

about exciting discoveries relating to transcriptional changes and several other biochemical events that are beginning to define the nature of the events which occur during the onset of sporulation. These studies are almost totally neglected in this book. The book is obviously of great value to applied microbiologists and those specifically interested in bacterial spores, but is not the best source of information for the general microbiologist interested in acquiring a broad understanding of recent advances in research on bacterial spores.

R. S. HANSON

*Department of Bacteriology,
University of Wisconsin, Madison*

Plant Pathogens

Phytotoxins in Plant Diseases. Proceedings of the NATO Advanced Study Institute, Pugnoli, Italy, June 1970. R. K. S. WOOD, A. BALLIO, and A. GRANITI, Eds. Academic Press, New York, 1972. xx, 530 pp., illus. \$26.50.

While this conference was in progress in Italy, in the United States southern corn leaf blight was spreading north to cause the greatest economic loss to a single crop in a single year ever recorded. In many respects, the 1970 corn blight epiphytotic was a replay of an epiphytotic that occurred two decades earlier, Victoria blight of oats. Each was caused by a new race of a fungus belonging to the genus *Helminthosporium* and in each case a metabolic product of the fungus was found to be selectively toxic to plants susceptible to the disease. Results with victorin, the toxin involved in Victoria blight of oats, reawakened interest in the role of toxins in plant diseases and stimulated much of the work reported in this volume.

The book is made up of 20 major papers and more than 30 brief contributions from approximately 60 participants. Most of these deal with the production, bioassay, chemistry, and mode of action of toxic metabolites produced by fungal and bacterial plant pathogens. A few are concerned with effects of toxins on host metabolism or ultrastructure and the remainder are devoted to a variety of special topics. Although errors occur (two were found in a random check of 40 literature citations) most of the articles are well written and adequately documented.

This volume should be valuable not only to plant pathologists but also to

those interested in the chemistry of natural products and in plant growth regulation. A large number of phytotoxins have recently been chemically characterized and some, for example fusaric acid, a diterpenoid glucoside produced by the almond pathogen *Fusicoccum amygdali*, appear to be active growth regulators. A better known example of a phytotoxin with growth regulating properties is, of course, gibberellin.

Readers searching for new concepts or stimulating discussions will be disappointed with this book. Most of the authors merely restate previously published views and positions. In a number of areas of controversy, only a single school was represented at the conference. This may account for the lack of spirited debate during the recorded open discussions. In one instance the editors note that the subject under discussion had already been covered adequately, and the same comment would have been appropriate in many other places. A sharper editorial pencil would have deleted the noninformative material. On balance, the book can be recommended as a useful reference.

HARRY WHEELER

*Department of Plant Pathology,
University of Kentucky,
Lexington*

Preservation

Public Archeology. CHARLES R. MCGIMSEY, III. Seminar Press, New York, 1972. xiv, 266 pp. \$9.50. Studies in Archeology.

All of us, the public, are the stewards of the past. If we are to learn about the past and save any evidences of it for the future we must act now, for, as McGimsey points out in this book, "Our generation cannot postpone the decision to work toward this preservation, for the forces of destruction are multiplying and gaining momentum. The next generation cannot study or preserve what already has been destroyed." The future of the past is "public archeology."

The book is aimed at archeologists, legislators, and citizens concerned with the archeological heritage of their locality or state. A basic principle is proposed that "no individual may act in a manner such that the public right to knowledge of the past is unduly endangered or destroyed" for "no one owns rights to an archeological object or to archeological data," not even the

archeologist. We must aim toward establishing that principle if the past is to become a body of usable information rather than a hodgepodge of antiquities.

The first part of the book is devoted to a short description of archeological practices and to the responsibilities of the archeologist, the amateur archeologist, and the public concerning archeological sites, and ends with a view of the plight of archeology today.

The heart of the text consists of three sections containing very practical advice on designing a state archeological program and a state antiquities act. Here the author uses his firsthand experience in establishing the Arkansas Archeological Survey and obtaining the antiquities legislation in that state, both of which are the best in the nation.

More than two-thirds of the text is a sourcebook of state-by-state information collected for many years on the various archeological programs and local and state legislation. The last section is on federal legislation affecting archeological preservation.

The book should be required reading for all students of archeology, professional and nonprofessional. It is an invaluable source of information for archeologists, legislators, and the public interested in learning what programs in archeology are provided in each state and what legislation is available for the preservation of archeological resources and support of archeological projects.

CARL H. CHAPMAN

*Department of Anthropology,
University of Missouri,
Columbia*

Photochemical Change

Photochemistry and Spectroscopy. J. P. SIMONS. Wiley-Interscience, New York, 1971. xiv, 344 pp. + plates. \$16.50.

Simons has written an interesting elementary book which will be useful to students who want to enter the field of spectroscopy and photochemistry or want to understand the conversation of peers who have done so. The book will probably find extensive use in introductory courses in the subject area, although I expect that most teachers will add more comprehensive supplementary texts chosen to suit focused interests within the broad field.

The first chapter, which is 25 percent