Phytopathology

1934 Volume 24 p. 1132

The Genus Diaporthe Nitschke and Its Segregates. By Lewis E. Wehmeyer. University of Michigan Studies, Scientific Series, Vol. IX. 11×8 inches. Pp. XII + 349. With 18 plates. University of Michigan Press, Ann Arbor, Mich. 1933. Price, \$3.50.

In this book the author, who has published extensively on Pyrenomycetes for more than a decade, undertakes the immense task of bringing order into the welter of more than 650 species that have accumulated in the genus Diaporthe since it was erected by Nitschke 67 years ago. Four genera, Diaporthopsis, Apioporthe, Diaporthella and Cryptodiaporthe, are recognized in addition to the basic genus, of which an amended definition is supplied. To this redefined genus, cited as Diaporthe Nit. Emend., are referred 70 different species not counting the recently described cranberry parasite, Diaporthe vaccinii, which is stated in an addendum to be closely related to D. phascolorum. The latter species is definitely made to include as varieties two parasites of economic importance that have enjoyed specific rank under the binomials D. sojae and D. batatis. The pathogenic form known under the binomial D. (Phomopsis) citri likewise is shorn of its independent status, being listed as a variety of D. medusaea.

The segregated genera show a smaller, yet still respectable, membership, 19 approved species being listed under Cryptodiaporthe, 3 under Diaporthella, 8 under Apioporthe, and 6 under Diaporthopsis. Two species of Diaporthopsis are cited as not having been examined, and 1 receives attention in the chapter on "Doubtful species" together with 18 species of Diaporthe. Excluded from Diaporthe are 89 species, among them the very familiar Endothia parasitica, and also the rose-canker parasite, Diaporthe umbrina, which is held to be referable to Cryptosporella. A final chapter entitled "Species not seen" gives 149 names, all under the genus Diaporthe, together with the original descriptions in Latin, English, German, French, Spanish, or Magyar attaching to them.

The morphological criteria are accorded primary importance in distinguishing the various species from one another. Host relationships are, however, kept clearly in view by giving separate treatment to plurivorous forms under each genus or other convenient group of host plants on which they occur. Such separate treatment includes citations of synonyms, individual host species, countries from which the host relationship has been reported, pertinent exsiccati, herbaria or individual collections in which material representative of the host relationship is found, and conidial connections together with appropriate discussion of the fungus in relation to the particular host plant or group of host plants in question. The semi-diagrammatic drawings illustrating outward habits, though hardly elegant, are yet workmanlike and consistent in execution. Especially to be commended are the figures of the spores that appear at a uniform magnification of × 1000—a uniformity certainly very desirable in any comparative work. The usefulness of the volume is enhanced by a well conceived index and by adequate keys to the species of the several genera treated. In a period of enfeebled finances it may not be inappropriate to add that the price of the book appears unusually reasonable.—Charles Drechsler, United States Department of Agriculture, Washington, D. C.