New Books

Microscopy & Fungi

Marcel Lecomte

Spiral bound paperback, 260 pp.

Full colour throughout. ISBN: 978-9603452-0-9 Publ. by www.amfb.eu/

Price (not incl. postage): £45.95 from Summerfield Books, www.summerfieldbooks.com

For anyone who wants to progress into the world of microscopy in order to increase their chances of identifying fungi, there can be no better guide than this. Here you will find every aspect of microscopy covered.

It begins with the basics of the microscope itself: what type of microscope to choose, what the various parts of the microscope do and the accessories you may want. How the lenses work and the many different types available along with their advantages and disadvantages. How to attach a camera and the types of camera available; essential if you wish to have a record of what you are viewing. This section, like all others in the book are comprehensively illustrated with

MCROSCOPY

FUNGI

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photographs and line drawings

Chemicals and stains are an essential part of the microscopist's tools to help prepare and view the important parts of the tissue. This guide has perhaps the most comprehensive and clearly described discussions of these chemicals I have seen. The formulas for each dye are given and in most cases photographs of actual stained tissues, spores, etc are shown so that you know what you should be seeing under the microscope. I stain tissues all the time but there are numerous dyes, techniques and treatments here of which I was unaware and look forward to trying in the coming season.

The different groups of fungi are discussed and the special features unique to each are comprehensively illustrated and described. Fungal structures have many technical terms applied to them and here you should be able to find a clear definition and illustration of almost any obscure term you might come across.

Quite often, for any particular group or microscopic structure the author will provide several alternative methods of preparation by well



known mycologists, pointing out their advantages, difficulties and practicalities - very useful if a particular technique is not working well for you, you can try one of the others.

For example, as someone who spends a lot of time trying to view the specialised cystidia on the cap surface of *Russula* species I am particularly excited to see four pages devoted to this topic and the different techniques available.

This book was originally in French, appearing in various versions and parts but the author has now gathered and consolidated all of these into one edition and has had the text translated into English. The translation is, on the whole, excellent with only minor oddities which are easily dealt with. The author is to be congratulated on making such a useful (I would say essential) work available to the English-speaking world.

I should state that I had a very tiny part in checking over some of the phrases that the author wanted advice on but otherwise had no other input to the book at all.

Studying the Discomycetes from initiation to advanced levels

René Dougoud

Softback, perfect bound, 82 pages, full colour throughout.

ISBN: 978-2-9587555-1-5 Publ. by Ascomycete.org

Price £22.50 from Summerfield Books, www.summerfieldbooks.com

Iwas particularly pleased to receive this book as I am almost entirely an agaricologist and know really very little about ascomycetes, so a very useful addition to my library.

The book begins with an overview of the discomycetes, their classification, principal taxonomic characters, ecology and feeding methods (saprotrophy, parasitism, etc). As with the book above this is beautifully illustrated with high quality photos on very glossy paper.

The basics of how to prepare samples and the chemicals and dyes needed are covered, providing an excellent instructional guide to those like myself hoping to become more familiar with their study.

Descriptions of their anatomy, spores, paraphyses, etc are extremely detailed, again with comprehensive illustrations and photographs showing exactly what you should be

seeing under the microscope.

There is a chapter on preserving material and starting your own herbarium and even a brief oversight of the new molecular techniques of sequencing and the analysis of any sequences generated - more and more an essential part of modern mycology. Like the previous book this is entirely in English, and of a very high standard.

I think this these two books would make a perfect pair for anyone wanting to get deeper into mycology. Both are great examples of clarity, easy to understand and written by mycologists who really know their topics.

Highly recommended.

Geoffrey Kibby



