REVIEW

E. F. GUBA, *Monograph of Monochaetia and Pestalotia.* (Harvard University Press. Cambridge, Mass. 10 June 1961.) Pp. vii + 342, 125 text-figures. Price: U.S. $ 10.00.

The appearance of a monograph is always of great interest to the mycologist, as it gives him a survey of all the species of the group dealt with as well as various important data. Information on too many taxa is till scattered throughout the literature or they are lying undescribed in the herbaria and collections all over the world.

The present monograph deals with the genera *Monochaetia* and *Pestalotia*, as mentioned in the title. After a short introduction, in which it is stated that the author spent nearly forty years on the compilation of this volume, there follows a chapter devoted to nomenclatural questions. It appears that *Monochaetia* (Sacc.) Allescher 1902 is not the oldest name since *Seiridium* Nees 1831 has priority. Therefore, Guba wants to conserve the name *Monochaetia* against the name *Seiridium*. The genus *Pestalotia* De Not. was dedicated by De Notaris to Fortunato Pestalozza, and thus this name was clearly a slip of the pen. Saccardo, who noted the error, changed the name into *Pestalozzia*. However, according to Guba this violates Article 72 of the International Code of Botanical Nomenclature. It is regrettable that such quibbling is allowed and that names of persons must be deformed to enforce the sacred rules. Surely it can hardly have been intended that the rules should be carried through *ad absurdum*.

Pestalotia was split by Steyaert into *Pestalotia*, *Truncatella*, and *Pestalotiopsis*, whereas the genus *Monochaetia* was incorporated into *Truncatella* and *Pestalotiopsis*. Guba does not accept these genera, but maintains the single genus *Pestalotia*.

In the next chapter cultural studies are discussed. The work of La Rue and Bartlett is mentioned who made 35 isolations of *Pestalotia* from different tropical plants. They arranged their isolates in 14 distinct groups, which they considered to represent strains of *Pestalotia Guepini*. It is now obvious, that they dealt with different species of *Pestalotia*. Variations in cultures are of common occurrence, but they are also found in nature. Marked aberrations are seldom met with and have no taxonomical value.

The next chapter concerns pathological considerations. For some time the genera in question were considered to contain many plant pathogenic species. The work of several plant pathologists has shown, that most species are saprophytes, but there are still a few species that must be considered parasitic, especially on woody plants. Other species are associated with the deterioration of wood, paper, and fabrics.

The fourth chapter is named "Ascigerous forms". In the old literature the reports on ascigerous stages were based on the occurrence of two stages on the same substratum, but, of course, only cultural experiments can show the true relationships. Bonar mentioned that he was able to show from cultures that the ascigerous stage of *Pestalotia gibbosa* was a species of *Dermatea*. Seaver, recognizing that the species did not fit into the genus *Dermatea*, introduced the genus *Pestalopezia* for it. However, Hansen *& al.* were able to demonstrate that the perfect stage of *Pestalotia palmarum* was a species of *Leptosphaeria*. They denied that there was any connection between *Pestalopezia* and *Pestalotia*.

The next item treated is appendages or setulae. It would have been better to incorporate this in the chapter on examination of species and use of the keys The fructifications of the species of *Monochaetia* and *Pestalotia* are acervuli and in general they are not considered significant in defining species. Most characters which serve to distinguish the different species are derived from the conidia. According to the septation of the conidia in both genera the following sections designated by Klebahn

may be used, viz. conidia 4-celled, *Quadriloculatae*, conidia 5-celled, *Quinqueloculatae* and conidia 6-celled, *Sexloculatae*.

Follows the revision of the genus *Monochaetia*. The number of species recognized in this monograph is 41, for which keys wholly based on conidial characters are given. In my opinion too much importance is attached to the dimensions of the conidia. Is it possible, for instance, to differentiate between conidia measuring 12–16 × 4–5 μ and those measuring 13–18 × 3–5 μ or between a group 25–35 ×6.5–9.5 μ and another 30–35 × 7–10 μ? Besides, many so-called species had better be discarded. *Monochaetia monorhincha* is described in six lines, whereas *M. Saccardiana* is allotted a whole page and *M. monochaeta* even four pages. In describing *M. unicornis*, for which species five pages are used, the last page ends with a diagnosis of *Cryptostictis cupressi* Guba sp. nov.

The largest part of the work is devoted to the genus *Pestalotia*. Here Section *Quinqueloculatae* is by far the biggest, followed by Section *Quadriloculatae*, whereas Section *Sexloculatae* contains only four species. The observations made above on the treatment of *Monochaetia* also apply to that of *Pestalotia*. A large number of species of which the descriptions proper range from three to five lines would have been better transferred to the chapter "Indefinite species of *Pestalotia*" which follows the revision of the genus. Why *P. versicolor* var. *polygoni* is placed on page 211 while *P. versicolor* comes on page 227 after the descriptions of 20 other species is not clear.

In the already mentioned chapter "Indefinite species of *Pestalotia*" 24 species are listed, but considering the insufficiently described species in the preceding chapter, this number could easily have been increased. The chapter might have been fused with the next, "Excluded species". In the latter numerous species are mentioned, most of which do not belong to the genus *Pestalotia* but to other genera such as *Cryptostictis*, *Ceratophorum*, *Diploceras*, *Monoceras*, *Mastigonetron*, *Coryneum*, *Neobarclaya*, *Morinia*, *Sphaerocista*, *Hyalotia*, *Pestalozzina*, *Robillarda*, *Mastigosporella*, *Bartalinia*, *Pleiochaeta*, *Heteropatella*. Species of the genus *Cryptostictis* are especially numerous. There follows a chapter "Miscellanea" in which several fungi are discussed which have conidial forms showing a remote resemblance to those of *Monochaetia* and *Pestalotia*. It would have been better, perhaps, to consolidate the account of related genera such as *Cryptostictis*, *Morina*, *Neobarclaya*, *Bartalinia*, *Hyalotia*, and *Pestalozzina* in separate chapters of the monograph.

The book is illustrated with 125 figures depicting mostly conidia. It is a pity that those conidia are not arranged in rows, which would greatly fascilitate comparison. Furthermore they are not drawn at the same magnification, so that species with small conidia are often depicted on a bigger scale than those with large conidia.

The books ends with an index but lacks a list of literature, because the papers in question are to be found listed under the discussion of the species. Notwithstanding the above criticisms the book will doubtless prove to be of great help in the study of the genera treated.

K. B. BOEDIJN