Book reviews

European Boletes: Volume 1

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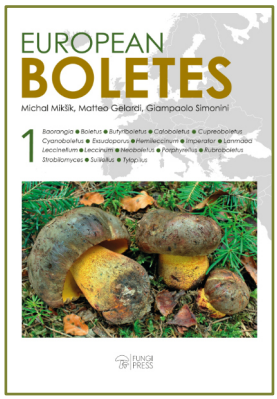


This mammoth work must surely rank as the most comprehensive review of its subject to date. It runs to over 3 ½ kg, 704 pages, more than 1500 photos and 2000 bibliographic references. The introduction alone, including dichotomous keys to genera and species, occupies a hundred pages. This is an epic work in every sense. Even more so when we remember that this is only volume one, with a second somewhat smaller volume promised. Here, 62 species and 36 forms or varieties in 17 genera are dealt with. These are all the larger red- and yellow-pored genera: *Butyriboletus*, *Boletus* s. str., *Caloboletus*, *Cupreoboletus*, *Cyanoboletus*, *Imperator*, *Neoboletus*, *Rubroboletus* and *Suillellus*, also *Lanmaoa*, *Leccinum*, *Leccinellum*, *Porphyrellus*, *Strobilomyces*, *Tylopilus* and two further genera unknown in Britain.

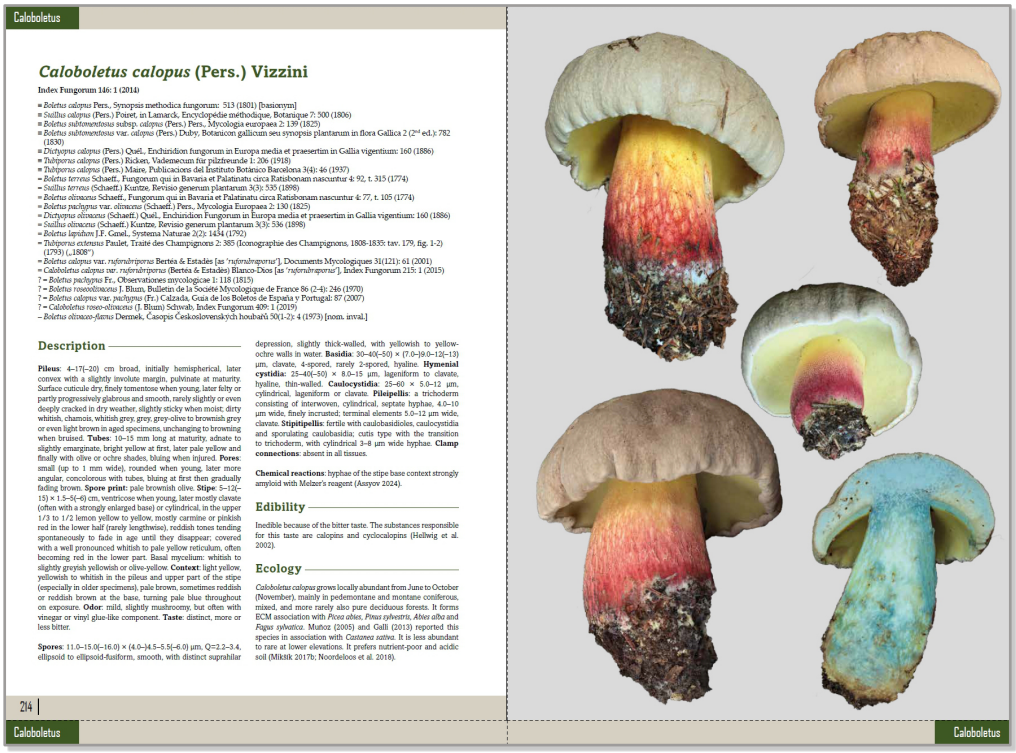
To give an idea of the coverage of this sumptuous work look no further than the entry for *Boletus edulis*, which spreads lavishly over no less than 20 pages! It includes comprehensive text, well laid out under separate headings. Each entry starts with an extensive description of both macro and micro details, then edibility, ecology, distribution (including map), affinities (similar species), occasionally additional information on variability, and finally notes. We are also treated to literally dozens of excellent high-quality photographs depicting the fungus in all stages of development in different kinds of habitats, in all kinds of colour forms and varieties, plus photos of microscopic features such as spores. This is a 'no stone left unturned' approach. Take for example the entry for *Neoboletus praestigiator* f. *pseudosulphureus*, basically just a yellow-capped form of what was once *Boletus erythropus*. In most books it would barely get a mention, if any at all. Yet here, even for this obscure colour form, we are treated to an amazing range of 64 fruitbodies in 16 photos spread over eight pages. There is never going to be a better way to understand the variability and look of a species than by flicking through the pages of this book. Most collectors could walk around for an entire mycological lifetime and never manage to see such a diversity of species in such an array of different guises.

For each entry there is an extensive list of synonyms, sometime half a page's worth – nomenclatural research appears to have been thorough. As with all new publications, we are exposed to the latest opinions on the correct names to use. The relatively unfamiliar name *Neoboletus praestigiator* is used here (as in Geoffrey Kibby's Mushrooms and Toadstools of Britain and Europe, Volume 1, published in 2017), for what older readers will have known as *Boletus erythropus* and then later as *B. luridiformis*. It is also suggested that we revert to *Leccinum rufum* just when we were getting used to using *L. albostipitatum*, and to *L. aurantiacum* instead of *L. quercinum*. *Boletus aestivalis* is preferred over *B. reticulatus*. No wonder the ecologist Ted Green refers to mycologists as "the name changers".

In a short review, it is impossible to fully convey the vast scope and coverage of this impressive book. It is traditional to try and have a balance of pros and cons, but scrambling around for any cons to this book becomes rather a churlish exercise. With the provisos that you will need to have both the strength to lift a nearly 4 kg book and £98 in ready cash, if you are truly interested in *Boletus*, this is a must have.

In the preface, the authors suggest this book may become an indispensable tool for the study of European boletes, but such is the breadth and depth of this monumental work it is likely to become the *only* tool that will be needed, for years to come. They boldly claim that they aim to provide the most complete and updated overview of European boletes, summarising all current knowledge, and after a considered viewing of this book, it would be hard to imagine anybody who could possibly disagree with them.

Mario Tortelli



Caloboletus

***Caloboletus calopus* (Pers.) Vizzini**

Index Fungorum 146: 1 (2014)

- *Boletus calopus* Pers., Synopsis methodica fungorum: 513 (1801) [basionym]
- *Sullius calopus* (Pers.) Poiret, in Lamarck, Encyclopédie methodique, Botanique 7: 500 (1806)
- *Boletus subtomentosus* subsp. *calopus* (Pers.) Pers., Mycologia europaea 2: 139 (1825)
- *Boletus subtomentosus* var. *calopus* (Pers.) Duby, Botanicon gallicum seu synopsis plantarum in flora Gallica 2 (2nd ed.): 782 (1830)
- *Dictyopus calopus* (Pers.) Quél., Enchiridion fungorum in Europa media et praesertim in Gallia vigentium: 160 (1886)
- *Tubiporus calopus* (Pers.) Rickon, Vademecum für pilzfreunde 1: 206 (1918)
- *Tubiporus calopus* (Pers.) Maire, Publicacions del Instituto Botánico Barcelona 3(4): 46 (1937)
- *Boletus terreus* Schaeff., Fungorum qui in Bavaria et Palatinatu circa Ratisbonam nascuntur 4: 92, t. 315 (1774)
- *Sullius terreus* (Schaeff.) Kuntze, Revisio generum plantarum 3(3): 535 (1898)
- *Boletus olivaceus* Schaeff., Fungorum qui in Bavaria et Palatinatu circa Ratisbonam nascuntur 4: 77, t. 105 (1774)
- *Boletus pachypus* var. *olivaceus* (Schaeff.) Pers., Mycologia Europaea 2: 130 (1825)
- *Dictyopus olivaceus* (Schaeff.) Quél., Enchiridion Fungorum in Europa media et praesertim in Gallia vigentium: 160 (1886)
- *Sullius olivaceus* (Schaeff.) Kuntze, Revisio generum plantarum 3(3): 536 (1898)
- *Boletus lapathum* J.F. Gmel., Systema Naturae 2(2): 1434 (1792)
- *Tubiporus extensus* Paulet, Traité des Champignons 2: 383 (Iconographie des Champignons, 1808-1835: tav. 179, fig. 1-2) (1793) („1808")
- *Boletus calopus* var. *rufonbriporus* Bertéa & Estadès [as '*rufonbriporus*'], Documents Mycologiques 31(121): 61 (2001)
- *Caloboletus calopus* var. *rufonbriporus* (Bertéa & Estadès) Blanco-Dios [as '*rufonbriporus*'], Index Fungorum 215: 1 (2015)
- ? – *Boletus pachypus* Fr., Observationes mycologicae 1: 118 (1815)
- ? – *Boletus roseolilacinus* J. Blum, Bulletin de la Société Mycologique de France 86 (2-4): 246 (1970)
- ? – *Boletus calopus* var. *pachypus* (Fr.) Calzada, Guia de los Boletos de España y Portugal: 87 (2007)
- ? – *Caloboletus roseo-olivaceus* (J. Blum) Schwab, Index Fungorum 409: 1 (2019)
- – *Boletus olivaceo-flavus* Dermek, Casopis Ceskoslovenských houbarů 50 (1-2): 4 (1973) [nom. inval.]

Description

Pileus: 4–17(–20) cm broad, initially hemispherical, later convex with a slightly involute margin, pulvinate at maturity. Surface cuticule dry, finely tomentose when young, later felty or partly progressively glabrous and smooth, rarely slightly or even deeply cracked in dry weather, slightly sticky when moist; dirty whitish, chamois, whitish grey, grey, grey-olive to brownish grey or even light brown in aged specimens, unchanging to browning when bruised. **Tubes**: 10–15 mm long at maturity, adnate to slightly emarginate, bright yellow at first, later pale yellow and finally with olive or ochre shades, bluing when injured. **Pores**: small (up to 1 mm wide), rounded when young, later more angular, concolorous with tubes, bluing at first then gradually fading brown. **Spore print**: pale brownish olive. **Stipe**: 5–12(–15) × 1.5–5(–6) cm, ventricose when young, later mostly clavate (often with a strongly enlarged base) or cylindrical, in the upper 1/3 to 1/2 lemon yellow to yellow, mostly carmine or pinkish red in the lower half (rarely lengthwise), reddish tones tending spontaneously to fade in age until they disappear; covered with a well pronounced whitish to pale yellow reticulum, often becoming red in the lower part. Basal mycelium: whitish to slightly grayish yellowish or olive-yellow. **Context**: light yellow, yellowish to whitish in the pileus and upper part of the stipe (especially in older specimens), pale brown, sometimes reddish or reddish brown at the base, turning pale blue throughout on exposure. **Odor**: mild, slightly mushroomy, but often with vinegar or vinyl glue-like component. **Taste**: distinct, more or less bitter.

Spores: 11.0–15.0(–16.0) × (4.0–)4.5–5.5(–6.0) µm, Q=2.2–3.4, ellipsoid to ellipsoid-fusiform, smooth, with distinct suprahilar depression, slightly thick-walled, with yellowish to yellow-ochre walls in water. **Basidia**: 30–40(–50) × (7.0–)9.0–12(–13) µm, clavate, 4-spored, rarely 2-spored, hyaline. **Hymenial cystidia**: 25–40(–50) × 8.0–15 µm, lageniform to clavate, hyaline, thin-walled. **Caulocystidia**: 25–60 × 5.0–12 µm, cylindrical, lageniform or clavate. **Pileipellis**: a trichoderm consisting of interwoven, cylindrical, septate hyphae, 4.0–10 µm wide, finely incrusted; terminal elements 5.0–12 µm wide, clavate. **Stipitipellis**: fertile with caulobasidioles, caulocystidia and sporulating caulobasidia; cutis type with the transition to trichoderm, with cylindrical 3–8 µm wide hyphae. **Clamp connections**: absent in all tissues.

Chemical reactions: hyphae of the stipe base context strongly amyloid with Melzer's reagent (Aanyov 2024).

Edibility

Inedible because of the bitter taste. The substances responsible for this taste are calopins and cyclocalopins (Hellwig et al. 2002).

Ecology

Caloboletus calopus grows locally abundant from June to October (November), mainly in pedemontane and montane coniferous, mixed, and more rarely also pure deciduous forests. It forms ECM association with *Picea abies*, *Pinus sylvestris*, *Abies alba* and *Fagus sylvatica*. Muñoz (2005) and Galli (2013) reported this species in association with *Castanea sativa*. It is less abundant to rare at lower elevations. It prefers nutrient-poor and acidic soil (Miktik 2017b; Noordeloos et al. 2018).

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Caloboletus

Caloboletus

Myxomycetes of the Forest

John Holden

Privately published, January 2025
ISBN: 9781036907280
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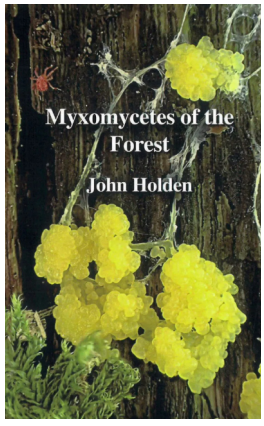
£29.99 from specialist book sellers



This informal and charming little book details the author's finds of slime moulds over many years, mainly from the Forest of Dean, Gloucestershire. The 98 species treated are illustrated with numerous excellent photos, both in the field and under the microscope, including the seldom illustrated immature states, so often met with in the field.

Descriptions are in the form of notes, with discussion on difficult or unusual features. A user-friendly Introduction covers 'What are Slime Moulds?', Ecology of Slime Moulds, Collection and Identification, and Classification. The Index of Species usefully includes synonyms and current names according to https://nomen.eumycetozoa.com.

Note that this is far from a conventional guide to British Myxomycetes. It only covers species the author has personally studied. It is essentially a worked up version of his admirably detailed collection notes. Self-published (help from Geoffrey Kibby is acknowledged), this book enables these notes to reach the wider readership they surely deserve.

This is not a stand-alone identification book: the book contains no keys to species. However, priced at £29.95 it provides a very useful addition to the library of anyone interested in slime moulds and their identification.

Dinah Griffin