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Dematiaceous Hyphomycetes inhabiting forest debris in Hungary II.

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Abstract: Twenty-five species of lignicolous and other saprophytic Hyphomycetes belonging to 20 genera are reported from Hungary. Some of them are common species. Several other taxa represented by very few Hungarian records have also been discovered, 7 of them being new to Hungary.

A preliminary account of 47 dematiaceous Hyphomycetes collected in Hungary has been published earlier (RÉVAY 1985). In the present contribution twenty-five Hyphomycetes are reported. Twenty-two species which had not previously been recorded by the author in this series are reported together with additional information on two species reported previously. The sites chosen for study were in the Börzsöny Mountains along the Morgó stream, in the Bükk Mountains along some mountain streams, as well as in SW Hungary (Zala County). Samples were collected from terrestrial forest litter, from brooks as well as from treehollows. The collected samples were examined immediately after transportation to the laboratory and were observed again after several days' incubation in moist chamber condition.

The material of the species listed below was collected by the author and J. GÖNCZÖL. The examined material is deposited in the Mycological Herbarium of the Hungarian Natural History Museum, Budapest.

SPECIES ACCOUNT

Actinocladium rhodosporum Ehrenberg, Jahrb. Gewächsk., 1: 52. 1819. (Pl.I. Fig.1.) Conidiophores simple, erect, straight, dark brown, paler towards the apex, 22-70 µm long and 3-4 µm thick. Conidia brown, consisting of a 10-19 x 4-5 µm stalk and 3 arms radiating at an angle of 30°-70°, arms 25-50 µm long and 4.8-6.4 um wide. This is not a common species in Hungary. - Collected on dead wood of Fagus silvatica, near the stream Pénz-patak in the Bükk Mts., 30.5.1985.

Aegerita candida Pers. ex Fr., Syst.Mycol. 3: 220, 1823. Sporodochia globose, 150-200 µm in diam. Conidia acrogenous, ovoid or obpyriform, hyaline, 12-20 µm in diam. This is a very common species on rotten wood. - Collected on dead wood, Bánya-hegy, Bükk Mts, 29.5.1985., near Rejtek in Bükk Mts, 9.10.1985., near the stream Morgó-patak, Börzsöny Mts., 29.3.1985.

Bactrodesmium obovatum (Oudem.) M.B. Ellis, Mycol. Pap. Kew, 87:42, 1963. (Pl.I. Fig.3.) Sporodochia punctiform, black, shining. Conidiophores fasciculate, hyaline or subhyaline, simple or branched, 25-60 x 2.5-3.5 µm. Conidia dark brown, with 3-5 thick and black septa, 38-42 x 16-19 µm, the basal cell paler than the others, the two terminal cells usually containing oil drops. This species is known in Europe - Great Britain, Netherlands and Czechoslovakia - and in North

America. It is the first record of B. obovatum from Hungary. - Collected on rotten wood of Fagus silvatica in the valley Sebesviz-völgy in the Bükk Mts, 8.10.1985.

Bactrodesmium pallidum M.B.Ellis, Mycol. Pap. 72:11, 1959. (Pl.V. Fig.3.)
Sporodochia punctiform, dark brown, 200-300 µm in diam. Conidiophores fasciculate, subhyaline, 30-50 x 1.5-3 µm. Conidia cylindrical, pale brown, 4-6-septate, 32-55 x 9.6-11.2 µm. - Collected on rotten wood, near Rejtek in the Bükk Mts., 10.10.1985.

Bispora antennata (Pers.ex Pers.) Mason, Can.J.Bot., 31:582, 1953. (Pl.I. Fig.2.)
Colonies effuse, black. Conidiophores 10-40 x 2-5 µm. Conidia dark or olive brown with a broad band at the septum, 17.6-22.4 x 6.4-8 µm. ELLIS (1971) gives somewhat smaller conidium size, 13-20(17) x 7-8(7.1) µm. It is not an uncommon species in Hungary. - Collected on rotten wood, Bányahegy in the Bükk Mts., 29.5.1985., near the stream Szén-patak, Börzsöny Mts., 6.9.1985.

Brachysporium obovatum (Berk.) Saccardo, Syll.Fung. 4:427, 1886. (Pl.I. Fig.4.)
Colonies effuse, black. Conidiophores erect, simple, straight, dark brown, paler towards the apex, 180-300 x 4-6 µm. Conidia obovoid to pyriform, smooth, 2-septate, basal cell very small and subhyaline, central and terminal cells much larger and pale brown, 20-40 x 11-13 µm. This species is common in Europe on decaying wood, it was reported from Hungary by HOLUBOVÁ-JECHOVÁ (1979) and by VASS (1984). - Collected on rotten wood of Fagus silvatica, near Rejtek in the Bükk Mts., 28.5.1985.

Brachysporium nigrum (Link) Hughes, Can.J.Bot. 36: 742, 1958. (Pl.III. Fig.1.)
This is a very common species on dead rotten wood of various deciduous trees in Hungary, both in frequency of occurrence and abundance. It was reported on two occasions from Hungary by HOLUBOVÁ-JECHOVÁ (1979) and RÉVAY (1985). There are minor differences in conidium size and colour between the present and the former collections. In the present collection the conidia are 19-24 x 12.8-14.6 µm. The two central cells are darker (almost black) and wider than they were in the former collections. ELLIS (1966) gives the size of conidia as 17-24(19.8) x 8-11(9.6) µm, HUGHES (1951) as (15)17-22(24) x (8)9-10(12) µm, HOLUBOVÁ-JECHOVÁ (1972) as (15)17-21(22.5) x (7)8-10(13) µm, RÉVAY (1985) as 17-19 x 8-10 µm. - Collected on rotten wood near Rejtek in the Bükk Mts., 9.10.1985.

Ceratocladium microspermum Corda, Pracht-Fl.: 41-42, 1839.
Setae erect, dark brown, repeatedly branched at the apex, up to 250 um long, stipe 4-4.5 µm thick. Conidiogeneous cells ampulliform, 6-10 x 3-4 µm. Conidia cylindrical with rounded ends, hyaline, 3.8-6.8 x 0.5-1 µm. This species is known from Czechoslovakia, Germany and Great Britain. This is the first record of C. microspermum from Hungary. - Found on rotten wood of Fagus silvatica, near the stream Szén-patak in the Börzsöny Mts., 6.9.1985.

Cordana crassa Tóth, Annls.hist.-nat.Mus.natn.hung. 67:32, 1975. (Pl.II. Figs.1-2)
This species of the genus Cordana was described by Tóth (1975) from bark of Fagus silvatica collected in Hungary. The occurrence of Cordana crassa on rotten wood of Alnus glutinosa was reported earlier (RÉVAY 1985). One of the collections cited below differs from the holotype in the presence of much longer conidiophores up to 500-600 µm and production of somewhat smaller conidia 17-24 x 11-14 µm. In the holotype the conidiophores are reported as up to 240 µm long and 6-7 µm thick. ELLIS (1976), in the description of Cordana boothii which represents the same fungus, gives the size of conidiophores as up to 300 µm long and 5-9 µm thick. - Collected on rotten wood, Odorhegy in the Bükk Mts., 10.10.1984., near the stream Garadna in the Bükk Mts., 29.5.1985.

Diplocladiella scalaroides Arnaud ex M.B.Ellis, More demat.Hyphomyc. p. 229, 1975. (Pl. II. Fig. 3.)
Conidiophores 16-23 x 3-4 µm, simple, geniculate, pale brown. Conidia triangular, 2-horned, pale to mid-brown, 22-25 µm wide with up to 19 µm long hyaline appendages, basal cell 2-3.5 x 2-3 µm. This species is well known from foam samples (INGOLD 1975, GÖNCZÖL & TÓTH 1974), from dead wood (ELLIS 1976) and from fallen leaves (KIRK 1982, 1983, MATSUSHIMA 1980). During our observations on forest litter we found some conidia of this fungus in a washed litter sample collected from alder litter (GÖNCZÖL & RÉVAY 1983). It was during the present collections that this species was found growing on its substrate for the first time in Hungary. - Collected on decaying cupules of Fagus silvatica, in the valley Sebesviz-völgy in the Bükk Mts., 8.10.1985., on rotten wood and on cupules of Quercus cerris, from tree-hollow near Bak in Zala County, 9.9.1984.

Endophragmiella biseptata (Peck) Hughes, Fungi Canadenses No. 125. 1978. (Pl.V. Fig.4.)
Conidiophores erect, simple, dark brown, proliferated ones up to 420 µm long, 8.5-10.5 µm thick. Conidia predominantly 2-septate, rarely 1-septate, obovoid to ellipsoidal, at the base with a frill,

basal cell usually paler than the dark brown distal cells, (19)24-28 x 12-15 µm. The range of distribution of this species comprises Europe and North America. It was reported from Hungary for first time by VASS (1981). The present collection constitutes the second record of E. biseptata from Hungary. - Collected on rotten wood of Fagus silvatica, at the stream Garadna in the Bükk Mts., 29.5.1985.

Endophragmiella pallescens Sutton, Mycol.Pap. 132:62, 1973. (Pl.V. Fig.2.)
Conidiophores simple or branched, erect, flexuous, brown, paler towards the apex, smooth, 60-230 x 4-5 µm. Conidia ellipsoidal, solitary, (1)2-septate, brown, smooth, 17-20 x 7-11 µm, with a basal frill. This species was described as the type of the genus by SUTTON (1973) from Canada. HUGHES (1978) reported it again from Canada. HOLUBOVÁ-JECHOVÁ (1979) found this fungus on rotten wood of Robinia pseudacacia in Hungary and KIRK (1981) found it growing on rotten wood of Quercus robus in the British Isles. The present collection is the second record from Hungary. In the present collection conidia are slightly longer and wider than in the other Hungarian material. HOLUBOVÁ-JECHOVÁ (1979) reported the conidia to be (2-) 1-septate, 12.5-17 x 6.5-7 µm. - Collected on rotten wood, near Bak in Zala County, 9.9.1984.

Endophragmiella uniseptata (Ellis) Hughes, N.Z.Jl.Bot. 17:156, 1979. (Pl.III. Fig.2.)
Conidiophores simple, erect, brown, subhyaline at the apex, 200-310 x 4.5-5 µm, 6-7 µm thick at the base. Conidia terminal on the conidiogenous cell and on each succesive percurrent proliferation, obovoid, at the base bearing a frill, smooth, brown, the lower cell sometimes slightly paler, 1-septate, slightly constricted at the septum, 19-22 x 9-10 µm. This is not an uncommon species in Hungary. - Collected on rotten wood, near Bak in Zala County, 9.9.1984., near the stream Morgó-patak in the Börzsöny Mts., 29.3.1984.

Guedea novae-zelandiae Hughes, N.Z.Jl.Bot. 18: 65, 1980. (Pl.IV. Figs. 1-2.)
Guedea was described as a new genus with a single species G. scabra by RAMBELLI and BARTOLI (1978) from the Ivory Coast. HUGHES (1980) described a second species G. novae-zelandiae, from New Zealand. This species was again collected in New York State by Wang and Sutton (1982). Conidiophores unbranched, erect, brown, 120-280 x 4.8-6.5 µm, indeterminate, compose of integrated conidiogenous cells. Conidia holoblastic, oblong to oval, 2-septate, septa sometimes thick bands, terminal cell slightly paler brown than the mid- and basal cells, 12.8-17 x 6.4-8 µm. As far as I know this collection represents the first European record of the species. - Collected from rotten wood, near the stream Morgó-patak, 29.8.1985.

Hydrometrospora symmetrica Gönczöl et Révay, Nova Hedw. 40:199, 1984. (Pl.III. Fig.4.)
This species was described by GÖNCZÖL and RÉVAY (1984) from decaying leaves of Alnus glutinosa and Carpinus betulus collected in Hungary. It is characterized by hyaline, acrogenous conidia composed of a more or less fusiform, septate 60-90 x 5-6 µm central body, to which a H-shaped, branched formation is attached directly or through a short cell. The branches are septate, 40-60 x 4-5 µm connected by a short cell. MARVANOVA (1980) reported conidia of water-borne and aquatic hyphomycetes from Sweden. Among these conidia she illustrated one which resembles those of Hydrometrospora symmetrica, but it is slightly smaller (Fig. 6 A). IQBAL et al. (1973) reported probably the same fungus from Pakistan too. During our observations of woodlitter hyphomycetes abundant sporulation of H. symmetrica was observed. Very small twigs of Alnus glutinosa were kept in petri-dishes and incubated in moist condition and after a week numerous detached conidia were found on the bottom of the petri-dishes. - Collected at the type locality near the stream Morgó-patak in the Börzsöny Mts., 29.3.1985.

Oncopodiella trigonella (Sacc.) Rifai, Persoonia 3: 409, 1965.
Conidia solitary, corniculate, trigonous, pyriform, pale brown, 14-20 x 12-15 µm, conical horns subhyaline, 2-3 µm long. This is not a common species, is represented in Herb. BP only in four collections, including the present one from Hungary. - Collected on cupules of Quercus cerris from tree-hollow, near Bak in Zala County, 9.9.1984.

Phragmocephala elliptica (Berk. et Br.) Hughes, N.Z. Jl. Bot. 17: 164, 1979.
Conidiophores arising in dense fascicles from a stroma, simple, straight, brown, cylindrical, 100-220 µm long, towards the apex 8-10 µm below 4.8-5.5 µm thick. Conidia solitary, ellipsoidal to obovoid, predominately 5-septate, the central cells dark brown, the two cells at each end smaller and pale brown. Size 37-41.6 x 18-21 µm. It occurs on a wide variety of herbaceous dead stems, rotten wood. It is common on decaying cupules of Fagus silvatica and was also recorded from decaying leaves. - Collected on leaves of Quercus sp., near Bak in Zala County 9.9.1984., on decaying cupules of Fagus silvatica near Garadna in the Bükk Mts., 8.10.1985.

Spadicoides bina (Corda) Hughes, Can.J.Bot. 36:805, 1958.
Conidiophores 120-250 x 2.4-4 µm. Conidia ellipsoidal or oblong with rounded ends, dark brown,

1-septate, with a dark brown band at the septa, 9-10 x 3-4 µm. In Europe it is a common lignicolous hyphomycete but only some data are known from Hungary. HOLUBOVÁ-JECHOVÁ (1979) reported it from rotten wood of Betula sp. and Fagus silvatica. - Found on dead wood, near the stream Morgó-patak in the Börzsöny Mts., 29.8.1985.

Sporidesmiella hyalosperma (Corda) P.M.Kirk var. hyalosperma, Trans.Br.mycol.Soc. 79: 481, 1982.

Conidiophores solitary, simple, straight or slightly flexuous, brown, 110-200 x 3-4.5 µm. Conidia acrogenous, solitary, clavate to obovoid, truncate at the base, 4-distoseptate, pale brown, 19-24 x 8-10 µm. This fungus was firts reported from Hungary from decaying culms of Phragmites australis collected in the Kiskunság National Park (GÖNCZÖL & RÉVAY 1983 in press.) - Present collection from dead wood, near Rejtek in the Bükk Mts., 11.10.1984.

Sporidesmium dennisii (M.B.Ellis) P.M.Kirk, Trans.Br.mycol.Soc. 80: 462, 1983. (Pl.IV. Fig. 3.)

Conidiophores solitary, erect, simple, straight or slightly flexuous, up to 260 µm long, 6-7 µm wide. Conidia solitary, acrogenous, ellipsoid, truncate at the base (2-) 3-septate, brown, apical cell paler than the others, 25-30 x 9-11.5 µm. This is an apparently rare species, it had not been found in Hungary previously. - Found on rotten wood of Alnus glutinosa, near the stream Morgó-patak in the Börzsöny Mts., 29.3.1985., 29.8.1985.

Sporidesmium goidanichii (Rambelli) Hughes, N.Z.Jl. Bot. 17: 162, 1978. (Pl.III. Fig. 3.)

Conidiophores solitary, erect, cylindrical, dark brown, up to 140 µm long and 4-6 µm thick. Conidia cylindrical, truncate at base, rounded at apex, pale brown, (5-,7-) 6-septate, (33)44-50(64) x 6-7,5 µm. This fungus was found in Hungary on one occasion and reported as Endophragmia alternata Tubaki & Saito, growing on strobili of Alnus glutinosa (GÖNCZÖL & RÉVAY 1983). - Collected on spruce cone of Picea abies from the stream Pénz-patak in the Bükk Mts., 30.5.1985.

Sporoschisma mirabile Berk. et Br. in Berk, Gdnr's Chron. p. 540, 1847. (Pl.IV. Fig.4.)

Capitate hyphae mixed with phialophores, 90-190 x 5-7 µm wide at base, dark brown, hyaline at apex which 5-8 µm wide. Phialophores solitary or in groups,, cylindrical, 180-270 x 7-11 µm, dark brown. Phialides subcylindrical up to 160 µm long, 12-15 µm wide. Conidia cylindrical with flattened ends, 3-septate, dark brown, smooth-walled, 32-35 x 11-12.8 µm. Common on rotten wood. It was reported from Hungary by HOLUBOVÁ-JECHOVÁ (1979). - Collected on rotten wood, near the stream Garadna in the Bükk Mts., 8.10.1985.

Sterigmatobotrys macrocarpa (Corda) Hughes, Can.J.Bot. 36: 814, 1958.

Conidiophores solitary, branched penicillately at the apex forming a stipe and head, blackish brown, 170-300 x 6-7 µm, head 60-70 x 50-60 µm. Conidia aggregated in slimy heads, slightly curved or straight, broadly fusiform, 2-septate, at first hyaline later the middle cell brown and the end cells pale brown, 20-24 x 6-7 µm. - Collected on rotten wood, near the stream Garadna in the Bükk Mts., 11.10.1984.

Stigmina longispora (Ellis) Hughes, N.Z.Jl.Bot. 16: 353, 1978. (Pl.II. Fig.4.)

Sporodochia punctiform, black. Conidiophores in fascicles, simple, pale brown, 25-35 x 3-4 µm. Conidia fusiform, truncate at the base, 60-80 x 6-7 µm, at the apex sometimes a thin spherical sheath, 9-13- septate (mainly 12-septate). ELLIS (1976) described Bactrodesmium longisporum from dead wood of Alnus ? collected in Great Britain. HUGHES (1978) transferred the name of the species to the genus of Stigmina. This is not a very common species, the present collections constitute the first record of S. longispora from Hungary. - Collected on rotten wood of Alnus glutinosa, near the stream Morgó-patak in the Börzsöny Mts., 29.3.1985., 29.8.1985.

Xylomyces chlamydosporis Goos, Brooks et Lamore, Mycologia, 69: 280, 1977. (Pl.V. Fig.1.)

Xylomyces was described as a new genus GOOS, BROOKS et LAMORE (1977) from dead, submerged wood, collected in the Saugatucket River in the Rhode Island. It was characterised by large, 100-450 x 35-42 µm, fusiform, blackish brown chlamydospores, which are solitary or in chains.During our studies on the wood-inhabiting fungi of both terrestrial and aquatic habitats, this interesting fungus it was found on submerged wood collected from a mountain stream. Mycelium immersed and superficial, composed of dark brown, anastomosing hyphae, 5-13 µm in diam. Chlamydospores intercalary, in chains of 2 to 6-7, with 5-10 septa, fusiform, first hyaline then becoming dark brown, 200-500 x 37-43 µm. This is the first record of X. chlamydosporis from Hungary and to my knowledge this collection represents the first European record of this species. - Collected on dead wood of Fagus silvatica, from the stream Pénz-patak in the Bükk Mts., 30.5.1985., 7.10.1985.

In this paper 36 records of 25 fungus species belonging to 20 genera are listed. Of these

some species are noteworthy and interesting, and seven of them are new to Hungary. My previous paper dealt only with fungi which were collected from terrestrial habitat (forest litter) and in the present collections the material was partly derived from several aquatic habitats: mountain streams and from the water of tree-hollows. GÖNCZÖL (1976) reported the tree-hollow as an interesting biotope of aquatic and aero-aquatic hyphomycetes. Similarly to this, it was my impression that a tree-hollow may be a rich source of noteworthy and rare dematiaceous hyphomycetes too. From underwater condition of mountain streams were collected: Sporidesmium goidanichii (Rambelli) Hughes and Xylomyces chlamydosporis GOOS, BROOKS & LAMORE, and from waters of tree-hollow: Diplocladiella scalaroides Arnaud ex M.B. Ellis, Oncopodiella trigonella (Sacc.) Rifai. In addition to the above-mentioned species some other interesting and probably unknown hyphomycetes might be found which will be described later.

REFERENCES

ELLIS, M.B. (1966): Dematiaceous Hyphomycetes VII.: Curvularia, Brachysporium etc. - Mycol.Pap. 106: 2-43.

ELLIS, M.B. (1971): Dematiaceous Hyphomycetes. - Commonwealth Mycol. Inst., England, 608 pp.

ELLIS, M.B. (1976): More dematiaceous Hyphomycetes. - Commonwealth Mycol. Inst., England, 507 pp.

GOOS, R.D., BROOKS, R.D. & LAMORE, BETTE J. (1977): An undescribed Hyphomycete from wood submerged in a Rhode Island stream. - Mycologia 69: 280-286.

GÖNCZÖL, J. (1976): Ecological observations on the Aquatic Hyphomycetes of Hungary, II. - Acta bot. hung. 22: 51-60.

GÖNCZÖL, J. & TÓTH, S. (1974): Rare or interesting conidia from streams of Hungary. - Bot. Közlem. 61: 57-75.

GÖNCZÖL, J. & RÉVAY, Á. (1983): Observations on the Hyphomycetes inhabiting forest litter of Hungary. - Acta bot.hung. 29(1-4): 107-125.

GÖNCZÖL, J. & RÉVAY, Á. (1984): Hydrometrospora, a new genus of leaf-litter Hyphomycetes from Hungary. - Nova Hedwigia 40: 199-205.

HOLUBOVÁ-JECHOVÁ, V. (1972): Lignicolous Hyphomycetes from Czechoslovakia 1. Brachysporium. - Folia Geobot. Phytotax., Praha 7: 217-224.

HOLUBOVÁ-JECHOVÁ, V. (1979): Lignocolous and some other saprophytic Hyphomycetes from Hungary. - Cesk.Myk. 33: 138-149.

HUGHES, S.J. (1951): Brachysporium in Britain. - Naturalist, London, 836: 45-48.

HUGHES, S.J. (1978): New Zealand Fungi 25. Miscellaneous species. - New Zealand J.Bot. 16: 311-370.

HUGHES, S.J. (1980): New Zealand Fungi 27. New species of Guedea, Hadrosporium and Helminthosporium. - New Zealand J.Bot. 18: 65-72.

INGOLD, C.T. (1975): An illustrated guide to aquatic and waterborne Hyphomycetes (Fungi Imperfecti) with notes on their biology. - Freshwater Biol.Ass.Ambleside, Sci.Publ. 30: 1-96.

IQBAL, S.H., SULTANA, K. & FARZANA, S. (1973): Stream spora of Pakistan. - Biologia, 19: 79-84.

KIRK, P.M. (1981): New or interesting microfungi II. Dematiaceous hyphomycetes from Esher Common, Surrey. - Trans. Br.mycol.Soc. 77: 279-297.

KIRK, P.M. (1982): New or interesting microfungi IV. Dematiaceous Hyphomycetes from Devon.- Trans.Br.mycol.Soc. 78: 55-74.

KIRK, P.M. (1983): New or interesting microfungi X. Hyphomycetes on Laurus nobilis leaf litter.- Mycotaxon 18: 259-298.

MARVANOVÁ, L. (1980): Water-borne Spores in Foam in a Subarctic Stream System in Sweden. - Sydowia 33: 210-220.

MATSUSHIMA, T. (1980): Saprophytic microfungi from Taiwan. Part 1. Hyphomycetes. - Matsushima Mycological Memoirs 1: 1-82.

RAMBELLI, A. & BARTOLI, A. (1978): Guedea, a new genus of Dematiaceous Hyphomycetes. - Trans.Br.mycol.Soc. 71: 340-342.

RÉVAY, Á. (1985): Dematiaceous Hyphomycetes inhabiting forest debris in Hungary I. - Studia bot. hung. 18: 65-71.

SUTTON, B.C. (1973): Hyphomycetes from Manitoba and Saskatchewan, Canada. - Mycol. Pap. 132: 1-143.

TÓTH, S. (1975): Some New Microscopic Fungi III. - Annls.hist.-nat.Mus.natn.hung. 67: 31-35.
VASS, A. (1981): Recent data to the microscopic fungi flora of the Mecsek Mts. and environs IX.- Janus Pannonius Muz. Évk. 25: 21-30.
VASS,. A. (1984): Recent data on the microscopic fungi of the Mecsek Mountains and environs XII.- Janus Pannonius Muz.Évk. 28: 7-13.
WANG, C.J.K. & SUTTON, B.C. (1982): New and rare lignicolous Hyphomycetes. - Mycologia 74(3): 489-500.

EXPLANATION OF PLATES

Plate I.

Fig. 1. Actinocladium rhodosporum Ehrenberg - conidia, X 625
Fig. 2. Bispora antennata (Pers. ex Pers.) Mason - chain of conidia, X 350
Fig. 3. Bactrodesmium obovatum (Oudem.) M.B.Ellis - conidia, X 325
Fig. 4. Brachysporium obovatum (Berk.) Saccardo - conidiophores with a conidium, X 770

Plate II.

Fig. 1-2. Cordana crassa Tóth - conidiophores with conidia, X 285, X 190
Fig. 3. Diplocladiella scalaroides Arnaud ex M.B. Ellis - conidia, X 830
Fig. 4. Stigmina longispora (Ellis) Hughes - conidia, X 820

Plate III.

Fig. 1. Brachysporium nigrum (Link) Hughes - conidiophores with conidia, X 860
Fig. 2. Endophragmiella uniseptata (Ellis) Hughes - conidiophores with conidia, X 380
Fig. 3. Sporidesmium goidanichii (Rambelli) Hughes - conidia, X 870
Fig. 4. Hydrometrospora symmetrica Gönczöl et Révay - conidia, X 400

Plate IV

Fig. 1-2. Guedea novae-zelandiae Hughes - conidiophore with conidia, X 1120, X 375
Fig. 3. Sporidesmium dennisii (M.B.Ellis) P.M.Kirk - conidia, X 1000
Fig. 4. Sporoschisma mirabile Berk. et Br. - Phialophore with capitate hyphae and chains of conidia, X 270

Plate V.

Fig. 1. Xylomyces chlamydosporis Goos, Brooks et Lamore - chlamydospores, X 250
Fig. 2. Endophragmiella pallescens Sutton - conidiophores with conidia, X 380
Fig. 3. Bactrodesmium pallidum M.B.Ellis - conidia, X 1000
Fig. 4. Endophragmiella biseptata (Peck) Hughes - conidiophores with conidia, X 770

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Plate I.

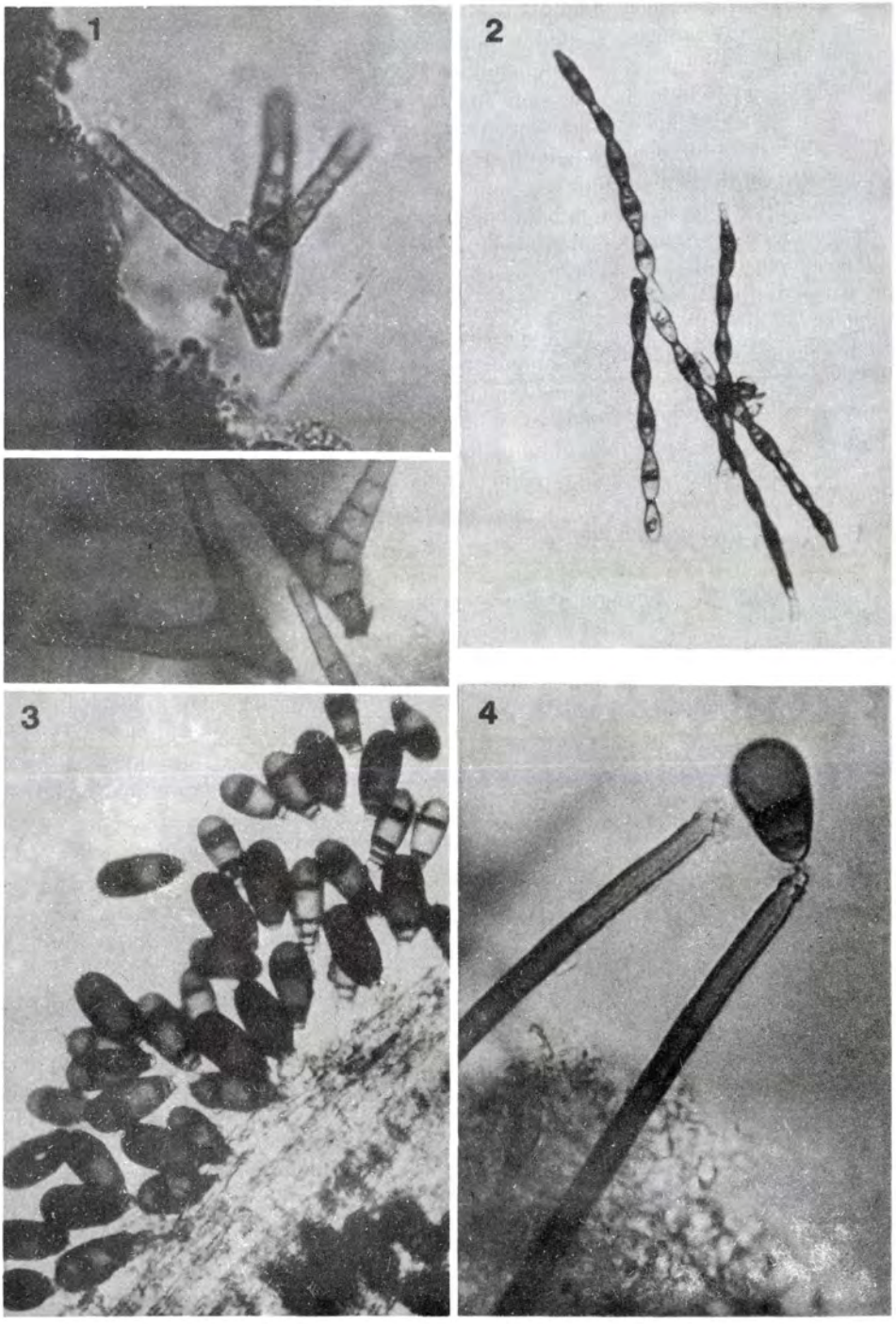
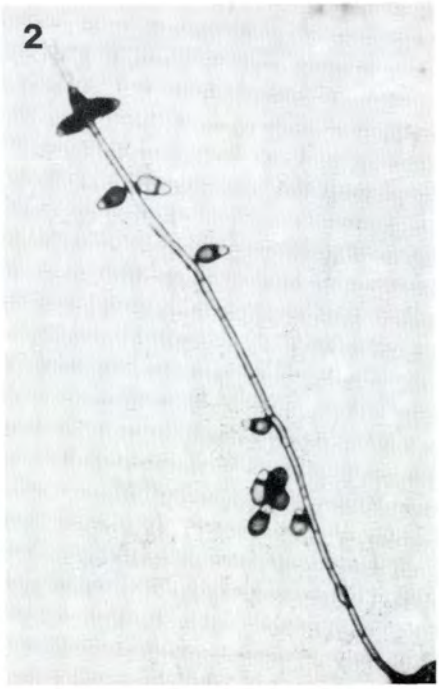
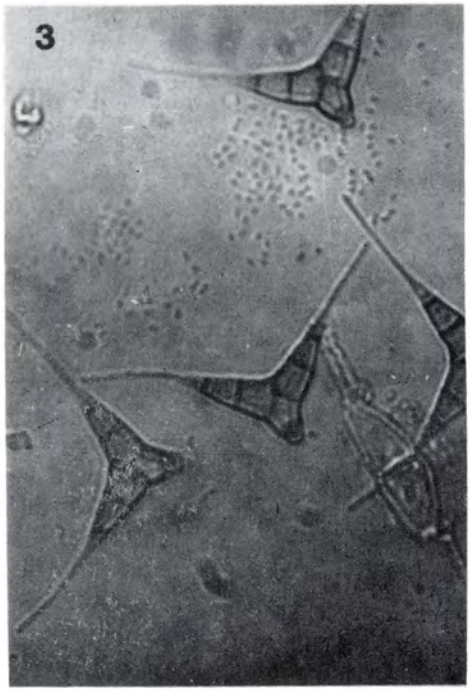
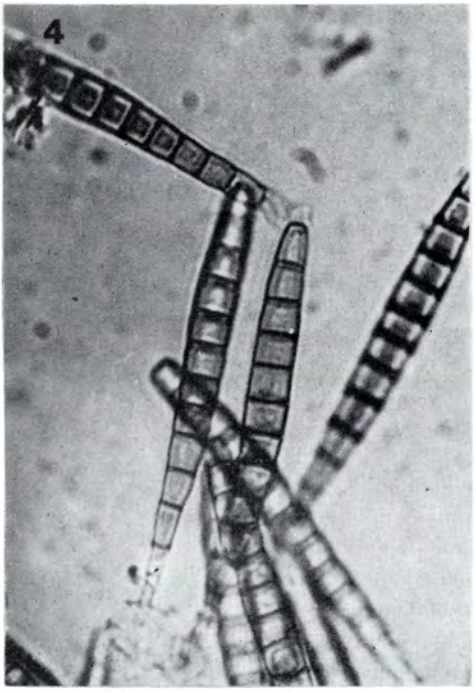


Plate II.





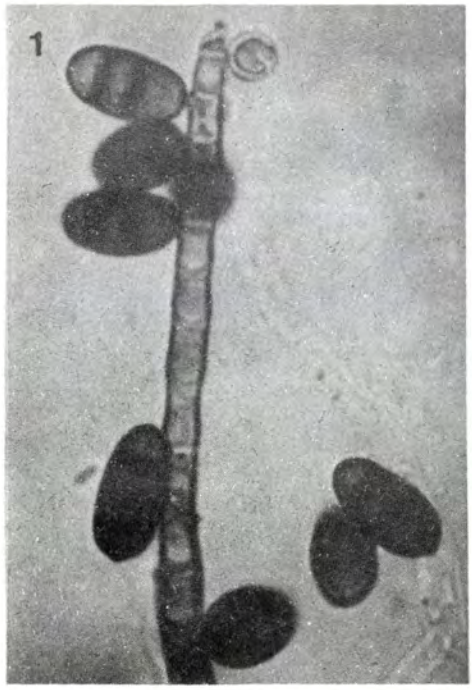






Zsuzsanna Páricsy-Komáromy
(1942–1985)

Plate IV.



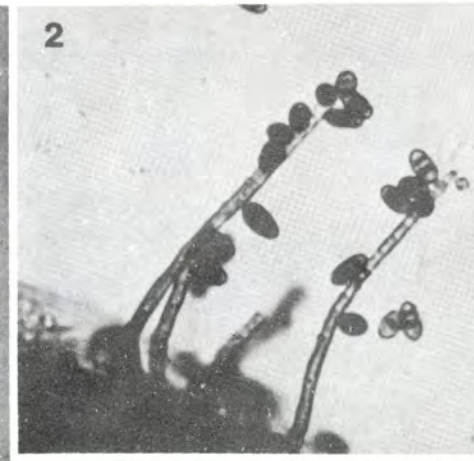








Plate V.

