Department of Botany  
Louisiana State University  
Baton Rouge, LA 70803

Dear Bernard:

I have received your review of THE MYCETOZOANS. Thank you for preparing it for ECONOMIC BOTANY.

Cordially,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/dlc

*To Thwait: 26-XII-'71  
with note &  
reprint.*

The Mycetozoans. Lindsay S. Olive. 293 pp. illus. Academic Press, New York, 1975. \$27.50.

In 1859, with the extraordinary insight that characterized much of his work, De Bary assigned the plasmodial slime molds (Myxomycetes) to his newly created taxon Mycetozoa, thereby emphasizing their affinities with the more primitive animals. This was an important departure from the practise initiated during the first quarter of the 19th century by Persoon and Fries, who, utilizing macroscopic criteria, mistakenly included the Myxomycetes with the puffballs. Though it eventually became clear that the Myxomycetes could not comfortably be fitted into any existing taxonomic scheme, mycologists continued to classify them with the fungi, more because of tradition than through conviction.

In searching for an appropriate niche for these lower eukaryotes, one is reminded of Dennis's observation that taxonomy is not a science but an art, because "its triumphs result not from experiment but from disciplined imagination guided by intuition." De Bary's serendipitous inclusion of the Myxomycetes in the Mycetozoa may have been largely intuitive, but his judgement has been further vindicated by the evidence presented in Olive's treatise. The revived and modified phylum Gymnomyxa (kingdom Protista) is divided into three subphyla: Mycetozoa, Plasmodiophorina and Labyrinthulina, with the protostelids, dictyostelids and myxomycetes designated as subclasses of the Mycetozoa. The Plasmodiophorina, although they produce microscopic plasmodia, are separated because of their obligate, intracellular parasitism and the enigmatic Labyrinthulina (including the thraustochytrids), mostly asexual aquatic forms still imperfectly understood, are considered as a separate line having little in common either with the fungi or Mycetozoa. Biochemical and ultrastructural studies tend to support Olive's hypothesis

that the Mycetozoa are polyphyletic in origin, probably having evolved from ancestral flagellates.

An adequate disposition of this puzzling conglomerate of organisms has challenged the ingenuity of biologists for over two centuries and though some mycologists will resist Olive's all-embracing interpretation of the Protista which unconditionally separates the Myxomycetes from the fungus world, he has performed an arduous and notable service for taxonomists.

The monograph is eminently useful, comprehensive and documented with the results of all the significant research in the field, much of it carried out with the indispensable assistance of Carmen Stoianovitch, who co-authored many of Olive's papers on the mycetozoans over the past 15 years. Her collaboration is specially acknowledged. The book has 251 figures and more than 500 titles are in the bibliography.

B. Lowy

Louisiana State University

Box 277  
Northern Kentucky State College  
Highland Heights, KY 41076  
December 9, 1975

Academic Press Inc.  
111 5th Avenue  
New York, NY 10003

Dear Sirs:

I should like to request, for ECONOMIC BOTANY, a review copy of the following book.

The Mycetozoans. Lindsay S. Olive.

This publication certainly should be called to the attention of the international and interdisciplinary audience reached by our journal.

The book may be sent directly to the following person, who has agreed to prepare the review for us.

Dr. Bernard Lowy  
Department of Botany  
Louisiana State University  
Baton Rouge, LA 70803

In turn, ECONOMIC BOTANY will send to you the usual copies of the published review.

Thank you for your help in our efforts to keep the review section in our journal one of the most inclusive in botany and to bring important books such as The Mycetozoans to the notice of our readers.

Cordially yours,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/dlc

✓cc: Dr. Bernard Lowy

The Society for



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Box 277  
Northern Kentucky State College  
Highland Heights, Kentucky 41076  
August 18, 1975

Dr. Bernard Lowy  
Department of Botany  
Louisiana State University  
Baton Rouge, Louisiana 70803

Dear Bernard:

I have received your review MOLDS, MUSHROOMS, AND MYCOTOXINS. Thank you for preparing it for ECONOMIC BOTANY.

Cordially,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/mls

*Keep the Vera Charles reprint,  
Bernard, with the  
compliments of JWT.*

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to J.W.T. 21-VII-75

Molds, Mushrooms, and Mycotoxins. Clyde M. Christensen. 264 pp. illus.  
University of Minnesota Press, Minneapolis, 1975. \$11.50.

Writing for the layman is a hazardous occupation and even the most skilled occasionally succumb to its dangers. The temptation to oversimplify and broadly generalize beckons the author and if he submits to this Lorelei the result is predictable.

One of the author's favorite digressions concerns taxonomy and taxonomists who "still labor under the doctrine of special creation, either by the Lord or by themselves, and they do not always make a clear-cut distinction between the two." Elsewhere we find this pleantry, to the effect that "to some dedicated describers of new species, just about anything they come across that is new to them, ... is a legitimate new species," and in the same vein referring to what he terms the "Fusarium taxonomy war", the author concludes that attempts to classify the species are so "complex that only the perpetrators can understand and use them." This and more of the same about taxonomy and taxonomists is sure to be quite amusing to the layman who knows nothing about taxonomy but at the very least it is misleading and does him a disservice because he has no way of evaluating the author's gratuitous appraisals. The unsuspecting reader simply alligns himself with the author against "nomenclaturists" who, he is assured are in any case, "not overburdened with common sense."

But it is in the section on hallucinogenic mushrooms that the author becomes not only petulant but acrimonious. Over the past two decades a considerable body of knowledge has been accumulated by competent ethnobotanists, taxonomists, anthropologists, and others who have carefully

examined hallucinogens of plant origin and their uses throughout man's history. The author's chief target in this area is R. G. Wasson whose work, together with that of others in a young and difficult discipline, is contemptuously dismissed as "romanticism in the guise of 'research', or 'gibberish'." One may disagree with conclusions regarding the significance that some hallucinogenic fungi have had in civilizations past and present, but deprecation and ridicule are not the usual weapons of the scientist.

Having said this to alert the unwary layman, there is much else in the book to attract the reader who is not already acquainted with the author's previous publications of similar genre which both edify and entertain. Although most of it has been said before, including a survey of poisonous mushrooms, ergotism, mycotoxins, fungus predators, decay in wood etc., it will stand repetition, and if some fine day the author were to turn his considerable writing talent to an objective exposition of taxonomy for the layman, we might all be the beneficiaries of his efforts.

B. Lowy  
LSU

To J. W. T. 18-I-'74

The Fungi. An advanced treatise. vol. IVB. A taxonomic review with keys:  
Basidiomycetes and Lower Fungi. Ed. G. C. Ainsworth, F. K. Sparrow & A. S.  
Sussman. 504 pp. illus. Academic Press, New York and London. 1973. \$28.00

With the publication of this volume, mycologists now have at hand in parts IVA (previously reviewed in these pages) and IVB, a comprehensive taxonomic work of the first magnitude. Together they form a compendium of over 1000 pages contributed by 31 authors whose efforts the editors have skillfully coordinated. The same format is maintained in this as in the companion volume and keys to all groups in part IVB refer to some 1500 taxa, so that the total number of genera included in both parts is approximately 4000. Part IVA dealt with Ascomycetes and Fungi Imperfecti and IVB treats the rest of the fungi, comprising the Myxomycota (Acrasiomycetes and Myxomycetes) and the remaining Eumycota, that is, the Mastigomycotina, Zygomycotina and Basidiomycotina, the book being nearly equally divided between the Basidiomycetes and Phy<sup>o</sup>mycetes (old-style terminology). The Acrasiomycetes and Myxomycetes are admittedly groups of uncertain relationships and are considered more for reasons of established custom than from the conviction that their affinities are demonstrably fungal. Recent studies strongly suggest that they probably have more in common with protozoa than with fungi.

When the monograph on the Myxomycetes by Martin and Alexopoulos appeared in 1969, many may have believed that taxonomic rearrangements within this group would not soon again be made, but in Alexopoulos's article the genera Clastoderma and Barbeyella have now been transferred from the Stemonitales to the Echinosteliales which was formerly monotypic. This testifies not to the vagaries of taxonomy but to its viability, for when taxonomic criteria undergo constant scrutiny, useful reevaluations often result. It should be noted, incidentally, regarding the still unsolved problem of the status of the Ceratiomyxaceae, that in the present volume

c/

it is placed by K. B. Raper in the Protosteliales, while it maintains its more conventional position among the Myxomycetes, as presented by Alexopoulos.

Each of the 24 chapters offers dichotomous keys (predominantly to genera) and among the longest of these are to the Uredinales (G. F. Laudon) 138 genera; Polyporaceae (D. N. Pegler) 121 genera; Corticiaceae (P. H. B. Talbot) 86 genera; Tricholomataceae (A. H. Smith) 81 genera; Chytridiales (F. K. Sparrow) 78 genera and Mucorales (C. W. Hesseltine and J. J. Ellis) 64 genera. The papers throughout are adequately and well illustrated but there are a number of plates in which the dimensions of microscopic structures shown are not given. In my review copy only about 20 percent of the pages are on glossy paper, an irregularity also noted in volume 3 of this series. The narrative portions of the chapters which preface the keys are informative without being prolix and generally stress the most essential details of morphology and taxonomy.

The two volumes encompass the entire field and they are sure to be eminently useful to the practicing taxonomist. The work is dedicated to the late Dr. George W. Martin, a fitting tribute to the memory of a master mycologist.

B. Lowy

Louisiana State University

Baton Rouge

Fungi that decay ponderosa pine. R.L. Gilbertson. 197 pp. illus. Paperbound. 1974. The University of Arizona Press. Tuscon. \$9.50.

Ponderosa pine is the most important source of timber in the Southwest and the largest natural stand of this valuable tree in North America is in Arizona and New Mexico where it is found associated with various species of oak and pine at elevations of about 5500 to 8500 feet. An impressive number of fungi find Pinus ponderosa and its two varieties, scopulorum and arizonica, congenial substrates for their growth and Dr. Gilbertson has given us a fine, descriptive catalogue of 228 species (in 85 genera) of Basidiomycetes that contribute to the deterioration of ponderosa wood. Of these, 200 are recorded as occurring in Arizona and New Mexico, with 28 extralimital species known from the Far West or Canada. All have dichotomous keys to their identification and each species is illustrated by carefully made camera lucida drawings of basidia, basidiospores, hyphae and sterile elements, drawn to the scale of ten microns to one centimeter. Twenty five species are listed as "major decay organisms" and these are distributed among 16 genera with only Poria, Tyromyces and Fomitopsis having two or more representatives.

Some users of the manual may wonder what has happened to the genera Polyporus, Fomes, Merulius or Corticium which predominate in the classical Friesian system and its later slight modification to which traditionalists still cling. However, recent studies by Donk, Parmasto, Domański, Jahn and others have resulted in many significant taxonomic and nomenclatural revisions in the Aphyllophorales and some of the changes suggested by these researchers have been adopted by the author. This leads to the usual discomforts suffered whenever the eternal scheme of things is altered, but synonymies are given in a check list and all taxa are included in the index, so that if one looks up

the old Friesian name Merulius corium it will be found on p. 12 listed as a synonym of Byssomerulius corium (Fr.) Parm. and in the body of the text under the number to which the species has conveniently been assigned, the appropriate literature citation also appears.

The great practicality of the Friesian system, which was based upon macromorphology of basidiocarps, led to its universal adoption and for over a century it dominated the field. Its influence remains strong. But attempts to construct a natural system of classification both for Agaricales and Aphyllophorales has shifted the emphasis of study to micromorphology, biochemistry and genetics. An examination of the descriptions of species in this volume shows the greatly diminished taxonomic importance of the gross morphology of basidiocarps (they are succinctly referred to but none are illustrated) and the almost exclusive concern with micromorphology and reactions to chemical reagents. This trend is substantially justified and will surely continue.

Not only has Dr. Gilbertson made a very useful contribution to our knowledge of some Aphyllophorales but he has also anticipated the direction in which much future research in taxonomic mycology will continue to advance.

B. Lowy

Louisiana State University

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B. Lowy

Louisiana State University

The Boletaceae of North Carolina. 1943. (paperbound reprint ed. 1974).  
William Chambers Coker and Alma Holland Beers. 96 pp. illus. (6 color p.).  
Dover Publications, Inc., New York. \$3.50

Among the fungi most easily recognizable on sight, even by those uninitiated into the arcana of fungus taxonomy, are the boletes. Their distinctive fleshy consistency and porous hymenium which is separable from the cap instantly sets them apart from other Agaricales. Yet it is paradoxical that in spite of the ease of placing them into a proper <sup>family</sup> ~~class~~ (Boletaceae), their further identification presents a formidable problem and as Saccardo noted in 1888, the species are "multae difficillime dignoscuntur et delimitantur." Bearing testimony to the accuracy of this observation is the fact that almost a century later taxonomic specialists are still in disagreement regarding the delimitation of some genera and the validity of others.

Not mycologists alone but foresters and mycophagists too are interested in boletes not only because many species are mycorrhizal but the great majority of them for which there is reliable information are edible as well.

When the University of North Carolina Press published this work in 1943, it was a pioneer in its field in America. During the intervening 3 decades much has been contributed to our knowledge of North American boletes notably by Snell and Dick, <sup>by</sup> Singer, and by Smith and Thiers, but a revision of Coker and Beers has not been undertaken, a project that is overdue particularly in regard to taxonomic and nomenclatural usage. Only 3 genera were recognized by Coker and Beers and of the 73 species they included, 68 were placed in Boletus, 4 in Boletinus and 1 in Strobilomyces. Most contemporary taxonomists see the need for additional genera, among them Gyrodon, Gyroporus, Leccinum, Tylopilus, Suillus and Xeroconomus.

The Dover reprint has made a gratuitous change of doubtful value in the original title of the book which was "The Boletaceae of North Carolina," substituting "Boleti" for "Boletaceae" and it also errs by printing the frontispiece in black and white instead of in color. The 6 color plates are reproduced with reasonably good fidelity as are the 5 plates of line drawings, but all the 55 photographic plates which illustrate species are inferior in quality to those of the original edition. One wonders about the source of a comment appearing in an advertisement to the paperbound edition, which refers to the boleti as "one of the safest groups of cup fungi." Anyway, they are safe.

Because of its low cost mycologists who do not own an original copy will consider having the reprint worthwhile.

B. Lowy

Louisiana State University

1902 as now, the emphasis was on illustration and of the 1000 species and "varieties" included, more than 130 of them are presented on 31 aesthetically pleasing and accurate color plates. In addition, some 20 full-page photographs and over 180 line drawings embellish the text. A notable feature of this early American guidebook to edible and poisonous mushrooms is the extensive, unhurried commentary on the idiosyncracies of species, giving details of habitat, distribution, spore size and color, morphological variations, culinary possibilities, and other pertinent data. Fifteen pages of recipes impart the secrets of how to cook, fry, bake, boil, stew, or "devil" the "toadstools". The glossary includes more than 700 terms, showing for all but the most obvious their derivation from Latin or Greek. Throughout the book almost all generic names and specific epithets are likewise translated.

Since the turn of the century, because of vastly increased knowledge in mycology, the names of many fungi have been changed in conformity with the rules of botanical nomenclature. Dr. Shaffer has appended to the book a list of 800 or more combinations used by Mellvane and has indicated for all the up-to-date names.

A brief article is included on raising mushrooms at home, but most modern devotees, for sundry reasons, may neither wish nor be able to take the first recommended step, which is to "thoroughly cleanse the cellar and give it an entire covering of whitewash". Things quickly become still more discouraging, and only the fanatically committed, devilishly ingenious, or scatologically inclined would now willingly go as far as to "calculate how much fresh horse manure . . . it will take to make a bed of desired dimensions solidly tramped", then "get it, put it in a compact heap, and keep it covered from rain".

In the manner of many contemporary works, regardless of size or pretensions, an account of the dangers of mushroom poisoning is not neglected. Yet some readers will surely be disappointed, for this section is not so morbid, lurid, or admonitory as are some modern accounts that excel in their efforts to achieve a frenzied mycophobia.

This informative, attractive, and inexpensive paperback will be useful to anyone who has the slightest interest in the fungi.

fermented foods, the principal fungal agents of which are species of *Rhizopus* and *Aspergillus*. Among them are such exotics (from the western viewpoint) as miso, shoyu, tempeh, and hamanatto, all as familiar in the Orient as are spinach, turnips, and cabbage to supermarket shoppers here.

The book is in two parts, the first of which was published in 1970, the second in 1973; this has apparently led to some inadvertent repetition. For example, the same outline drawing is given in figure 14 (part I) and in figure 1 (part II), identified in the first as *Amanita muscaria* and in the other as an "agaric". On p. 16 (part I) photos of four species of *Morchella* are shown on a single plate, the same illustrations being repeated as separate figures on pp. 154-155 (part II). The reader is advised (p. 15, part I) to eat "only those morels that look exactly like those on figure 5", but on p. 154 (part II), a photo of one of these, *Morchella hybrida*, bears the comment that it should not be eaten unless one is "quite sure that he can distinguish it from *M. bohemica*." Of the ample total of 552 references at least 12 of them are repeated in the separate bibliographies. Although these are small details, the work lacks the unity it would have had if the separate parts had been edited as a single volume. A combined index appears at the end of part II.

There are numerous admonitions on the dangers of misidentification, and about 20 pages are devoted to "mushroom poisoning and poisonous mushrooms", in which statistics and case histories (some quite lurid) are cited by various authorities, many of whom disagree as to which species are poisonous (76 are listed) and to what degree. The heavy emphasis on the possible dire consequences of eating a less than salubrious mushroom borders on mycophobia, and I agree with the author when he says that "perhaps after all there is in our cultural heritage a vaguely remembered taboo (possibly imposed by early Christianity) against the eating of mushrooms". Nonetheless, I would take exception to the author's advice to avoid all members of the genus *Amanita*, since doing so excludes possibly the greatest delicacy of them all, *A. caesarea*. Having often enjoyed this noteworthy agaric I think it is unfortunate to reject it out of hand because of a possible error in identification. A good color photograph along with a proper description would make it quite as easy to identify as any of the 28

recommended but distinctly more plebeian species that are included in the form of an illustrated, annotated manual.

The section on ethnomycology is welcome and timely, and, though the author offers a generally excellent summary of recent trends in this relatively new field, I believe that his supercilious treatment of Allegro's book *The sacred mushroom and the cross* exhibits a certain heresyphobia. Whatever may be the merits or failings of this learned but controversial tome, it is disconcerting that we should be "seriously advised to read the thoughtful review of Jacobsen and Richardson" [these are separate reviews in any case] before consulting the book itself, presumably because "Allegro's position has few if any adherents . . . is at best in poor taste . . . and may be regarded as offensive by many people." Readers may prefer to decide the issue for themselves.

Dr. Gray has assembled and summarized many informative, provocative, and useful data (including, incidentally, 24 obviously irresistible mushroom recipes). Mycologists, ethnobotanists, and the general public alike will applaud his efforts.

B. LOWY

Louisiana State University  
Baton Rouge, Louisiana

**One Thousand American Fungi.** Charles Mellvaine and Robert K. Macadam; with a new essay on nomenclatural changes by Robert L. Shaffer. Unabridged republication of the second revised edition (1902) of the work. 729 pp. illus. Dover Publications, New York, 1973. \$6.50

The mushroom hunter and mycophagist in the United States now has access to a number of manuals and guides that may satisfy either the modest requirements of the occasional collector or the more ambitious aims of the serious amateur. The choice ranges from a pamphlet of a few pages to a book of several hundred, with illustrations in black and white or in color or both. In view of the friendly competition for the public's attention among the more lavishly illustrated of these publications, it is of special interest to see resuscitated one of the first and most elaborate of mushroom books for the tyro to have anywhere in North America. In

**The Use of Fungi as Food and in Food Processing.** William D. Gray. [Part I], pp. 1-113, 1970; Part II, pp. 115-218, 1973. Chemical Rubber Company Press, Cleveland, Ohio. illus. \$13.00 (each part)

In 1959 Dr. Gray published his *Relation of fungi to human affairs*, an account of the beneficial as well as harmful effects of fungi, but whereas that work was designed as a primer in industrial mycology, his present effort will interest a larger audience for it includes topics that range from edible and poisonous mushrooms and mycophagy to hallucinogenic mushrooms and ethnomycology. In a valuable chapter of about 25 pages, the potential uses of fungi as a world crop are carefully surveyed with emphasis on the possibilities of combining the "carbohydrate-synthesizing capacities of higher green plants with the protein-synthesizing capacities of fungi." The uninitiated are also introduced to some techniques and vicissitudes encountered in growing the few species of mushrooms that have traditionally been cultivated in the Orient and Occident. These are the Padi-Straw mushroom (*Volvariella volvacea*) and Shiitake (*Lentinus edodes*) of the Far East; *Tuber melanospermum*, the much-praised European truffle; and *Agaricus bisporus*, the most common commercial mushroom of the western world. A review is made of methods of preparation and

# ECONOMIC BOTANY

DEVOTED TO APPLIED BOTANY AND PLANT UTILIZATION

A Publication of  
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## Book Reviews

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VOLUME 28  
NUMBER 2  
April-June 1974

**Tropical Macrofungi. Some Common Species.** M. H. Zoberi. 158 pp. illus. Hafner Publishing Company, New York, 1972. \$16.95

The author of this slender volume has compiled information on some 110 species of fungi, about 95 of them Basidiomycetes, the rest Ascomycetes largely from tropical West Africa (especially Nigeria), an area of great intrinsic mycological interest. We are told in the introduction that the book's purpose is to introduce the reader to "these insignificant-looking objects of the hidden world", and hints are made about revealing "secrets of Nature" and plunging "deep into the waters of learning". The author's enthusiasm is evident, but there is some disappointment awaiting the reader on all of these scores.

It is difficult to characterize this little book, which seems to strive for scientific accuracy, yet errs abundantly in such simple matters as spelling and grammatical usage and in the omission of many relevant data. More pertinently, I found to my consternation that many of the descriptions of families, genera, and species have been taken verbatim or nearly so from various sources, without proper acknowledgment being made to the authors. In the 58 pages devoted to the Agaricales, for example, the diagnoses of families and genera are taken from Singer's *Agaricales in modern taxonomy* (1962) and the author has indulged in the additional liberty of selecting from the diagnoses, more or less at random, such passages as suited his fancy. Likewise, the entry under "Auriculariaceae" includes only the genus "*Auricularia*" with two species, descriptions of which are taken almost verbatim from Lowy (1952). Other diagnoses, I believe, have also resulted from similar "research".

"Martin (1961)" is frequently cited (obviously incompletely) but this author is deleted from the inadequate bibliography, as is "Ainsworth (1961)", which refers to the 5th edition of the well-known dictionary (why not the newest 6th?), a fact withheld from the "amateur naturalist" for whose benefit this book was presumably written. The glossary finds room for such transparent terms as "rough", "pallid", "striate", "viscid", and "lobed", but it omits "paraphysis", "perithecium", "mycelium", "saprobic", and "ectograph". There are 46 good line drawings but these lack legends,

identification of parts, and magnifications. The 16 color photographs fall so far short of acceptable standards that many of them are useless for purposes of identification. The chapter entitled "Keys to the families discussed" is a misnomer, for there are no keys, only lists of family, generic, and species names. The title of one of Donk's papers is cited as "The genuine names proposed in Polyporaceae", whereas the correct title is "The generic names proposed for Polyporaceae".

In short, the subject of this book is surely a worthy one but its conception and execution are deplorably faulty. The price is incredibly inflated, and I do not know who would be willing to pay so much for so little.

B. LOWY

Louisiana State University  
Baton Rouge, Louisiana

**The Use of Fungi as Food and in Food Processing.** William D. Gray. [Part I], pp. 1-113, 1970; Part II, pp. 115-218, 1973. Chemical Rubber Company Press, Cleveland, Ohio. illus. \$13.00 (each part)

In 1959 Dr. Gray published his *Relation of fungi to human affairs*, an account of the beneficial as well as harmful effects of fungi, but whereas that work was designed as a primer in industrial mycology, his present effort will interest a larger audience for it includes topics that range from edible and poisonous mushrooms and mycophagy to hallucinogenic mushrooms and ethnomycology. In a valuable chapter of about 25 pages, the potential uses of fungi as a world crop are carefully surveyed with emphasis on the possibilities of combining the "carbohydrate-synthesizing capacities of higher green plants with the protein-synthesizing capacities of fungi." The uninitiated are also introduced to some techniques and vicissitudes encountered in growing the few species of mushrooms that have traditionally been cultivated in the Orient and Occident. These are the Padi-Straw mushroom (*Volvariella volvacea*) and Shiitake (*Lentinus edodes*) of the Far East; *Tuber melanospermum*, the much-praised European truffle; and *Agaricus bisporus*, the most common commercial mushroom of the western world. A review is made of methods of preparation and the nutritional virtues of some fungus-

recommended foods, the principal fungal agents of which are species of *Rhizopus*, and *Aspergillus*. Among them are such exotics (from the western viewpoint) as miso, shoyu, tempeh, and hamanatto, all as familiar in the Orient as are spinach, turnips, and cabbage to supermarket shoppers here.

The book is in two parts, the first of which was published in 1970, the second in 1973; this has apparently led to some inadvertent repetition. For example, the same outline drawing is given in figure 14 (part I) and in figure 1 (part II), identified in the first as *Amanita muscaria* and in the other as an "agaric". On p. 16 (part I) photos of four species of *Morchella* are shown on a single plate, the same illustrations being repeated as separate figures on pp. 154-155 (part II). The reader is advised (p. 15, part I) to eat "only those morels that look exactly like those on figure 5", but on p. 154 (part II), a photo of one of these, *Morchella hybrida*, bears the comment that it should not be eaten unless one is "quite sure that he can distinguish it from *M. bobemica*." Of the ample total of 552 references at least 12 of them are repeated in the separate bibliographies. Although these are small details, the work lacks the unity it would have had if the separate parts had been edited as a single volume. A combined index appears at the end of part II.

There are numerous admonitions on the dangers of misidentification, and about 20 pages are devoted to "mushroom poisoning and poisonous mushrooms", in which statistics and case histories (some quite lurid) are cited by various authorities, many of whom disagree as to which species are poisonous (76 are listed) and to what degree. The heavy emphasis on the possible dire consequences of eating a less than salubrious mushroom borders on mycophobia, and I agree with the author when he says that "perhaps after all there is in our cultural heritage a vaguely remembered taboo (possibly imposed by early Christianity) against the eating of mushrooms". Nonetheless, I would take exception to the author's advice to avoid all members of the genus *Amanita*, since doing so excludes, possibly the greatest delicacy of them all, *A. caesarea*. Having often enjoyed this noteworthy agaric I think it is unfortunate to reject it out of hand because of a possible error in identification. A good color photograph along with a proper description would make it quite as easy to identify as any of the 28

species that are included in the form of an illustrated, annotated manual.

The section on ethnomycology is welcome and timely, and, though the author offers a generally excellent summary of recent trends in this relatively new field, I believe that his supercilious treatment of Allegro's book *The sacred mushroom and the cross* exhibits a certain heresyphobia. Whatever may be the merits or failings of this learned but controversial tome, it is disconcerting that we should be "seriously advised to read the thoughtful review of Jacobsen and Richardson" [these are separate reviews in any case] before consulting the book itself, presumably because "Allegro's position has few if any adherents . . . is at best in poor taste . . . and may be regarded as offensive by many people." Readers may prefer to decide the issue for themselves.

Dr. Gray has assembled and summarized many informative, provocative, and useful data (including, incidentally, 24 obviously irresistible mushroom recipes). Mycologists, ethnobotanists, and the general public alike will applaud his efforts.

B. LOWY

Louisiana State University  
Baton Rouge, Louisiana

**One Thousand American Fungi.** Charles McIlvaine and Robert K. Macadam; with a new essay on nomenclatural changes by Robert L. Shaffer. Unabridged republication of the second revised edition (1902) of the work. 729 pp. illus. Dover Publications, New York, 1973. \$6.50

The mushroom hunter and mycophagist in the United States now has access to a number of manuals and guides that may satisfy either the modest requirements of the occasional collector or the more ambitious aims of the serious amateur. The choice ranges from a pamphlet of a few pages to a book of several hundred, with illustrations in black and white or in color or both. In view of the friendly competition for the public's attention among the more lavishly illustrated of these publications, it is of special interest to see resurrected one of the first and most elaborate of the mushroom books for the tyro to have appeared in North America. In

1902 as now, the emphasis was on illustration and of the 1000 species and "varieties" included, more than 130 of them are presented on 31 aesthetically pleasing and accurate color plates. In addition, some 20 full-page photographs and over 180 line drawings embellish the text. A notable feature of this early American guidebook to edible and poisonous mushrooms is the extensive, unhurried commentary on the idiosyncracies of species, giving details of habitat, distribution, spore size and color, morphological variations, culinary possibilities, and other pertinent data. Fifteen pages of recipes impart the secrets of how to cook, fry, bake, boil, stew, or "devil" the "toadstools". The glossary includes more than 700 terms, showing for all but the most obvious their derivation from Latin or Greek. Throughout the book almost all generic names and specific epithets are likewise translated.

Since the turn of the century, because of vastly increased knowledge in mycology, the names of many fungi have been changed in conformity with the rules of botanical nomenclature. Dr. Shaffer has appended to the book a list of 800 or more combinations used by McIlvane and has indicated for all the up-to-date names.

A brief article is included on raising mushrooms at home, but most modern devotees, for sundry reasons, may neither wish nor be able to take the first recommended step, which is to "thoroughly cleanse the cellar and give it an entire covering of whitewash". Things quickly become still more discouraging, and only the fanatically committed, devilishly ingenious, or scatologically inclined would now willingly go as far as to "calculate how much fresh horse manure . . . it will take to make a bed of desired dimensions solidly tramped", then "get it, put it in a compact heap, and keep it covered from rain".

In the manner of many contemporary works, regardless of size or pretensions, an account of the dangers of mushroom poisoning is not neglected. Yet some readers will surely be disappointed, for this section is not so morbid, lurid, or admonitory as are some modern accounts that excel in their efforts to achieve a frenzied mycophobia.

This informative, attractive, and inexpensive paperback will be useful to anyone who has the slightest interest in the fungi.

B. LOWY

Molds, Mushrooms, and Mycotoxins. Clyde M. Christensen. 264 pp. illus.  
University of Minnesota Press, Minneapolis, 1975. \$11.50.

Writing for the layman is a hazardous occupation and even the most skilled occasionally succumb to its dangers. The temptation to oversimplify and broadly generalize beckons the author and if he submits to this Lorelei the result is predictable.

One of the author's favorite digressions concerns taxonomy and taxonomists who "still labor under the doctrine of special creation, either by the Lord or by themselves, and they do not always make a clear-cut distinction between the two." Elsewhere we find this pleasantry, to the effect that "to some dedicated describers of new species, just about anything they come across that is new to them, ... is a legitimate new species," and in the same vein referring to what he terms the "Fusarium taxonomy war", the author concludes that attempts to classify the species are so "complex that only the perpetrators can understand and use them." This and more of the same about taxonomy and taxonomists is sure to be quite amusing to the layman who knows nothing about taxonomy but at the very least it is misleading and does him a disservice because he has no way of evaluating the author's gratuitous appraisals. The unsuspecting reader simply alligns himself with the author against "nomenclaturists" who, he is assured are in any case, "not overburdened with common sense."

But it is in the section on hallucinogenic mushrooms that the author becomes not only petulant but acrimonious. Over the past two decades a considerable body of knowledge has been accumulated by competent ethnobotanists, taxonomists, anthropologists, and others who have carefully

examined hallucinogens of plant origin and their uses throughout man's history. The author's chief target in this area is R. G. Wasson whose work, together with that of others in a young and difficult discipline, is contemptuously dismissed as "romanticism in the guise of 'research', or 'gibberish'." One may disagree with conclusions regarding the significance that some hallucinogenic fungi have had in civilizations past and present, but deprecation and ridicule are not the usual weapons of the scientist.

Having said this to alert the unwary layman, there is much else in the book to attract the reader who is not already acquainted with the author's previous publications of similar genre which both edify and entertain. Although most of it has been said before, including a survey of poisonous mushrooms, ergotism, mycotoxins, fungus predators, decay in wood etc., it will stand repetition, and if some fine day the author were to turn his considerable writing talent to an objective exposition of taxonomy for the layman, we might all be the beneficiaries of his efforts.

B. Lowy  
LSU

LOUISIANA STATE UNIVERSITY  
AND AGRICULTURAL AND MECHANICAL COLLEGE

BATON ROUGE • LOUISIANA • 70803

*College of Arts and Sciences*

DEPARTMENT OF BOTANY

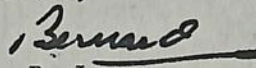
21-VII-1975

Dear John,

You will find only my review of Christensen's book enclosed. The Vera K. Charles reprint is a light-weight, run-of-the-mill publication and Economic Botany will not be the poorer for excluding it from its pages. But I have said what I think should be said about the other.

Let me know if you need to have the Charles pamphlet returned.

Yours,

  
B. Lowy

*The Society for*



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Journal: ECONOMIC BOTANY

Box 277  
Northern Kentucky State College  
Highland Heights, Kentucky 41076  
May 30, 1975

Dr. B. Lowy  
Department of Botany  
Life Sciences Building  
Louisiana State University  
Baton Rouge, LA 70501

Dear Bernard:

Without first asking your leave, I am sending the following two books for review for ECONOMIC BOTANY. I feel certain that you will not object to my doing so.

Molds, Mushrooms, and Mycotoxins. Clyde M. Christensen. 264 pp. illus. University of Minnesota Press, Minneapolis, 1975. \$11.50.

Introduction to Mushroom Hunting. Vera K. Charles. 60 pp. illus. Facsimile of the 1946 edition. Dover Publications, New York, 1974. \$1.25.

Your review of Christensen should not exceed about 250 words in length; of Charles, about 150 words. I regret the word limitation.

The reviews will be due on or before 1 August 1975. The review copies are yours to keep.

Best wishes.

Cordially,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/mls

*The Society for*



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Box 277  
Northern Kentucky State College  
Highland Heights, Kentucky 41076  
December 11, 1974

Dr. Bernard Lowy  
Department of Botany  
Louisiana State University  
Baton Rouge, Louisiana 70803

Dear Dr. Lowy:

I have received your reviews of FUNGI THAT DECAY PONDEROSA PINE and THE GASTEROMYCETES OF THE EASTERN UNITED STATES AND CANADA. Thank you for preparing it for ECONOMIC BOTANY.

Cordially,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/mls

# BOTANY



Jacket illustration from  
*Introduction to the History of Mycology*

CAMBRIDGE UNIVERSITY PRESS  
32 East 57th Street New York, New York 10022

Digitized by the Hunt Institute for Botanical Documentation

# INTRODUCTION TO THE HISTORY OF MYCOLOGY

by G. C. AINSWORTH, *Formerly Director of the Commonwealth Mycological Institute, Kew*

This is the first volume to provide an historical, documented outline of the development of the main branches of mycology. Dr. Ainsworth gives the principle views held about fungi for the past three millennia and discusses the development of the study of fungi as a branch of science for the last 250 years. There is an emphasis on the solution of the major problems which have confronted students of the subject and an account of the novel discoveries which have given new insights. Material included covers the origin and status of fungi; form and structure; culture and nutrition; sexuality, cytology and genetics; pathogenicity; poisonous, hallucinogenic, and allergenic fungi; uses and distribution of fungi; classification and the organization of mycology.

\* 1976 c 350 pp. color frontispiece/17 plates/8 tables  
90 line diagrams & graphs 21013 5 \$27.50

Box 277  
Northern Kentucky State College  
Highland Heights, KY 41076  
February 12, 1976

Cambridge University Press  
32 East 57th Street  
New York, NY 10022

Dear Sirs:

I should like to request, for ECONOMIC BOTANY, a review copy of the following book.

Introduction to the History of Mycology. G. C. Ainsworth.

This publication certainly should be called to the attention of the international and interdisciplinary audience reached by our journal.

The book may be sent directly to the following person, who has agreed to prepare the review for us.

Dr. B. Lowy  
Department of Botany  
Louisiana State University  
Baton Rouge, LA 70803

In turn, ECONOMIC BOTANY will send to you the usual copies of the published review.

Thank you for your help in our efforts to keep the review section in our journal one of the most inclusive in botany and to bring important books such as Introduction to the History of Mycology to the notice of our readers.

Cordially yours,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/dlc

✓cc: Dr. B. Lowy

To JWT 15-XI-176  
Econ. Bot. 31 (1): 4-5, 1977.

Introduction to the history of mycology. G. C. Ainsworth. 359 pp. illus.  
Cambridge University Press, New York. 1976. \$27.50

It flatters our vanity to look back on humble beginnings and observe the advances made in various branches of human endeavor. A page of the "Grete Herball" of 1526 is illustrated in this attractive and meticulously planned text, and on it we read with amusement and perhaps with some condescension, that "fungi ben mussheron. ..There be two maners of them; one is deedly and sleeth them that eateth of them and be called tode stoles, and the other dooth not." Yet more than four and a half centuries later, this aphorism is still not far from the mark in summing up the lay mycological knowledge of millions. Some beliefs have a relentless tenacity and who has not heard the common wisdom declare that a silver coin will blacken if dropped into a boiling pot of poisonous mushrooms? Since antiquity the origin of fungi has conjured up fanciful notions because of their lack of root, stem, leaf or seed. In the days when the theory of abiogenesis held sway, they were described as an "evil ferment of the earth," and were thought of as being engendered by thunder or by shooting stars. How curious that some of these ideas should still survive and find a place in the folklore of our contemporaries!

Dr. Ainsworth's landmark book is embellished with numerous striking illustrations, many of which are now only infrequently seen by scholars and include excerpts from the works of such illustrious 17th, 18th and 19th century writers as Clusius, Bauhin, Sterbeeck, Hooke, Micheli, Bolton, Buillard, Prévost, Corda, Lévillé, Berkeley, Persoon and Fries. Although mycologists will be acquainted with the pioneering work of these and many others whose

notable contributions to the advancement of mycology are included, never have their principal achievements been concisely evaluated and graphically documented in a single narrative which makes it possible to see the entire field in clear perspective over a period of more than 3 centuries. Each of the 106 illustrations, except the portraits of authors, whether taken from the pages of Clusius, Micheli, Tulasne, deBary, Thaxter, Buller or Blakeslee, elucidates some highly pertinent facet of their life's work.

It has been Dr. Ainsworth's purpose to write a succinct account of mycological history from the earliest times to the present, in which "emphasis is placed on the solution of major problems which have confronted students of fungi over the centuries and novel discoveries which have given new insights." Some of these problems are concerned with the origin of fungi, their form and structure, culture and nutrition, sexuality, genetics and pathogenicity; others with their use, distribution and taxonomy and with their toxic or hallucinogenic properties. Each of these themes is treated systematically and chronologically, the result being a compendium which illuminates the full sweep of development of the science.

In addition to detailed author and subject indices which occupy 20 pages, and a short chapter of notes on the text, there is an unique 29-page chronology and bibliography, the first entry dated 1491 and the last 1974. Nearly 500 titles are listed, over 300 of them selected from works published in the 20th century. Printing errors are rare. However, the justification for deleting any reference to the ant-fungus and termite-fungus relationships is debatable.

Dr. Ainsworth has given us a panoramic view of mycological

history from its superstitious beginnings to its present impressive stature among the sciences, a view that only the historical approach can achieve, and one which only a master could envision and successfully transmit.

Bernard Lowy

Louisiana State University

Baton Rouge

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Dr. Ainsworth has given us a panoramic view of mycological history from its superstitious beginnings to its present impressive stature among the sciences, a view that only the historical approach can achieve and one that only a master could envision and successfully transmit.

BERNARD LOWY  
Louisiana State University  
Baton Rouge, Louisiana

# reviews

## Historical essays on mycology

C. T. Ingold

*Introduction to the History of Mycology.* By G. C. Ainsworth. Pp. xi+359. (Cambridge University: Cambridge, London and New York, 1976.) £11.

MYCOLOGISTS have always lacked a comprehensive history of their subject. Many of the older mycologists have read with profit Whetzel's *An Outline of the History of Phytopathology* (1918) and have relished Ramsbottom's *The Expanding Knowledge of Mycology Since Linnaeus* (1941). And a much wider circle has also rejoiced in Large's *The Advance of the Fungi*. But now at last here is a full-scale history of mycology, although, with characteristic modesty, the author presents it as an *Introduction*.

Only one with an encyclopaedic knowledge of the literature on fungi could have produced this work which fittingly comes from the pen of one who can be described as the Dr Johnson of mycology. No other worker in this field can exist without almost daily reference to his *Dictionary of Fungi*.

Dr Ainsworth has sensibly not attempted to keep all sections of the subject in play while proceeding steadily from the earliest times to the present day, but has rather produced a series of historical essays on various aspects of mycology. These form his chapter headings: origin and status of fungi; form and structure; culture and nutrition; sexuality, cytology and genetics; pathogenicity; poisonous, hallucinogenic and allergenic fungi; classification; and finally the organisation of mycology.

P. A. Micheli, born in 1679 and the author of *Nova Plantarum Genera* (1729), is rightly regarded as starting the scientific study of the fungi; as the father of mycology. We learn from the English translation of his epitaph in Florence that he "was much beloved by all the worthy men of his age on account of his wisdom, sweetness of disposition and modesty". A number of figures from his magnum opus are reproduced: the full title-page; his lovely plate of *Clathrus*; his representation of agaric structure and development; his drawings of almost pure cultures of moulds on melon slices; his illustrations of *Aspergillus* and *Botrytis*; and his dynamic figure of a cup-fungus



Mayan mushroom stone (British Museum, London), probably from Guatemala and believed to date from the middle of the first millennium AD—early evidence for a mushroom cult in Central America.

puffing. Also reproduced are Micheli's original drawings of asci, the first ever made, showing clearly that the block-maker did a rather poor job at times in preparing the plates for the printed book.

There is a basic difficulty about a history that extends from the misty past to the present. In the earlier part much must be made from very little; and in the more recent part there is such a wealth of material that the historian is faced with an almost impossible task of selective condensation. It is, of course, easy to criticise this selection from recent history. For example, in connection with mycorrhiza no mention is made of Melin's work and the reader is referred for a recent view on ericaceous mycorrhiza to a 1927 review by Rayner! Again, in the genetics section the early work of Hansen and Smith in 1932 on heterokaryosis does not figure; indeed, the word does not

occur in the index. But any criticisms of this nature are of marginal significance.

The chapter on pathogenicity is particularly rewarding because the author, with his profound knowledge of medical and veterinary mycology, presents a balanced picture in which diseases of plants and of animals (including man) are nicely balanced. Occasionally, perhaps inevitably, a chapter becomes something of a catalogue and this is most noticeable in the chapters on the distribution of fungi and on classification.

Illustrations are a special feature of the book. In all, 106 carefully selected figures—including reproductions of historic drawings; portraits and photographs of eminent mycologists; and facsimile reproductions of pages from books and manuscripts—provide a distinguished atmosphere for the book.

A brief section which many will enjoy deals with hallucinogenic fungi. The Wassons together with Roger Heim are regarded as the founders of ethnomycology.

The final chapter on the history of the organisation of the subject is stimulating. It is concerned with mycological societies, journals and books. Due credit is given to de Bary's textbook. Although over a hundred years old, this great work is still a model that has never been surpassed and is still an inspiration to working mycologists. The same chapter is enlivened by one of Worthington Smith's delightful cartoons of fungal forays a century ago.

Another mycologist writing a history (but it is difficult to think of anyone else who could do it) would certainly achieve a different balance. To some extent the balance reflects Dr Ainsworth's own interests but happily these are exceptionally wide. It is perhaps not a book for the undergraduate student, but it will be read with enormous pleasure by all mycologists with a broad interest in their subject. Every library in an institution where fungi are studied will have to possess a copy and many individual workers will want one of their own. □

C. T. Ingold was Professor of Botany at Birkbeck College, University of London, UK, from 1944 to 1972.

LOUISIANA STATE UNIVERSITY  
AND AGRICULTURAL AND MECHANICAL COLLEGE

BATON ROUGE · LOUISIANA · 70803

College of Arts and Sciences



DEPARTMENT OF BOTANY

19-11-1977

Dear Dr. Sutton,

I presume you wanted this corrected and returned, although the envelope did not have the usual order form for reprints. (In any case, I do not want any.)

I regret the deletion indicated. After submitting the review to Dr. Thieret, I realized that the sentence was not entirely accurate, so I asked Dr. Thieret to strike it from the ms. Apparently he forgot to do it.

Sincerely yours,  
B. Long

*The Society for*

Journal: ECONOMIC BOTANY



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Box 277  
Northern Kentucky University  
Highland Heights, KY 41076  
December 8, 1976

Dr. Bernard Lowy  
Department of Botany  
Louisiana State University  
Baton Rouge, LA 70803

Dear Bernard:

Thanks a million for your review of Hard's book.

You have risen to new literary heights in the review. Ineluctable,  
no less.

Best wishes.

Cordially yours,

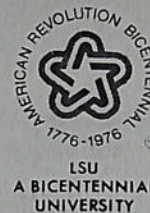
John W. Thieret  
Review Editor  
ECONOMIC BOTANY

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LOUISIANA STATE UNIVERSITY  
AND AGRICULTURAL AND MECHANICAL COLLEGE

BATON ROUGE • LOUISIANA • 70803

*College of Arts and Sciences*



DEPARTMENT OF BOTANY

13 - XII - 1976

Dear John:

In my review of Ainsworth's book, I included a sentence that I would prefer to delete. The xerox copy enclosed indicates where this deletion should be made. Although the ant-fungus relationship is overlooked, there is a brief reference to the termite-fungus symbiosis. I think it is preferable to strike the sentence.

I appreciate your comment on my review of the Hard book. Since I occasionally indulge in onychophagia just prior to submitting a piece for publication, your words are reassuring.

vielen herzlichen Grüßen,

*Bernard*  
B. Lowy

The Society for

Journal: ECONOMIC BOTANY



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Box 277  
Northern Kentucky University  
Highland Heights, KY 41076  
November 29, 1976

Dr. Bernard Lowy  
Department of Botany  
Louisiana State University  
Baton Rouge, LA 70803

Dear Dr. Lowy:

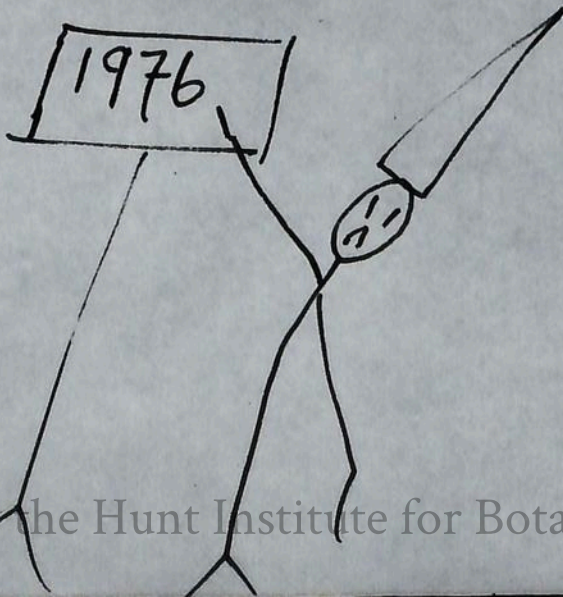
I have received your review of ESTUDOS SOBRE A MANDIOCA. Thank you for preparing it for ECONOMIC BOTANY.

Your review of the book, however, neglects to mention the date of publication. Would you please jot down this datum below and return this letter to me.

Cordially,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/dlc



The Society for

Journal: ECONOMIC BOTANY



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Box 277  
Northern Kentucky University  
Highland Heights, KY 41076  
November 17, 1976

Dr. Bernard Lowy  
Department of Botany  
Louisiana State University  
Baton Rouge, LA 70803

Dear Dr. Lowy:

I have received your review of INTRODUCTION TO THE HISTORY OF MYCOLOGY.  
Thank you for preparing it for ECONOMIC BOTANY.

Cordially,

*John*

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/dlc

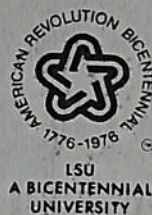
I was grateful for your letter  
re my surgery. Things are coming  
along fine now. I'm practically  
back to normal -- and am, of  
course, much better so far as the  
heart is concerned.

LOUISIANA STATE UNIVERSITY  
AND AGRICULTURAL AND MECHANICAL COLLEGE

BATON ROUGE · LOUISIANA · 70803

College of Arts and Sciences

DEPARTMENT OF BOTANY



8 - XI - 1976

Dear John,

I have just heard from Shirley Tucker of your recent (?) hospitalization for open heart surgery. She reports that you appeared to be in good spirits and I hope that your recovery has been total.

It is disconcerting to have news of a dangerous crisis in the life of a good friend. Now that you have conquered it, presumably with a little expert help, I know that you will be wise enough to avoid such encounters in future - and stay healthy the rest of your life!

With all best wishes,

as ever,

Bernard

John W. Thieret



Highland Heights, Kentucky 41076

Journal: ECONOMIC BOTANY

# ECONOMIC BOTANY

THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Box 277  
Northern Kentucky University  
Highland Heights, KY 41076  
November 10, 1976

Dr. B. Lowy  
Department of Botany  
Louisiana State University  
Baton Rouge, LA 70803

Dear Bernard:

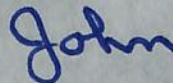
Once again, without first asking your leave, I am sending a book for a brief review.

Mushrooms, Edible and Otherwise: Habitat and Time of Growth. Miron Elisha Hard. Unabridged republication of the first (1908) edition, as published. . . under the title The Mushroom, Edible and Otherwise. 623 pp. illus. Dover Publications, New York, 1976. \$7.95.

Your review should not exceed about 250 words in length. It will be due on 1 February 1977. The review copy is yours to keep.

Best wishes.

Cordially,



John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/dlc

RAG CONTENT

Rec'd  
not

Box 277  
Northern Kentucky University  
Highland Heights, KY 41076  
September 9, 1976

Dover Publications, Inc.  
180 Varick Street  
New York, NY 10014

Dear Sir:

I should like to request, for ECONOMIC BOTANY, a review copy of the following book.

Mushrooms, Edible and Otherwise: Habitat and Time of Growth. Miron  
Elisha Hard. 1968, 609 pp.

This publication certainly should be called to the attention of the international and interdisciplinary audience reached by our journal.

The book may be sent directly to the following person, who has agreed to prepare the review for us.

Dr. B. Lowy  
Department of Botany  
Louisiana State University  
Baton Rouge, LA 70803

In turn, ECONOMIC BOTANY will send to you the usual copies of the published review.

Thank you for your help in our efforts to keep the review section in our journal one of the most inclusive in botany and to bring important books such as Mushrooms, Edible and Otherwise to the notice of our readers.

Cordially yours,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

[REDACTED]

## SIGNS USED IN CORRECTING PROOFS

[REDACTED]	Insert marginal correction at this point in line	⌞	Less space
<i>tr</i>	Transpose; indicate by $\curvearrowright$ in text	⊖	Close up entirely
<i>cap</i>	Capital; put 3 lines under letter or word	⊙	Period
<del><i>sc</i></del>	<del>Small capital; put 2 lines under letter or word</del>	⋄	<del>Comma</del>
<i>lc</i>	Lower-case letter; put oblique line through letter	⊕	Colon
<i>ital</i>	Italic; underline letter or word	;	Semicolon
<i>rom</i>	Roman letter; circle letter or word	∨	Apostrophe
<i>sp out</i>	Spell out; circle abbreviation	“ or ”	Quotation
<i>bf</i>	Boldface; underline letter or word with wavy line	=	Hyphen
<i>wf</i>	Wrong font; circle letter or word		Straighten lines
X	Defective letter	[	Move left
↓	Push down space	]	Move right
⊖	Turn over	□	Em-quad space
⊗	Take out	$\frac{1}{m}$	One-em dash
∧∨∧	Space evenly	¶	Make paragraph
#	Insert space	no ¶	No paragraph

The signs listed above are used in marking proofs and they are readily understood by the printer. However, in the event of any possibility of ambiguity the instruction should be written fully on the proof rather than indicated by sign.

*To alter with least cost:*

1. Wherever possible make substitutions equal in number of letters to corresponding deletions.
2. If it is necessary to insert new material, add at end of paragraphs, preferably as new paragraphs.

Box 277  
Northern Kentucky State College  
Highland Heights, KY 41076  
December 14, 1973

Publicity Department  
Academic Press Inc.  
111 5th Avenue  
New York, New York 10003

Dear Sirs:

I should like to request, for ECONOMIC BOTANY, a review copy of the following publication.

The Fungi. An Advanced Treatise. vol. IV B. Basidiomycetes and Lower Fungi. ed. G. R. Ainsworth, F. K. Sparrow, & A. S. Sussman.

This publication certainly should be called to the attention of the international and interdisciplinary audience reached by our journal.

The book may be sent directly to the following person, who has agreed to prepare the review for us.

Dr. Bernard Lowy  
Department of Botany  
Life Sciences Building  
Louisiana State University  
Baton Rouge, LA 70803

In turn, ECONOMIC BOTANY will send to you the usual copies of the published review.

Thank you for your help in our efforts to keep the review section in our journal one of the most inclusive in botany and to bring important books such as The Fungi. An Advanced Treatise to the notice of our readers.

Cordially yours,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/dln

The Society for



# ECONOMIC BOTANY, INC.

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Journal: ECONOMIC BOTANY

Box 277  
Northern Kentucky State College  
Highland Heights, Kentucky 41076  
November 7, 1974

Dr. B. Lowy  
Department of Botany  
Life Sciences Building  
Louisiana State University  
Baton Rouge, Louisiana 70803

Dear Bernard:

Another item for you has come in and has been sent on its way to Baton Rouge.

The Gasteromycetes of the Eastern United States and Canada. William Chambers Coker and John Nathaniel Couch. 201 pp. illus. Unabridged republication of the work originally published by the University of North Carolina Press. Together with "The Gasteromycetae of Ohio: Puffballs, Birds'-nest Fungi and Stinkhorns." Minnie May Johnson. 82 pp. illus. Unabridged reprint of an article originally published in the Ohio Biological Survey Bulletin 22, Vol. IV, No. 7, pp. 271-352. Dover Publications, New York, 1974. \$5.00.

No date is given for the original publication of the Johnson paper.

Best wishes.

Cordially,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/dln.



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Box 277  
Northern Kentucky State College  
Highland Heights, Kentucky 41076  
November 25, 1974

Dr. Bernard Lowy  
Department of Botany  
Louisiana State University  
Baton Rouge, Louisiana 70803

Dear Bernard:

In your review of The Boletaceae of North Carolina, you say on page 1, line 5 from top, "...placing them into a proper class (Boletaceae)." "Boletaceae" does not sound to me like a class. Maybe, though, there is something about the endings of fungal taxa names that I do not know about.

*family*

On page 1, line 7 from bottom, I want to insert a "by" between "Dick," and "Singer," and a comma after "Singer," to make the following:

"...notably by Snell and Dick, by Singer, and by Smith and Thiers." Is this O.K.?

✓

Cordially,

*John*  
John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/mls

*Wow!*  
*Of course, you're right on all counts. Fungi are*  
*are different but "aceae" still designates a*  
*family! Please make the corrections and thanks*  
*for saving me from this embarrassment.*

The Gasteromycetes of the Eastern United States and Canada. W. C. Coker & J. N. Couch. 210 pp. illus. 1928. Reprint ed. Dover Publications Inc. New York. 1974. \$5.00.

During the past decade or so in the United States there has been a notable surge of popular interest in the culinary and artistic attributes of the larger fungi and a number of manuals have appeared, some of them elaborately illustrated in color, designed for use by the inquiring mycophile. During this interval there have also been made available selected volumes of mycological research that have long been out of print but which because of their continued usefulness still merit the attention of amateur and professional alike. The latest of these welcome and inexpensive reprints (one of a series offered by Dover) is Coker and Couch's well known volume on Gasteromycetes in which about 140 species are described and are provided with adequate keys to their identification. Most of the species are illustrated on 103 plates of photographs in black and white. These are supplemented by 20 plates of line drawings showing pertinent microscopic details of nearly all species included. The monograph still serves as an excellent reference and this valued publication will now be accessible to a larger audience than was heretofore possible.

Appended to the book is an 82-page illustrated paper by M. M. Johnson on the "Gasteromycetae of Ohio" which though a commendable piece of work, is made to appear largely superfluous since it has little or nothing to add to what Coker and Couch already offer us.

B. Lowy

Louisiana State University

LOUISIANA STATE UNIVERSITY  
AND AGRICULTURAL AND MECHANICAL COLLEGE

BATON ROUGE · LOUISIANA · 70803

College of Arts and Sciences

DEPARTMENT OF BOTANY

22-X-1974.

Dear John,

what looks like a worthy candidate  
for review is a "Mycology Guidebook"  
by Russell B. Stevens, ed. 1974. Univ.  
Washington Press. Seattle.

Could you, would you, could you,  
would you, would you write the  
Press?

Bernard

Dear Bernard: When I got the above book (quite some time ago) I naturally  
thought of you immediately as a prime candidate for a reviewer (the PRIMEST).  
But then I noted that Bernard Lowy is IN the book... To my mind, that makes  
the selection of you not the best thing to do. So instead I got in touch with  
OSU's John Schmitt. He agreed to do the task.

I received yesterday: Fungi that decay ponderosa pine. Robert L.  
Gilbertson. 197 pp. illus. University of Arizona Press, Tucson, 1974. \$9.50.

I'm enclosing a xerox of the back cover. Will you review the book for ECONOMIC

BOTANY? Let me know.

John

Someone should have a  
good word to say about  
that book! Sure. Send St.  
Gilbertson.



NORTHERN KENTUCKY STATE COLLEGE

Box 277  
Northern Kentucky State College  
Highland Heights, Kentucky 41076  
September 6, 1974

Dr. Bernard Lowy  
Louisiana State University  
Department of Botany  
Baton Rouge, Louisiana 70803

Dear Bernard:

The notice of The Boletaceae of North Carolina has been received. The opus is a typical Lowyan production (by that I mean "excellent"). Thank you.

Originally I had planned to go to Leningrad. But then the University of Michigan invited me to teach at the Douglas Lake Biological Station that summer. I chose teaching at a biological station over going to the USSR.

Cordially,

John W. Thieret, Chairman  
Department of Biological Sciences

JWT/dln

*The Society for*



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Box 277  
Northern Kentucky State College  
Highland Heights, Kentucky 41076  
June 12, 1974

Dr. B. Lowy  
Department of Botany  
Life Sciences Building  
Louisiana State University  
Baton Rouge, Louisiana 70803

Dear Bernard:

I'm sending a reprinting of Coker and Beers: The Boleti of North Carolina for "notice" in ECONOMIC BOTANY. I am certain you will be willing to write such a notice--a short notice of 150-200 words.

Cordially,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/dln

LOUISIANA STATE UNIVERSITY  
AND AGRICULTURAL AND MECHANICAL COLLEGE

BATON ROUGE · LOUISIANA · 70803

College of Arts and Sciences

DEPARTMENT OF BOTANY

27-VIII-1979

Dear John,

Saludos! I'm back at my desk after a summer of field work in Guatemala, mostly at the archeological site of Yaxha which by government decree must now be abandoned. Now the culture thieves take over!

I hope all goes well with you. Shall we meet before the Leningrad Congress next year?

Best wishes,

Bernard

P.S. Enclosed is the notice you asked me to write on June 12. By June 5 I had already left for Guatemala.

The Boletaceae of North Carolina. 1943. (paperbound reprint ed. 1974).  
William Chambers Coker and Alma Holland Beers. 96 pp. illus. (6 color p.).  
Dover Publications, Inc., New York. \$3.50

Among the fungi most easily recognizable on sight, even by those uninitiated into the arcana of fungus taxonomy, are the boletes. Their distinctive fleshy consistency and porous hymenium which is separable from the cap instantly sets them apart from other Agaricales. Yet it is paradoxical that in spite of the ease of placing them into a proper class (Boletaceae), their further identification presents a formidable problem and as Saccardo noted in 1888, the species are "multae difficillime dignoscuntur et delimitantur." Bearing testimony to the accuracy of this observation is the fact that almost a century later taxonomic specialists are still in disagreement regarding the delimitation of some genera and the validity of others.

Not mycologists alone but foresters and mycophagists too are interested in boletes not only because many species are mycorrhizal but the great majority of them for which there is reliable information are edible as well.

When the University of North Carolina Press published this work in 1943, it was a pioneer in its field in America. During the intervening 3 decades much has been contributed to our knowledge of North American boletes notably by Snell and Dick, Singer and by Smith and Thiers, but a revision of Coker and Beers has not been undertaken, a project that is overdue particularly in regard to taxonomic and nomenclatural usage. Only 3 genera were recognized by Coker and Beers and of the 73 species they included, 68 were placed in Boletus, 4 in Boletinus and 1 in Strobilomyces. Most contemporary taxonomists see the need for additional genera, among them Gyrodon, Gyroporus, Leccinum, Tylopilus, Suillus and Xerocomus.

The Dover reprint has made a gratuitous change of doubtful value in the original title of the book which was "The Boletaceae of North Carolina," substituting "Boleti" for "Boletaceae" and it also errs by printing the frontispiece in black and white instead of in color. The 6 color plates are reproduced with reasonably good fidelity as are the 5 plates of line drawings, but all the 55 photographic plates which illustrate species are inferior in quality to those of the original edition. One wonders about the source of a comment appearing in an advertisement to the paperbound edition, which refers to the boleti as "one of the safest groups of cup fungi." Anyway, they are safe.

Because of its low cost mycologists who do not own an original copy will consider having the reprint worthwhile.

B. Lowy

Louisiana State University

The Society for



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Box 277  
Northern Kentucky State College  
Highland Heights, Kentucky 41076  
February 19, 1974

Dr. B. Lowy  
Louisiana State University  
Department of Botany  
Baton Rouge, Louisiana 70803

Dear Dr. Lowy:

I have received your review of One Thousand American Fungi by Charles McIlvaine and Robert K. Macadam.

Thank you for preparing it for ECONOMIC BOTANY.

Cordially,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/dln



NORTHERN KENTUCKY STATE COLLEGE

28 January 1974

Dear Bernard,

I feel certain that you will be willing to prepare a notice of the republication of this item.

Best wishes.

Cordially,

John W. Thieret

I enjoyed your comments on Gray's comments on the Sacred Mushroom and the Cross. My feeling is that folks are more or less avoiding that book.

Hillside Bond  
RAG CONTENT

*The Society for*



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Box 277  
Northern Kentucky State College  
Highland Heights, Kentucky 41076  
January 25, 1974

Dr. B. Lowy  
Louisiana State University  
and Agricultural and Mechanical College  
Baton Rouge, Louisiana 70803

Dear Dr. Lowy:

I have received your review of The Use of Fungi as Food and in Food Processing by W. D. Gray. Thank you for preparing it for ECONOMIC BOTANY

Cordially,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/dln

*The Society for*



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Box 277  
Northern Kentucky State College  
Highland Heights, Kentucky 41076  
January 21, 1974

Dr. B. Lowy  
Louisiana State University  
and Agricultural and Mechanical College  
Baton Rouge, Louisiana 70803

Dear Dr. Lowy:

I have received your review of The Fungi. An Advanced Treatise.  
Thank you for preparing it for ECONOMIC BOTANY.

Cordially yours,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/dln



NORTHERN KENTUCKY STATE COLLEGE

Hillside Bond

RAG CONTENT

Box 277  
Northern Kentucky State College  
Highland Heights, KY 41076  
December 14, 1973

Dr. Bernard Lowy  
Department of Botany  
Life Sciences Building  
Louisiana State University  
Baton Rouge, LA 70803

Dear Bernard:

Report on your five reviews.

Flesh of the Gods. To appear in vol. 20<sup>7</sup> (4).

Mushrooms in Their Natural Habitats. Sent to New York on 29 November 1973.

The Fungi. An Advanced Treatise. vol. IV A. Sent to New York on 29 November 1973.

Narcotic Plants. (I think this is yours). To appear in vol. 21 (1).

Tropical Macrofungi. Just received; will be sent to New York within a couple of weeks.

I have sent for a review copy of vol. IV B of The Fungi. An Advanced Treatise. Hope one will reach you soon.

Best wishes.

Cordially,

John W. Thieret, Chairman  
Department of Biological Sciences

JWT/dln

The Society for



# ECONOMIC BOTANY

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Box 277  
Northern Kentucky State College  
Highland Heights, KY 41076  
December 12, 1973

Dr. B. Lowy  
Department of Botany  
Life Sciences Building  
Louisiana State University  
Baton Rouge, LA 70803

Dear Dr. Lowy:

ECONOMIC BOTANY has received for review a copy of the following publication.

The Use of Fungi as Food and in Food Processing, Part I. William D. Gray.  
100 pp. illus. CRC Press, Cleveland, Ohio, 1970. \$13.00.

The Use of Fungi as Food and in Food Processing, Part II. William D. Gray.  
89 pp. illus. CRC Press, Cleveland, Ohio, 1973. \$13.00.

Would you be willing to prepare a brief review of this work for us? If so, I shall send the book on to you. Books reviewed for ECONOMIC BOTANY become, of course, the property of the reviewer.

I am enclosing copies of the tables of contents.

Your review should not exceed 400 words in length; it will be due two months after the book reaches you.

May I hear from you?

Sincerely yours,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/dln  
Enclosure

LOUISIANA STATE UNIVERSITY  
AND AGRICULTURAL AND MECHANICAL COLLEGE

BATON ROUGE • LOUISIANA • 70803

*College of Arts and Sciences*

DEPARTMENT OF BOTANY

December 10, 1973

Dr. John W. Thieret  
Northern Kentucky State College  
Highland Heights, Ky., 41076

Dear John:

Together with the enclosed bit of homework for the day, I would like to request that another and rather more important tome, be sent to me for review. "The fungi. An advanced treatise. vol. IVB. Basidiomycetes and lower fungi." ed. G.R.Ainsworth, F.K.Sparrow & A.S.Sussman. Academic Press, New York & London. 1973. You have my review of vol. IVA in this series.

I also note that this is the fifth review that I have sent to you this year, none of them having yet appeared in the journal. Qué vergüenza !

Con los afectuosos saludos de siempre,

  
B. Lowy

The fungi. An advanced treatise. vol. IVA. A taxonomic review with keys:  
Ascomycetes and Fungi Imperfecti. Ed. G. C. Ainsworth, F.K. Sparrow  
& A. S. Sussman. 621 pp. illus. Academic Press, New York and  
London, 1973. \$20,00

According to Ainsworth and Bisby's 6th edition of the "Dictionary of the fungi", the Ascomycotina comprise 15,000 species (a conservative estimate) distributed among some 2,000 genera and the Deuteromycotina (Imperfect Fungi) are about equally numerous. The construction of keys even to representative genera of such a multitude of diverse fungi is a challenging task which is here achieved through the efforts of 13 specialists. The collaboration of the authors has produced a compendium of keys to most of the recognized orders, families and genera of Ascomycetes. But there is more than that, because apart from the keys which are the "raison d'être" of the work, the authors of most of the 11 chapters offer a pertinent introductory section, historical data, morphological notes, a consideration of taxonomic criteria, definitions, line drawings and photographs. The result is a small taxonomic encyclopedia of information on the Ascomycetes, of a kind never before assembled in a single volume. Since the keys do not attempt to include all known genera, almost all of them are prefaced with one of the qualifying terms "representative" or "important".

To mention a few of the longer entries, W. B. Kendrick and J. W. Carmichael illustrate 566 form-genera of Hyphomycetes on 67 plates but rather than attempt to present dichotomous keys for the identification of this unwieldy number of fungi, "key-lists" are given in which

genera are grouped according to their spore characters, in the Saccardo fashion. B. C. Sutton has keys to 157 genera of Coelomycetes; R. P. Korf's key to the Helotiales, the longest dichotomous key in the book, included 174 genera and in another key there are 95 genera of Pezizales; E. S. Luttrell's key to the Pleosporaceae has 66 genera; E. Müller and J. A. von Arx diagnose 57 genera of Diaporthaceae and D. I. Fenell keys out 53 genera of Eurotiales. The other contributors and their special taxonomic groups are: N. J. W. Kreger-van Rij - Endomycetales and basidiomycetous yeasts; C. L. Kramer - Protomycetales and Taphrinales; C.E. Yarwood - Erysiphales; R. K. Benjamin - Laboulbeniomycetes. Dr. Ainsworth has written a brief introductory chapter in which keys to all classes of the fungi are outlined. The taxonomic arrangement of the Ascomycotina follows the proposal recommended by Ainsworth (1966), now almost universally adopted, which includes the classes: Hemiascomycetes, Loculoascomycetes, Plectomycetes, Laboulbeniomycetes, Pyrenomycetes and Discomycetes.

There are over 100 illustrative plates, mostly of high merit, extensive bibliographies and indices to authors and taxa, the latter containing about 2,800 names. Not since the days of Engler and Prantl and Clements and Shear has a work of similar scope been attempted. The volume will become a "vade mecum" for the professional mycologist and for numerous other investigators who are concerned in any way with taxonomic matters related to the Ascomycetes.

B. Lowy  
Louisiana State University, Baton Rouge

One Thousand American Fungi. McIlvane, Charles & Robert K. Macadam.  
729 pp. reprint. illus. incl. 31 color plates. Dover Publications,  
Inc. New York. 1973. \$6.50

The mushroom hunter and mycophagist in the United States now has access to a number of manuals and guides which may satisfy either the modest requirements of the occasional collector or the more ambitious aims of the serious amateur. The choice may range from a pamphlet of a few pages to a book of several hundred, with illustrations in black and white or in color or both. In view of the friendly competition for the public's attention among the more lavishly illustrated of these publications, it is of special interest to see resurrected one of the first and most elaborate of the mushroom books for the tyro to have appeared in North America. In 1902 as now, the emphasis was on illustration and of the thousand species and "varieties" included, more than 130 of them are presented on 31 aesthetically pleasing and accurate color plates. In addition, some 20 full-page photographs and over 180 line drawings embellish the text. A notable feature of this early American guidebook to edible and poisonous mushrooms is the extensive, unhurried commentary on the idiosyncracies of species, giving details of habitat, distribution, spore size and color, morphological variations, culinary possibilities and other pertinent data. Fifteen pages of recipes impart the secrets of how to cook, fry, bake, boil, stew or "devil" the "toadstools" and there is a glossary of more than 700 terms, all but the most obvious of which show their derivation

from the Latin or Greek. Throughout the book almost all generic names and specific epithets are likewise translated. Since the turn of the century, because of the vastly increased knowledge in all branches of mycology, the names of many fungi have been changed to make them conform with the international rules of botanical nomenclature. Dr. Robert L. Shaffer has appended a list of 800 or more combinations used by McIlvaine and has made the necessary changes.

A brief article is ~~appended~~<sup>included</sup> on "raising mushrooms at home," but most modern devotees, for sundry reasons, may neither wish nor be able to take the first recommended step which is to "thoroughly cleanse the cellar and give it an entire covering of whitewash." Things quickly become still more discouraging and only the fanatically committed, devilishly ingenious or scatologically inclined would now willingly go so far as to "calculate how much fresh horse manure ... it will take to make a bed of desired dimensions solidly tramped," then "get it, put it in a compact heap, and keep it covered from rain."

In the manner of many contemporary works, regardless of size or pretensions, an account of the dangers of mushroom poisoning is not neglected. Yet some readers will surely be disappointed, for this section is neither as morbid, lurid nor admonitory as are some modern accounts which excell in their efforts to achieve a frenzied mycophobia.

The reprint edition of this informative, attractive and inexpensive paperback will be useful to anyone who has the slightest interest in the fungi.

B. Lowy

Louisiana State University

Baton Rouge

The use of fungi as food and in food processing. W. D. Gray. Pt. I, p.1-113 (1970); Pt. II, p.115-218 (1973). illus. Chemical Rubber Co. Press. Cleveland, Ohio. §

In 1959 Dr. Gray published his "Relation of fungi to human affairs," an account of the beneficial as well as harmful effects of fungi, but whereas that work was designed as a primer in industrial mycology, his present effort will interest a larger audience for it includes topics that range from edible and poisonous mushrooms and mycophagy to hallucinogenic mushrooms and ethnomycology. In a valuable chapter of about 25 pages, the potential uses of fungi as a world crop is carefully surveyed with emphasis on the possibilities of combining the "carbohydrate-synthesizing capacities of higher green plants with the protein-synthesizing capacities of fungi." The uninitiated are also introduced to some techniques and vicissitudes encountered in growing the few species of mushrooms that have traditionally been cultivated both in the Orient and Occident. These are the Padi-Straw mushroom (Volvariella volvacea) and Shiitake (Lentinus edodes) of the Far East; Tuber melanospermum, the much-praised European truffle and Agaricus bisporus, the most common commercial mushroom of the western world. A review is made of methods of preparation and the nutritional virtues of some fungus-fermented foods, the prinipal fungal agents of which are species of Rhizopus and Aspergillus. Among them are such exotics (from the western viewpoint) as miso, shoyu, tempeh and hamanatto, all as familiar in the Orient as are spinach, turnips or cabbage to supermarket shoppers here.

The book is in two parts, the first volume of which was originally published in 1970, the second in 1972 and this has apparently led to some inadvertent repetition. For example, the same outline drawing is given in

figure 14 (Pt. I) and in figure 1 (Pt. II), identified in the first as Amanita muscaria and in the other as an "agaric." On p.16 (Pt. I) photos of 4 species of Morchella are shown on a single plate, the same illustrations being repeated as separate figures on pp.154-155 (Pt. II). The reader is advised (p.15, Pt. I) to eat "only those morels that look exactly like those on figure 5," but on p.154 (Pt. II), a photo of one of these, Morchella hybrida, bears the comment that it should not be eaten unless one is "quite sure that he can distinguish it from M. bohemica." Of the ample total of 552 references at least 12 of them are repeated in the separate bibliographies. Although these are small details, the work lacks the unity it would have, had the separate parts been edited as a single volume. A combined index appears at the end of Pt. II.

There are numerous admonitions on the dangers of misidentification and about 20 pages are devoted to "mushroom poisoning and poisonous mushrooms," in which statistics and case histories (some quite lurid) are cited by various authorities, many of whom disagree as to which species are poisonous (76 are listed) and to what degree. The heavy emphasis on the possible dire consequences of eating a less than salubrious mushroom borders on mycophobia and I agree with the author when he says that "perhaps after all there is in our cultural heritage a vaguely remembered taboo (possibly imposed by early Christianity) against the eating of mushrooms." Nonetheless, I would take exception to the author's advice to avoid all members of the genus Amanita, since doing so excludes possibly the greatest delicacy of them all, A. caesarea. Having often enjoyed this noteworthy agaric I think it is unfortunate to reject it out of hand because of a possible error in identification. A good color photograph along with a proper description would make it quite as easy to identify as any of the 28 recommended but distinctly more plebeian

species that are included in the form of an illustrated, annotated manual.

The section on ethnomycology is welcome and timely and though the author offers a generally excellent summary of recent trends in this relatively new field, I believe that his supercilious treatment of Allegro's book "The sacred mushroom and the cross" exhibits a certain heresyphobia. Whatever may be the merits or failings of this learned but controversial tome, it is disconcerting that we should be "seriously advised to read the thoughtful review of Jacobsen and Richardson" (these are separate reviews in any case) before consulting the book itself, presumably because "Allegro's position has few if any adherents ... is at best in poor taste ... and may be regarded as offensive by many people." Readers may prefer to decide the issue for themselves.

Dr. Gray has assembled and summarized much informative, provocative and useful data (including incidentally, 24 obviously irresistible mushroom recipes) and mycologists, ethnobotanists and the general public alike will applaud his efforts.

B. Lowy

Louisiana State University

Baton Rouge

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B. Lowy

Louisiana State University

Baton Rouge

Tropical macrofungi. Some common species. M. H. Zoberi. XVI + 158 pp, illus. Hafner Publishing Company. New York. 1972. \$16.95

The author of this slender volume has compiled information on some 110 species of fungi, about 95 of them Basidiomycetes, the rest Ascomycetes largely from tropical West Africa (especially Nigeria), an area of great intrinsic mycological interest. We are told in the introduction that the book's purpose is to introduce the reader to "these insignificant-looking objects of the hidden world," and hints are made about revealing "secrets of Nature" and plunging "deep into the waters of learning." The author's enthusiasm is evident but there is some disappointment on all of these scores.

It is difficult to characterize this little book which seems to strive for scientific accuracy, yet errs abundantly in such simple matters as spelling and grammatical usage and in the omission of much relevant data. More pertinently, I found to my consternation that many of the descriptions of families, genera and species have been taken verbatim or nearly so from various sources, without proper acknowledgement being made to the authors. In the 58 pages devoted to the Agaricales, for example, the diagnoses of families and genera are taken from Singer's "Agaricales in modern taxonomy" (1962) and the author has indulged in the additional liberty of selecting from the diagnoses, more or less at random, such passages as suited his fancy. Likewise, the entry under "Auriculariaceae" includes only the genus "Auricularia" with two species, descriptions of which are taken almost verbatim from Lowy (1952). Other diagnoses, I believe, have also resulted from similar research.

"Martin (1961)" is frequently cited (obviously incompletely) but this author is deleted from the inadequate bibliography, as is "Ainsworth (1961)" which refers to the 5th edition of the well-known dictionary (why not the newest 6th?) a fact withheld from the "amateur naturalist" for whose benefit

this book was presumably written. The glossary finds room for such transparent terms as "rough", "pallid", "striate", "viscid," and "lobed", but omits "paraphysis", "perithecium", "mycelium", "saprobic" and "ectotroph." There are 46 good line drawings but these bear neither legends, identification of parts nor magnifications and the 16 color photographs fall so far short of acceptable standards that many of them are useless for purposes of identification. The chapter entitled "Keys to the families discussed" is a misnomer, for there are no keys, only lists of family, generic and species names. The title of one of Donk's papers is cited as "The genuine names proposed in polyporaceae," whereas the correct title is "The generic names proposed for polyporaceae."

In short, the subject of this book is surely a worthy one but its conception and execution are deplorably faulty. The price is incredibly inflated and I do not know who would be willing to pay so much for so little.

B. Lowy

Louisiana State University

Baton Rouge



NORTHERN KENTUCKY STATE COLLEGE

29 November 1973

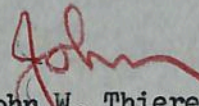
Dr. B. Lowy  
Department of Botany  
Life Sciences Building  
Louisiana State University  
Baton Rouge, LA 70803

Dear Bernard:

Feeling certain that you will, with alacrity, accept the task, I am sending the following book for review.

Tropical macrofungi. Some common species. M. H. Zoberi. 158 pp. illus. Hafner Publishing Company, New York, 1972. (price?)

Best wishes.

  
John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/mp

Mushrooms in their natural habitats. Alexander H. Smith. 626 pp, illus. 11  
figs. Sawyer's Inc., Portland, Oregon. 1949. Reprinted by Hafner Press, New  
York. 1973. \$14.95.

The increasing popularity of books which offer information on how to collect, identify and eat, to reject or avoid some of the more common wild mushrooms, has encouraged the publication of manuals which range from the short, simple and superficial to more complete, elaborate and scientifically accurate accounts. Because little or no previous knowledge of fungi is required by the prospective users of such works, heavy reliance is generally placed on illustrations, often in color, to guide the reader to the desired immediate goal - correct identification of the mushroom at hand.

When Dr. Smith's work first appeared in 1949, it was evident at once that a new high standard had been established for mushroom books. It included 231 species of the larger fungi (representing 84 genera) each of them meticulously described in terms that were neither oversimplified nor too technical to be fully understood by the layman. This has been reprinted verbatim. A unique feature of the 1949 edition was the inclusion in a separate volume, of 33 reels in color of natural habitat photographs of mushrooms, almost all of them strikingly beautiful. A stereoscopic viewer was provided for their appreciation. The entire set soon became a most sought-for collector's item and for many years now this has been virtually unobtainable.

Although the introductory treatment, description of species and keys to their identification are models of excellence in content and presentation, the text was designed to be used in conjunction with the brilliant photographs. Since these do not accompany the reprinted edition, no doubt because of the excessive cost in reproducing them, their lack seriously diminishes the utility of the volume ~~to~~ of the aspiring mycophile. But mycologists and other interested students who may have missed acquiring this when it was first offered will still find the text a worthy addition to their personal libraries.

B. Lowy  
Louisiana State University  
Baton Rouge

The Society for



# ECONOMIC BOTANY, INC.

DEVOTED TO THE PAST, PRESENT, AND FUTURE USES OF PLANTS BY MAN

Box 277  
Northern Kentucky State College  
Highland Heights, KY 41076  
October 12, 1973

Dr. Bernard Lowy  
Department of Botany  
Life Sciences Building  
Louisiana State University  
Baton Rouge, LA 70803

Dear Dr. Lowy:

ECONOMIC BOTANY has received for review a copy of the following publication.

The Fungi. An Advanced Treatise. Vol. 4a. A Taxonomic Review with Keys: Ascomycetes and Fungi Imperfecti. Edited by G. C. Ainsworth, Frederick K. Sparrow, and Alfred S. Sussman. 621 pp. illus. Academic Press, New York, 1973. \$20.00.

Would you be willing to prepare a brief review of this work for us? If so, I shall send the book on to you. Books reviewed for ECONOMIC BOTANY become, of course, the property of the reviewer.

Your review should not exceed about 400 words in length; it will be due two months after the book reaches you.

May I hear from you?

Sincerely yours,

John W. Thieret  
Review Editor  
ECONOMIC BOTANY



1401 Dixie Highway  
Covington, Kentucky 41011

LOUISIANA STATE UNIVERSITY  
AND AGRICULTURAL AND MECHANICAL COLLEGE

BATON ROUGE • LOUISIANA • 70803

College of Arts and Sciences

DEPARTMENT OF BOTANY

15-X-1973

Dear John,

Yes, you may send the book  
for review.

Are you trying to curb some of your  
more wordy (windy?) reviewers? Well,  
400 words or less should be ample  
for a taxonomic work.

I hope you are enjoying life in Kentucky.

Cordially,

Bernard Henry

**Principles of Fungal Taxonomy.** P. H. B. Talbot. 274 pp. illus. St. Martin's Press, New York, 1971. \$11.95.

When taxonomy was recently defined as a "low but necessary form of scientific endeavor," one was left with the distinct impression that the author of this evaluation begrudgingly conceded more than he would like to have done. Another has said that "taxonomy is deadly monotony." This was also more in the nature of a slur than a definition and was obviously a judgment concerning a matter of taste. One of the most provocative definitions was given by Dennis. "Taxonomy," he said, "is not a science, but an art, for its triumphs result not from experiment, but from disciplined imagination guided by intuition." But the fact that there are *descriptive* as well as *experimental* sciences has eluded some observers. Are astronomy and geology not sciences merely because they are nonexperimental? The general aims of science are description, explanation, and prediction; by these criteria, taxonomy clearly cannot be excluded. Nor are imagination and intuition incompatible with science, for the experience of many scientists testifies to the illuminating role that these factors can play. If these animadversions purport to demonstrate what taxonomy is not, what is taxonomy? Rogers succinctly observes, in a statement that comes much closer to the mark, that "ultimately, taxonomy is one sort of synthesis of almost everything that is known about living things."

Talbot's book on fungal taxonomy is singular for its brevity, lucidity, and elegance of style. The emphasis throughout is on taxonomic principles, and it is not until after the first hundred pages that the systematic presentation begins. Few textbooks that have come to my attention can boast of saying more in so short a space. Brief textbooks tend to be vague and to leave the student puzzled; long ones are often verbose and overwhelm the student with detail. Talbot has struck a fine balance with highly satisfactory results. The author has taken meticulous care in his exposition, so that his stated aim — "to give a concise account of fungi suitable for a short undergraduate course in mycology" — is more than adequately fulfilled.

Textbooks are traditionally compilations of knowledge taken from many sources. Whatever claim they may have to usefulness or originality must come from the discretion exercised in the

selection of subject matter and from the way this is organized and presented. This is precisely wherein the distinction of Talbot's book lies. There are a few questions of interpretation in the taxonomy of the Basidiomycetes on which I do not agree with the author, but these differences have been expressed elsewhere and perhaps have already been unduly emphasized. One must follow the dictates of his best judgment in matters of classification as in other spheres, but what is infrequently understood is that, as in all sciences, taxonomic statements are not dicta of a permanent nature but partake of the same quality of incertitude as other scientific data; hence they are constantly subject to change in the light of new evidence.

In Talbot's treatment, within the Myxomycota are included the Myxomycetes Plasmodiophoromycetes, Acrasiales, and Labyrinthulales. The latter two groups have long been considered to be taxa of uncertain affinities, and Olive has suggested (1970) that the Acrasiales and Myxomycetes be transferred to the Protozoa. The taxonomy of the Eumycota generally follows Martin's outline with the notable exceptions of the Plasmodiophoromycetes (included by Martin in the Eumycota) and the Dacrymycetales and Tulasnellales, which Talbot considers to be Holobasidiomycetes but which are interpreted as Heterobasidiomycetes by Martin and others. The section on lichens, to which less than a page is devoted, should probably be revised in future editions. If lichens are to be included, then they should merit greater attention than is presently given to them.

Dr. Talbot's book is a masterful short treatise on the morphology and taxonomy of fungi and, as well, a scholarly overview of their varied activities, special adaptations, and significance.

BERNARD LOWY  
Louisiana State University  
Baton Rouge, Louisiana



University of Southwestern Louisiana

Lafayette, Louisiana 70501

College of Liberal Arts  
Department of Biology

Box 915  
University of Southwestern Louisiana  
Lafayette, LA 70501  
30 April 1973

Hafner Press  
Macmillan Publishing Co., Inc.  
108P Brown Street  
Riverside, NJ 08075

Dear Sirs:

I am writing to request a review copy of each of the following publications.

Mushrooms in their natural habitats. Alexander H. Smith.  
1949 (1973).

Tropical macrofungi. M. H. Zoberi. 1972.

The review copies may be sent to the following person, who has agreed to review the books for ECONOMIC BOTANY.

Dr. Bernard Lowy  
Department of Botany  
Life Sciences Building  
Louisiana State University  
Baton Rouge, LA 70803

ECONOMIC BOTANY is an international and interdisciplinary journal. Its review section is one of the most extensive published.

We shall be grateful for your help.

Cordially,

*John W. Thieret*

John W. Thieret  
Review Editor  
ECONOMIC BOTANY

JWT/mp

*Let's hope this gets the books to you!*

Feb. 1, 1973.

Flesh of the Gods. Peter T. Furst ed. 302 pp, illus. 37 figs. Praeger Publishers. New York - Washington. 1972. \$10.00

Few themes have more fascination than those which reflect man's endless search for answers to the real as well as imagined problems of life and death. The spectre of personal annihilation remained intolerable until man's invention of religion promised him more hopeful alternatives. His ego rarely allowed him to accept death as a natural phenomenon and elaborate mythologies, past and present, testify to his preoccupation with the mysterium tremendum et fascinans of his existence. Carlyle's plaintive cry still echoes the sentiments of vast millions: "But whence? O heaven, whither? Sense knows not, faith knows not, only that it is through mystery to mystery, from God and to God." Anthropomorphic gods are common and man created his most powerful deities in his own image, endowing them with virtues and vices differing from his own principally in magnitude. In all societies religion has served to vindicate man's most extravagant hopes as well as to mitigate his profoundest fears.

Both in the Old World and the New, shamans devised mystical ceremonies for communicating with deities and served as sacred intermediaries for their fellow tribesmen who were not endowed with such esoteric knowledge. Early American civilizations including the Aztec, Maya, Inca and their predecessors discovered hallucinogenic plants that were capable, upon ingestion or inhalation, of producing vivid, other-worldly visions and of literally transporting man, if only briefly, to the dwelling places of the gods. The deeply impressive experiences of participants in shaman-conducted agapés fortified man's belief in the supernatural and probably also awakened hopes and intimations of immortality.

Nine of the ten essays in this compendium deal with some of the better known magical plants, their characteristics, distribution, physiological effects, sociological impact, chemical composition and most particularly, with their ceremonial use. Although Professor Weston La Barre's contribution to the book is placed last, his chapter on "hallucinogens and the shamanistic origins of religion" may very appropriately be read first because it offers an interpretation of the origin, evolution and meaning of religious cults, whether these are associated with the veneration of peyote, mushrooms or other sacred plants. Here are a few excerpts from Prof. La Barre's illuminating text. "Among human institutions, ... religions of the supernatural perhaps represent the purest form of subjective wish, for in the supernatural we deny the natural world, and in religion we willingly ignore the mundane in our yearning for the idea(1). A religion is a kind of group dream - the subjective poetry in which, supporting one another's faith or need to believe, we strive desperately to believe... Every religion, in historic fact, began in one man's "revelation" - his dream or fugue or ecstatic trance." For a memorable psychological and anthropological study of religion the reader is referred to La Barre's recent (1970) book "The Ghost Dance."

Almost all the chapters are based on previously published works of the authors and their presentation in book form is a useful device for acquainting a broader audience with the rapidly growing body of information on plant hallucinogens and the cults associated with them. Among the plants considered and their expositors are teonanácatl (mostly Psilocybe spp.) the sacred mushrooms of Mexico, reviewed by R. Gordon Wasson, Soma, recently identified by Wasson as Amanita muscaria, in a book which gives

massive evidence to support this interpretation, peyote (Lophophora Williamsii) the Mexican vision-producing cactus, presented by Peter T. Furst; - (This cactus is the raison d'être of the Native American Church now having a membership of about 250,000) - San Pedro (Trichocereus pachanoi) another hallucinogenic cactus used by shamans in northern Peru, by Douglas Sharon, who, in the manner of Carlos Castaneda, became apprenticed to a curandero; ayahuasca (Banisteriopsis caapi) a liana of the Malpighiaceae with a wide distribution throughout the Amazonian region, by Gerardo Reichel-Dolmatoff; marihuana (Cannabis sativa) by William A. Emboden, Jr.; tobacco (Nicotiana spp.) among the Warao Indians of Venezuela, by Johannes Wilbert; iboga (Tabernanthe iboga) an African psychotomimetic plant of the Apocynaceae, by James W. Fernandez; and in a chapter entitled "an overview of hallucinogens in the Western Hemisphere," by the distinguished ethnobotanist Richard E. Schultes, a number of hallucinogen-producing plants are discussed and illustrated, including tobacco, ayahuasca, Datura spp., morning-glories (Ipomoea and Rivea of the Convolvulaceae), mushrooms (Strophariaceae), paricá (Virola spp.) and other myristicaceous snuffs.

A formidable array of plant hallucinogens is reviewed and there is included a bibliography of 336 titles. The unexpected and highly significant role that naturally occurring psychoactive substances have played in establishing man's rapport with and belief in the supernatural is only beginning to be recognized.

B. Lowy

Louisiana State University

Baton Rouge

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B. Lowy

Louisiana State University  
Baton Rouge

LOUISIANA STATE UNIVERSITY  
AND AGRICULTURAL AND MECHANICAL COLLEGE

BATON ROUGE · LOUISIANA · 70803

College of Arts and Sciences

DEPARTMENT OF BOTANY

16-V-1973.

Dear John,

Thanks for your kind words, also for the honorarium.

I very much appreciate the courtesies that you and Mildred showed me during my short visit.

I wish you both a good summer and lots of luck at your new teaching post.

Would you please send me your exact new address in Kentucky?

All best wishes,

Bernard

Enclosed is my review of Smith's reprint.

I leave for Oronoke June 5.



University of Southwestern Louisiana

Lafayette, Louisiana 70501

College of Liberal Arts  
Department of Biology

8 May 1973

Dr. Bernard Lowy  
Department of Botany  
Life Sciences Building  
Louisiana State University  
Baton Rouge, LA 70803

Dear Bernard:

Finally the "honorarium" funds have come through.

I certainly wish to thank you for the fine talk you gave here. It was a highlight--perhaps the highlight--of the last few years--at USL, where highlights are few and far between.

I have heard many comments from students to the effect that the presentation was great. It was indeed.

Best wishes.

Cordially,

John W. Thieret

LOUISIANA STATE UNIVERSITY  
AND AGRICULTURAL AND MECHANICAL COLLEGE

BATON ROUGE · LOUISIANA · 70803

*College of Arts and Sciences*

DEPARTMENT OF BOTANY

12-I-1973

Dear John:

My 6-months in Peru was partly routine (Univ. de Piura) but also exhilarating (Amazonas, Madre de Dios) and among other things, I have some new data on the use of the "San Pedro" cactus, a specimen of which I brought back with me. It will be ready for your inspection whenever you come down here.

If you are still holding "Flesh of the Gods" you may send it to me for review.

Saludos and all best wishes for the new year.

B. L.

**Introduction to Fungi.** John Webster. 424 pp. illus. Cambridge University Press, New York, 1970. \$12.50.

Mycological research and publication have flourished during the past 2 decades, but there are still relatively few textbooks in English to serve as a guide for the elementary student wishing to pursue the study of this rapidly growing discipline. As is clearly implied in the title of his book, Professor Webster's presentation is directed to the beginner. A perusal of the contents shows that his approach is taxonomic and morphological with considerable emphasis given to pathology where this is warranted by the economic importance of certain fungus pathogens, including the mildews, rusts, and smuts. The author has chosen to adopt Ainsworth's "general purpose classification" and, as he correctly observes, it should "not be surprising that different authorities do not use the same scheme." Nevertheless it may be argued whether the beginning student should be kept entirely innocent of existing alternate schemes or of the possible justification for their use. In spite of the author's view that there is "no great merit in burdening the student with arguments in favor of this or that system," a brief discussion of the reasons for preferring a specific taxonomic system would be very appropriate for the orientation of the tyro to whom this matter might otherwise remain an impenetrable mystery. In the absence of such consideration, a greater disadvantage is perhaps the likelihood that the student will remain quite indifferent to all schemes of classification and be disposed to accept uncritically any to which he is introduced. Moreover, the acceptance or rejection of a particular scheme is of less importance to the student than reinforcing one of the fundamental tenets of science, the spirit of constructive dissent.

Substantial reasons have been found for excluding the Myxomycota from the fungi since, as the author states, they may be "more closely related to the Protozoa." But if they are to be retained (as I believe they should) among the fungi, whether for convenience or for didactic reasons, then they would merit far greater consideration, even in an introductory work, than Professor Webster has seen fit to give them. Of the four classes included in the Myxomycota (Acrasiomycetes, Hydromyxomycetes, Myxomycetes, Plasmodiophoromycetes), the first three of these are dismissed in three brief paragraphs, and the student is referred to other sources for additional information on them. In view of Professor Webster's hope to encourage students "to go into the field and look for fungi," his summary treatment of these groups — particularly the Myxomycetes, which are among the most common, attractive, and easily collected forms — will hardly be conducive to fulfilling that hope. In the paragraph dedicated to the Myxomycetes, the reader is informed that "the zygote undergoes nuclear division to form a multicellular plasmodium." This of course is not the case. Septa are never formed in the plasmodium, which remains multinucleate but unicellular. The Fungi Imperfecti as a class are not considered (although selected form-genera are discussed and have a place among the Ascomycetes to which they are most intimately related) because their inclusion "would have made the work much longer." The Trichomycetes and Laboulbeniales are deleted, the latter appearing in the general classification without further comment. The Laboulbeniales are among the most interesting of fungi and may be found in virtually any habitat that is populated by insects. A random collection

of beetles would most probably reward the collector with more than one species of these handsome and highly specialized parasites to which Thaxter devoted a lifetime of research, published in five memorable tomes that are a classic in mycological literature. It seems a pity to limit the knowledge of the student to the bare fact that Laboulbeniales exist.

The Tulasnellales (including the Auriculariaceae, Dacrymycetaceae, and Sporobolomycetaceae) are placed among the Hymenomycetes, a disposition required by Ainsworth's classification. Here it would surely have been appropriate to direct the student's attention to the controversial nature of at least part of this treatment. Some students may consider classification to be a disagreeable though unavoidable necessity, but one may question the prudence of encouraging them to disregard the reasons for a discriminating approach to taxonomy and the need for a careful scrutiny of a tool that is not only indispensable to the practicing taxonomist but which serves as the framework for orientation of the student in a first course.

The points I have raised, though substantial and often overlooked in elementary treatises, are not of a kind that significantly diminish the usefulness of the text. Professor Webster's style is lucid and pleasant to read. There are 242 illustrations, almost 200 of them drawings, nearly all of which have exceptional merit. The photographic work, too, is of an almost uniformly high order of excellence. Over 900 titles are listed in the bibliography, and there is an adequate index which, however, has been set in 6-point type, a trifle small for comfortable reading. Professor Webster's attractive book is likely to gain wide currency among students in the English-speaking world, wherever introductory mycology is taught.

B. LOWY

Louisiana State University  
Baton Rouge, Louisiana

#

Reprint costs attached.

Dr. Lowy

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Thank you for all assistance.

Joseph G. Sutton  
Manager of Publications  
The New York Botanical Garden

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B. LOWY

Louisiana State University  
Baton Rouge, Louisiana

attractive presentation of morphology, physiology, and ecology, an objective at least quantitatively achieved. Approximately one-third of the text is devoted to each of these topics, including also the utilization of fungi by man and the role of fungi as saprophytes, parasites, predators, and symbionts. But whereas the physiological and ecological parts are successfully treated, considering the introductory nature of the work, the same cannot be said of some of the taxonomic interpretations.

The student is informed that the term "Phycomycete" is rejected and is replaced by the expression "lower fungi," but adequate reasons for supporting this position other than that the Phycomycetes include "unrelated organisms" are not given. A beginning student deserves and requires somewhat more by way of explanation to vindicate this departure from accustomed usage. It is not the departure itself that is to be decried but rather the missed opportunity to explain to students something of the mechanism and philosophy of taxonomy. In like manner, the deletion of the Myxomycetes might have provided a strong motive to discuss the justification for this preference of the author. It was only yesterday that the Myxomycetes were included (though rather arbitrarily, perhaps) in mycology textbooks, and it would have been appropriate to signify the reasons for their apparent demise (or is it only an eclipse?). Instead, without mention of their still generally prominent position in mycological works and despite the lavish attention they have received and continue to receive from many mycologists, we find that the Myxomycetes appear to have suffered the fate of the Snark, for from this book they have indeed "softly and suddenly vanished away."

The information on Heterobasidiomycetidae (particularly the Tremellales) is disappointing. Not only is there no reference made to important differences in the terminology of the basidium (the illustrative summary in Ainsworth and Bisby's *Dictionary* would have been helpful here) but Donk's term "metabasidium" is incorrectly defined in the glossary. No attempt is made to summarize pertinent discussions on the basidium by Martin, Rogers, Donk, or Talbot, to name a few of the more prominent mycologists who have contributed much to our understanding of this problem. Other oversights in reference to recent taxonomic literature of the Basidiomycetes include the works of Lemke, Lentz, and Welden on Thelephoraceae; R. Peterson on Clavariaceae; Snell and Dick on Boletaceae; Singer,

Smith, and Hesler on Agaricaceae; and Harrison on Hydnaceae. Phylogeny of the fungi is touched on in several places but recent references to this subject of ample debate are few.

Almost all the illustrations, both photographs and line drawings, are more than adequate. The great majority of them was borrowed from numerous properly acknowledged sources. A glossary followed by author and subject indices concludes the work.

A textbook cannot be all things to all people. Nor should it be expected that it will be encyclopedic (unless it is by Chadeffaud). It is more commonly a well-planned and carefully written compromise which includes selected topics destined for use by a select range of students. Dr. Moore-Landecker's book is to be welcomed in this spirit.

B. LOWY

Louisiana State University  
Baton Rouge, Louisiana

**Fundamentals of the Fungi.** Elizabeth Moore-Landecker. 482 pp. illus. Prentice-Hall, Englewood Cliffs, New Jersey, 1972. \$16.00.

Until quite recently, the appearance of a textbook for students in mycology was an unusual event, but since 1968 four such works in English have been published, each of them having a distinctive approach. Although morphology and taxonomy will continue to be the basis for a correct understanding of the fungi, it is evident that in recent years more experimental work has been consistently emphasized. This trend will in all likelihood continue. The thrust of Moore-Landecker's book is to offer a balanced and

Principles of Fungal Taxonomy. P. H. B. Talbot.  
274 pp. illus. St. Martin's Press, New  
York, 1971. \$11.95.

When taxonomy was recently defined as a "low but necessary form of scientific endeavor," one was left with the distinct impression that the author of this evaluation begrudgingly conceded more than he would like to have done. Another has said that "taxonomy is deadly monotony." This was also more in the nature of a slur than a definition and was obviously a judgment concerning a matter of taste. One of the most provocative definitions was given by Dennis. "Taxonomy," he said, "is not a science, but an art, for its triumphs result not from experiment, but from disciplined imagination guided by intuition." But the fact that there are *descriptive* as well as *experimental* sciences has eluded some observers. Are astronomy and geology not sciences merely because they are nonexperimental? The general aims of science are description, explanation, and prediction; by these criteria, taxonomy clearly cannot be excluded. Nor are imagination and intuition incompatible with science, for the experience of many scientists testifies to the illuminating role that these factors can play. If these animadversions purport to demonstrate what taxonomy is not, what is taxonomy? Rogers succinctly observes, in a statement that comes much closer to the mark, that "ultimately, taxonomy is one sort of synthesis of almost everything that is known about living things."

Talbot's book on fungal taxonomy is singular for its brevity, lucidity, and elegance of style. The emphasis throughout is on taxonomic principles, and it is not until after the first hundred pages that the systematic presentation begins. Few textbooks that have come to my attention can boast of saying more in so short a space. Brief textbooks tend to be vague and to leave the student puzzled; long ones are often verbose and overwhelm the student with detail. Talbot has struck a fine balance with highly satisfactory results. The author has taken meticulous care in his exposition, so that his stated aim — "to give a concise account of fungi suitable for a short undergraduate course in mycology" — is more than adequately fulfilled.

Textbooks are traditionally compilations of knowledge taken from many sources. Whatever claim they may have to usefulness or originality must come from the discretion exercised in the selection of subject matter and from the way this is organized and presented. This is precisely wherein the distinction of Talbot's book lies. There are a few questions of interpretation in the taxonomy of the Basidiomycetes on which I do not agree with the author, but these differences have been expressed elsewhere and perhaps have already been unduly emphasized. One must follow the dictates of his best judgment in matters of classification as in other spheres, but what is infrequently understood is that, as in all sciences, taxonomic statements are not dicta of a permanent nature but partake of the same quality of incertitude as other scientific data; hence they are constantly subject to change in the light of new evidence.

In Talbot's treatment, within the Myxomycota are included the Myxomycetes Plasmodiophoromycetes, Acrasiales, and Labyrinthulales. The latter two groups have long been considered to be taxa of uncertain affinities, and Olive has suggested (1970) that the Acrasiales and Myxomycetes be transferred to the Protozoa. The taxonomy of the Eumycota generally follows Martin's outline with the notable exceptions of the Plasmodiophoromycetes (included by Martin in the Eumycota) and the Dacrymycetales and Tulasnellales, which Talbot considers to be Holobasidiomycetes but which are interpreted as Heterobasidiomycetes by Martin and others. The section on lichens, to which less than a page is devoted, should probably be revised in future editions. If lichens are to be included, then they should merit greater attention than is presently given to them.

Dr. Talbot's book is a masterful short treatise on the morphology and taxonomy of fungi and, as well, a scholarly overview of their varied activities, special adaptations, and significance.

BERNARD LOWY

*Louisiana State University*

*Baton Rouge, Louisiana*

Dr. Lowy

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Joseph G. Sutton  
Manager of Publications  
The New York Botanical Garden

## Book Reviews

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BERNARD LOWY  
Louisiana State University  
Baton Rouge, Louisiana

Econ. Bot. 26(4). 1972

**Synoptic Plates of Higher Marine Fungi.** Jan and Erika Kohlmeyer. 3rd revised and enlarged edition. 87 pp. illus. Verlag von J. Cramer, Lehre, Germany, 1971. \$8.00.

Despite the multitude of biological studies that have been made on many aspects of marine life, the mycoflora of oceans was largely neglected until the pioneering work of Barghoorn and Linder appeared in 1944. Almost 2 decades later, Johnson and Sparrow (1961) completed their *Fungi in Oceans and Estuaries*, presently the definitive treatment of this challenging field of investigation. With the recent emphasis on studies of the potentialities of the marine environment, and with exhortations on the dangers of its gross contamination by man, it is pertinent to draw attention to the role of fungi in marine habitats. The contribution of saprobic species in the degradation of organic substrates and the infection of marine plants and animals by fungus parasites needs closer scrutiny. This outline should stimulate further research.

The authors of this slender volume made a notable contribution to our knowledge of marine fungi in their *Icones Fungorum Maris*, published in seven parts during the years 1964 to 1969. These publications, with their 90 plates of drawings, have become a standard taxonomic reference. As the title of the Kohlmeyers' newest paper indicates, they present in condensed form

a description of the principal kinds of higher marine fungi, together with dichotomous keys and diagnostic characteristics of 190 species of which 164 are illustrated with drawings of spores. In all, there are 135 species of Ascomycetes, 51 Fungi Imperfecti, 3 Basidiomycetes, and 1 of Mycelia Sterilia. The sketches were not drawn to a common scale, but spore dimensions are found with the abbreviated species descriptions. A useful feature of this synoptic guide is a list of substrates upon which the fungi have been reported, including algae, flowering plants, wood, bark, and sand. Over 150 references are given. The work concludes with a species index.

B. LOWY  
*Louisiana State University*  
*Baton Rouge, Louisiana*

**The Physiology of Reproduction in Fungi.** Lilian E. Hawker. Facsimile of the 1957 edition. 128 pp. illus. Hafner Publishing Company, New York, 1971. \$6.95.

This small volume reviews some basic aspects of fungus physiology with emphasis on sexual and asexual adaptations for reproduction and on the effects of environment and nutrition on sporulation. Although the account still has usefulness as an introductory statement, the hiatus of some 15 years in the literature since its first publication may be an inconvenience to the contemporary student.

B. LOWY  
*Louisiana State University*  
*Baton Rouge, Louisiana*

RECIPIENT—Write reply—retain necessary copies for your files and return remaining copies to sender.

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TO Dr. Bernard Lowy  
Department of Botany  
Louisiana State University  
Baton Rouge, Louisiana 70821

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M (212) 933-9400

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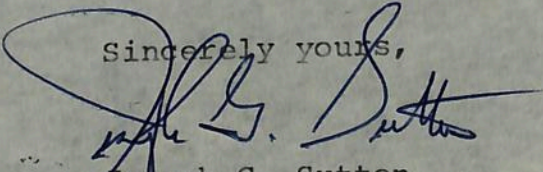
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Joseph G. Sutton  
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JGS;bp

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University of Southwestern Louisiana

Lafayette, Louisiana 70501

17 Sept 1972

Dear Bernard,

Yours of the 11th received. Now there is an original opening sentence!

The plan—to send the book to LSU and then to use a Peruvian (or even Panamanian) address—is truly splendiferous. It will be implemented.

Here is the contents;:-

An overview of hallucinogens in the western hemisphere. Schultes.

Tobacco and shamanistic ecstasy among the Warao Indians of Venezuela.  
Johannes Wilbert.

The cultural context of an aboriginal hallucinogen: Banisteriopsis caapi.  
Gerardo Reichel-Dolmatoff.

> | The San Pedro cactus in Peruvian folk healing. Douglas Sharon. ✓

To find our life: peyote among the Huichol Indians of Mexico. Peter Furst.

The divine mushroom of immortality. R. Gordon Wasson.

What was the soma of the Aryans? R. Gordon Wasson.

Tabernathe iboga: narcotic ecstasis and the work of the ancestors. James W. Fernandez.

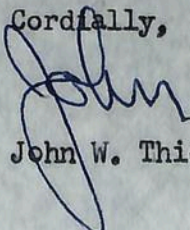
> | Hallucinogens and the shamanic origins of religion. Weston La Barre.

As much as I hate to be the bearer of bad tidings, I must inform you (in answer to your wondering about the matter) that B. Lowy is not in the lit. cited.

I realize, of course, that one person can hardly be completely informed in all of the above specialties. But I regard you as a prime prospect for reviewing the book because of your interest in and knowledge of one important aspect of the work.

Best wishes.

Cordially,

  
John W. Thieret



University of Southwestern Louisiana

Lafayette, Louisiana 70501

2 Sept 1972

Dr. B. Lowy

Dear Bernard:

How good to hear from you!

Sorry to hear about the Britannica affair. But, as you suggest, maybe in three years. I certainly shall continue to urge the inclusion of the ETHNOMYCOLOGY article.

A brand-new book—just the thing for you to review—has arrived:

Flesh of the Gods. The Ritual Use of Hallucinogens. Edited by Peter T. Furst.

Among the contributors are Wasson, Furst, Wilbert, Sharon, Emboden, Fernandez, LaBarre, Reichel-Dolmatoff, and Schultes.

I am wondering if the book has a good chance of reaching you in Peru..?? It would be great to carry a review of it by Lowy with his address given as Universidad Nacional Tecnica de Piura, etc., rather than LSU. We have so many reviews by Louisiana folks, *giving their La. addresses,*

If you think the book has a chance of getting through AIRMAIL, and if you would agree to the address idea, I'll ~~MMMM~~ send it on. Otherwise I'll wait to send it to you at LSU in December.

Let me hear.

Best wishes,

Cordially,

*John*  
John W. Thieret

The book covers not just fungi but peyote, Banisteriopsis, Cannabis, Tabernanthe, etc.



UNIVERSIDAD NACIONAL TÉCNICA DE PIURA

PIURA

11-IX-1972

Piura, Peru

Dear John:

I'm glad to hear about the new book. The title indicates an emphasis on mushroomic hallucinogens (besides being a catchy title) since "Flesh of the Gods" is a translation of the Nahuatl word "Teonanacatl," used by the natives of pre-Columbian Mexico and specifically applicable to the sacred mushrooms. Of the contributors you name I know Schultes and Wasson personally (the latter from only a single meeting years ago) and Weston LaBarre through correspondence. I would be interested in knowing who the other contributors are.

I may have told you about my controversy with Wasson over an interpretation concerning mushroom stones, which impelled him to write an abusive letter to me. I replied in a measured but firm manner and he subsequently wrote me an apology. Since then, in correspondence, he has expressed "excitement" over my "discoveries". I wonder whether he has remembered this in his contribution to the book or whether he even includes any reference to my papers (which excited him so much) in his bibliography.

Although I am eager to see the book, I think it would be best to send it to me at LSU. My receipt of mail from home has been irregular. I received nothing for the first month and have reason to believe that more than one piece of mail has been lost. Another reason for waiting is that in all likelihood I shall want to refer to certain of the authors' publications which I do not now have at hand and are unavailable to me here. Our university library, by the way is pitifully inadequate.

.....  
... ..

If you prefer to have a Peruvian address on my review go ahead! My grant does not end, technically, until December 31 at which time the Fairy Godfather who is the Director of the Fulbright Commission will wave his magic wand .. and I will turn into a Coonass (sp ?). Anyway, the review cannot possibly appear before July 1973 (at which time ~~XXX~~ I'll probably be elsewhere in Latin America) (would a Panamanian address please you ?), so I see no impediment in the use of a Peruvian address.

Best regards,

as ever,

B. Lowy



UNIVERSIDAD NACIONAL TECNICA DE PIURA

PIURA

J. THIERRY  
UNIVERSITÄT  
LAPPACHTLE

21 August 1972

Dear John:

Greetings from the Urwald from which I have very recently returned and now find myself in the "civilized" place called Piura. I am ever more convinced that the Urwald is the place to be - on a more or less permanent basis, if possible I think you will understand this partial misanthropy.

The university has just concluded a 3-month strike and classes began almost with my appearance on the scene. A nice case of the dissociation of cause and effect. But the problems are far from over. The Government insists on having greater control (it pervades almost everything already) and the university wants greater autonomy. Of course this is an oversimplification but it is certainly one of the fundamental differences in viewpoints. The completely controlled press is filled with rhetoric about the "gloriosa Revolución" but most observers agree that it has scarcely made an improvement in the lives of the people. The most conspicuous scapegoat is Communism, here defined as anything opposed to Government ideas and practices. This regime has been successful (ie still in power) since 1968, a relatively long time for a military government in these parts.

A very tactful and I think sincere letter from Judith N. Eshleman, Senior Editor of the "Britannica," was forwarded to me. My paper is being returned because it was "next-to-impossible to include additional articles at this late date," and the hope is expressed that "we will be able to work together in the future." Altogether, I think this was a soft rejection and it may be that the next edition "in about three years," will have an article of mine on ethnomycology.



UNIVERSIDAD NACIONAL TÉCNICA DE PIURA

PIURA

You will be starting a new semester again soon and you have my best wishes for a successful year. I expect to be home by Christmas. Should you come across any mycological publications that you think I could review for "Economic Botany," please send them to me at ISU.

With kindest regards,

B. Lowy

LOUISIANA STATE UNIVERSITY  
AND AGRICULTURAL AND MECHANICAL COLLEGE

BATON ROUGE · LOUISIANA · 70803

College of Arts and Sciences

DEPARTMENT OF BOTANY

June 1, 1972

Dear John,

Your unflinching kindness is something I deeply value! — Of course, should you some day reject one of my small literary efforts, I might change my mind. Gratitude, they name is Vanity!

Anyway, it appears that you are not done in your extravagance because I have been invited to join the Editorial Board of Mycologia for 1973-77.

If I hear from Mr. York (I have not written to him), I shall let you know. I now plan to leave at the end of this month, rather later than I had expected, because of unfinished business. Should you think it appropriate, I'll write to Mr. York after my arrival in Peru, unless he or another B.B. representative gets in touch with me before that time.

Un abayo cordial de

Box 915  
University of Southwestern Louisiana  
Lafayette, LA 70501  
23 February 1972

Prentice-Hall, Inc.  
Englewood Cliffs, NJ 07631

Gentlemen:

I am writing to request, for ECONOMIC BOTANY, a review copy of the following book.

Moore-Landecker, E. 1972. Fundamentals of the fungi.

The review copy may be sent directly to the following person, who has agreed to prepare the review for us.

Dr. B. Lowy  
Department of Botany  
Louisiana State University  
Baton Rouge, LA 70803

Thank you for your cooperation in our efforts to keep the review section of our journal as comprehensive as possible.

Cordially,

John W. Thieret  
Review Editor

JWT/mp

Dear Bernard,

Thanks for the Flora Neotropica contribution and the mushroom stone opus.  
And congratulations!

I'll try to persuade the publishers of *Taxonomy of Fungi Imperfecti* to send a copy to you. Thank you for calling the item to my attention.

Congrats, also, on the Fulbright and the proposed trip to Peru and maybe Ecuador.

I'm thinking about trying to get a Fulbright to go somewhere—preferably (both for my sake and for the sake of the natives) someplace where English is the language.

Best wishes.

Cordially,

  
John W. Thieret

received: 17-II-72

LOUISIANA STATE UNIVERSITY  
AND AGRICULTURAL AND MECHANICAL COLLEGE

BATON ROUGE . LOUISIANA . 70803

*College of Arts and Sciences*

DEPARTMENT OF BOTANY

February 11, 1972

Dear John:

I can take a hint ! Here are your "200 - 300 words."

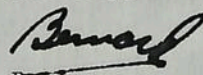
I have just heard of a new book that I think I would like to sink my teeth into, if you could persuade the publishers to send me a copy for review. "Taxonomy of *Fungi Imperfecti*." Bryce Kendrick ed. University of Toronto Press, Toronto 181, *Canada*.

I am in a rather festive mood, but not because of the impending madness of Mardi Gras. I have a Fulbright grant which together with a sabbatical leave, will allow me to spend about 5 months in Peru later this year on a teaching-research project. I also hope to get into SE Ecuador.

You have showered me with books but I have sent you none. The enclosed copy has the singular advantage of your not having to review it.

With best regards,

Cordially,



~~B. Lowy~~

Fundamentals of the fungi. Elizabeth Moore-Landecker. 1972. 482 pp. illus. Prentice-Hall, Inc. New Jersey. \$16.00.

Until quite recently, the appearance of a textbook for students in mycology was an unusual event but since 1968 four such works in English have been published, each of them having a distinctive approach. Although morphology and taxonomy will continue to be the basis for a correct understanding of the fungi, it is evident that in recent years more experimental work has been consistently emphasized and this trend in all likelihood will continue. The thrust of Moore-Landecker's ~~book~~ is to offer a balanced and attractive presentation of morphology, physiology and ecology, an objective which is at least quantitatively achieved. Approximately one third of the text is devoted to each of these topics, including <sup>also</sup> the utilization of fungi by man, and the role of fungi as saprophytes, parasites, predators and symbionts. But whereas the physiological and ecological parts are successfully treated, considering the introductory nature of the work, the same cannot be said of some of the taxonomic interpretations.

The student is informed that the term "Phycomycete" is rejected and is replaced by the expression "lower fungi," but adequate reasons for supporting this position other than that the Phycomycetes include "unrelated organisms" are not given. A beginning student deserves and requires somewhat more by way of explanation to vindicate this departure from accustomed usage. It is not the departure itself that is to be decried but rather the missed opportunity to explain to students something of the mechanism and philosophy of taxonomy. In like manner, the deletion of the Myxomycetes might have provided a strong motive to discuss the justification for this preference of the author. It was only yesterday that the Myxomycetes were included,

(though rather arbitrarily, perhaps), in mycology textbooks and it would have been appropriate to signify the reasons for their apparent demise (or is it only an eclipse?). Instead, without mention of their still generally prominent position in mycological works and despite the lavish attention they have received and continue to receive from many mycologists, we find that the Myxomycetes appear to have suffered the fate of the Snark, for from this book they have indeed "softly and suddenly vanished away."

The information on Heterobasidiomycetidae (particularly the Tremellales) is disappointing. Not only is there no reference made to important differences in the terminology of the basidium (the illustrative summary in Ainsworth and Bisby's "Dictionary" would have been helpful here) but Donk's term "metabasidium" is incorrectly defined in the glossary. No attempt is made to summarize pertinent discussions on the basidium by Martin, Rogers, Donk or Talbot, to name a few of the more prominent mycologists who have contributed much to our understanding of this problem. Other oversights in reference to recent taxonomic literature of the Basidiomycetes include the works of Lemke, Lentz and Welden on Thelephoraceae, R. Peterson on Clavariaceae, Snell and Dick on Boletaceae, Singer, Smith and Hesler on Agaricaceae and Harrison on Hydnaceae. Phylogeny of the fungi is touched on in several places but recent biographical references to this ample subject of debate are few.

Almost all the illustrations, both photographs and line drawings are more than adequate and the great majority of them have been borrowed from numerous properly acknowledged sources. A glossary followed by author and subject indices concludes the work.

A textbook cannot be all things to all people. Nor should it be expected that it will be encyclopedic (unless it is by Chadeffaud). It is more commonly

a well planned <sup>and</sup> carefully written compromise which includes selected topics  
destined for <sup>use by</sup> a select range of students. Dr. Moore-Landecker's book is to  
be welcomed in this spirit.

B. Lowy

Louisiana State University

The Thicket - 16-II-72

Synoptic plates of higher marine fungi. J. & E. Kohlmeyer. Third revised and enlarged ed. 87 pp. illus. 16 pl. J. Cramer, Lehre, Germany. 1971. \$8.00

Despite the multitude of biological studies that have been made on many aspects of marine life, the mycoflora of oceans was largely neglected until the pioneering work of Barghoorn and Linder appeared in 1944. Almost two decades later, Johnson and Sparrow (1961) completed their "Fungi in oceans and estuaries," presently the definitive treatment of this challenging field of investigation. With the recent emphasis on studies of the potentialities of the marine environment and exhortations on the dangers of its gross contamination by man, it is pertinent to draw attention to the role of fungi in marine habitats. The contribution of saprobic species in the degradation of organic substrates and the infection of marine plants and animals by fungus parasites needs closer scrutiny. This outline should stimulate further research.

The authors of this slender volume made a notable contribution to our knowledge of marine fungi in their "Icones fungorum maris," published in 7 parts between the years 1964-69. These publications, with their 90 plates of drawings, have become a standard taxonomic reference. As the title of their newest paper indicates, they present in condensed form a description of the principal kinds of higher marine fungi, together with dichotomous keys and diagnostic characteristics of 190 species of which 164 are illustrated with drawings of spores. In all, there are 135 species of Ascomycetes, 51 Fungi Imperfecti, 3 Basidiomycetes and one species of Mycelia Sterilia. The sketches have not been drawn to a common scale, but spore dimensions are found with abbreviated species descriptions. A useful feature of this synoptic guide is a list of substrates upon which the fungi have been reported, including algae, flowering plants, wood, bark and in sand. Over 150 references are given and the work concludes with a species index.

B. Lowy

Louisiana State University

# ECONOMIC BOTANY

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# ECONOMIC BOTANY

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Box 915  
University of Southwestern Louisiana  
Lafayette, LA 70501  
4 February 1972

Dr. B. Lowy  
Department of Botany  
Life Sciences Building  
Louisiana State University  
Baton Rouge, LA 70803

Dear Bernard:

Without first asking your leave I am sending the following item for review.

Synoptic plates of higher marine fungi. An identification guide for the marine environment. 3rd revised and enlarged edition. Jan and Erika Kohlmeyer. 87 pp. illus. Verlag von J. Cramer, Lehre, Germany, 1971. \$8.00.

I presume that you will be willing to prepare one of your scholarly reviews. Perhaps 200-300 words. And in a month or two.

Best wishes. And thanks.

Cordially yours,

John W. Thieret  
Review Editor

P.S. I'm sending two copies.

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## TO THE BOOK REVIEW EDITOR

Herewith is your review copy of the book described below

Introduction to the History of Mycology

Author: G. C. Ainsworth

PUBLISHER Cambridge University Press

PLACE OF PUBLICATION New York or New York and London

PUBLICATION DATE November 24, 1976

SIZE 6 x 9

PAGES xi + 359

FRONT & BACK MATTER Epilogue, notes, chronology  
and bibliography, names index, subject index

ILLUSTRATIONS 7 tables, 106 figures, frontispiece  
in color

ISBN 0 521 21013 5

LC 75-21036


PRICE \$27.50



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Formerly Director of the Commonwealth Mycological Institute,  
Kew

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