

New or less known Discomycetes. XXII.

Nové nebo méně známé diskomycety. XXII.

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Seven new species of Discomycetes according to the material collected in Czechoslovakia are described: *Calycellina chalarae*, *Chlorosplenium hyperici-maculati*, *Cistella citrinescens*, *Hymenoscyphus caeruleo-annulatus*, *Hymenoscyphus sclerotigerus*, *Incrupilella carpini* and *Orhilia aranea*.

Je popsáno sedm nových druhů z Československa: *Calycellina chalarae*, *Chlorosplenium hyperici-maculati*, *Cistella citrinescens*, *Hymenoscyphus caeruleo-annulatus*, *Hymenoscyphus sclerotigerus*, *Incrupilella carpini* a *Orhilia aranea*.

Calycellina chalarae sp. nov.

Apothecia 0.5 - 1 μm diam., solitaria inter conidiophora hyphomyceti *Chalara cylindrosperma* ab initio in superficie folii, late sessilia, albida, pallida, tinctu fusco vel cinereo, disco subplano, sicco albido vel pallide luteolo, margine extusque subtiliter puberula, subnuda. Excipulum parte basali cellulis usque ad 14 μm latis, subglobosis vel angulato-globosis, luteolis, tenuiter vel parum incrassato-tunicatis, marginem versus elongatis, angulatis, minoribus (6 - 7 μm latis), cellulis superficialibus indumenti breviter lageniformibus vel conico-angustatis, 12 - 15 x 3 - 5 μm , hyalinis, tenuiter tunicatis. Asci 40 - 50 x 5 - 6 μm , oblongo-clavati, deorsum sensim crasse stipitati, basi interdum subfurcati, apice angustati, poro amyloideo, 8-spori. Paraphyses filiformes, 1.5 - 2.5 μm crassae, apice rectae, non dilatatae, obtusae, ascos non superantes, hyalinae. Ascosporae 8 - 10 x 1.5 - 2 μm , anguste fusiformes polis angustatis usque attenuatis, latere uno applanatae, rectae vel subcurvatae, eguttulatae, hyalinae.

H a b i t a t ad paginam inferiorem folii emortui deiecti *Betulae pendulae*.

B o h e m i a c e n t r a l i s: Nemiž prope Vlašim (distr. Benešov ap. Pragam), in fruticeto *Juniperi communis* arcae tutae „Na ostrově“, 27. IX. 1981 leg. M. Svrček (holotypus PRM).

The minute apothecia of this discomycete occur in small groups on fallen leaf amongst conidiophores of dematiaceous hyphomycete *Chalara cylindrosperma* (Corda) Hughes, and are distinctive from other foliicolous *Calycellina*-species by light-yellowish excipulum without the dark coloured basal ring. M. B. Ellis (1971), T. R. Nag Raj and B. Kendrick (1975) recorded *Chalara cylindrosperma* as a polyphagous fungus on dead wood, beech cupules, dead leaves and herbs. *Calycellina chalarae* was published by me as „nomen nudum“ in a paper on the fungus flora of the nature reserve „Na ostrově“ (Svrček 1982), where *Juniperus communis* is a dominant shrub. *Calycellina populina* (Fuckel) Höhn. on fallen leaves of deciduous trees (typically on *Populus*) with a dark brown or blackish basal ring, sometimes very prominent, and only rarely not well developed, has similar superficial cells (Dennis 1956). *Hyaloscypha puberula* ss. Cooke (non Lasch), mentioned by Dennis

(1956) has also a dark brown basal ring and resembles *Calycellina populina*, but is much hairier (on leaves of *Quercus*). The material collected by me is scarce but this foliicolous discomycete cannot be identified with similar species, and especially its relationship to *Chalara cylindrosperma* should be further observed.

***Chlorosplenium hyperici-maculati* sp. nov.**

Apothecia 0.8 - 1.5 μm diam., solitaria vel 2 - 3 aggregata, firme subcanosa, patellaria, mox explanata, subtus breviter stipitata (stipite 0.4 - 0.8 μm longo), basi attenuata, tota conspecte pulchreque viridia, disco saturate viridi facie velutino, extus concolor atque subtiliter fibrillosa. Excipulum obscure viride, textura porrecta, cellulis omnibus tenuiter tunicatis, angulatis, in seriebus ordinatis, usque ad 13 x 6 μm magnis, parte basali subsodiametricis, plus minusve angulatis, usque ad 8 μm diam., hyalinis, hyphis marginalibus cylindraceutis, 50 - 60 μm longis, 2.5 - 3.5 μm crassis, apice obtusis, septatis, minute granuloso-incrassatis vel sublaevibus, hyalinis. Superficies excipuli hyphis longis, 1.5 - 3 μm crassis, nudis vel subtiliter granuloso-incrustatis, hyalinis, in strato pallide viridibus tecta. Asci 50 - 60 x 6 - 8 μm , oblongo-clavati vel clavate-cylindraceuti, basi breviter vel longius attenuati, apice obtusi, poro minuto (0.8 - 1 μm diam.) inamyloideo, sed post vi solutionis 10% KOH amyloideo vel subamyloideo, 8-spori, sporis partim distichis. Paraphyses 2.5 - 3 μm crassae, apice non dilatatae, obtusae, rectae, hyalinae, ascis aequilongae vel parum longiores. Ascospores 8 - 10 x 2.5 - 3 μm , oblongae, inaequilaterales, polis obtusis, guttulis binis minutis polaribus instructae, sed etiam eguttulatae, hyalinae.

Habitat and caules emortuos deiectos *Hyperici maculati* Cr.

Slovakia: montes Belianské Tatry, Tatranská Kotlina, in convalle „Kotlina Siedmich prameňov“ (=Holubyho dolina), in declivitate montis Bujáci vrch (1950 m s. m.), loco „Lavinový žlab“, 1900 m s. m., 5. X. 1958 leg. J. Kubička et M. Svrček (BT no. 965; holotypus PRM).

The beautiful colour of this discomycete is conspicuously deep green in all outer parts of apothecia, the disc has an almost velvety appearance. The only one herbicolous species of *Chlorosplenium* Fr., *Ch. aeruginellum* (Karst.) Karst. is very close; it is occurring on rotting stems of *Filipendula ulmaria* which are blue-green stained. It is a very rare species found also by me in Southern Bohemia. No green colour of *Hypericum* - stems has been observed. In spite of the intensive research with a view to the discomycetes on *Hypericum* spp. in our country, this *Chlorosplenium* was not more found.

***Cistella citrinescens* Velenovský in Svrček, sp. nov.**

Apothecia 0.5 - 1 μm diam., dense gregaria, sessilia, patellaria, dein explanata, margine saepe flexuosa, viva niveo-alba, pellucida, sed vulnerata cito citrino-lutescentia denique rubrobrunnescentia, extus margineque subtiliter pruinoso-granulosa. E disco apothecia nova minuta copiose proliferunt. Excipulum textura angularis usque prismatica cellulis angulatis, hyalinis, margine extusque pilis numerosis 10 - 20 x 2.5 - 6 μm , cylindraceutis vel

oblongo-clavatis, 0-2-septatis, hyalinis, tenuiter tunicatis, cellula terminali minutissime dense granulato-incrustata tectum. Asci (25-) 30 - 35 x 4-5 μm , breviter clavati, apice obtusi, deorsum sensim crasse attenuati, 8-spore, poro amyloideo. Paraphyses 2 - 2,5 μm crassae, apice rectae, obtusae, non dilatatae, hyalinae ascos non superantes. Ascospores 4 - 5 x 1.5 - 1.8 μm , fusioideae, uno latere applanatae, rectae, basi attenuatae, eguttulatae, hyalinae.

Habitat ad lignum putridum (? *Pinus* sp.) tabulae deiectae.

Bohemia centralis: Praha-Nové Město, in horto botanico Universitatis Carolinae, 11. XI. 1922 leg. J. Velenovský (holotypus PRM 149504).

This species, collected by J. Velenovský on pine board in Botanical Garden at Prague and described by him in his manuscript-notes only as *Pezizella citrinescens* sp. n., but not published, is preserved in the herbarium PRM. I completed the original description by some microscopical features according to the holotypus. This is a true *Cistella* remarkable by the change of colour when fresh.

Hymenoscyphus caeruleo-annulatus sp. nov.

Apothecia (sicca) 1 - 1.5 μm diam., sparse gregaria, cyathiformia, breviter crasseque stipitata (0.3 - 0.4 μm), stipite cylindraco, pallide luteola, disco luteola vel pallide brunneolo, margine subflexuoso tinctu brunneo, acuto, extus nuda, laevia, interdum subalbida, stipite cylindraco radium thecii breviori (plerumque 0.5 μm), deorsum brunneola, basi obscure brunnea usque nigrella, hyphis ferrugineo-flavis substrato coniuncta. Apothecia in aqua humectata tota subalba vel albida apparet. Superficies stipitis atque excipuli inferiori distincte griseocaeruleo-colorata est. Excipulum textura prismatica, parte basali cellulis angulatis, usque ad 25 x 18 μm magnis, marginem versus elongatis angustioribusque (22 x 5 μm), tenuiter tunicatis, hyalinis, hyphae marginales paraphysiformes, dense continuae, 70 - 150 μm longae, guttulis parvis impletae. Hyphae myceliales parte basali excipuli hyalinae, tenuiter tunicatae, septatae, 1.5 - 3 μm crasse, in solutione Melzeri fulgide vinaceo-rubescens (dextrinoideae). Pars basalis stipitis e cellulis isodiametricis, 5 - 10 μm diam., subcrasse tunicatis, atque annulo obscure brunneo, 20 - 30 μm lato instructa, sursum cum hyphis caeruleo-violaceis, usque 100 - 200 μm attingentibus. Superficies stipitis atque excipuli partim cellulis vel hyphis brevibus, 0-1-septatis, vesiculosis, cylindracois, saepe clavato-vel subclavulato-terminatis, 5 - 8 μm crassis, griseo-caeruleis (in aqua, etiam in NH_4OH), partim hyphis longis, valde flexuosis, ramosis, 3 - 4 μm crassis, septatis, ferrugineoflavis tecta est. Asci 80 - 90 x 6.5 - 8 μm , clavato-cylindracois, deorsum sensim longe stipitati, apice obtusi, 8-spore, sporis monostichis. Paraphyses valde numerosae, 1.5 - 2.5 μm crassae, hyalinae, intus dense guttulis parvis impletae, apice rectae, non dilatatae, obtusae. Ascospores 12 - 15 (-17) x 3.5 - 4.5 μm , oblongo-fusiformes, latere uno applanatae, polis angustatis sed obtusis, rectae, guttulis binis maioribus nonnullisque parvis implatae, hyalinae.

S l o v a c i a : Herlany, silva parkensis, 25. IX. 1990, leg. H. Deckerová (herb. J. Herink No. 611/90, holotypus PRM).

This *Hymenoscyphus* is very remarkable by its blue or almost violet or greyish-violet cells and hyphae at the base of stipe and outer part of excipulum, as well as by the presence of ferruginous superficial excipular hyphae. It is close to *Hymenoscyphus sazavae* (Vel.) Svr. (Svrček 1984), a species occurring on conifer-debris, too, but without a ring-like zone and bluish coloured hyphae.

***Hymenoscyphus sclerotigerus* sp. nov.**

Apothecia 1 - 2 μm diam., breviter vel longius stipitata, tota fulgide vitellino-lutea, disco mox plano, anguste marginato, extus nuda, stipite concolori e sclerotio vivo *Typhulae* sp. ecescentia, solitaria vel subfasciculata. Excipulum textura prismatica, cellulis angulatis, oblongis, usque ad 22 x 10 - 12 μm magnis, tenuiter tunicatis, hyalinis, parte basali excipuli longioribus angustioribusque, 2.5 - 5 μm crassis, non dextrinoideis, hyphis marginalibus anguste cylindraccis. Asci 50 - 60 x 6 - 7.5 μm , oblongo-clavati, deorsum sensim attenuati, apice obtusi, poro amyloideo, 1.3 - 1.5 μm diam., 8-spори, sporis partim distichis vel monostichis. Paraphyses 2 - 3 μm crassae, simplices, apice obtusae, rectae, totae pigmento fulgide luteo-colorato impletae. Ascospores 6.5 - 8.5 x 1.8 - 2 μm , oblongae, uno latere applanatae, polis obtusis attenuatis, eguttulatae, hyalinae.

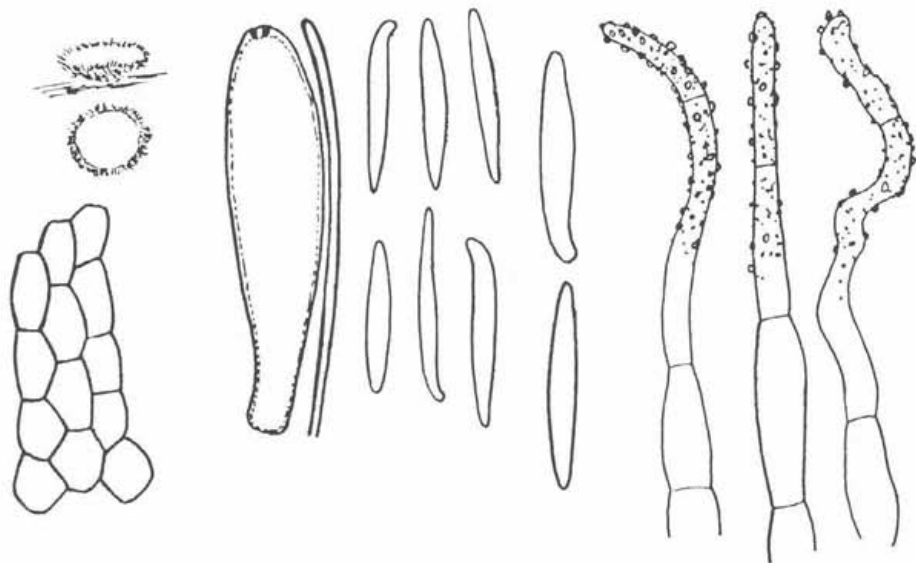
H a b i t a t ad sclerotia viva *Typhulae* sp. in petiolis foliorum emortuorum anno praecedente *Petasitis* sp. (probabiliter *P. albus*).

Bohemia septentrionalis: montes Krkonoše, Malá Úpa, ad ripam rivi Malá Úpa apud ostium vallis rivuli „Jelení potok“, cca 800 m s. m., copiose, 14. - 16. IX. 1989, leg. M. Svrček (holotypus PRM).

The bright yellow apothecia arising from living brown sclerotia of *Typhula* sp. occurring in dead petioles of *Petasites* sp. (probably *P. albus*) are very peculiar and unusual character in the genus *Hymenoscyphus*. The shortly articulate, irregularly flexuous, brown or blackish coloured hyphae 2 - 3.5 μm thick are present at the spot where the stalk is growing from the sclerotium.

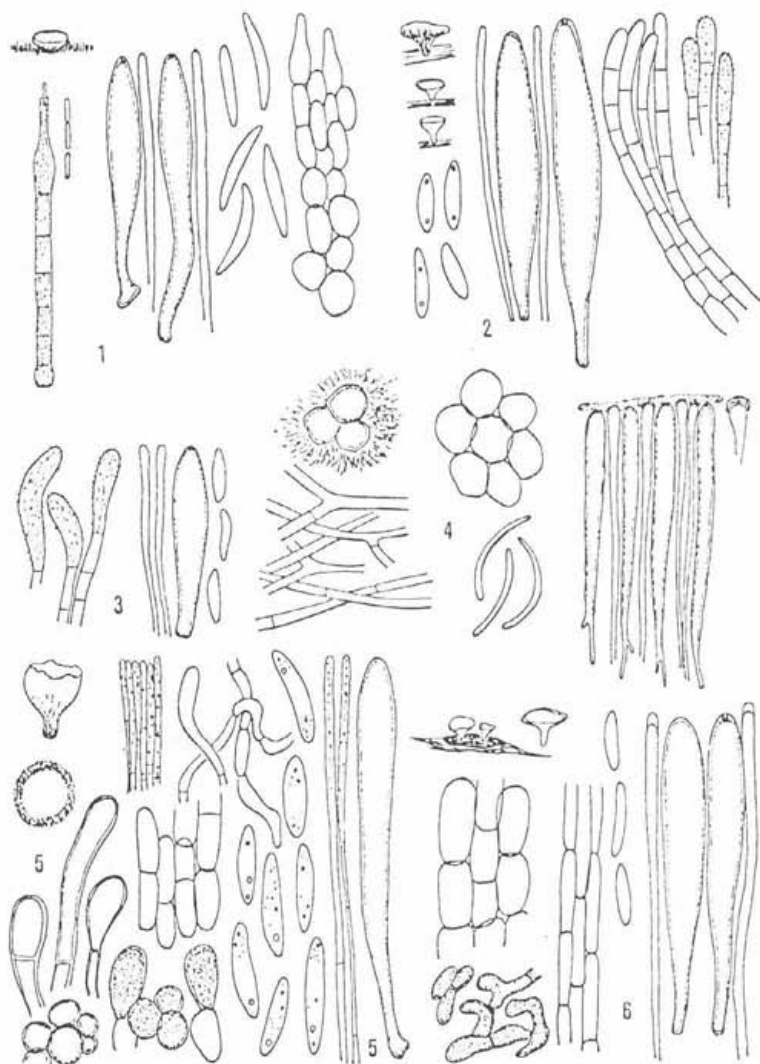
***Incrupilella carpini* sp. nov.**

Apothecia 0.2 - 0.5 μm diam., singularia, rarior gregaria, indistincte marginata, subtus brevissime stipitiformiter angustato-sessilia, mollior ceracea, patellaria dein explanata, disco plano, orbicularia, extus dense breviter tomentoso-pilosula, margine dense erecto-pilosula, primo subalba deinde tinctu cremeo-luteo usque butyraceo-luteo vulnerata immutabilia. Excipulum textura prismatica e cellulis angulatis, parte basali magis rotundatis, tenuiter tunicatis, hyalinis. Pili 40 - 70 x 2 - 3 (apex), 3 - 5 (pars basalis) μm , cylindracci, septati, flexuosi, apice obtusi, tenuiter tunicati, toti vel maxima e parte grosse granulato-incrustati, hyalini. Asci 50 - 60 x 7 - 8 μm , 8-spори (sporis plus minusve distichis), crasse clavati, apice rotundati, basi breviter crasseque stipitati, poro amyloideo.



Incrupilella carpini Svr. (holotype). Apothecia, excipular cells, ascus, paraphysis, ascospores (right two ascospores under oil immersion), three hairs.

M. Svrček del.



1. *Calycellina chalarae* Svr. (holotype). Apothecium amongst conidiophores of *Chalara cylindrosperma* (Corda) Hughes, one conidiophore and conidia of this *Chalara*, asci, paraphyses, ascospores, marginal excipular cells. - 2. *Chlorosplenium hypericimaculati* Svr. (holotype). Apothecia, ascospores, asci, paraphyses, marginal excipular hyphae. - 3. *Cistella citrinescens* Vel. in Svr. (holotype). Hairs, paraphyses, ascus, ascospores. - 4. *Orbilia aranea* Svr. (holotype). Apothecia on subiculum, hyphae of the subiculum, excipular cells, ascospores, asci, paraphyses. - 5. *Hymenoscyphus caeruleo-annulatus* Svr. (holotype). Apothecium, blue-coloured ring-like zone at the base of apothecium, superficial blue-coloured hyphae and cells from the outer part of the excipulum and stipe, excipular cells, flexuous rust coloured hyphae from the ectal part of the excipulum, ascospores, paraphyses, ascus. - 6. *Hymenoscyphus sclerotigerus* Svr. (holotype). - Apothecia (partly on the *Typhula*-sclerotium), excipular cells, articulate hyphae from the base of apothecium, excipular long hyphae from the inferior part of excipulum, ascospores, paraphyses, asci.

M. Svrček del.

Paraphyses filiformes, apice non dilatatae, 1.5 μm crassae, rectae, cum ascis aequilongae, hyalinae. Ascosporae 14 - 19 x 2 - 3 (-3.5) μm , anguste fusioideae vel cylindraco-fusoidae, rectae, apice uno plerumque rostro parvo obtuso curvatoque instructae, eguttulatae, hyalinae.

Habitat ad nervos foliorum deietorum (ad paginam inferiorem) *Carpini betuli*.

Bohemia septentrionalis: České středohoří, Vchynice prope Lovosice, in declivitate septentr. collis „Ovčín“ (431 m s. m.), 18. XI. 1960 leg. M. Svrček (holotypus PRM).

The encrusted hairs of this discomycete are of the same shape as that of the type-species of the genus *Incrupilella* Svr., *I. flexipila* Svrček (1986). The encrustation can be only badly observable in water because the granules easily fall off. When dried, the hairs are very conspicuously encrusted. The foliicolous *Setyscypha lachnobrachya* (Desm.) Svrček (1987:196) with similar ascospores, differs in its quite smooth and pointed hairs.

Orbilina aranea sp. nov.

Apothecia 0.3 - 2 μm diam., subiculo arachnoideo candido insidentia, plerumque gregaria usque confluentia, rare solitaria, late sessilia, tenuiter marginata, orbicularia, nuda, disco plano, vinoso-lutea vel ochracea, sicca pallide luteola vel pallida, molliter elasticocamosa. Excipulum e cellulis parte basali elongato-angulatis, ad marginem versus late ellipsoideis usque rotundatis, ad 35 μm diam., vel 25 x 17 μm diam., marginalibus minoribus (solum 3 - 4 μm diam.), hyalinis, tenuiter tunicatis. Hyphae subiculi e cellulis basalibus excipuli crescentes, 3 - 5 μm crassae, longae, rectae, ramosae, tenuiter tunicatae (sed firmae), nudaee vel sparse granulosaee, remote septatae, hyalinae, partim paulisper inflatae. Asci 30 - 45 x 3 - 4 μm , breviter vel longius stipitati (stipite usque ad 12 μm longo, simplici vel brevissime bifurcato), cylindraco, apice subtruncati, poro inamyloideo, 8-spore (spore distichis), epithecio valido (2 - 5 μm crasso) hyalino vel luteolo tecti, paraphysibus firme cohaerentes. Paraphyses filiformes, apice plerumque clavato-dilatatae (1.5 - 2.5 μm). Hypothecium hyalinum e cellulis 1.5 - 3 μm diam., isodiametricis instructum. Ascospore 8 - 13 x 0.8 - 1 μm (plerumque 10 - 12 μm longae), arcuatae, basi sensim attenuatae, eguttulatae, hyalinae.

Habitat ad corticem ramorum deietorum (in cumulo iacentibus) *Populi tremulae*.

Bohemia meridionalis: Boudy prope Čimelice (distr. Pisek), in declivitate orient. collis „Hrad“ (574 m s. m.), 1. VIII. 1969 leg. M. Svrček (608/89, holotypus PRM 684767).

This *Orbilina* is remarkable by the pure white, cobweb-like subiculum (hypothallus) forming a dense mat to a distance up to 2 μm from apothecium, and separable as a thin membrane when dried apothecia are moistened. Apothecia grown often on lenticels in bark of fallen branches. In the past, I collected and identified this *Orbilina* several times under the name *Orbilina curvatispora* var. *robiniae* Vel., doubtless identical with *O. aranea*, e. g. in woods near Karlštejn, Central Bohemia, on bark of accumulated branches of *Robinia pseudacacia*, 19. VI. 1949 (see also Velenovský 1934, Svrček 1954).

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