

Book review

M. B. Ellis: More dematiaceous Hyphomycetes. Commonwealth Mycological Institute, Kew, Surrey, England, 1976; pp. 507; price £ 15. Obtainable from Commonwealth Agricultural Bureaux, Central Sales Branch, Farnham Royal, Slough SL2 3BN, England.

Part I of the Dematiaceous Hyphomycetes (Ellis, 1971) was warmly welcomed by mycologists (e.g. by the present reviewer in this journal 78 (1973): 73. The second part which has just appeared supplements the first with another 732 species. With these two volumes, M. B. Ellis rounds off his assiduous and painstaking life's work on dematiaceous Hyphomycetes at the Commonwealth Mycological Institute, Kew.

The layout is the same as in Part I, with most emphasis on the illustrations of material studied by the author. Genera exhaustively treated and provided with keys include *Oidiendron*, *Sporidesmium*, *Pollaccia*, *Spilocaea*, *Endophragmia*, *Scolecobasidium*, *Veronaea*, *Pseudospiropes*, *Periconia*, *Drechslera* (more species, including *Exserohilum*), *Ulocladium*, *Embellisia* and *Cladosporium* (in the last genus the key is arranged according to host plants); in the genera *Stigmina*, *Phaeoisariopsis*, *Cercospora*, *Stenella* and *Phaeoramularia*, numerous species are arranged by host plants; several new species are described for *Alternaria*. In some genera new species are included from 1970 up to 1975 and some new genera are incorporated. The genera are arranged in fairly systematic order and bear the same numbers as in Part I; those which are newly inserted have the number of the most related genus plus an A or B. Species already treated in Part I are not mentioned again, not even in the keys. The same procedure has unfortunately been adopted in the key to the genera. This key of 167, mostly dichotomous couplets is again written without any subdivision and is difficult to survey. The fact that many genera treated in Part I have been omitted, detracts much from the value of Part II. Any identification requires much experience, otherwise the user may lose himself. A critical comparison of genera scattered over the two volumes is not possible from the key, nor from comments in the descriptions, but only by comparison of illustrations. The identification process is thus more a matter of working with a picture book than with a key so that the user is forced to look carefully for important criteria. Ellis has recommended to me to look first for a known genus that is similar to the fungus to be identified and then to turn over the leaves in its neighbourhood. It is admittedly very difficult to express in words the often inconspicuous differences between various characters of these numerous taxa, but some synoptic plates and at least a collation of the keys to the fungi of both volumes would have been indispensable.

The omission of species treated in Part I has some unfortunate consequences, e.g. in *Cladosporium* the only plurivorous species would be *C. tenuissimum*, whilst the most important species are described in Part I. This genus is unsatisfactorily treated and apparently heterogeneous; it shows to where one may be led if pure culture work is categorically refused. Similarly, the treatment of *Phialophora* is no improvement on the work of other authors and makes identification impossible because of the splitting of the species over the two volumes. The more species are known, the more genus delimitation becomes problematic, e.g. *Pleurophragmium*, *Dactylaria* and *Veronaea* are rather vaguely distinguished whilst *Catenularia* is understood in quite a heterogeneous way. Studies of pure cultures are likely to bring about some major changes.

This volume cannot be used without simultaneous consultation of Part I; conversely Part I needs this supplement and can no longer be used without it. Users must again be warned that, even in both parts together, all species ever described are not included in the genera. The introductory suggestion that the taxonomic publications listed in the 'Bibliography of Systematic Mycology' should be consulted is of little help to the user. In conclusion, I express my deep admiration for the amount of sound work included. I regret, however, that the author has not taken the effort to communicate more of his enormous experience to others. He thus runs the risk that his taxonomic intentions will often be misunderstood.

W. Gams