

Book Review

Verkley, G. J. M. (1999). A monograph of the genus *Pezicula* and its anamorphs. – Studies in Mycology 44: 180 pp. ISBN 90-70351-40-4. NGL 68.–, excl. posting and handling.

The discomycetous genus *Pezicula* and its anamorph, *Cryptosporiopsis*, have recently become of interest to fungal ecologists because of their frequent presence as endophytes in healthy plant tissue of several plants. Their significance as plant pathogens, however, was already known to plant pathologists since several decades and the work by Groves (e.g., 1939) and Johansen (1949) clearly pointed out the complexity of the taxonomy of this genus.

Subsequent plant pathology and fungal ecology work has only underlined the need for a comprehensive taxonomic treatment of both teleomorph and anamorph of *Pezicula* and its allies, but so far no satisfactory monographic work has been carried out. The treatise by G. Verkley fills therefore an extremely important gap in fungal taxonomy and represents a very welcome addition to fungal taxonomy.

The monograph comprises an extensive description of the problems linked to the taxonomy of the genus and presents a detailed historic and scientific appraisal of the taxonomic position of *Pezicula* within the Discomycetes. The general part includes also an attempt to the molecular characterisation of *Pezicula* using RFLP. This, in my opinion, is the weak part of the work, as it adds only little to the solving of the taxonomic problems within the genus. In fact, as also acknowledged by Verkley, the cluster analysis does not allow one to draw any clear conclusion, although the detection of species-specific bands with some restriction enzymes certainly is of interest. Definitely a sequencing of selected DNA regions would have yielded more useful results.

As an enthusiastic follower of numerical taxonomy methods I would have very much liked to see numerical methods applied to the wealth of morphological data collected, as this would probably have helped in the construction of keys and in the re-enforcement of key characters.

The taxonomic section begins with five detailed identification keys. An excellent key to the genera under consideration is presented, followed by a key to the species of *Pezicula*, one to the species of *Neofabraea*, a key to the anamorphs of both genera and to species of *Cryptosporiopsis* without known teleomorphs, and a key for the identification of *Pezicula* and *Cryptosporiopsis* species sporulating in pure culture. I have some reservation on the user-friendliness of the keys to the species, as a first trial to use them with some of my endophytic isolates was not very successful. In particular, I believe that some of the characters used in the key do not separate the species successfully enough: for instance, just by the look at Figs. 49 and 50 (and this is also supported by my personal experience) one gets the impression that cultural characters are very variable and therefore not reliable for the use in the key. Time, however, and repeated usage of the keys will tell. In any case, the excellent and detailed descriptions of the species are helpful enough to allow one a satisfactory identification of specimens.

Verkley has provided all descriptions with excellent, detailed line drawings, and Figs. 43–48 present good photographic plates of selected species. I was glad to

see faithful representations of microconidia producing ascospores, as this is a character seldom reported but quite frequent for species of *Pezicula*.

It was also good to see the erection of a new genus (*Scleropezicula*) for *Pezicula alnicola* Groves.

A commented list of excluded or insufficiently known teleomorph and anamorph taxa, followed by a very useful host index conclude the monograph.

The work done by Verkley is an important addition to the taxonomy of discomycetes. It is a classical taxonomic treatise, of which I wish I could see more, as they are becoming increasingly rare contributions – yet extremely important and useful. The monograph is very accurate, complete and well presented. The only weak point I could spot was the molecular work – which in this monograph, however, is only of secondary value and of little importance for the outcome of the whole monograph.

I am extremely happy to have this book on my bookshelf, as it will undoubtedly become invaluable for the identification of pathogenic and endophytic *Pezicula* and *Cryptosporiopsis* species. I am sure that no plant pathologist or fungal ecologist who occasionally or regularly come across these genera can afford not to have it in his/her library.

Orlando Petrini,
Comano, Switzerland

References

- Groves, J. W. (1939). Some *Pezicula* species and their conidial stages. – Canad. J. Res., Sect. C, 17: 125–143.
Johansen, G. (1949). The Danish species of the discomycete genus *Pezicula*. – Dansk Bot. Ark. 13(3): 1–26.

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Sydowia](#)

Jahr/Year: 2000

Band/Volume: [52](#)

Autor(en)/Author(s): Anonymus

Artikel/Article: [Book Review. 321-322](#)