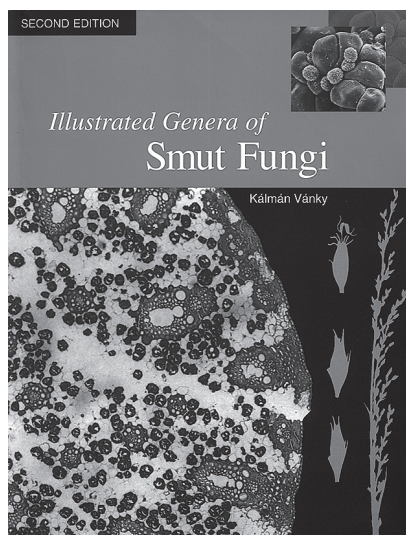


Book Reviews

(Edited by C.M. Denchev)

Kálmán Vánky. 2002. *Illustrated genera of smut fungi.*

Second edition. American Phytopathological Society, St. Paul, Minnesota. Pp. xiv + 238, figures 92 (containing 441 illustrations), plates 1 (containing 11 illustrations). Softcover book. ISBN 0-89054-297-X.



The name of Dr Kálmán Vánky has been inextricably bound up with taxonomic investigations of smut fungi more than 40 years. He is one of the most enthusiastic collectors of smut fungi and, at the same time, the best field researcher of that group.

In 1987 he published his book *Illustrated genera of smut fungi*, which has been for a long time the best manual on the taxonomy of the smut fungus genera.

Compared with the first edition of that book, in the expanded new one the number of accepted smut genera has increased from 50 to 77. Of the 120 described genera, 36 are considered synonyms, while 7 have been excluded from the smuts. In addition, there are 10 anamorphic smut genera.

The introductory chapters include: general information on recent classification systems of smuts and allied

fungi, the known number of species within each genus, and its host plant family(ies), discussion on problems in the classification of the smut fungi, and brief analyses of their host specialization, as well as more detailed information on septal pore types and host-parasite interactions.

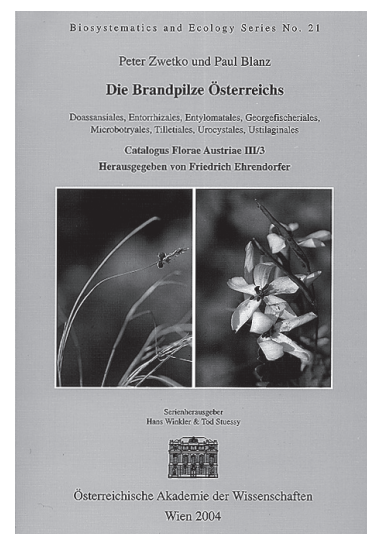
The main body of the book consists of a key to the genera of smut fungi (including the Microbotryales) and descriptions and illustrations of genera. A glossary explains the most important special expressions and terminology used in the book. Each genus is provided with carefully selected and correctly presented diagnostic information on the development of the sori and their morphology, microscopic features of the spores, the type of host-parasite interaction, and septal pore type. For each genus, nomenclature, description, and illustrations of the type species are given, including development of the sori and their morphology, microscopic features of the spores as seen by LM and SEM, germination of the spores, hosts, distribution, and the main literature sources. The drawings and LM and SEM photographs are of high quality and successfully complement the descriptions of the type species.

Detailed information of 12 doubtful or recently excluded genera and their type species are also given. In the rest of the book there is a list of regional monographs, a list of basic literature on general problems, phylogeny, and classification, comprehensive references to literature about smut fungus genera and their type species, and an index of fungus names.

No doubt, this new edition of *Illustrated genera of smut fungi* will also continue to be a valuable basic manual on which mycologists, phytopathologists, and others interested in smut fungi can rely.

Peter Zwetko & Paul Blanz. 2004. *Die Brandpilze Österreichs. Doassansiales, Entorrhizales, Entylomatales, Geoglyphales, Microbotryales, Tilletiales, Urocystales, Ustilaginales.*

Catalogus Florae Austriae 3(3), Biosystematics and Ecology Series 21. Verlag der Österreichischen Akademie der Wissenschaften, Wien. Pp. iv + 241, maps 27, tables 1, CD 1. Softcover book. ISBN 3-7001-3266-2.



This new number of the *Catalogus Florae Austriae* provides an annotated checklist of the known smut fungi in Austria. Altogether 167 species in 25 genera have been recognized in Austria so far. In the catalogue, based on detailed investigations of the available literature sources and herbarium specimens, the following genera are considered: *Anthracoidea* (41 species of which 26 were already known, while the occurrence of the rest is treated as possible on a host(s) distributed in that country), *Bauerago* (2/0), *Doassansia* (6/0), *Doassansopsis* (2/0), *Doassinga* (1/0), *Entorrhiza* (5/2), *Entyloma* (56/23), *Farysia* (2/1), *Glomosporium* (1/1), *Heterodoassansia* (3/0), *Jamesdicksonia* (2/1), *Melanopsichium* (1/1), *Melanotaenium* (6/2), *Melanustilospora* (1/1), *Microbotryum* (37+1/27+1), *Moesziomyces* (1/1), *Moreaua* (2/0), *Nannfeldtiomyces* (2/0), *Neovossia* (1/1), *Orphanomyces* (3/0), *Rhamphospora* (1/1), *Schizonella* (4/3), *Sphacelotheca* (1/1), *Sporisorium* (7/7), *Stegocinctria*

(2/2), *Thecaphora* (10/5), *Tilletia* (20/8), *Tolyposporium* (1/0), *Tothiella* (1/1), *Tracya* (2/0), *Tranzscheliella* (3/1), *Urocystis* (71/33), *Ustanciosporium* (3/2), *Ustilago* (25+2/11+1), *Ustilentyloma* (3/0), and *Vankya* (3/3). The genera are presented in accordance with the system of Vánky (2002, see the first book review in this issue), except for the genus *Melanustilospora* which was described later, in 2003.

The distribution and ecology of the members of the genus *Anthracoidea*, the best documented genus in Austria, are discussed in detail. The distribution of 29 species is presented on 23 grid maps in colour. In addition, grid maps for 166 species, photographs, and checklists of smut fungi from the administrative and ecological regions of Austria are given on a CD published together with the book.

A host-fungus index, list of synonyms, and register of fungus names are also provided.

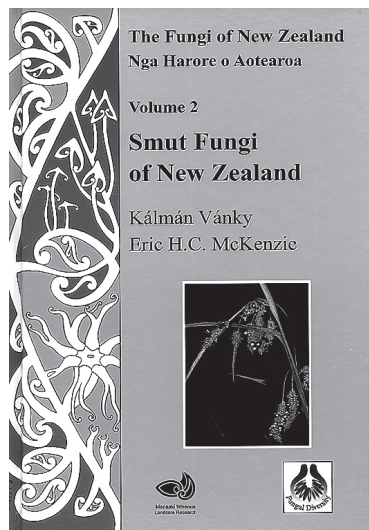
The catalogue has been compiled very carefully, and will be helpful for everyone interested in learning about Austrian smut fungi.

Kálmán Vánky & Eric H.C. McKenzie. 2002. *Smut fungi of New Zealand*.

Fungi of New Zealand 2, Fungal Diversity Research Series 8. Fungal Diversity Press, Hong Kong. Pp. xii + 259, figures 261, plates 1 (containing 6 colour photos). Hardcover book. Fungi of New Zealand ISSN 1684-7199, no. 2; Fungal Diversity Research Series ISSN 1608-6791, no. 8; ISBN 962-85677-0-5.

This book is a critical monograph on the smut fungi of New Zealand, and represents the second title in the monographic series *Fungi of New Zealand*.

All 93 species of smut fungi known from New Zealand (plus one species found only in a quarantine, containment glasshouse) are included. The following 25 genera are considered: *Anthracoidea* (5 spp.), *Bauerago* (2 spp.), *Cintractia* (2 spp.), *Doassansiopsis* (1 sp.), *Entorrhiza* (5 spp.), *Entyloma* (14 spp.), *Farysia* (5 spp.), *Farysporium* (1 sp.), *Heterotolyposporium* (1 sp.), *Jamesdicksonia* (3 spp.), *Microbotryum* (3



spp.), *Moesziomyces* (1 sp.), *Moreaua* (4 spp.), *Mundkurella* (1 sp.), *Restiosporium* (1 sp.), *Rhamphospora* (1 sp.), *Schizonella* (1 sp.), *Sphacelotheca* (1 sp.), *Sporisorium* (2 spp.), *Tilletia* (11 spp.), *Tolyposporium* (1 sp.), *Tranzscheliella* (3 spp.), *Urocystis* (11 spp.), *Ustilago* (13 spp.), and *Vankya* (1 sp.). The genera are presented in accordance with the system of Vánky (2002, see the first book review in this issue). For each genus and species, the nomenclature, development of the sori and their morphology, microscopic features of the spores and of the sterile cells (if there are any), germination of the spores, hosts, distribution, and specimens examined are given. Ninety-one species are illustrated with line drawings of their habit on the host plants and/or by photomicrographs of their spores, taken by SEM and/or LM. Six colour photos of sori are added. All the illustrations are of a high quality.

A host-fungus list for all 216 host-pathogen combinations in New Zealand and index of fungus names are added.

The monograph is the result of long-term investigations by the authors which are pulled together here. This work provides very good information on our current knowledge of New Zealand smut fungi.

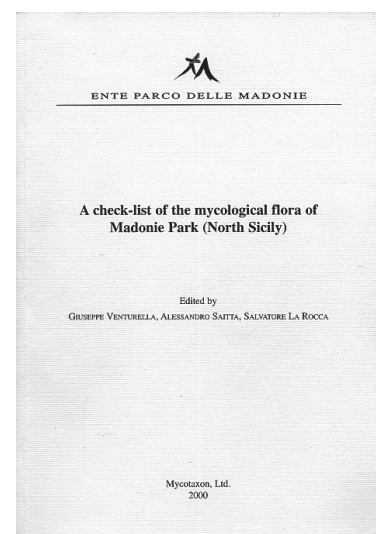
Giuseppe Venturella, Alessandro Saitta & Salvatore La Rocca. 2000. *A check-list of the mycological flora of Madonie Park (North Sicily)*.

Mycotaxon, Ltd., Ithaca, NY. Pp. 246, figures 3. Softcover book. ISBN 0-930845-10-2.

In 1995 the Madonie Park Administration funded a specific project with the aim of increasing the knowledge of macromycetes in the Madonie area. The investigation carried out in the Madonie Park contributed to increase the number of taxa, not only in that area but also in Sicily at whole, and the knowledge of their distribution and ecology. The study resulted in this checklist of the macromycetes in the Madonie Park.

Sixty-three ascomycetes and 551 basidiomycetes, in total from 200 genera and 79 families are listed, this species richness constituting about 50 % of the known Sicilian mycota. For each taxon the habitats, fructification periods, and detailed cartographic references are recorded; distribution maps are also presented.

November and October, followed by September and December, prove to be the richest months judged by the number of taxa found.



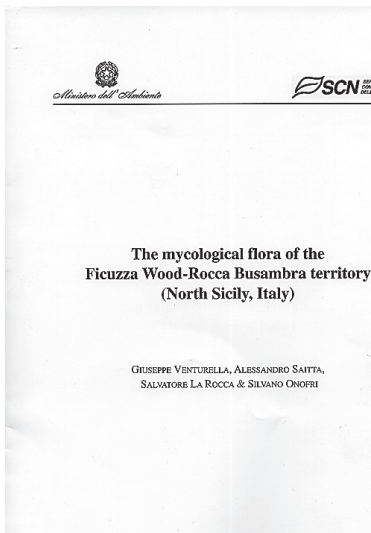
The authors conclude that the increase of human presence in the territory, the absence of rules for picking mushrooms, the ease in reaching the woods with cars, the permanence of activity such as grazing and use of wood

for charcoal and firewood, have caused damage to the mycocoenoses. Another problem, particularly for plant health, is the management of the woody areas. In many cases these activities altered the environment resulting in a decline of many fungal species. In addition, cutting of wood caused the appearance of a wide number of rot fungi on fallen branches, stumps, trunks, and wood debris. Proposals for the conservation of the fungi are also given.

This book is consequently very useful both for mycologists and officers responsible for the management of protected areas.

Giuseppe Venturella, Alessandro Saitta, Salvatore La Rocca & Silvano Onofri. 2001. *The mycological flora of the Ficuzza Wood-Rocca Busambra territory (North Sicily, Italy)*.

Mycotaxon, Ltd., Ithaca, NY. Pp. 66, figures 6, tables 2. Softcover book. ISBN 0-930845-11-0.



The Ficuzza Wood-Rocca Busambra territory is among the most interesting natural areas in Sicily. It was established as a nature reserve in 1981, and includes the Ficuzza and Cappelliere Woods, and the Rocca Busambra and the Gorgo del Drago areas. A checklist of the macromycetes occurring in the Ficuzza Wood-Rocca Busambra Natural Reserve is presented. Altogether 72 ascomycetes and 669 basidiomycetes, representing 210 genera and 80 families, and their cartographic

references are listed (Table 1). Helpful information on fructification periods, habitats, substrata, and considerations on the status of each ascomycete and basidiomycete are also recorded in Table 2.

October and November, followed by September and December, were found to be the richest months with respect to the number of basidiomycete taxa recorded. The terricolous fungi are predominant (75% of the whole macromycete mycota).

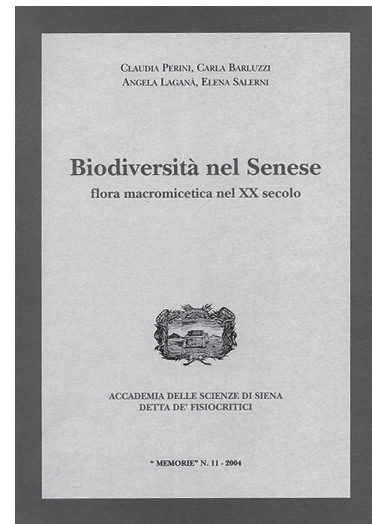
That book is of interest to mycologists and will be a useful tool for institutions operating in the conservation field.

Claudia Perini, Carla Barluzzi, Angela Laganà & Elena Salerni. 2004. *Biodiversità nel Senese. Flora macromicetica nel XX secolo*. [*Biodiversity in the Siena area. Macro-fungal flora in the past century*].

Accademia delle Scienze di Siena detta de' Fisiocritici, Memorie 11. Siena. Pp. 335, tables 3 (as appendixes C-E). Softcover book. ISSN not indicated.

The authors of this book note that "In fact, progress in conservation depends on the information and understanding of the natural world. This is particularly true in mycology, which has been explored much less than botany and zoology, especially in the Mediterranean area". I would like not only to agree with them in this, but to add, as another good sample, the status of the inventory of the fungi in the whole Balkan Peninsula.

The authors investigated and interpreted the contributions to the macromycete mycota in the Siena area which have been published since 1896. In the present checklist 1314 taxa, including more than 1300 species, are listed in alphabetical order. Among them, there are 161 taxa obtained from hitherto unpublished data. For published taxa, locality(ies) and references are given, while for the previously unpublished ones information about the date, altitude, vegetation, and collector is added. The 318 localities visited are identified



according to the national mycological mapping-programme by a six-number code referring to units of about 9 km². In the cases when this was not possible, a larger scale was used up to only three-number codes corresponding to a map at 1:50 000 (Appendix D). Geographical coordinates of the localities are also given. Vegetation types are summarized in Appendix E.

As a critical note, I would like to draw attention to the fact that it is definitely time to finish using of the term 'flora' in relation to fungi (cfr Hawksworth 2003: 40).

The book will be very helpful to everyone interested in macromycetes and the conservation of fungal diversity.

Hawksworth, D.L. 2003. Monitoring and safeguarding fungal resources worldwide: the need for an international collaborative MycoAction Plan. – *Fungal Diversity* **13**: 29-45.