POLYPORES

of the Mediterranean Region

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with the contribution of
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The book we are presenting here focuses on the *Polyporaceae* species of the Mediterranean region, one of the hot spots of biodiversity of the Planet, also including references to polypores of northern Europe. The volume of about 900 pages contains updated nomenclatural information for the polypore fungi found in the Mediterranean and adjacent areas, with **116 genera and 435 species** accepted and described, and six new combinations proposed. For most species a complete description is given with macro- and microphotographs, with comments on ecology and geographical distribution. Keys are provided for all genera and species.

Since the publication of the book of Annarosa Bernicchia, *Polyporaceae s.l.* in 2005, new species have been described and a number of nomenclatural changes have been proposed. While maintaining the essence of a classic monograph with keys, descriptions and macro photographs, we have also included as a true novelty microscopical images aimed at ensuring a direct vision of relevant characteristics of fungal structures. Most of these images were contributed by Luigi Arras, Annarosa Bernicchia, Marco Facchini, Marcel Gannaz, Giuseppe Porcu and Gérard Trichies, allowing an entirely new view compared to classical taxonomy books on fungi, mainly based on drawings from the microscope. A fair number of macroscopic pictures were generously granted by several colleagues, whom we thank for their valuable contribution. Text and keys have been written by Annarosa Bernicchia and Sergio P. Gorjón according to updated taxonomic knowledge, with comments on between-genera phylogenetic relationships.

Although this book focuses on typical species of the **Mediterranean region**, it is often difficult to establish strict geographical limits. Therefore, several species **from central and north Europe**, including **Caucasus and western Russia**, have been included to give a comprehensive overview of some genera with closely related species. The data on fungi of some Mediterranean areas are still limited, in particular for countries which have unfortunately passed periods of armed conflicts or political instability. Also, data for North Africa are largely incomplete. One of the goals of this book is to provide updated information on Mediterranean polypores, thus encouraging future studies that would, hopefully, contribute to cut present gaps in knowledge. Another primary goal is to highlight the importance of these fungi in forest conservation, with a focus on key and vulnerable species.

In this digital era, many forums, web pages and scientific journals contain valuable information and iconography about a number of genera and species. We hope our book will represent a further relevant step forward in the direction of knowledge dissemination. The authors are, however, well aware of the vastity of the treated matter and of the wide space remaining open for future research and will welcome any contribution and criticism coming from the mycological community, both to update scientific issues and to help in disseminating the knowledge of this important group of fungi among the general public.

Cover: *Hexagonia nitida* on *Quercus cerris* (B. De Ruvo).

Polyporus meridionalis

(A. David) H. Jahn, Westfäl. Pilzbriefe 11: 176, 1980; ≡*Leucoporus meridionalis* A. David, Bull. Soc. Mycol. France 88: 301, 1972; ≡*Cerioporus meridionalis* (A. David) Zmitr. & Kovalenko, Int. J. Medic. Mush. 18(1): 33, 2016.

Description – Basidiomes annual, centrally stipitate, usually single, bell-shaped to convex or flat, sometimes infundibuliform, umbilicate, (1)2-4 cm wide and 5-7 mm thick; margin involute and minutely ciliate; sterile surface pale brown to ochraceous with very thin dark tufts of appressed squamules; pore surface white to whitish; pores slightly radially elongated, but not polygonal, 1(2) per mm, slightly decurrent on the stipe; the latter is central, cylindrical, pale brown, brown to greyish brown, tomentosus, flocky at the base, 2-4 cm long and 2-4 mm wide; context white to cream, homogeneous and 1-3 mm thick; tube layer whitish as pore surface, up to 4 mm thick. *Hyphal system dimitic*: generative hyphae hyaline, with clamps, thin-walled and 2.5-6 µm wide in the subhymenium, thin- to slightly thick-walled, inflated and up to 15-20 µm wide, with large clamps in the context; skeleto-binding hyphae hyaline or yellowish, branched, interwoven, thick-walled to subsolid, 2.5-8 µm wide; cuticular hyphae hyaline, irregular in width, up to 3-15 µm wide, with few clamps, mixed up with closely packed, brown hyphae; terminal hyphae of epicutis, thin-walled, hyaline or brownish, sinuous, apically rounded; hyphae of velutinous stipe arranged in tufts, brown and somewhat thick-walled; cystidia absent while fusoid cystidioles seen; basidia hyaline, clavate, with a basal clamp and 4 slender, thin sterigmata up to 5.5-6 µm long, 25-45 × 5-6 µm; basidiospores hyaline, smooth, thin-walled, guttulate, IKI–, ellipsoid to amygdaliform, 7-9 × 3-4 µm.

Habitat and distribution – *Polyporus meridionalis* apparently grows on the ground, on buried roots of macchia shrubs as *Cistus*, *Rosmarinus*, *Phillyrea*, *Lentiscus*, *Helichrysum*, and *Erica*, from autumn to late winter. It has a Mediterranean distribution, recorded from Portugal, Spain, France, Italy, ex-Yugoslavia, Greece, Turkey and Cyprus.

Remarks – The small size of pileus, the growth on buried wood in Mediterranean macchia are distinctive characteristics of this species.

Figure 555 – *Polyporus meridionalis* (C. Agnello).

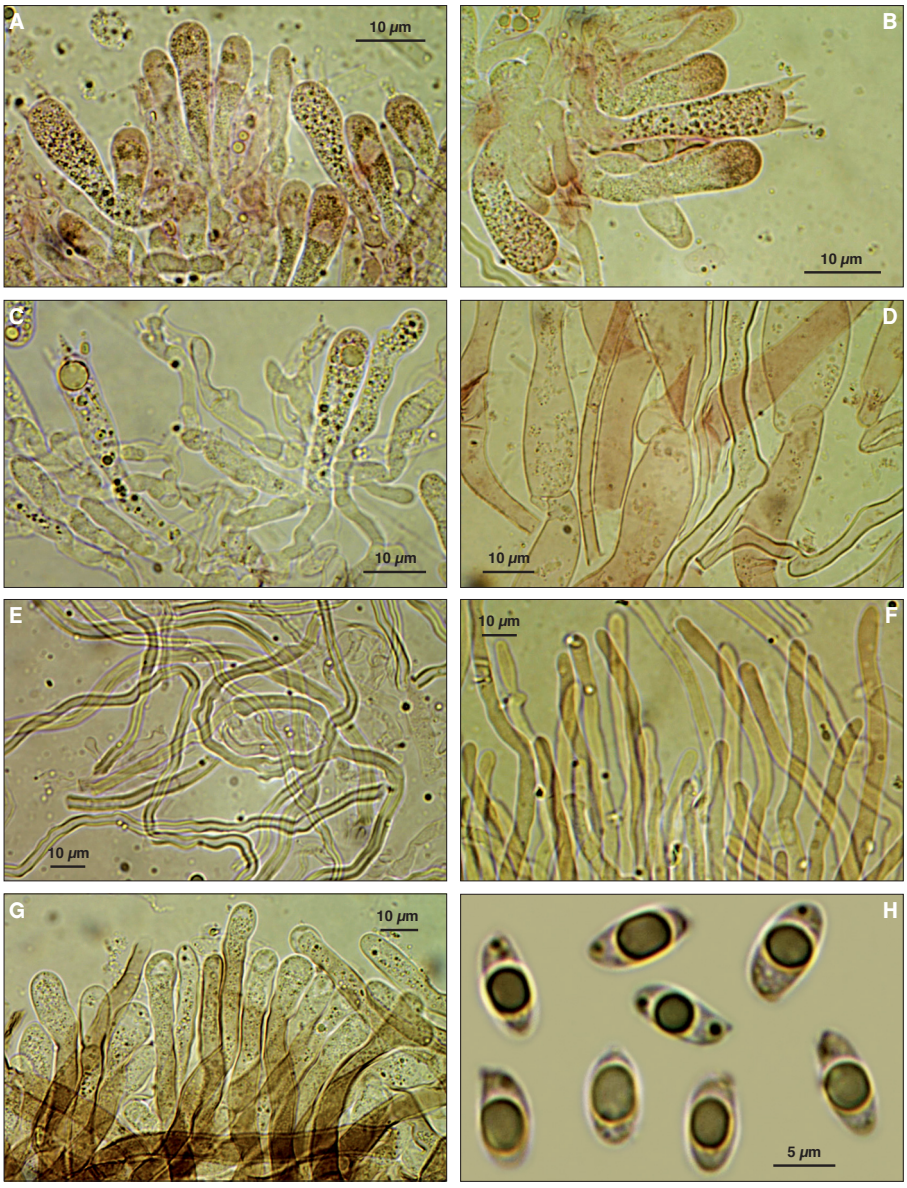

Figure 556 – *Polyporus meridionalis*: A. part of hymenium with longly clavate basidia and long sterigmata; B. some hymenial elements with basidia and cystidioles; C. hymenial elements and sinuous subhymenial hyphae; D. some sinuous and inflated generative hyphae of context; E. skeleto-binding hyphae of trama; F. generative hyphae of dissepiment edges; G. terminal hyphae of epicutis; H. basidiospores (coll. ex HUBO 6963, coll. and photos G. Porcu).

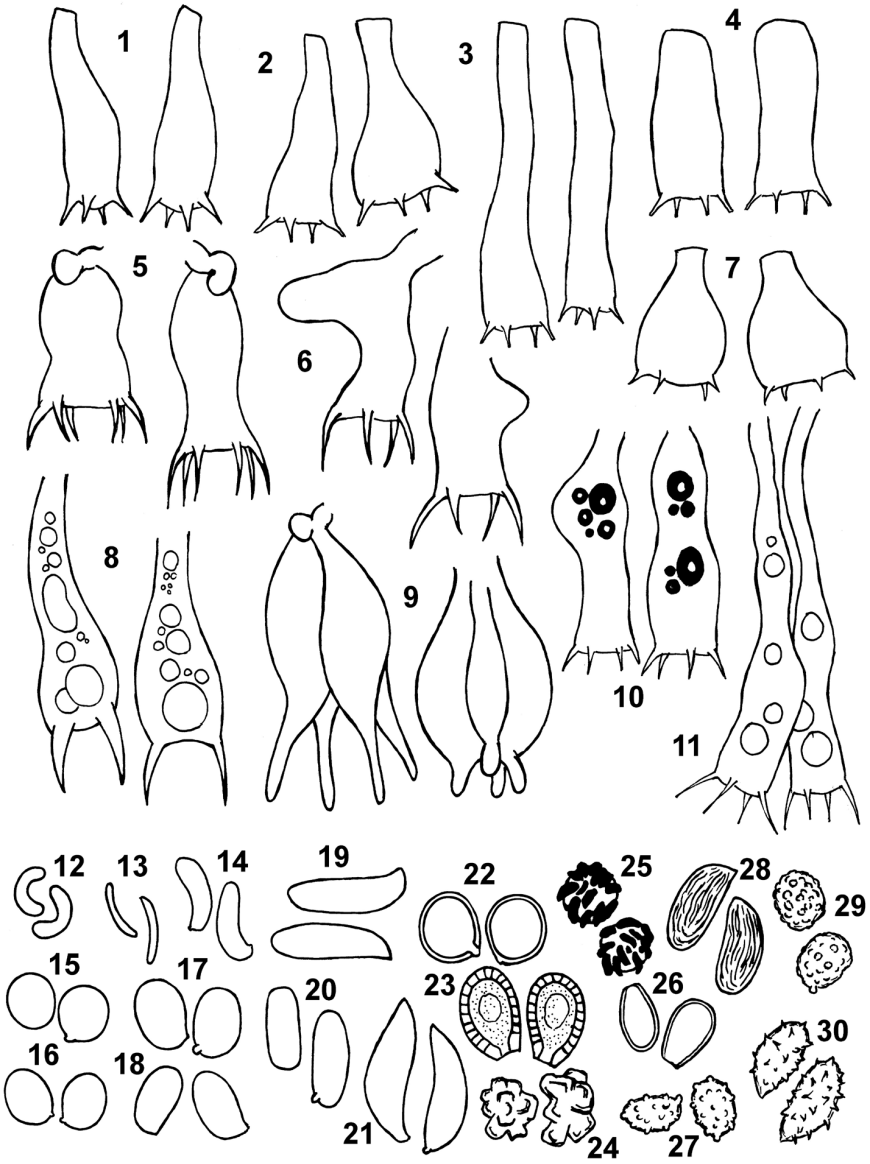

Figure 4 - **Basidia**. 1. Clavate. 2. Broadly clavate. 3. Tubular. 4. Barrel-shaped. 5. Uniform. 6. Pleural. 7. Subglobose. 8. Clavate, bisterigmate. 9. Longitudinally septate. 10. Constricted. 11. Pedunculate. **Basidiospores**. 12. Lunate. 13. Narrowly allantoid. 14. Allantoid. 15. Globose. 16. Subglobose. 17. Broadly ellipsoid. 18. Ellipsoid. 19. Cylindrical. 20. Short-cylindrical. 21. Navicular. 22. Thick-walled. 23. Double-layered. 24. Polygonal. 25. Crested. 26. Truncate. 27. Verrucose. 28. Striate. 29. Warted. 30. Echinulate. (Not to scale; drawings S.P. Gorjón)

Polypores of the Mediterranean Region contains updated nomenclatural information about the polypore fungi found in the Mediterranean Region and adjacent areas. A total of 116 genera and 435 species are accepted and described in detail including comments on ecology, distribution and comparison with closely related species. Full-colour macro- and microphotographs highlight most of the described species and keys are provided for all genera and species. In addition, six new combinations are proposed by the Authors.

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