

New species of *Bactrodesmium*, *Corynespora*,
Septonema and *Taeniolella*

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Borowska A., 1975, *New species of Bactrodesmium, Corynespora, Septonema, and Taeniolella*, *Acta Mycol.* 11 (1): 59-65, 1975.New species of dematiaceous *Hyphomycetes* occurring on dead wood of deciduous trees in Poland are described: *Bactrodesmium xerophilum*, *Corynespora quercicola*, *Septonema binum*, and *Taeniolella dichotoma*.*Bactrodesmium xerophilum* sp. nov.

Sporodochia punctiformia, atro-brunnea, dispersa usque ad 300 μm in diametro habentia. Mycelium in substrato immersum, hyalinum. Conidiophora fasciculata, simplicia vel ramosa, pallide olivaceo-brunnea, ad 15 μm alta, 1-2-(4-)septata. Cellulae conidiogenae monoblasticae, intergrae, apicales, determinatae, obclavatae vel lageniformes, 3,5-4,5 μm longae et prope basim 3 μm latae. Conidia singula in apice conidiophori oriunda, cylindrica, ellipsoidea vel clavata, ad basim truncata, brunnea, 2-(1-)septata, 14-26 μm longa, 3,5-7,5 μm lata (ad basim 2 μm); septis supremis crassis, ad 4 μm latitudinis.

Habitat: in ligno betulino (Betula pendula Roth.).

Typus: in ligno betulino, in Pino-Querceto var. Scorzonera humilis, Kampinoski Park Narodowy, Krzywa Góra, Polonia, leg. A. Borowska, 21.X.1971 (WA 20590).

Sporodochia punctiform, scattered, black-brown, up to 300 μm in diametr. Mycelium immersed in the substrate, composed of subhyaline, branched and septate, 3-6 μm thick hyphae. Conidiophores fasciculate, pale olive-brown, simple or branched, 1-2-(4-)septate, up to 15 μm long. Conidiogenous cells monoblastic, integrated, terminal, determinate, obclavate or lageniform, 3,5-4,5 μm long and 3 μm thick at the base. Conidia cylindrical, ellipsoid or obovoid, slightly curved, brown, 14-26 × 3,5-7,5 μm, 2-(1-)septate with a thick (up to 4 μm)

black-brown band at the upper septum; apical cell rounded, basal cell tapering, 2 μm wide at the base, truncate.

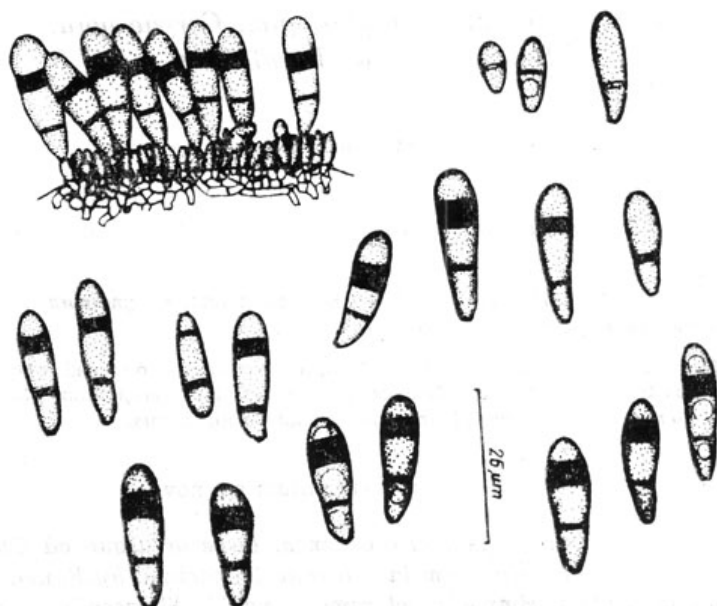


Fig. 1. *Bactrodesmium xerophilum* sp. nov. Sporodochium and conidia (type). Del. A. Borowska.

Bactrodesmium xerophilum was found on the dead rotten wood of *Betula pendula* Roth., in *Pino-Quercetum* var. with *Scorzonera humilis*, Kampinos National Park, Krzywa Góra, Poland, leg. A. Borowska, 21.X.1971, type (WA 20590). Fig. 1.

This species differs from all known species of *Bactrodesmium* (Ellis 1959, 1963, 1965, 1971; Holubová-Jechová 1972) by its 2-septate, with a broad dark brown band at the upper septum, conidia.

Corynespora quercicola sp. nov.

Coloniae paulo profusae, atro-brunneae, pilosae, humiles in ligno habitantes. Mycelium substrato infusum, hyphae superficiales raro oriuntur. Conidiophora dense aggregata vel solitaria, recta, 80-150 μm longa, 4-6 μm lata, simplicia, altro-brunnea et apice paulo clariora, 4-8 septata,

crassitunicata. Cellula conidiogena apicalis, unipora, integra, cylindrica. Conidia ellipsoidea vel cylindrica, in utraque parte rotundata, levia, 15-22 μm longa, 5,5-7,5 μm lata, 2-septata, cellula media brunnea et maior quam ceterae subhyalinae cellulae est, catenulata, catenulis usque e 5 conidiis compositis.

Habitat: in ligno roboreo (*Quercus robur* L.).

Typus: in ligno *Quercus roborei*, in Pino-Querceto var. *Carpinus betulus*, Kampinoski Park Narodowy, Sieraków, Polonia, leg. A. Borowska, 26.VI.1971 (WA 20599).

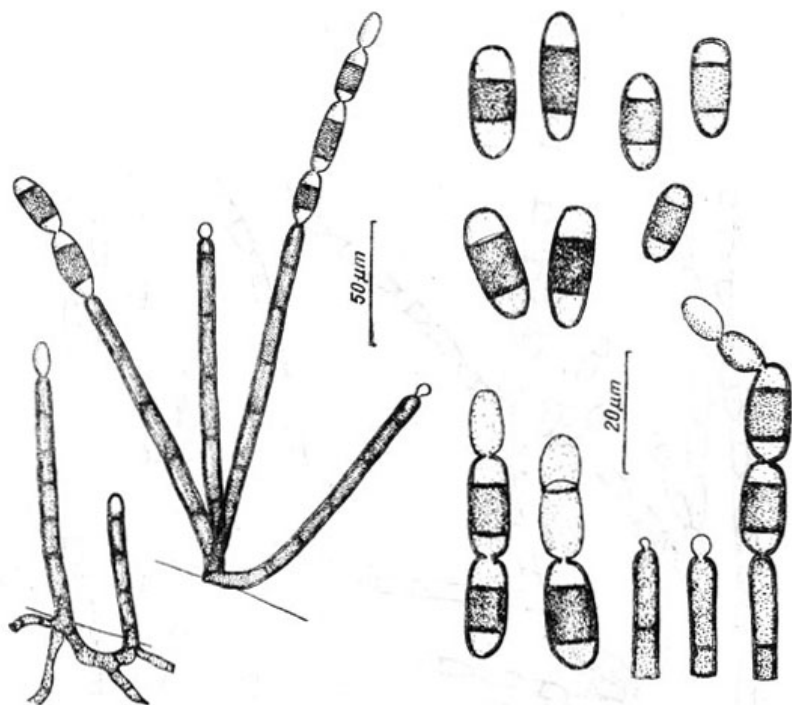


Fig. 2. *Corynespora quercicola* sp. nov. Conidiophores, conidiogenous cells, and conidia (type). Del. A. Borowska.

Colonies are minute or irregularly effused, dark brown, hairy. Mycelium partly superficial, partly immersed in the substrate. Conidiophores solitary or in groups, erect, $80-150 \times 4-6 \mu\text{m}$, unbranched, dark brown, thick-walled. Conidiogenous cells monotretic, integrated, terminal, cylindrical, brown, paler near the apex. Conidia in chains of 2-6, ellipsoid to cylindrical, rounded at each end, $15-22 \times 5,5-7,5 \mu\text{m}$,

smooth-walled, usually 2-septate; middle cell brown, apical and basal cells hyaline or pale coloured, usually smaller.

On fallen, decaying wood of *Quercus robur* L., in *Pino-Quercetum* var. with *Carpinus betulus*, Sieraków, leg. A. Borowska, 26.VI.1971, type (WA 20599) and in *Pino-Quercetum* var. with *Scorzonera humilis*, Krzywa Góra, 28.IX.1971, leg. A. Borowska (WA 20594); Kampinos National Park, Poland. Fig. 2.

Corynespora quercicola is similar to *C. biseptata* Ellis (1960). The new species differs, however, distinctly by smaller conidia and different colour of the cells of the conidia.

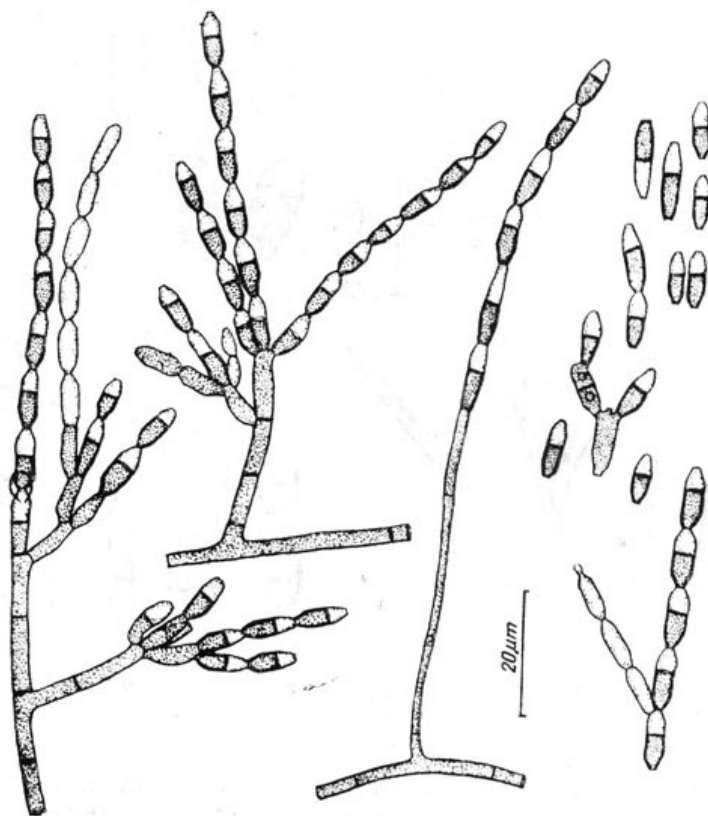


Fig. 3. *Septonema binum* sp. nov. Conidiophores and conidia (type). Del. A. Borowska.

Septonema binum sp. nov.

Coloniae effusae, fusco-olivaceae, lanosae, laxae. Hyphae mycelli superficiales arcuate erectae, ad 4 µm latae, septa 50-70 µm a se distantia habentes, in quo mycelio conidiophora in magis distantibus oriuntur. Conidiophora brunneo-olivacea, simplicia vel ramosa, ad 250 µm alta, atque ad basim 4-7 µm lata. Cellulae conidiogenae monoblasticae, vel polyblasticae, apicales, infrequens intercalares, cylindricae, 15-18,5×4-5,5 µm habent. Conidia cylindrica vel oblonga, in utraque parte angustata ac truncata, 11-15 µm alta, 3-4 µm lata, 1-septata, cellula superior hyalina vel incolorata, cellula inferior brunneo-olivacea et longior, catenulata, catenulis e 6-8 conidiis compositis, simplicia vel ramosa.

Habitat: in ligno roboreo (Quercus robur L.).

Typus: in ligno roboreo, in Pino-Querceto var. Carpinus betulus, Kampinoski Park Narodowy, Zamczysko, Polonia, leg. A. Borowska, 20.X.1971 (WA 20595).

Colonies effuse, dark olivaceous brown, cottony. Mycelium superficial; hyphae olivaceous brown, branched, 4 µm thick. Conidiophores erect, olivaceous brown, simple or branched, septate, up to 250 µm long, 4-7 µm thick at the base. Conidiogenous cells monoblastic, cylindrical, determinate, 15-18,5×4,5-5,5 µm, usually terminal. Conidia cylindrical or oblong, abruptly tapered to the truncate ends, 11-15×3-4 µm, 1-septate, apical cell hyaline or pale coloured, basal cell brown, in acropetal, simple or branched chains.

Found on dead rotten wood and bark of fallen decayed trunks of *Quercus robur* L., in two localities in Poland, in Kampinos National Park; in *Pino-Quercetum* var. with *Carpinus betulus*: Sieraków, 26.VI.1971 (WA 20596) and Zamczysko, 20.X.1971, type (WA 20595); leg. A. Borowska, Fig. 3.

Taeniolella dichotoma sp. nov.

Coloniae atro-brunneae, effusae, pulvinatae, laxae. Mycelium ex hyphis hyalinis vel palide brunneis, partim superficiales partim in substrato immersum in aliquibus locis dense ramosis constructum est. Mycelium aerium ex paucis hyphis palide brunneis, levibus, paulo ramosis atque 6-8 µm latis, ac septa transversa in 30-90 µm distantes habentes, constructum est. Conidiophora simplicia vel in parte apicali dichotomice ramosa, palide brunneis vel brunneis, ad 150 µm alta, 8 µm lata. Cellulae conidiogenae monoblasticae, integrae, cylindricae, apicales. Conidia cylindrica, in apice rotundata et paulo angustata, ad basim truncata, 55-220 µm longa, 7,5-11 µm lata, brunnea vel atro-brunnea, ad 20-septata, catenulata, catenulis simplicis vel dichotome ramosa (ad 4-dichotome ramosa).

Habitat: in ligno roboreo (*Quercus robur* L.).

Typus: in ligno roboreo (*Q. robur*), in Tilio-Carpineto, Kampinoski Park Narodowy, Zamczysko, Polonia, leg. A. Borowska, 29.IV. 1971 (WA 20597).

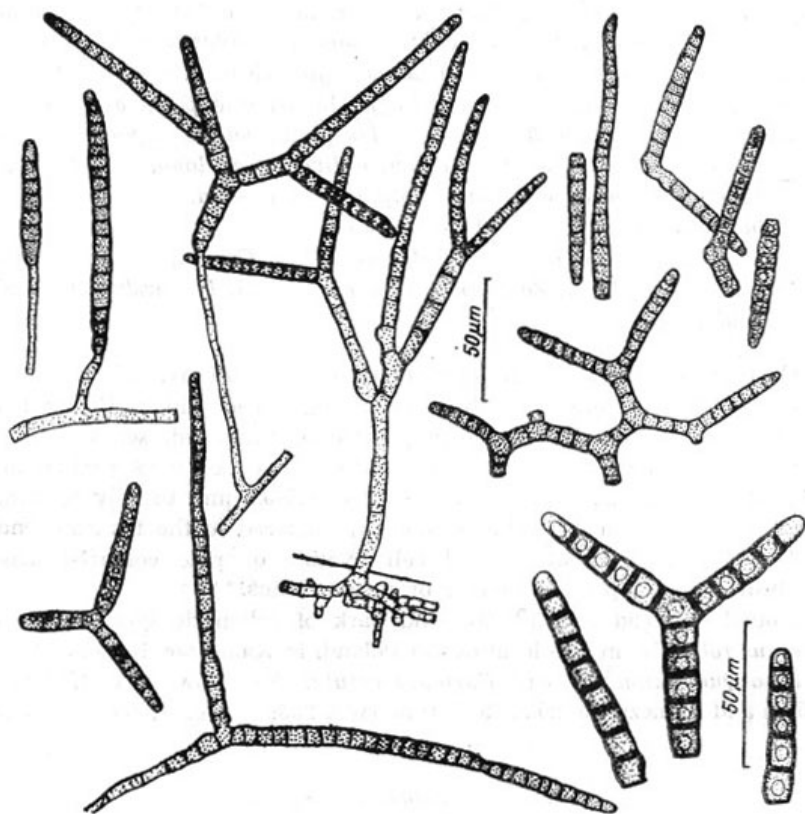


Fig. 4. *Taeniolella dichotoma* sp. nov. Conidiophores and conidia (type). Del. A. Borowska.

Colonies effuse to pulvinate, loose, dark blackish brown. Mycelium partly immersed in the substrate partly superficial. Immersed mycelium composed of hyaline to pale brown hyphae ramifying through the substrate, densely aggregated around the base of the conidiophore. Superficial mycelium composed of pale brown, 6-8 μm thick, sparsely branched and sparsely septate, hyphae. Conidiophores arising singly or in small groups, simple or dichotomously branched, up to 150 μm long and 5-8 μm thick, pale brown to brown, septate. Conidia

brown to dark brown, cylindrical, rounded or truncate at the ends, 4-20-septate, smooth, $55-220 \times 7,5-11 \mu\text{m}$, in long, simple or 3-4 times dichotomously branched, acropetal chains.

Taeniolella dichotoma was found on wood and bark *Quercus robur* L. in two localities in Poland, in Kampinos National Park: Zamczysko, in *Tilio-Carpinetum*, leg. A. Borowska, 29.IV.1971, type (WA 20597) and Sieraków, leg. A. Borowska, 26.VI.1971 (WA 20598), in *Pino-Quercetum* var. with *Carpinus betulus*. Fig. 4.

This taxon differs distinctly from all described species of genus *Taeniolella* (Ellis 1971; Hughes 1953, 1958) by the dimension of the conidiophores and conidia, and by the dichotomously branched conidia.

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Nowe gatunki z rodzajów — *Bactrodesmium*, *Corynespora*, *Septonema* i *Taeniolella*

Streszczenie

W pracy opisano cztery nowe dla nauki gatunki grzybów z grupy *Deuteromyces*. Są to: *Bactrodesmium xerophilum*, *Corynespora quercicola*, *Septonema binum* i *Taeniolella dichotoma*. Wyrastanie tych grzybów stwierdzono na rozkładającym się drewnie dębu (*Quercus robur* L.) i brzozy (*Betula pendula* Roth.) w Kampinoskim Parku Narodowym.