# CZECH MYCOLOGY

Publication of the Czech Scientific Society for Mycology

Volume 53

July 2002

Number 4

# Ludmila Marvanová – 70th birthday

Jan Špaček

In 1991, Olga Fassatiová published an article in Česká mykologie, Praha (45:123–127, 1991) on the occasion of Ludmila Marvanová's 60th birthday (born on February 22, 1931), including a list of Ludmila Marvanová's publications. Ten years after we commemorate her continuing activities.

Ludmila Marvanová as curator has been working in the Czech Collection of Microorganisms with unchanging intensity. Along with the development of electronic media the way of keeping data on collection cultures has changed, too, and the Czech Collection of Microorganisms joined the European project MINE (Microbial Network Europe). Ludmila Marvanová has had her share in refining definitions of database fields for fungi, and in implementing the project launched by the



L. Marvanová at a collecting trip to streams in Portugal.

Photo Amaro Rodrigues, January 2002.

Ministry of the Environment (Building of National Node for the Database Researches) as part of the collection of fungi.

In the nineties various grant agencies and other institutions started to operate in the Czech Republic, opening competitions or entering into contracts for important projects. Ludmila Marvanová took part in several Czech and international projects, focussed mainly on aquatic hyphomycetes. At that time hydrobiologists started to be increasingly interested in these organisms, as they proved to play an important part in the food networks of aquatic ecosystems where decomposed leaf mass often was the only food source for benthic zoocenoses. Hand in hand went a growing interest in detailed study of the fungi, their life cycles and environmental requirements. Within the Czech Republic Ludmila Marvanová studied the fungi under the project Social and Natural Landscape Elements in the Extended Area

of the Dukovany-Dalešice Power System (1993-95), and between 1998-2000 as project researcher of the Taxonomy of Aquatic Hyphomycetes of Temperate Climate and their Species Diversity in Waters of the Czech Republic opened by the Grant Agency of the Czech Republic. Nowadays, many world research institutes study these fungi and their ecosystem functions. Ludmila Marvanová has been respected as one of the leading experts in this fungal ecologic group worldwide. She has often been called to participate in foreign research programmes, the solution of which requires taxonomy. In 2001 and 2002 Ludmila Marvanová won a scholarship under the INVOTAN programme for shared research of aquatic hyphomycetes at the University do Minho in Portugal. Several research institutes engaged in molecular methods in fungal taxonomy have shown their interest in co-operating with Ludmila Marvanová and utilize her unique collection of aquatic hyphomycetes (such as Technical University Berlin, New University of Lisbon, Mount Allison University in Sackville, University of Illinois, Urbana, Clark University in Massachusetts). In addition to that, Ludmila Marvanová travelled abroad several times with the purpose of preparing the manuscript of a monograph of aquatic fungi, together with other two foreign authors.

However, Ludmila Marvanová's professional activities were not concentrated on studies of aquatic fungi only. In the past ten years, she took part in the following projects: Analysis of Natural Conditions of the Peat Bog Locality Kaltwasser in the Flood Area of the Reservoir Turček (1992–1993), Basic Microbial Research in the Caves of the Moravian Karst (1994), or Biodiversity Protection Programme (1996–1997) in the region of lower River Dyje. Ludmila Marvanová published the results of her research activities both in scientific publications and also by way of presentation at congresses, conferences and symposiums held in the Czech Republic and abroad: (7<sup>th</sup> IUMS Congresses, Prague 1994, 5<sup>th</sup> International Mycological Association Congress, Vancouver 1994, 20<sup>th</sup> Czechoslovak Microbiological Society Congress, Ostrava 1995, 8<sup>th</sup> International Congress for Culture Collections, Veldhoven 1996, 2<sup>nd</sup> International Meeting on Plant Litter Processing in Freshwaters, Lunz 1999).

To get an idea of the volume of work carried out by Ludmila Marvanová we must not forget services related to her collection of fungi, mainly identification of microscopic fungi upon the requirements placed by various research institutes, industrial plants, private entrepreneurs, etc. These identifications, and in most cases also isolation of microscopic fungi from industrial products affected by biodeterioration, from food-processing plants, agricultural production, etc. have not been published.

The scope of activities rendered by experts of the Czech Collection of Micro-organisms does not include teaching primarily. Ludmila Marvanová, however, got involved in teaching in the last ten years, too. She was a consultant to several degree works and PhD theses, took part in determination courses held for graduate biolo-

gists in hygienic and water management practice, both here and abroad (such as in Riegersburg, Austria, for students of the University of Vienna, at a course focussed on identification, biodiversity, ecology and aquatic hyphomycetes preservation held in Coimbra, Portugal in 1998).

The description of Ludmila Marvanová's activities in the past ten years is supported by the bibliography thereof, which shows that the biggest part of her publications concentrated on taxonomic-morphologic aspects (description of new or little known taxons, new information on conidiogenesis, etc.). Another substantial part of Ludmila Marvanová's work mentioned in bibliography dealt with biodiversity of aquatic hyphomycetes in the Czech Republic and abroad, and also of micromycetes in caves and soil. Most of the publications are to be found in renowned international journals of a high quoting rate.

Ludmila Marvanová is a member of several mycological societies. The Czech Scientific Society awarded Ludmila Marvanová the title of Honorary Member for her credit of mycology development in 1996, on the occasion of the  $50^{th}$  anniversary of the Society. Her present commitment in the Society is that of a member of the editorial board of the journal Czech Mycology. She is also a member of the British Mycological Society, Mycological Society of Japan and since 1998 Honorary Member of the Mycological Society of America.

A general overview of Ludmila Marvanová's activities clearly shows that her achievements are based on a studied, systematic and dedicated work and working possibilities. She managed to combine scientific talent with publishing abilities, communication skills and readiness for action. Her work also proves that certain branches, tasks and problems have to be studied on a lifetime basis to obtain results from the research and routine for permanent service. Her knowledge and experience is based on a wide insight in the sciences and deep biological background extended earlier on by several years of agricultural research.

We express our congratulations to Ludmila, wishing her good health in the coming years to continue her work.

Ad multos annos!

Bibliography of L. Marvanová since 1991 with additions of titles missing in Česká mykologie 45: 123-127.

1980

Marvanová, L. (1980): New or noteworthy aquatic hyphomycetes: Clavatospora, Heliscella, Nawawia & Heliscina. – Trans. Br. Mycol. Soc. 75: 221–231.

Švábová, J., Zemek, J., Augustín, J., Kuniak, L. and Marvanová, L. (1980): Enzyme apparatus of the genus Fusarium. – Folia Microbiol.25: 233–237.

1990

Marvanová, L., Bandoni, R. J. and Wakley, G. (1990): Conidial basidiomycetes in freshwater habitats. – Abstr. IV $^{th}$  Mycological Congress, Regensburg. p. 137.

#### 1991

- Marvanová, L. and Fisher, P. J. (1991): A new endophytic hyphomycete from alder roots. Nova Hedwigia 52: 33–37.
- Fuska, J., Proksa, B., Uhrín, D., Marvanová, L. and Šturdíková, M. (1991): Biosynthesis of dehydroaltenusin by Talaromyces flavus. – Acta Biotechnol. 11: 73–76.

#### 1992

- Marvanová, L., Fisher, P. J., Aimer, R. and Segedin, B. (1992): A new Filosporella from alder roots and from water. – Nova Hedwigia 54: 151–158.
- Marvanová, L., Kalousková, V., Hanuláková, D. and Scháněl, L. (1992): Microscopic fungi in the Zbrašov aragonite caves.— Č. mykol. (Praha) 46: 243–250.
- Roldán, A., Marvanová, L. and Descals, E. (1992): Concerning Varicosporium tricladiiforme anam. nov. – Mycol. Res. 96: 935–938.

### 1993

Marvanová, L., Om-Kalthoum Khattab, S. and Webster, J. (1993): Mycofalcella calcarata, anam. gen. et sp. nov. – Nova Hedwigia 56: 401–408.

#### 1994

- Descals, E. and Marvanová, L. (1994): Conidiogenesis in stauroconidial anamorphs. Abstr. V<sup>th</sup> International Mycological Congress, Vancouver p. 50.
- Marvanová, L. and Descals, E. (1994): Caveats for the identification of aquatic hyphomycetes. Abstr.  $V^{th}$  International Mycological Congress, Vancouver p. 135.
- Webster, J., Marvanová, L. and Eicker, A. (1994): Spores from foam from South African Rivers. Nova Hedwigia 57: 379–398.

# 1995

- Marvanová, L. (1995): Some Rare Penicillia and Similar Genera. In: Prášil, K. and Kubátová, A.: Present State, Modern Methods and Perspectives in Penicillium Study. Proceedings of the Penicillium Seminar, Prague, 9. June, 1994, p. 89–97 (in Czech).
- Marvanová, L and Hanuláková, D. (1995): Catalogue of Cultures. Fungi. 5<sup>th</sup> Edition. Czech Collection of Microorganisms, Brno.

## 1996

- Marvanová, L. (1996): Concerning Pseudoanguillospora and water-borne Mycocentrospora spp. Czech Mycol. 49: 7–20.
- Marvanová, L. (1996): [rec.] D. C. Erwin, S. Bartnicki-García and P. H. D. Tsao (eds.): Phytophthora. Its Biology, Taxonomy and Pathology. – Folia Geobot. Phytotax., Praha, 31: 536–537.
- Marvanová, L. and Descals, E. (1996): Hyphomycetes from streams: New taxa and new combination. – Mycotaxon 60: 455–469.

# 1997

- Marvanová, L. (dated 1997, issued 1998): Cladochasiella divergens gen. et sp. nov. Cryptogamie, Mycol. 18: 285–289.
- Marvanová, L. (1997): Biodiversity of aquatic hyphomycetes in running waters of the vicinity of Dukovany. – Acta Sci. Natur. Musei Moraviae Occid. Třebič 26: 1–41 (in Czech).

- Marvanová, L. (1997): Freshwater hyphomycetes: a survey with remarks on tropical taxa. In: Janardhanan, K. K., Rajendran, C., Natarajan, K. and Hawksworth, D. I. (eds): Tropical Mycology. Science Publishers, Inc., Enfield, USA, pp. 169-226.
- Marvanová, L. (1997): Culture collections of microorganisms: centres of information and services. Abstracts of the 1st Czech-Slovak Interdisciplinary Conference of Medical Mycology, October 30 – November 11, 1997, Pardubice, p. 11.
- Marvanová, L. (1997): Some rare fungi as possible causes of human diseases. Abstracts of the Czech-Slovak Interdisciplinary Conference of Medical Mycology, October 30-November 11, 1997, Pardubice, p. 70.
- Marvanová, L., Fisher, P. J., Descals, E., and Bärlocher, F. (1997): Fontanospora fusiramosa sp. nov., a hyphomycete from tree roots and from stream foam. – Czech Mycol. 50: 3–11.
- Přidal, A., Sedláček, I. and Marvanová, L. (1997): Microbiology of Bombus terrestris L. larvae (Hymenoptera: Apoidea) from laboratory rearing. – Acta Univ. agric. et silvic. Mendel. brunensis (Brno), 45 (3-4): 55-66.

# 1998

- Marvanová, L. (1998): Systematics of the genus Acremonium and its mycological pecularities. In Drozdová, A. and Cagaš, B. (eds): Proceedings of the seminar "Actual knowledge about endophytic fungi in forage and turf grass grasses". Zubří, Dec. 10, 1997, p. 1–17 (in Czech).
- Marvanová, L. and Bärlocher, F. (1998): New species of Filosporella, Pachycladina and Pleuropedium from Canadian streams. Mycol. Res. 102 (6): 750–754.
- Marvanová, L. and Bärlocher, F. (1998): Hyphomycetes from Canadian streams III. Arcispora bisagittaria gen. et sp. nov. – Mycologia 90 (3): 531–536.
- Marvanová, L. and Bärlocher, F. (1998): Hyphomycetes from Canadian streams. IV. Spirosphaera dimorpha sp. nov. – Mycotaxon 68: 33–40.
- Marvanová, L. (1998): Aquatic hyphomycete biodivesity in a landscape with intensive agriculture. Abstract Book. 21st Congress of the Czechoslovak Society for Microbiology, Sept. 6–10, 1998, Hradec Králové, p. 369.
- Descals, E., Marvanová, L. and Webster, J. (dated 1998, issued 1999): New species and new combinations of 'aquatic hyphomycetes'. - Can. J. Bot. 76: 1647-1669.
- Gulis, V. I. and Marvanová, L. (1998): Filosporella exilis sp. nov. on submerged plant debris from Belarus. – Mycotaxon 68: 313–320.
- Páčová, Z. and Marvanová, L. (1998): Experience with cryodesiccation of bacteria and fungi in the CCM. – Abstract Book. 21st Congress of the Czechoslovak Society for Microbiology, Sept. 6–10, 1998, Hradec Králové, p. 237.
- Páčová, Z., Marvanová, L., Urbanová, E. and Sedláček, I. (1998): Czech Collection of Microorganisms activities and services. Abstract Book. 21st Congress of the Czechoslovak Society for Microbiology, Sept. 6–10, 1998, Hradec Králové, p. 238.
- Vytřasová, J. Přibáňová, P., and Marvanová, L. (1998): Investigation of xerophilic micromycetes in selected foodstuffs. – Abstract Book. 21st Congress of the Czechoslovak Society for Microbiology, Sept. 6–10, 1998, Hradec Králové, p. 328.

## 1999

- Marvanová, L. (1999): Biodiversity of soil micromycetes in grassland ecosystems in the vicinity of Lanžhot-Soutok and Lednice-Nejdek. – Život v pôde II. Czechoslovak Society for Microbiology and Institute of Microbiology SAS, Bratislava. 2nd International Seminar, 29.1.1999, p. 102–104 (in Czech).
- Marvanová, L., Štegnerová, H., Vaňková, I. and Hajdušková, K. (1999): Microbial communities in caves. 11<sup>th</sup> International symposium of speleotherapy. Zlaté Hory, Sept. 23–26, 1999.
- Gulis, V. I. and Marvanová, L. (1999). Three new scolecosporous hyphomycetes from waters in Belarus. – Mycotaxon 72: 237–250.

- Oh, H., Kwon, T., Gloer, J. B., Marvanová, L. and Shearer, C. A. (1999): Tenellic acids A/D: new bioactive diphenyl ether derivatives from the aquatic fungus Dendrospora tenella. – J. Nat. Prod. 62: 580–583.
- Páčová, Z., Marvanová, L., Benda, P., Sedláček, I.. Novotný, D., Štegnerová, H., Štětina, V. and Švec. P. (1999): Catalogues of cultures. Bacteria. fungi. 6<sup>th</sup> edition, 255 pp. Masaryk University Brno, Faculty of Sciences.
- Prášil, K.; Kubátová, A. and Marvanová, L. (1999): Seminar "Problematics of the anamorph genus Fusarium". Mykologické listy 71: 20-23. (in Czech).
- Tesařová, M., Fiala, K., Tůma. I., Marvanová, L., Smrž, J., Zelená, V., Sedláková, I., Jakrlová, J., Šroubková, E., Hybler, V., Kordiakovský, R. and Záhora, J. (1999): Influence of water management measures in South Moravia on state and biodiversity of grassland ecosystems (in Czech). Proc. of the seminar "Floodplain a multidisciplinary point of view III", 20.10.1999, Brno, p. 39–40.

# 2000

- Marvanová, L. and Bärlocher, F. (2000): Hyphomycetes from Canadian streams. V. Two new conidial basidiomycetes. – Mycotaxon 75: 409–423.
- Marvanová, L. and Gulis, V. 1. (2000): Notes on aquatic hyphomycetes and streamborne spora from Austria. – Österr. Z. Pilzk. 9: 125–140.
- Marvanová, L. and Hywel-Jones, N. L. (2000): Sigmoidea contorta sp. nov., and two rare hyphomycete species from streams in Thailand. – Cryptogamie, Mycol. 21: 13–26.

#### 2001

- Bosák, P., Vašátko, J., Cílek, V., Dumnicka, E., Hanuláková, D., Horáček, I., Jeník, J., Kopecký, J., Marvanová, L., Mlejnek, R., Růžička, V. and Zacharda, M. (2001): Czech Republic. In: Juberthie C. and Decu, V. (eds.): Encyclopaedia Biospéléologica, Tom III: 1405–1426, Société de Biospéléologie, Moulis-Bucarest.
- Marvanová, L. and Bärlocher, F. (2001): Hyphomycetes from Canadian streams. VI. Rare species in pure cultures. – Czech Mycol. 53: 1–28.
- Šafránková, I. and Marvanová, L. (2001): An unusual Penicillium on Rockwool in Glasshouses. Plant Protect. Sci. 37 (4): 149–150.

### 2002

- Vytřasová, J., Přibáňová, P. and Marvanová, L. (2002): Occurrence of xerophilic fungi in bakery gingerbred production. – Int. J. Food Microbiol. 72: 91–96.
- Marvanová L. (2002): Streamborne fungal spora in running waters of the Bohemian Forest. Silva Gabreta 7: 147–164.