

Deuteromycetes from the Botanic Garden of the Martin-Luther-University Halle-Wittenberg

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Abstract: MEL'NIK, V.A. & Braun, U. 1999: Deuteromycetes from the Botanic Garden of the Martin-Luther-University Halle-Wittenberg. *Schlechtendalia* 2: 29-36.

40 imperfect fungi from the Botanic Garden of the Martin-Luther-University Halle-Wittenberg are listed. *Ascochyta sporoboli*, *Pteronidium intermedium*, and *Scyphospora hysterina* are new records for Germany.

Zusammenfassung: MEL'NIK, V.A. & Braun, U. 1999: Deuteromycetes from the Botanic Garden of the Martin-Luther-University Halle-Wittenberg. *Schlechtendalia* 2: 29-36.

40 imperfekte Pilze aus dem Botanischen Garten der Martin-Luther-Universität Halle-Wittenberg werden aufgezählt. *Ascochyta sporoboli*, *Pteronidium intermedium* und *Scyphospora hysterina* sind Erstnachweise für die Bundesrepublik Deutschland.

Introduction

In the course of two scientific stays of V.A. Melnik at the Martin-Luther-University Halle-Wittenberg in 1997 and 1998, numerous deuteromycetes have been collected in the Botanic Garden of this university. Most specimens are from dead culms and leaves of grasses. Beside various common saprophytes, some interesting species, which are new for Germany, have been found. In the following chapter, the specimens concerned are listed and some of them are briefly discussed. Samples of all collections are deposited at LE.

Annotated alphabetical list

Alternaria alternata (Fr.) Keissler, Beih. Bot. Zbl. 29: 434 (1912)

On dead culms of *Panicum virgatum*, 23 Sept. 1998; on *Pennisetum alopecuroides*, 29 Sept. 1998.

Alternaria tenuissima (Kunze) Wiltshire, Trans. Br. Mycol. Soc. 18: 157 (1933)

On dead leaves of *Arundo donax*, 29 Sept. 1998.

Arthrinium arundinis (Corda) Dyko & B. Sutton, Mycotaxon 8: 119 (1979)

On dead leaves of *Achnatherum calamagrostis*, 29 Sept. 1998; on dead culms of *Arundinaria nitida*, 23 Sept. 1997; *A. pygmaea*, 26 Sept. 1998; *Buchloë dactyloides*, 24 Sept. 1998; *Miscanthus sinensis*, 15 Sept. 1998; on dead leaves of *Panicum virgatum*, 24 Sept. 1998.

Arthrinium phaeospermum (Corda) M.B. Ellis, Mycol. Pap. 103: 8 (1965)

On necrotic parts of living leaves of *Arundinaria pygmaea*, 27 Sept. 1998; on dead culms of *Miscanthus sinensis*, 15 Sept. 1998.

Ascochyta sporoboli E. Castell. & Graniti, Nuovo Giorn. Bot. Ital., N.S., 57: 254 (1950)

On dry leaves of *Sporobolus heterolepis*, 24 Sept. 1998 (together with *Epicoccum nigrum* and *Periconia atra*) and 27 Sept. 1998.

Conidiomata pycnidoid, amphigenous, scattered or in small groups, immersed, later somewhat erumpent, globose to globose-depressed, ostiolate, mostly 160 µm diam., pore 10-18 µm diam., wall rather thin, membranaceous, *textura angularis*. Conidia more or less cylindrical to narrowly ellipsoid, slightly narrowed at the base and apex, base truncate to rounded, apex rounded, medianly uniseptate, usually non-constricted at the septa, usually with several minute guttules in each cell, hyaline, 12-14(-16) x 3-4 µm.

This is the first record of this species from Germany. The size and shape of the conidia agree very well with the original description of *A. sporoboli* (GRANITI 1950, conidia 12-14 x 3-4 µm), whereas PUNITHALINGAM (1979) described larger conidia, viz. 14-16 x 4-4.5(-5) µm.

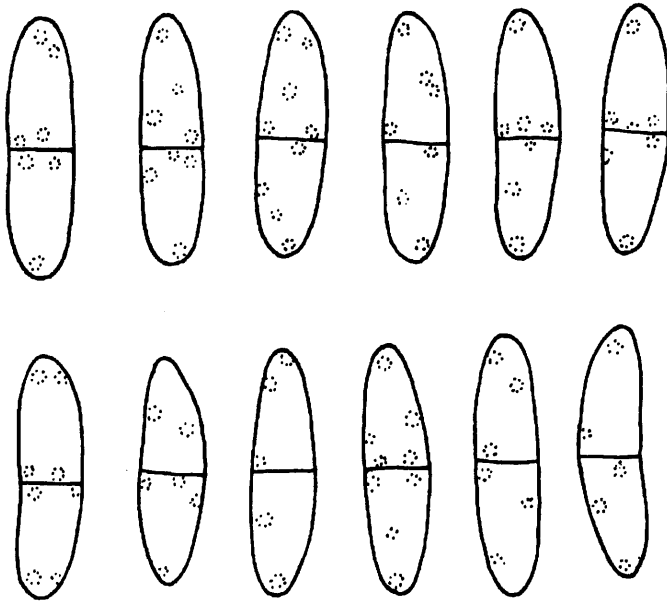


Fig. 1: *Ascochyta sporoboli*, conidia; V.A. Mel'nik del.

Bipolaris sorokiniana (Sacc.) Shoemaker, Can. J. Bot. 37: 884 (1959)

On living and fading leaves of *Bouteloua hirsuta*, 24 Sept. 1998.

Botrytis cinerea Pers.: Fr., Syst. Mycol. 3: 396 (1832)

On decaying, but still attached leaves of *Celtis australis*, 29 Sept. 1998.

Chalara ampullula (Sacc.) Sacc., Michelia 1: 80 (1877)

On dead culms of *Arundinacea pygmaea*, 29 Sept. 1998.

Chalara brevipes Nag Raj & W.B. Kendr., A monograph of *Chalara* and allied genera: 95 (1975)

On dead culms of *Arundinaria pygmaea*, 28 Sept. 1998; on rotten culms of *Miscanthus sinensis*, 15 Sept. 1998.

Cladosporium cladosporioides (Fres.) G.A. de Vries, Contribution to the knowledge of the genus *Cladosporium* Link ex Fr.: 57 (1952)

On necrotic tips of living shoots of *Arundinaria nitida*, 24 Sept. 1998.

Cladosporium herbarum (Pers.: Fr.) Link, Mag. Ges. Naturf. Freunde Berlin 7: 37 (1816)

On dead leaves of *Arundo donax*, 24 Sept. 1998; *Setaria italica*, 25 Sept. 1998.

Cladosporium sphaerospermum Penz., *Michelia* 2: 473 (1882)

On dead culms (inside) of *Arundinaria nitida*, 23 Sept. 1998.

Colletotrichum graminicola (Ces.) G.W. Wilson, *Phytopathology* 4: 110 (1914) s.lat.

On dead leaves of *Buchloë dactyloides*, 24 Sept. 1998.

Cryptocline cinerescens (Bubák) Arx, *Verh. Konink. Nederl. Akad. Wet., Afd. Natuurk., Sect. II*, 51(3): 73 (1957)

On living leaves of *Quercus imbricata*, 31 Sept. 1998. This material will be distributed in D. Triebel's „Microfungi exsiccati“.

Dictyochoaeta fertilis (S. Hughes & W.B. Kendr.) Hol.-Jech., *Folia Geobot. Phytotax.* 19: 426 (1984)

On dead culms of *Miscanthus sinensis*, 15 Sept. 1998; on dead leaves of *M. sinensis*, 24 Sept. 1998.

Dinemasporium strigosum (Pers.: Fr.) Sacc., *Michelia* 2: 281 (1881)

On dead leaves of *Buchloë dactyloides*, 24 Sept. 1998; *Miscanthus sinensis*, 24 Sept. 1998.

Epicoccum nigrum Link, *Mag. Ges. Naturf. Freunde Berlin* 7: 32 (1815)

On various parts of dead or fading plants of *Arundo donax*, 29 Sept. 1998; *Bouteloua hirsuta*, 24 Sept. 1998; *Brachypodium sylvaticum*, 29 Sept. 1998; *Buchloë dactyloides*, 24 Sept. 1998; *Celtis australis*, 24 Sept. 1998, 26 Sept. 1998; *Cortaderia selloana*, 24 Sept. 1998; *Equisetum hyemale* var. *robusta*, 29 Sept. 1998; *Melica uniflora*, 29 Sept. 1998; *Miscanthus sinensis*, 15 Sept. 1998, 29 Sept. 1998; *Panicum virgatum*, 23 Sept. 1998; *Sesleria alba*, 25 Sept. 1998; *Setaria italica*, 25 Sept. 1998; *Sporobolus heterolepis*, 24 Sept. 1998; *Stipa robusta*, 24 Sept. 1998; *Uniola latifolia*, 24 Sept. 1998.

Gonatobotrys simplex Corda, *Pracht-Fl. eur. Schimmelbild.*: 9 (1839)

On dead, but still attached leaves of *Celtis australis*, 29 Sept. 1998 (together with *Epicoccum nigrum*); on colonies of *Fusarium* sp. on dead leaves *Equisetum hyemale* var. *robusta*, 29 Sept. 1998; on dead inflorescences of *Sesleria alba*, 29 Sept. 1998 (together with *Epicoccum nigrum*).

Hendersonia brachypodii Unamuno, Bol. R. Soc. Hist. Nat. 30: 185 (1930)

On dead leaves of *Brachypodium sylvaticum*, 29 Sept. 1998.

Leptostroma donacinum Sacc. var. *majus* Trail, Scot. Nat. 8: 267 (1886)

On dead culms of *Achnatherum calamagrostis*, 29 Sept. 1998.

Myrothecium verrucaria (Alb. & Schwein.) Ditmar : Fr., Syst. mycol. 3: 217 (1839)

On dead leaves of *Buchloë dactyloides*, 25 Sept. 1998; *Pennisetum alopecuroides*, 24 Sept. 1998; *Sporobolus heterolepis*, 24 Sept. 1998; *Stipa robusta*, 24 Sept. 1998.

Nigrospora sphaerica (Sacc.) E.W. Mason, Trans. Br. Mycol. Soc. 12: 158 (1927)

On dead leaves of *Panicum virgatum*, 29 Sept. 1998; *Pennisetum alopecuroides*, 24 Sept. 1998.

Oidiodendron citrinum G.L. Barron, Can. J. Bot. 40: 597 (1962)

On dried leaf sheath of *Cortaderia selloana*, 24 Sept. 1998.

Olpitrichum macrosporum (Farlow ex Sacc.) Sumstine, Mycologia 3: 55 (1911)

On rotten fruits of *Mespilus germanica*, 29 Aug. 1997.

Periconia atra Corda, Icon. Fung. 1: 19 (1837)

On dead leaves of *Buchloë dactyloides*, 24 Sept. 1998; *Miscanthus sinensis*, 15 Sept. 1998; *Sporobolus heterolepis*, 24 Sept. 1998.

Periconia cookei E.W. Mason & M.B. Ellis, Mycol. Pap. 56: 72 (1953)

On dead leaves of *Carex* sp., 24 Sept. 1998.

Periconia hispidula (Pers.: Fr.) E.W. Mason & M.B. Ellis, Mycol. Pap. 56: 112 (1953)

On dead leaves of *Carex pendula*, 29 Sept. 1998.

Periconia minutissima Corda, Icon. Fung. 1: 19 (1837)

On dead leaves of *Achnatherum calamagrostis*, 29 Sept. 1998; *Cortaderia selloana*, 24 Sept. 1998; *Melica uniflora*, 29 Aug. 1998; *Miscanthus sinensis*, 29 Sept. 1998.

Phlyctema vagabunda Desm., Ann. Sci. Nat., Ser. 3, 8: 16 (1847)

On dead branches of *Lespedeza thunbergii*, 6 Dec. 1998.

Phoma hedericola (Durieu & Mont.) Boerema, Trans. Br. Mycol. Soc. 67: 295 (1976)

On living leaves of *Hedera helix*, 24 Sept. 1998 and 29 Sept. 1998.

Phyllosticta sphaeropsidea Ellis & Everh., Bull. Torrey Bot. Club 10: 97 (1883)

On living leaves of *Aesculus hippocastanum*, 26. Sept. 1997.

Pteroconium intermedium M.B. Ellis, More Dematiaceous Hyphomycetes: 479 (1976)

On dead culms of *Arundinaria nitida*, 26 Sept. 1997; *A. pygmaea*, 26 Sept. 1997 [this material

Fig. 2

has been distributed as „D. Triebel, Microfungi exsiccati 339 and 340“ (1998)]. Sporodochia punctiform, scattered, erumpent, dark brown to black. Stromata well-developed, erumpent, brown to dark brown, *textura angularis*. Conidiophore mother cells ampulliform, 6-12 x 5-7 μm . Conidiophores arising singly from the mother cells, macronematous, mononematous, basauxic, cylindrical, hyaline to pale brown, smooth, 40-45 x 2.5-3.5 μm , with thick, brown to black, transverse septa. Conidiogenous cells usually monoblastic, occasionally polyblastic, integrated, terminal as well as intercalary, cylindrical, with very short cylindrical denticles. Conidia solitary, acropleurogenous, lenticular, with a hyaline rim or germ slit, rounded or slightly polygonal in surface view, pale brown to brown, aseptate, 14-18(-20) μm diam. This is the first report of this species from Germany.

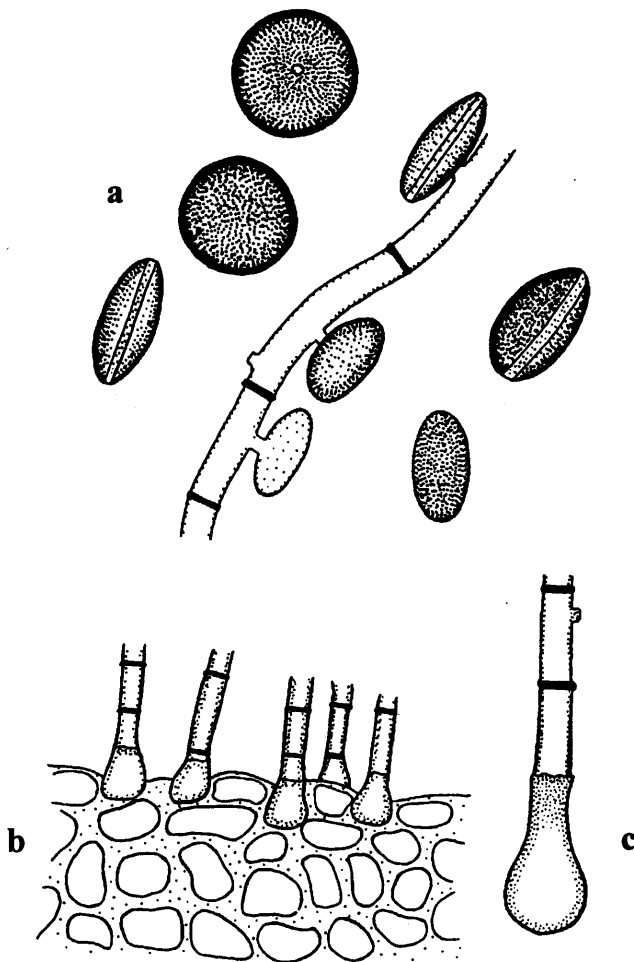


Fig. 2: *Pteroconium intermedium*, a - conidia, b - part of a stroma, with conidiophores, c - mother cell of a conidiophore; V.A. Mel'nik del.

Ramichloridium anceps (Sacc. & Ellis) de Hoog, Stud. Mycol. 15: 77 (1977)

= *Veronaea parvispora* M.B. Ellis, 1976.

On dead culms and leaves of *Arundinaria nitida*, 29 Sept. 1998; *A. pygmaea*, 23 Sept. 1998; *Buchloë dactyloides*, 24 Sept. 1998; *Miscanthus sinensis*, 29 Sept. 1998; *Pennisetum alopecuroides*, 29 Sept. 1998.

Ramichloridium carlinae (M.B. Ellis) de Hoog, Stud. Mycol. 15: 85 (1977)

= *Veronaea carlinae* M.B. Ellis, 1976.

On dead culms and leaves of *Achnatherum sylvaticum*, 29 Sept. 1998; *Arundinaria nitida*, 22 Sept. 1998; *Carex pendula*, 29 Sept. 1998; *Cortaderia selloana*, 24 Sept. 1998.

Scyphospora hysterina (Sacc.) Sivan., Trans. Br. Mycol. Soc. 81: 331 (1983)

Fig. 3

= *S. phyllostachydis* Kantchaveli, 1928.

On dead culms of *Arundinaria nitida*, 23 Sept. 1998 (this material will be distributed in D. Triebel's „Microfungi exsiccati“); *A. pygmaea*, 23 Sept. 1998; *Miscanthus sinensis*, 24 Sept. 1998.

Conidiomata 800-1200 µm long and 400-600 µm wide, 200-250 µm deep, dark brown to black, subglobose to globose with somewhat flattened base, parallel to the long axis of the host, opening by longitudinal splitting of the epidermis, exposing the black conidial mass. Conidiophore mother cells ampulliform, oblong, ovate to subglobose, 8-15 x 5 µm, pale brown, with superficial granular depositions, opening widely at the apex, appearing cupulate, producing a single conidiophore, conidiophores cylindrical, 10-25 x 4 µm, basauxic, polyblastic, straight to flexuous, simple, hyaline to slightly brown, with granular depositions near the apex, septate, septa not markedly thickened or pigmented. Conidia acropleurogenous, bell-shaped in surface view, 14-19(-20) µm high and 15-18 µm wide across the flat top, with a light coloured, horizontal rim just below the top and a ragged, circular abscission scar below, 3-4 µm diam., brown, smooth. This is the first record of this species from Germany. The teleomorph of this species has been observed as well: *Apiospora bambusae* (Turconi) Sivan., Trans. Br. Mycol. Soc. 81: 331 (1983), = *Scirrhia bambusae* Turconi, 1916; = *Apiospora tintinnabula* Samuels et al., 1981.

Sporidesmiella hyalospora (Corda) P.M. Kirk var. *hyalospora*, Trans. Br. Mycol. Soc. 79: 481 (1982)

On dead leaves of *Ammophila arenaria*, 29 Sept. 1998; on dead culms of *Arundinaria nitida*, 29 Sept. 1998; *A. pygmaea*, 29 Sept. 1998; on decaying leaves of *Carex pendula*, 29 Sept. 1998.

Sporidesmium coronatum Fuckel, Symb. Mycol., Nachtr. 2: 77 (1874)

On dead culms (inside) of *Miscanthus sinensis*, 29 Sept. 1998.

Tetraploa aristata Berk. & Broome, Ann. Mag. Nat. Hist., Ser. 2, 5: 459 (1850)

On dried leaves of *Ammophila arenaria*, 29 Sept. 1998; on dead culms of *Arundinaria nitida*, 26 Sept. 1998; *A. pygmaea*, 23 Sept. 1997 and 29 Sept. 1998 (this material will be distributed in D. Triebel's „Microfungi exsiccati“).

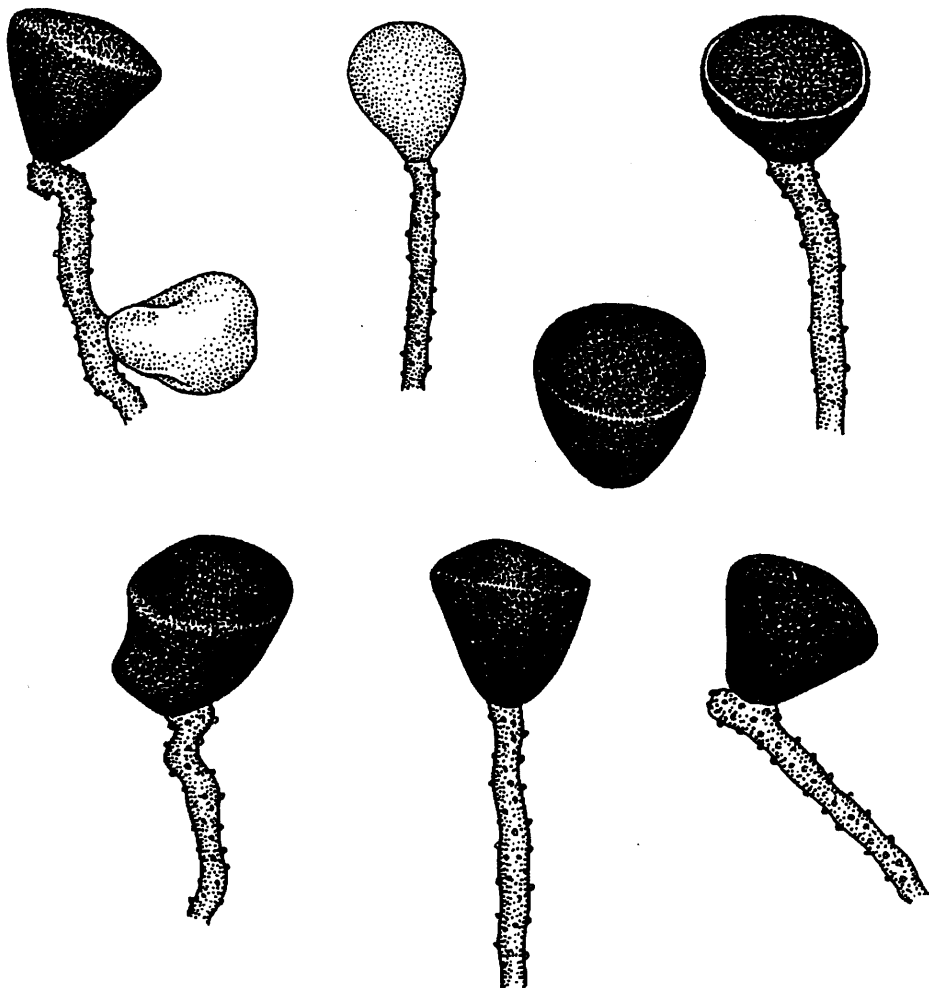


Fig. 3: *Scyphospora hysterina*, conidia; V.A. Mel'nik del.

Torula herbarum (Pers.) Link, Mag. Ges. Naturf. Freunde Berlin 3: 21 (1809)
On dead leaves of *Achnatherum calamagrostis*, 29 Sept. 1998.

Ulocladium atrum Preuss, Linnaea 25: 75 (1852)
On dead stems of *Equisetum hyemale* var. *robusta*, 29 Sept. 1998.

Literature:

GRANITI, A. 1950: Su alcuni fungilli gramminicoli dell'Africa Orientale. Nuovo Giornale Botanico Italiano, N.S., 57(1-2): 247-256.

PUNITHALINGAM, E. 1979: Graminicolous *Ascochyta* species. Mycological Papers 142: 1-214.

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