

NOTES ON SOME JUGOSLAV FUNGI

DEREK A. REID

(Royal Botanic Gardens, Kew, England)

Received February 11, 1975

During a short visit to Yugoslavia in August 1974, a number of fungi were collected, two of which, viz. *Truncospora ochroleuca* (Berk.) S. Ito and *Corticium jose-ferreirae* Reid, had not previously been reported from this country. The latter species is now considered by the autor to belong in the genus *Phanerochaete* Karst. and the necessary transfer is made below.

Detailed descriptions are given of these fungi, based exclusively on the Yugoslav material.

Truncospora ochroleuca (Berk.) S. Ito in *Mycological Flora of Japan* 2, 316, 1955.

Polyporus ochroleucus Berk. in *Hooker's London Jl. Bot.* 4, 53, 1845.

Trametes ochroleuca (Berk.) Cooke in *Grevillea* 19, 99, 1891.

Fomes ochroleucus (Berk.) Pat. in *Bull. trimest. Soc. mycol. Fr.* 14, 187, 1898.

Ungulina ochroleuca (Berk.) Pat. in *Essai Taxonomique sur les familles et les genres des Hyménomycètes*, 102, 1900.

Fomitopsis ochroleuca (Berk.) Imazeki in *Bull. Tokyo Sci. Mus* No. 6, 92, 1943.

Poria ochroleuca (Berk.) Kotl. & Pouz. in *Česká Mykol.* 13, 32, 1959.

Heterobasidium ochroleucum (Berk.) G. H. Cunn. in *N. Z. Dep. Sci. industr. Res. Bull.* No. 164, 145, 1965.

Perenniporria ochroleuca (Berk.) Ryv. in *Norweg. J. Bot.* 19, 143, 1972.

Trametes ochroleuca var. *lusitanica* Torrend in *Bull. Soc. portug. Sci. nat.* 4, 36, 1910.

Sporophore 5.5 cm wide, 3 cm from point of attachment to margin, dimidiate, indistinctly zonate and gibbous behind, where it is up to 1.6 cm in thickness. The matt surface varies from purplish brown to almost black at the acute margin, which is radially fissured, but the entire surface is also minutely to distinctly tessellated, especially when examined under a lens. Pores 3 per mm, fawn, remarkably regularly arranged, and uniformly rounded with thick dissepiments. Tubes up to 1 cm long, lignicolorous. Flesh: there is a distinct horny cuticle, but the flesh itself is lignicolorous, hard, chalky, and up to 5 mm in

thickness. Cuticle forming a thin dark resinous line in section, virtually structureless, formed by breakdown and gelatinization of hyphae. Hyphal structure: trimitic in the older portions of the fruit-body. Generative hyphae hyaline, 3.0—4.0 μ wide, with thin to slightly thickened walls, and clamp-connexions at the septa. Skeletal hyphae hyaline, up to 5 μ wide, with thickened walls but with a wide, sometimes secondarily septate lumen, occupying about 1/3 of the total width of the hypha; the skeletal hyphae are mostly unbranched but may fork near the apex. Binding hyphae hyaline, 2.5—3.0 μ wide, with thickened walls but retaining a fairly wide lumen, irregularly kinked and sparingly branched, not forming dense coralloid complexes. Basidia: 25.0—30.0 \times 8.75—12.0 μ , clavate to subcapitate, conspicuously narrowed below to a clamped basal septum. Spores 10.0—16.0 \times 7.0—8.0 \times 8.0—10.0 μ , hyaline, elliptic, with slightly to very conspicuously thickened dextrinoid and cyanophilous walls, but with a thin-walled truncate somewhat invaginated apical pore; apicules scarcely visible.

Habitat: on *Ceratonia siliqua*, Brsećine near Dubrovnik, Southern Jugoslavia, coll. D. A. Reid, 22 Aug. 1974.

Unfortunately the Yugoslav specimen is rather old and discoloured, although abundantly fertile. Fruitbodies in prime condition have a yellowish ochraceous surface which is sometimes radiately roughened to minutely scrupose.

There has been some divergence of opinion as to the hyphal structure of *T. ochroleuca*; Cunningham (1965) has interpreted it as dimitic but according to Farinha (1964) it is trimitic. I prefer the latter view, although the binding hyphae do not form dense complexes but appear as individual scattered elongated kinked hyphae, with lax branching.

Truncospora ochroleuca, although widespread throughout the tropics and subtropics, is very rare in Europe, having been found for the first time in Portugal (Pinto-Lopez, 1953), on such hosts as *Ulex europaeus*, *Arbutus unedo*, *Robinia pseudacacia* and *Pinus pinaster*. There are also 3 Portuguese gatherings in K: — On *Quercus ilex*, leg. J. Pinto-Lopes (No. 920), Nov. 1949; on *Arbutus unedo*, Serra da Arrabida, near Setubal, coll. R. W. G. Dennis, 25 Oct. 1955; on *Quercus* sp., Serra da Arrabida, coll. M. H. da Costa Sampaio, 20 May 1974. In addition Jahn (1972/73) has reported it from both Spain: the island of Ibiza, on *Ceratonia siliqua* and *Juniperus oxycedrus*; and France: Corsica, on *Juniperus phoenicea*; Toulon, on *Juniperus* sp. It is also known from N. Africa.

Donk (1974), rather surprisingly, casts doubt on the occurrence of *T. ochroleuca* in Europe. He noted that none of the reports of this species from Portugal included details of spore characters. He also drew attention to the fact that some of the records had originally been reported as »*Fomes*« *scutellatus*, and later as *Trametes* (*Truncospora*) *ohiensis*. The latter appears to be a microspecies which is exceedingly closely related to *Truncospora ochroleuca*, the distinctions being mostly subjective, i.e. the fruitbodies are usually smaller, as also are the pores, and the spore range according to Overholts (1953) is 9—12 \times 6—7 μ , as against 12—16 \times 6—8 μ for *T. ochroleuca* fide Cunningham (1965). Reference to the above description of the Yugoslav specimen shows it to have a spore range spanning these two spore sizes. In the Portuguese material from Serra da Arrabida, collected by Dennis, the spores are the same size and shape as those illustrated (Fig. 1) measuring 12.0—14.5 \times 6.2—8.0 μ . If there are really two different species involved, the European specimens appear to be referable to *T. ochroleuca* rather than to *T. ohiensis*.

Phanerochaete jose-ferreirae (Reid) Reid, comb. nov.
(= *Corticium jose-ferreirae* Reid. in Rev. Biol. 5, 140, 1965).

Sporophores consisting of either numerous small irregular pale ochraceous fawn patches, 2—10 mm in diam., or covering the undersides of small twigs and extending for up to 5.5 cm in length. The margin of the fruitbodies may thin out gradually and become white pruinose, or end abruptly; in the latter case there is a tendency for the margin to lift away slightly from the substrate. The fertile surface may be smooth, or it may develop numerous, small, rounded, wart-like irregularities. In addition it may become very densely but minutely cracked, especially when seen under a lens. In some fruitbodies there is a tendency for the wartlike irregularities to become purplish-brown in colour. **Structure:** the fruitbody is 130—150 μ thick. There is a basal layer, 20—50 μ wide, of horizontal, nondextrinoid, often somewhat agglutinated, branched hyaline hyphae, 2.5—3.5 (—4.0) μ wide, with thickened walls, although retaining a wide lumen; these hyphae lack clamp connexions, Toward the upper region of this zone the hyphae gradually become perpendicular and give rise to the hymenium, which in older fruitbodies is strongly thickened, reaching a width of 100—150 μ . The structure in the lower regions of the hymenium is difficult to distinguish as the hyphae tend to become rather indistinct, nevertheless these regions have an almost lattice-like appearance as if some thin-walled structures or crystalline material had once been present, but no trace of either could be found. In some sporophores there is a dense zone, 40 μ wide, beneath the current hymenial layer in which there is an inconspicuous brownish granular deposit on the hyphae. The current hymenial layer, 26 μ wide, consists entirely of basidia. **Basidia:** 26—31 \times 4—5 μ , clavate, tapering toward the basal septum, which lacks a clamp-connexion; they are thin-walled, hyaline, and 4-spored. **Spores** scanty, mostly immature, up to 7.5 \times 2.5 μ , thin-walled, hyaline, subcylindric and nonamyloid (Fig. 2).

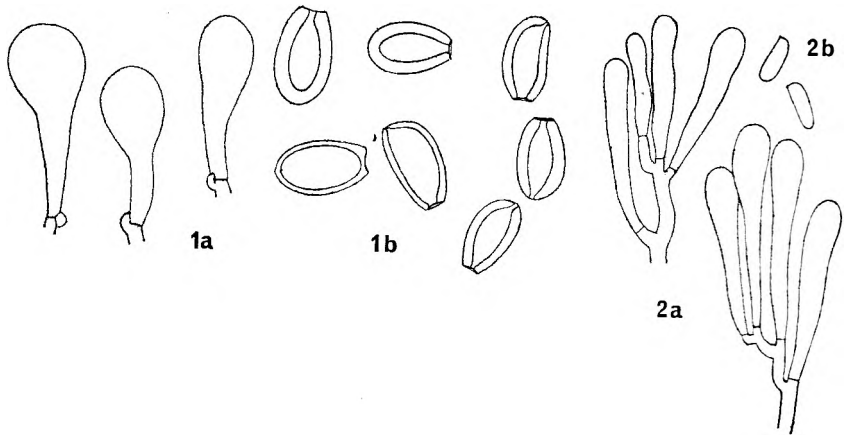


Fig 1. *Truncospora ochroleuca*. a. Basidia, b. Spores x 866

Fig. 2. *Phanerochaete jose-ferreirae*. a. Basidia, b. Spores x 866

Habitat: On *Olea europaea*, Brsećine near Dubrovnik, Southern Yugoslavia, coll. D. A. Reid, 28 Aug. 1974.

The Yugoslav material agrees closely with the type material from Portugal, with the exception that the basal layer of hyphae is somewhat narrower; the spores are also slightly smaller but are scanty and appear to be somewhat immature.

Shortly after I described this species in 1965, Parmasto (1968) published his classic *Conspectus Corticiacearum*, from which it would seem that following his system of classification *C. jose-ferreirae* is best referred to the genus *Phanerochaete* Karst. subgenus *Phanericium* Parm. The necessary transfer has therefore been made.

The occurrence of these two species in Yugoslavia is of particular interest since, hitherto, the first was known from a few localities in Portugal, Spain and France and the second only from Portugal. Although Southern European in distribution, they are evidently more widespread than was previously supposed.

Follows a short list of remaining species collected.

BASIDIOMYCETES

APHYLLOPHORALES:

Coriolellus serpens (Fr. ex Fr.) Bond. — on *Ceratonia siliqua*, Brsećine near Dubrovnik, 22 Aug. 1974.

Gloeophyllum sepiarium (Wulf. ex Fr.) Karst. — on *Cupressus* sp., Brsećine, 22 Aug. 1974.

Inonotus hispidus (Bull. ex Fr.) Karst. — Morinj, Gulf of Kotor, on *Populus* sp., 21 Aug. 1974.

Laeticorticium roseum (Fr.) Donk — Brsećine, 22 Aug. 1974.

Peniophora lycii (Pers.) Hohn. & Litsch.—Brsećine, 22 Aug. 1974.

UREDINALES:

Puccinia pelargonii-zonalis Dodge — on *Pelargonium zonale*, Brsećine, 22 Aug. 1974.

ASCOMYCETES

Cucurbitaria rhamni (Nees ex Fr.) Fuckel — Lisarica, 20 Aug. 1974.

Summary

In August 1974 the author collected in Yugoslavia a number of fungi, two of which, *Truncospora ochroleuca* (Berk.) S. Ito and *Corticium jose-ferreirae* Reid, had not previously been reported from this country. The latter species is now considered by the author to belong in the genus *Phanerochaete*, and the necessary transfer has been made. Detailed descriptions of these fungi are given. The paper concludes with a short list of other species found.

Reference

- Cunningham, G. H., 1965: *Polyporaceae* of New Zealand. N. Z. Dep. sci. industr. Res. Bull. 164.
Donk, M. A., 1974: Check List of European Polypores. Amsterdam.
Farinha, M., 1964: Caracteres morfológicos das hifas dos himenoforos de *Polyporaceae*. Portug. Acta Biol. (B) 7, 4, 288—346.

- Jahn, H., 1972/73: Neue europäische Funde von *Perenniporia ochroleuca* (Berk.) Ryv. Westf. Pilzbr. 9, 68—72.
- Overholts, L. O., 1953: The *Polyporaceae* of the United States, Alaska and Canada. Ann Arbor.
- Parmasto, E., 1968: Conspectus Systematis *Corticacearum*. Tartu.
- Pinto-Lopes, J., 1953: *Polyporaceae* de Portugal (excepto resupinadas). Revta Fac. Ci. Univ. Lisb. II (C), 2, 157—238.
- Reid, D. A., 1965: May Fungi in Portugal. Rev. Biol. 5, 1—2, 135—158.

S A D R Ź A J

BILJEŠKE O NEKIM GLJIVAMA JUGOSLAVIJE

Derek A. Reid

(Royal Botanic Gardens, Kew, England)

Za vrijeme kratkog boravka u Jugoslaviji u kolovozu 1974. sakupio je autor izvjestan broj vrsta gljiva, od kojih dvije, *Truncospora ochroleuca* (Berk.) S. Ito i *Corticium jose-ferreirae* Reid, nisu dosad bile zabilježene za našu zemlju. Obje vrste detaljno opisuje isključivo na osnovi materijala iz Jugoslavije.

Vrsta *Truncospora ochroleuca* je rasprostranjena u tropima i sup-tropima, a u Evropi je dugo bila poznata samo iz Portugala. Tek je pred nekoliko godina nađena na španjolskom otoku Ibizi, na Korzici i kod Toulona. Nalaz u Jugoslaviji dokazuje da je u Evropi šire rasprostranjena nego se smatralo. Vrstu *Corticium jose-ferreirae* je autor opisao iz Portugala i ovo je prvi nalaz u nekoj drugoj zemlji. Prema monografiji Parmasta (1968) pripada zapravo rodu *Phanerochaete*, pa je ovdje i formalno prenesen u taj rod. Na kraju je dodan popis ostalih sakupljenih vrsta.

Dr. Derek A. Reid
Royal Botanic Gardens
Kew Richmond, Surrey TW9 3AB
England