

**IL GENERE CORTINARIUS IN ITALIA. PARTE PRIMA.** CONSIGLIO, G., ANTONINI, D. & ANTONINI M. (2003). ASSOCIAZIONE MICOLOGICA BRESADOLA, TRENTO, ITALY. 64 + 200 PP.

This publication is a four-ring, loose-leaf binder, with folded sheets comprising four printed pages, each 240 × 168 mm. The paper is high quality, coated and very suitable for reproduction of colour photographs. The format is such that to comfortably read the pages it is necessary to open the rings and remove each sheet. I suspect that in the long term this will result in wear and tear near the punched holes. This format is similar to that for the multi-volume Swedish series *Cortinarius Flora Photographica* by Brandrud *et al.* and the French series *Atlas des Cortinaires* by Bidaud *et al.* Both these publications have been commercially successful so my concerns about durability may be unfounded. *Atlas des Cortinaires* illustrates macroscopic characters with colour drawings and paintings whereas colour photographs are used in *Cortinarius Flora Photographica* and *Il Genere Cortinarius in Italia*.

This publication is the beginning to a revision of the genus *Cortinarius* (Pers. : Fr.) Gray in Italy. It is made up of two sections. Section 1, of 64 pages, comprises the table of contents, preface, acknowledgements, introduction, the system of classification adopted, and bibliography. This is followed by a comprehensive review (35 pages) by Alfredo Vizzini on the secondary metabolites of species of *Cortinarius*, particularly those of Section *Orellani*.

Section 2 is a taxonomic treatment of 50 taxa. *Cortinarius sensu lato* is a very large genus of ectomycorrhizal fungi, commonly associated with angiosperm trees. Trescol (1994) reported almost 2800 binomials. There has been no agreed generic or infrageneric classification of the genus though there is an expectation that molecular studies will eventually provide a robust classification. In this volume the evolving system of classification set out in the *Atlas des Cortinaires* has been adopted with six subgenera: *Cortinarius*, *Dermocybe* (Fr.) Trog, *Hydrocybe* (Fr.) Trog, *Myxacium* (Fr.) Trog, *Phlegmacium* (Fr.) Trog, and *Telamonia* (Fr.) Trog. Representatives of all six subgenera are included in this volume. The concepts of these subgenera are somewhat different from those in Moser & Horak (1975).

The second section of this publication gives detailed descriptions of 47 species and three varieties. Each description occupies four pages. Information provided about each taxon includes: location and number of the type specimen if designated; a list of synonyms; taxonomic placement in *Cortinarius Flora Photographica*, the *Atlas des Cortinaires* and for species of *Phlegmacium* the classification of Moser (1960). For each taxon three descriptions are given: the original Latin description; an Italian translation of the original description; and a comprehensive description based on recent Italian collections. Additionally there are recent bibliographic references; the etymology of the specific epithet; and, where necessary, additional taxonomic comments. To illustrate each taxon there is a SEM photograph of basidiospores; a map of known distribution in Italy; drawings of basidiospores; and colour photographs of two recent collections. Unlike in the *Atlas des Cortinaires* there are no illustrations of either cystidia or the structure of the cuticle. For 39 of the taxa in this book the statement is made 'Typus: non designato'. There is no indication whether or not the taxon has subsequently been epitypified, lectotypified or neotypified.

The photographs are of a uniform high quality and show natural backgrounds. For most taxa the basidiomes shown in the two photographs are similar though from widely separated localities, or photographed in different years, whereas others are very different *e.g.* *C. citrinofulvescens* M.M. Moser, *C. integerrimus* Kühner or *C. moenne-loccozii* Bidaud. Subtle differences in colours of various parts of the basidiome have often been used to distinguish between taxa of *Cortinarius*. These photographs are a timely reminder that identifications based only on characters that can be observed in the field must be done with great caution.

For students of the genus *Cortinarius* this book will be a valuable addition to the library.

J. A. Simpson

## References

- Bidaud, A., Moëgne-Loccoz, P., Reumaux, P., Henry, R. (and others in various volumes). (1990–2002). *Atlas des Cortinaires*. 12 volumes. Éditions Fédération Mycologique Dauphiné-Savoie, France.
- Brandrud, T.E., Lindström, H., Marklund, H., Melot, J. & Muskos, S. (1989–1998). *Cortinarius, Flora Photographica*. 4 volumes. *Cortinarius* HB, Matfors, Sweden.

Moser, M. (1960). Die Gattung *Phlegmacium*. *Die Pilze Mitteleuropas* 4, 1–440.

Moser, M. & Horak, E. (1975). *Cortinarius* Fr. und nahe Verwandte Gattungen in Südamerika. *Beiheft zur Nova Hedwigia* 52, 1–628.

Trescol, F. (1992). *Cortinaires Diagnoses—Clés*. 4 volumes. Edition Mycologique Alésienne, Ales, France.