

Fungi from *Pezizales* new for Bulgaria

Evtimiya Dimitrova

Institute of Botany, Bulgarian Academy of Sciences, Acad. Georgi Bonchev St., bl. 23,
1113 Sofia, Bulgaria, e-mail: efi@bio.bas.bg

Received: February 19, 2009 ▷ Accepted: March 16, 2009

Abstract. Four new for the country Pezizalean species – *Discina melaleuca*, *Otidea bufonia*, *O. myosotis*, and *Scutellinia trechispora* are presented. They are accompanied with a concise description and data about their distribution across the country.

Key words: Bulgaria, discomycetes, *Pezizales*

Introduction

The article contains new data about the species composition of Bulgarian discomycetes. Four species from *Pezizales* new for the country are reported: *Discina melaleuca*, *Otidea bufonia*, *O. myosotis*, *Scutellinia trechispora*. Each taxon is presented with a short description, accompanied with measurement of the morphologic elements with taxonomic value: asci, ascospores and paraphyses. Data about distribution across the country are given for all species.

Material and methods

Fresh specimens collected from different floristic regions of Bulgaria were used for investigation. Squash mounts from the apothecia were made in Melzer's reagent. Morphological elements were observed and measured under the Amplival LM, with magnification 1000.

For identification of species of the investigated specimens, the following reference sources were used: Eckblad (1968), Dennis (1978), Breitenbach & Kränzlin (1984), Dissing (2000). The authors names of the taxa are abbreviated according Kirk & Ansell (2004), and the nomenclature follows Kirk & al. (2008). Dis-

tribution of species is given according to the floristic regions adopted in the *Flora of the PR Bulgaria* (Jordanov 1966).

All collected specimens included in the paper are deposited in SOMF.

Results

PEZIZOMYCETES, PEZIZALES

Discinaceae

Discina melaleuca Bres., Fungi Tridentini, 2, p. 74, 1898 (Fig. 1)

Apothecia 4–6 cm in diameter, sessile, single or crowded, discoid, irregularly deformed, expanded, flat, strongly folded with wavy margin, curved inside, and with yellowish-brown to chestnut-brown hymenium; outside whitish to isabelline. **Asci** 220–280 × 12.5–15 µm, cylindrical, J-, 8-spored. **Ascospores** 15–20 × 7.5–10 µm, ellipsoid, unicellular with 1–3 large oil drops, during maturity fine verrucose, without appendages, hyaline. **Paraphyses** cylindrical, rounded and slightly widened, up to 5–6 µm at the top, septate, with pale brownish contents.

On soil, Northeast Bulgaria (Shumen Plateau), 25.10.2007, leg. D. Stoykov, SOMF 26 810.

Pyronemataceae

Otidea bufonia (Pers.) Boud., Hist. Class. Discom. Eur., p. 52, 1907 (Fig. 2)

Apothecia up to 4 cm in diameter, single or in small groups, deeply cupulate, one-sidedly convoluted, divided into several triangular sections, outside hard piled, brown, fibrillose and with an even darker hymenium. **Asci** 162.5–210 × 10–12.5 µm, cylindrical, J⁻, 8-spored. **Ascospores** 12.5–15 × 7.5 µm, ellipsoid-fusiform, unicellular, with two large oil drops, uniseriate in the ascus, hyaline. **Paraphyses** cylindrical, 2.5 µm wide, septate, strongly curved at the top.

On soil in an oak forest, Mt Sredna Gora (Mt Lozenska, between the villages Novi Han and Gabra), 17.09.2005, leg. B. Assyov, SOMF 25 215.

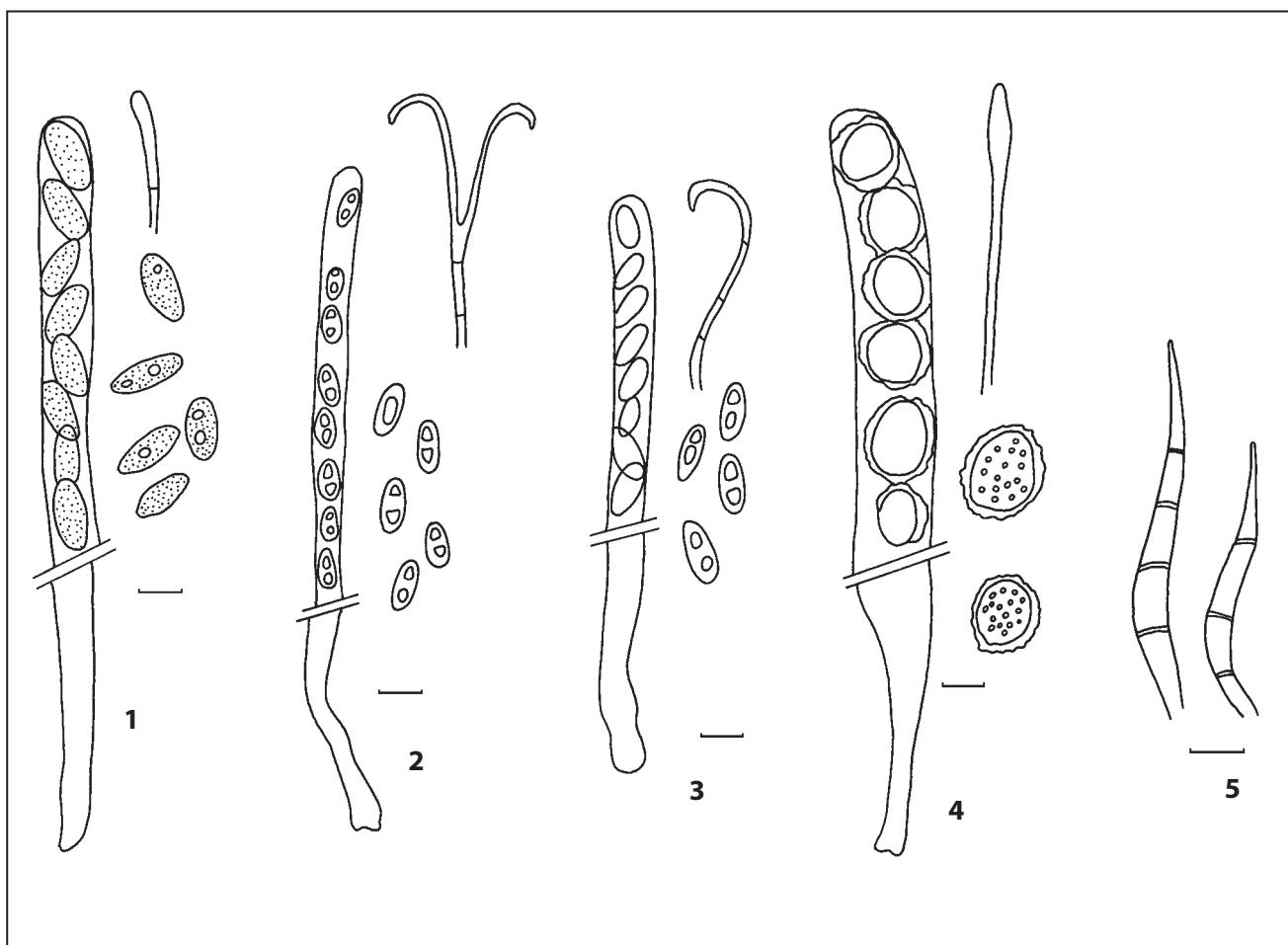
Otidea myosotis Harmaja, Karstenia, 15, p. 32, 1976 (Fig. 3)

Apothecia 2.5–2.8 cm high and 3.5–4 cm wide, sessile, crowded, one-sidedly convoluted (ear-shaped) with ochraceous-yellow hymenium and smooth, slightly split margin; outside even, unicoloured, with hymenium, and with a rose-violet shade around the edge. **Asci** 162.5–187.5 × 10 µm, cylindrical, apex rounded, J⁻, 8-spored. **Ascospores** 12–12.5 (–13) × 7–7.5 µm, broadly ellipsoid unicellular, with two large oil drops, uniseriate in the ascus, hyaline. **Paraphyses** cylindrical, forked and strongly hooked at the top, septate, 2.5–3 µm wide.

On soil in a coniferous forest, Vitosha region (Mt Plana), 10.10.2007, leg. A. Grozdanov, SOMF 26 811.

Scutellinia trechispora (Berk. & Broome) Lambotte, Mém. Soc. Roy. Sci. Liège, Série 2, 14, p. 299, 1887 (Figs 4, 5)

Apothecia up to 3.5 mm in diameter, initially cup-shaped, subsequently discoid, almost flat, out-



Figs 1–4. Asci, ascospores and paraphyses of: 1, *Discina melaleuca*; 2, *Otidea bufonia*; 3, *O. myosotis*; 4, *Scutellinia trechispora*; Scale bars = 10 µm

Fig. 5. Hairs of *S. trechispora*. Scale bar = 50 µm

side bright red, with orange-red or red hymenium, covered by dense brown hairs, 230–800 µm long, forked or simple in the base, and abruptly attenuated and acuminate at the top, with several thin septa and brown walls, 5–7 µm thick. **Asci** 207.5–280 × 15–22.5 µm, cylindrical, J⁻, 8-spored. **Ascospores** 15–17.5 µm in diameter, globose, uniseriate in the ascus, ornamented on the surface, with cut and blunt spines at the top, 4 µm long, hyaline. **Paraphyses** cylindrical, clavate at the top, up to 10 µm wide.

On soil, Forebalkan (Vratchanski Divide, above Lyutadzhik village), 05.10.2006, leg. B. Assyov, SOMF 26 216.

Acknowledgements. Special thanks are extended to the anonymous reviewer for the critical notes and valuable suggestions.

References

- Breitenbach, J. & Kränzlin, F. 1984. Fungi of Switzerland. Vol. 1 *Ascomycetes*. Verlag Mykologia, Lucerne.
- Dennis, R.W.G. 1978. British *Ascomycetes*. 2nd ed. J. Cramer, Vaduz.
- Dissing, H. 2000. *Pezizales*. – In: Hansen, L. & Knudsen, H. (eds). Nordic Macromycetes. Vol. 1, *Ascomycetes*. Helsinki Univ. Printing House, Helsinki.
- Eckblad, F.-E. 1968. The genera of the Operculate discomycetes. A re-evaluation of their taxonomy, phylogeny, and nomenclature. – Nytt Mag. Bot., 15: 1-192.
- Jordanov, D. (ed.) 1966. Flora Reipublicae Popularis Bulgaricae. Vol. 3. In Aedibus Acad. Sci. Bulgaricae, Serdicae (in Bulgarian).
- Kirk, P.M. & Ansell, A.E. 2004. Authors of fungal names. Electronic version CAB International, Wallingford, UK (www.indexfungorum.org/Names/Authors%20of%20Fungal%20Names.asp).
- Kirk, P.M., Cannon, P.F., Minter, D.W. & Stalpers, J.A. (eds). 2008. Dictionary of the Fungi. 10th ed. CAB International, Wallingford.

