

## Book reviews

**Books for consideration to review in this section should be posted to the Editor-in-chief.**

### Rating system

- ★★★★★ Exceptional/brilliant.
- ★★★★☆ Excellent.
- ★★★☆☆ Good'
- ★★☆☆☆ Has merit
- ★☆☆☆☆ Not worth reading

### **Fungal Pathogenesis in Plants and Crops, Molecular Biology and Host Defense Mechanisms, 2<sup>nd</sup> Edition**

by P. Vidhyasekaran

CRC Press (Taylor & Francis Group)

2007, 509 pages, hard back

ISBN 978-0-8493-9867-4.

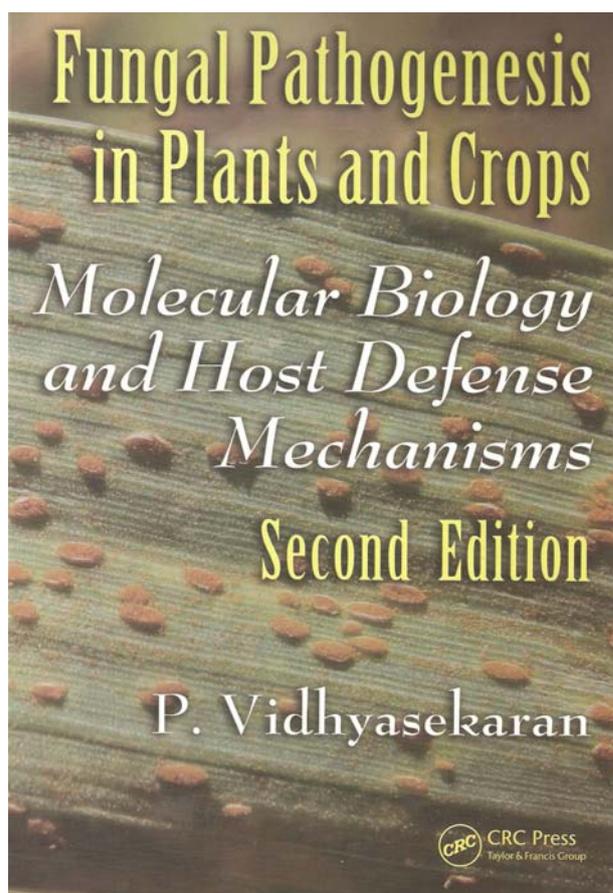
This book was first published in 1997, however since then several groundbreaking molecular biology studies have taken place, including reclassification, communications between the plants and fungal pathogens and cloning of numerous disease resistant genes. These and many other new discoveries are claimed to be included and updated in the new edition. The book contains 8 Chapters with many subsections and deals with topics ranging from plant signals in pathogens to disease resistance and genes.

To check whether the books were really up to date I looked at the references lists. This is conveniently provided at the end of each chapter. So I picked Chapters where most recent research is likely to have occurred. Unfortunately to say there were very very few recent references (I found some 2005 refs and a 2007 handbook by the same author). Thus the book does not appear to have kept abreast of the literature.

As a basic text this book has a lot of data and is certainly important for plant pathologists and anyone wanting a background in fungal pathogenesis in plants.

The print is quite small so this has the advantage that there is a lot of text for your

money, but the disadvantage of being difficult to read. The paper is not great quality but the layout is good enough, but not inspiring. There is a lot of text and very few diagrams to help illustrate points. So don't expect your students to read this eagerly. There is a reasonable index provided.



**Rating:** ★★★

**Recommendation:** The book should be available in all Universities and colleges and

any research institute where research in any aspect of plant pathology is carried out or where plant pathology is taught.

Cost: £111.00

Order from: [www.taylorandfrancisgroup.com](http://www.taylorandfrancisgroup.com)

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### **Potato Health Management**

Edited by Dennis A. Johnson

APS Press

2008, 261 pages, paper back

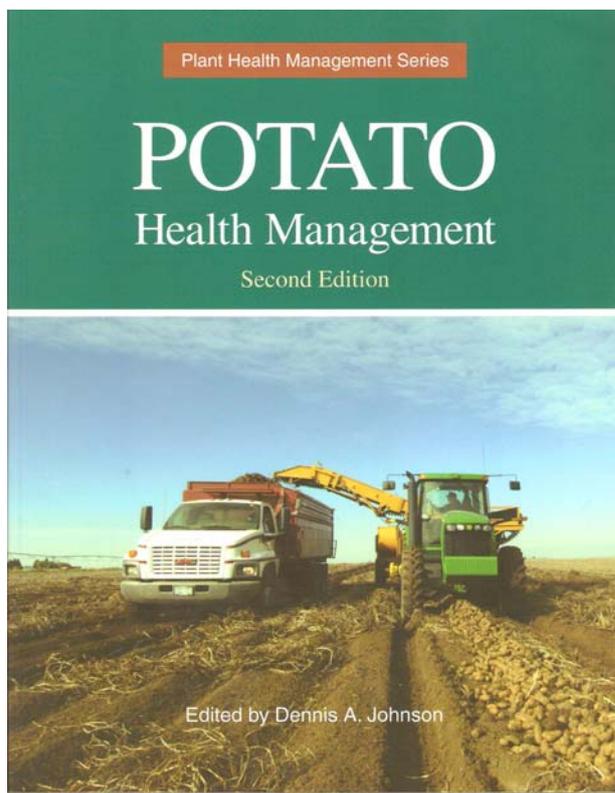
ISBN 978-0-89054-353-5.

This book was first published in 1993 and sold more than 7000 copies. The new edition updates topics with recent research findings with the first edition providing a solid foundation for the revision. A scientist with knowledge for each Chapter was selected to be the principle author and chose coauthors as they desired.

Well everything you want to know about growing potatoes is in this book. The first five chapters deal with potato health management and discusses a holistic approach to growing potatoes. There is no single correct way to grow potatoes – it depends on numerous local factors and constraints! Chapter's 6-10 deal with preparation and planting, and Chapter 11 and 12 deal with organic potato production and home garden production respectively. Chapters 13 to 23 are all about managing disease and thus are important to mycologists, plant pathologists and extensionists alike.

Since I am a mycologist I took a close look at the Chapter (21) on foliar diseases. This is a very nicely laid out and illustrated Chapter. The disease symptoms and life cycles are nicely illustrated. The main diseases are incorporated here and ways to avoid such diseases by management strategies are clearly outlined. Boxes are provided and summarize the main points.

Like many APPS books, this is very nicely laid out and it is not expensive. The paper and print is of excellent quality. The text is a bit small but the numerous diagrams and colour plates inspire one to read on. The arrangement of Chapters, headings, sub-headings and subtitles has been nicely thought out and it is easy to maneuver your way around the book. I particularly like the boxes which summarize information.



**Rating:** ★★★★★

**Recommendation:** The book should be available in all universities, colleges, schools, farms and even homes and any research institute where research in any aspect of plant pathology is being carried out, or where horticulture or plant pathology is taught. It would be very useful to any person interested in growing potatoes.

Cost: US\$ 89.00

Order from: <http://shopapspress.stores.yahoo.net/>

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### **Mineral Nutrition and Plant Disease**

Edited by Lawrence E. Datnoff, Wade H.

Elmer and Don M. Huber

APS Press

2007, 278 pages, hard back

ISBN 978-0-89054-346-7.

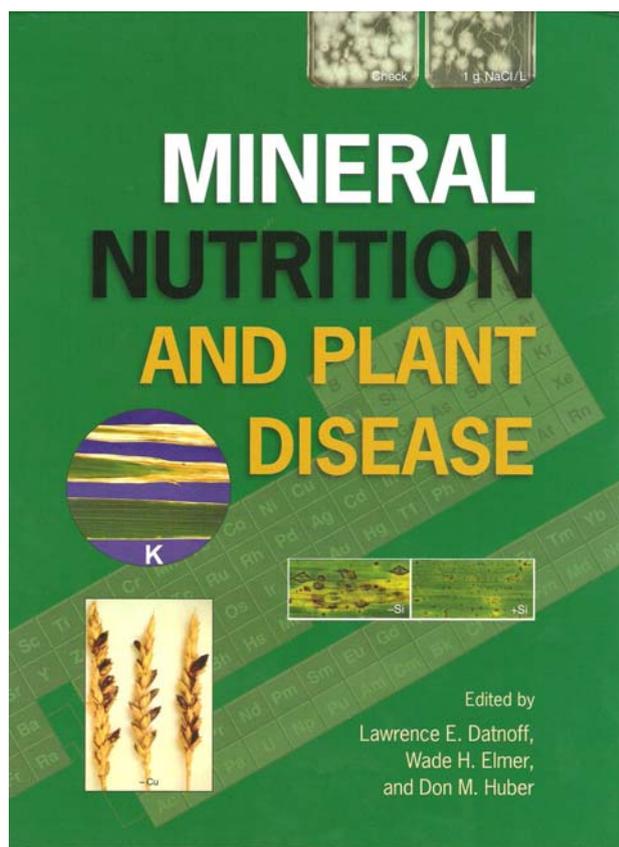
This aim of this book is to summarize the current understanding of the effects of mineral nutrition on plant diseases and claims to be a comprehensive presentation of the current knowledge of mineral nutrition and its affect on plant diseases. Each of the 18 Chapters is written by experts in each field.

Chapter 1 deals with the chemistry of essential plant nutrients in soil and can be considered as an overview to the following more detailed Chapter on each topic. Chapter 2

is also broad and deals with the physiological role of the minerals in the plant.

Chapter 3 onwards become more specific each chapter dealing with nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, zinc, copper, chlorine, molybdenum, boron, nickel, silicon and aluminum and the relationship with plant disease.

I looked more closely at the Chapter on silicon having not known of this elements role in plant disease. The Chapter comprises a *Introduction*, in which silicon in soils and plants is discussed, *Silicon in soil*, *Silicon in plants* where the role and presence of silicon in plants is discussed and the *Use of silicon to control plant diseases*. How *Silicon can slow the epidemic development of some diseases* and the way *Silicon controls diseases in plants* is then discussed. This is a generous list of references at the end of the Chapter, although all but one 2005 references were pre 2005.



Like the above APPS book, this is very nicely laid out (but not as nice) and it is not expensive. The paper and print is of excellent quality. The text size is a good and there are diagrams and colour plates to break up the

layout. The arrangement of Chapters, headings, subheadings is good and it is easy to maneuver your way around the book.

**Rating:** ★★★★★

**Recommendation:** The book should be available in all universities, colleges, and research institutes where research in any aspect of plant pathology is being carried out, or plant pathology is taught.

**Cost:** US\$ 89.00

**Order from:** <http://shopapspress.stores.yahoo.net/>

### Aquatic Ecosystems - Trends and Global Prospects

Edited by Nicholas V.C. Polunin

Cambridge University Press

2008, 482 pages, hard back

ISBN 978-0-521- 83327-1.

This is an edited book in which various aspects of aquatic ecosystems are dealt with in 23 Chapters by more than 100 scientists. The idea of the book “was to bring together many of the best qualified ecologists to consider at a global level the present and possible future states of all the Earth’s aquatic ecosystems”.

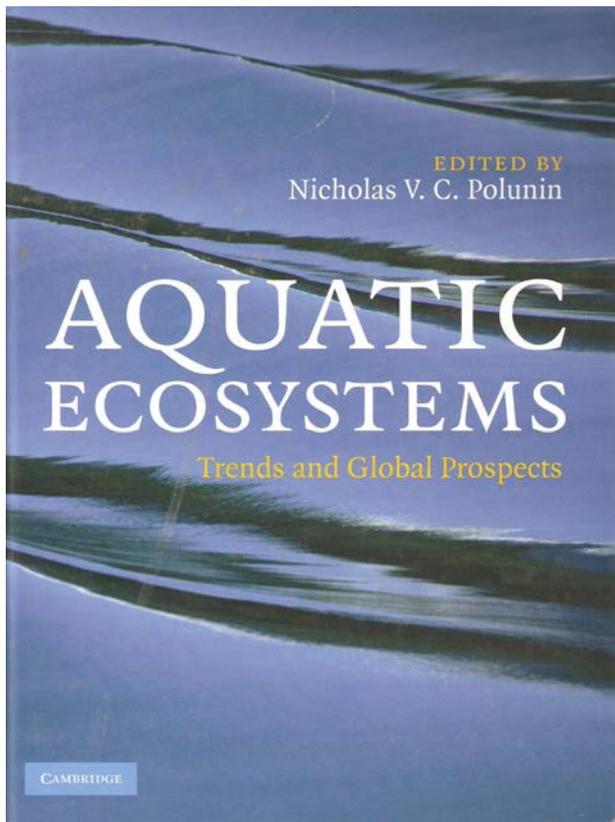
The reason I asked to review the book is that I am interested in aquatic ecosystems, both in the lignicolous fungi in freshwater and the marine fungi the mangroves and oceans. I wanted to establish how well (if at all) these topics were addressed. Firstly I will address the various chapters and then return to the fungi

Chapter 1 is an introduction to climate, people, fisheries and aquatic ecosystems and after that the book is divided into IV parts. Part I deals with flowing waters, with Chapter 2 dealing with prospects for streams and rivers; Chapter 3, groundwater ecosystems; and Chapter 4, flood plains. Part II deals with still waters. This includes the future of small lakes and ponds (5), future of large freshwater lakes (6) and salt lakes (7). In Part III freshwater wetlands are explored including temperate and tropical freshwater wetlands (9 & 10) and temperate peatlands (8), while coastal wetlands (11, saltmarshes; 12, mangroves; and 13, estuaries) are discussed in Part IV. Part V deals with rocky shores including rocky shores (14), kelp ecosystems (15) and coral reefs (16). Part VI has chapters on soft shores, while Part VII

deals with the vast marine ecosystems. There is a synthesis in Part VIII which addresses trend and global prospects in aquatic ecosystems.

The print is quite small so this has the advantage that there is a lot of text for your money, but the disadvantage of being difficult to read. The paper is good quality and there are adequate diagrams and pictures. This is a good book dealing with the future of aquatic ecosystems.

Now to return to the fungi. Well this book does claim to deal much with biodiversity, but does not deal with the fungi.



**Rating:** ★★★★★

**Recommendation:** The book should be available in all Universities and colleges and any research institute where research in any aspect of aquatic ecosystems is carried out or where aquatic ecology is taught.

**Cost:** £80.00

**Order from:** <http://www.cambridge.org/uk/default.asp>

All reviews by K.D. Hyde