

## Book Review

# THE PLANT DISEASE CLINIC AND FIELD DIAGNOSIS OF ABIOTIC DISEASES

reviewed by Francis W. Holmes

**The Plant Disease Clinic and Field Diagnosis of Abiotic Diseases**, 1997, by Malcolm C. Shurtleff and Charles W. Averre III: 8 1/2 x 11 inch hard-cover book, x + 245 pages, 32 drawings, 115 color photos in 6 plates, 31 references, 18 appendices (6 with the chapters and 12 at the end), an 11-page index and a 37-page glossary (containing 1,460 definitions). ISBN #0-89054-217-1. Published by APS Press, American Phytopathological Society, 3340 Pilot Knob Rd., St. Paul, MN 55121-2097, tel. 800-328-7560 in U.S. or Canada. Price (includes shipping) = US \$79.00 in U.S.A., US \$99.00 elsewhere.

Although this excellent book is essential for someone who plans to operate a diagnostic laboratory, it's also highly valuable to anyone who communicates with such a facility, who collects samples for diagnosis in such a lab, or who makes diagnoses in the field. The authors wisely content themselves with less than half the book for their 5 chapters (intro, plant disease clinic, gathering information, diagnosis in the field, and diagnosis in the clinic) and then give more than half the book to many tables and to lists that will help everyone. Indeed a specialist who sets up a clinic may well know all the terms in the huge glossary; here the benefit is MOSTLY to an arborist or other user, who will need to understand what the clinic pathologists are saying! Again, a shade tree specialist or arborist might wonder about a book that talks about ALL plants: I can assure you that nearly everything in this book is relevant to trees. As someone who specialized (after Dutch elm disease) in salt injury to trees, I was delighted with

Appendix #5.2, which shows the degree of tolerance to salt and to salt-spray for many plants (very many of them trees). There are 9 tables of measurements and conversions, lists of testing laboratories in U.S. and Canada, an appendix on problems from plant interactions (like harm from root exudates of black walnut), a long list of plants that tolerate highly acid or alkaline soils, a list of sterilizing agents, recipes for making 259 of the culture media used in plant diagnosis, 39 formulas for fixatives and stains for microscopic study of fungi plus a separate appendix on staining bacteria for study under the microscope, a table of cleaning solutions, a discussion of ways to control temperature and humidity, a table of the ranges of pH indicator materials and a table of buffers to maintain certain pH levels, directions for how to collect, prepare and mail the specimens needed for a diagnostic lab to make a diagnosis, and how to preserve such specimens for later reference. The bibliography is rather short and omits many books of broad scope (for example I saw no mention of Pirone). But most of us have long since had to compile large libraries and have gathered bibliographies about our work: we won't demand that this book do that job, too! I'm delighted to add this book to my reference library. I'm sure every reader of this review will come to the same conclusion!

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