

THE GENUS *SPONGIPELLIS* PAT.
(POLYPORACEAE) IN YUGOSLAVIA

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Although the genus *Spongipellis* was proposed by Patouillard in 1887, it was for a long time treated by certain authors as a part of the genus *Tyromyces* P. Karst. (= *Leptoporus* Quel.). Recently it was characterised anew by Kotlaba and Pouzar (1965). According to them, the most important character, in addition to the duplex structure of the context, is the relatively thick spore wall. The hyphal system is monomitic, with thin-walled to thick-walled hyphae bearing clamp connections. The spores are short-elliptical, smooth, hyaline, inamyloid, indextrinoid and acyanophilous. As the form of the hymenophore is not now considered to be of a paramount importance in taxonomy, both the species with poroid and irpicoid hymenophore are included.

The above-mentioned authors cite six species belonging to this genus. One of them, *S. unicolor* (Schw.) Murr., grows only in North America, while the rest occur in Europe. They are more or less rare; the rarest, *S. foetidus* (Velen.) Kotl. et Pouz., is known only from the original locality in Prague, and has apparently never been collected since. *S. spumeus* (Sow. ex Fr.) Pat., *S. pachyodon* (Pers.) Kotl. et Pouz., *S. litschaueri* Lohwag and *S. bredecelensis* (Pil. ex Pil.) Bond. were reported from several countries, but nowhere from many localities.

David (1969) has studied pure cultures of four species of this group: *S. unicolor*, *S. spumeus*, *S. pachyodon* and *S. bredecelensis*. They had many mycelial characters in common, and the genus is therefore homogenous. She also showed that *S. bredecelensis* is identical with the American species *S. delectans* (Peck) Murr., which name therefore has priority.

Very little is known about the occurrence of the genus *Spongipellis* in Yugoslavia. In fact, in the literature dealing with the mycoflora of this country there is only one definite locality mentioned for *S. pachyodon*, backed by voucher specimens (Tortić 1964). Some other data

were given under doubtful or incorrect names and could be checked only in one case, where there exists an exsiccate. However, recent investigations have shown that four species of this genus occur in Yugoslavia and in this paper their known distribution is presented on the basis of the author's collections in the Institute for Botany, Zagreb (ZA), as well as the exsiccates in the Natural History Museum, Beograd (BEO).

Spongipellis spumeus (Sow. ex Fr.) Pat. is apparently the most frequent of the four. It has been reported from Europe, the northern part of Asia and from North America, growing on living trees or dead wood of various hardwoods, particularly in parks.

Localities in Yugoslavia: »Auf einem Obstbaum bei Sarajevo« 1885, leg. et det. G. de Beck as *Polyporus epixanthus* Rostk. (= *Tyromyces stipticus*), revid F. Kotlaba and Z. Pouzar 13. VI 1971, PRC. (Beck 1890: *P. epixanthus* Rostk. Auf einem alten Kirschenbaume bei Sarajevo. Juni). — Petnica near Valjevo, on *Ulmus campestris*, leg. Ž. Perišić 18. XI 1951, det. V. Lindtner, revid. M. Tortić, BEO. — Kanfanar in Istria, on *Sophora* VII 1968, on *Ulmus* X 1970, leg. I. Velenik, det. M. Tortić, revid. F. Kotlaba and Z. Pouzar. ZA, PR.

Voss (1889—92) gave *Polyporus suberosus* Wahl. as not frequent on old rotting oaks near Ljubljana. Pilát (1936—42) cites this species as a possible, but doubtful, synonym of *S. spumeus*. No specimen under that name was found in the Voss herbarium in the Natural History Museum in Ljubljana, therefore this locality could not be taken into account. Blagaić (1921) mentions *Polyporus spumeus* Sow., but only to point out that he considers it different from *P. epileucus* Fr. which he found near the Plitvice Lakes and in Maksimir Park in Zagreb. According to his description, his find could be *Tyromyces fissilis*. He does not say whether he ever found the true *P. spumeus*.

S. pachydon (Pers.) Kotl. et Pouz. is known from Europe and North America. Because of its irpicoid hymenophore it was treated earlier as belonging to the group of *Hydnaceae*. Pilát (1936—42) placed it in the genus *Trametes* in the *Polyporaceae*.

Localities in Yugoslavia: Maksimir Park in Zagreb, 26 XI 1961, 3 XI 1963, leg. et det. M. Tortić, ZA. This locality was published by the present author (Tortić 1964), without emphasizing that it was the first record for Yugoslavia. The fungus grew on a living beech tree and was observed during four years, from 1961—1964, when the tree was felled. — Medvednica mountain near Zagreb, on a small log of *Castanea*, 5 III 1967, leg. et det. M. Tortić, ZA. — Avala mountain near Beograd, on living *Fagus* trees, 15 VII 1954, 26 IX 1954, 6 VIII 1955, 18 IX 1955. BEO 5514, 5625, 6024, 6113. The duplicate of BEO 5625 is in PR 623853. All specimens were collected by V. Lindtner. Before he died, Lindtner had informed the author that he had found this species on Avala, but no name was written on the labels (except on the specimen in PR which was revised by A. Pilát), so she had to find the specimens and revise them anew. It is probable that they all grew on the same tree, as was the case with the specimens in Maksimir.

S. delectans (Peck) Murr. was described by Pilát (1936—42) from the Transcarpathian part of the Ukrainian SSR where he found it on *Fagus* logs, as *Leptoporus bredecelensis*. Afterwards this species was transferred to the genus *Spongipellis*, as *S. bredecelensis* (Pil. ex Pil.) Bond. It was found also on *Tilia* logs in Białowieża in Poland (D o m á n-

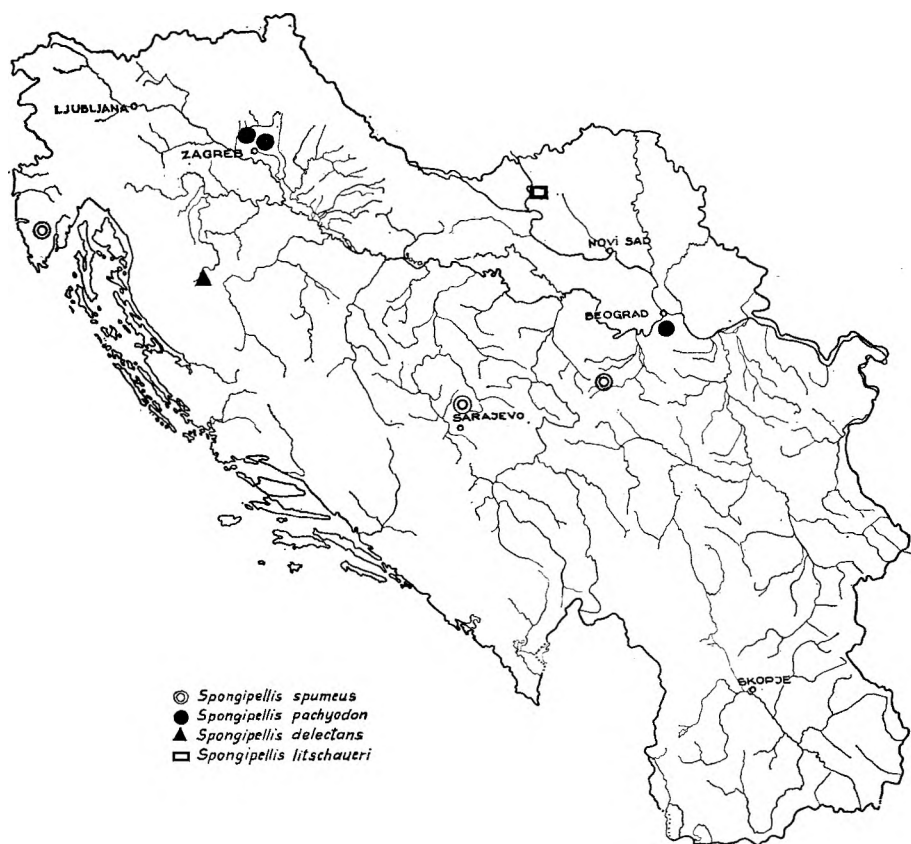


Fig. 1. The localities of the species of the genus *Spongipellis* in Jugoslavia.
 Sl. 1. Nalazišta vrsta roda *Spongipellis* u Jugoslaviji.

ski 1967), and the collections of this species in France from *Populus* and *Fagus* were reported by David (1969), who showed that *S. bredecelensis* was identical with *S. delectans*, described from North America. In Denmark the fungus was found on *Fagus* by Printz, who described it in "Meddelelser fra Foreningen til Svampenkundskabens Fremme" in 1970 (information by H. Jahn).

The species is known from many places in North America (Overholts (1953), but except for the above mentioned localities, no others have been published for Europe. However, the author was kindly informed by H. Jahn about two localities in Germany, and by F. Kotlaba and Z. Pouzar about three localities in Czechoslovakia, which are going to be published by the respective authors. Also, in PR there exists a specimen from Hungary: Haromszentek pr. v. Vétyem (com. Zala) in fagineto, in trunco putrido *Fagus silvaticae*, leg. Z. Igmándy 21 IX 1959, det. A. Pilát as *Trametes pachyodon*, revid. F. Kotlaba and Z. Pouzar 6 VI 1962 as *Spongipellis bredecelensis*. PR 534155. It is therefore probable that the species is not as rare as it seemed earlier.

Locality in Yugoslavia: Beech forest above the Lake Kozjak (Plitvice Lakes), on a *Fagus* log, 11 X 1972, leg. et det. M. Tortić and M. Jelić, revid. F. Kotlaba and Z. Pouzar. All the characters agreed well with descriptions, except that the pores were not labyrinthiform, and therefore more similar to those in American specimens. This is the first record for that species in Yugoslavia.

S. litschaueri Lohwag is confined to Europe and North-east Asia. In Europe it has been found in Austria, Czechoslovakia, France, Hungary, Roumania and the USSR (Kotlaba and Pouzar 1965). It grows as a parasite on oaks, particularly on *Quercus cerris*, very rarely on other broadleaved trees.

Locality in Yugoslavia: Near Apatin, on *Quercus robur*, leg. J. Erdeši XI 1951, det. M. Tortić, revid. F. Kotlaba and Z. Pouzar 1973. BEO 4344. No trace of the substrate was found on the single specimen which was cut into segments, and it was therefore impossible to ascertain whether it was really *Q. robur*, or, perhaps, *Q. cerris*.

Recently, Donk (1972) has presented some rather strong arguments for the view that *S. litschaueri* is really identical with *S. schulzeri* (Fr.) Bourd. et Galz. (*Polyporus schulzeri* Fr., *P. irpex* Schulzer), which name was used earlier. If we accepted this view, the original locality of *P. schulzeri* in Vinkovci would represent the first find in Yugoslavia. However, the author does not share Donk's opinion and proposes to discuss the whole problem of *Polyporus schulzeri* in a later paper. Therefore she considers the above mentioned locality as the first definite record of *S. litschaueri* for Yugoslavia.

Summary

The distribution of four species of the genus *Spongipellis* in Yugoslavia is presented. *S. spumeus* and *S. pachyodon* were each found on three localities, with only one earlier known for *S. pachyodon*; *S. spumeus* was published under an incorrect name. *S. delectans* and *S. litschaueri* are now known for the first time for Yugoslavia, with one locality each. All the finds are backed by voucher specimens. As the author cannot agree with the opinion of Donk (1972) about the identity

of *S. litschaueri* and *Polyporus schulzeri*, she could not take Schulzer's locality (Vinkovci) into account. The problem of *P. schulzeri* is going to be treated in a later paper.

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SADRŽAJ

ROD *SPONGIPELLIS* PAT. (*POLYPORACEAE*) U JUGOSLAVIJI

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Rod *Spongipellis* opisao je Patouillard već 1887, no mnogo ga je autora još dugo uključivalo u rod *Tyromyces* P. Karst. (= *Leptoporus* Quél.). Tek su relativno nedavno taj rod nanovo opisali i označili Kotlaba i Pouzar (1965) na osnovi morfoloških obilježja plodišta. Njihove je zaključke potvrdila David (1969) ispitujući razvitak micelija u čistoj kulturi.

U rod *Spongipellis* ubraja se sada 6 vrsta. *S. unicolor* (Schw.) Murr. ograničen je na Sjevernu Ameriku, a ostale su vrste ustanovljene u Evropi. Od njih je *S. foetidus* (Velen.) Kotl. et Pouz. poznat samo

s originalnog nalazišta u Pragu, kasnije nikad nije nađen. *S. spumeus* (Sow. ex Fr.) Pat., *S. pachyodon* (Pers.) Kotl. et Pouz., *S. litschaueri* Lohwag i *S. delectans* (Peck) Murr. (*S. bredecelensis* (Pil. ex Pil.) Bond.) publicirani su iz različitih zemalja Evrope, ali nigdje s mnogo lokaliteta.

Za Jugoslaviju je dosad bio zabilježen samo jedan nalaz *S. pachyodon* (Tortić 1964). Međutim, novija su istraživanja pokazala da kod nas dolaze četiri vrste. Njihova je rasprostranjenost prikazana u ovom članku na osnovi primjeraka iz Instituta za botaniku Sveučilišta u Zagrebu (ZA) i Prirodnjačkog muzeja u Beogradu (BEO), koje sam sve pregledala i najvećim dijelom odredila. Dio toga materijala revidirali su F. Kotlaba i Z. Pouzar. *S. spumeus* je nađen na tri lokaliteta (jedan je od njih objavio Beck 1890, ali pod krivim imenom), *S. pachyodon* također na tri, a *S. delectans* i *S. litschaueri* sa po jednog. Tri su vrste dakle ovim prvi put sigurno utvrđene za Jugoslaviju.

Donk (1972) iznosi mišljenje da je *S. litschaueri* identičan s *Polyporus schulzeri* (*Spongipellis schulzeri*), pa bi prema tome Schulzerov nalaz iz okolice Vinkovaca predstavljao još jedan, i to prvi lokalitet za tu vrstu. Međutim, smatram da se tu radi o dvije vrste, pa ću o tom problemu raspravljati na drugom mjestu.

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