Curriculum Vitae

Name Alexander URBAN

Date of Birth September 30, 1968
Place of Birth Vienna, Austria

Current Position University Assistant
Address Department for Systematic and Evolutionary Botany
Faculty of Life Sciences
University of Vienna,
Rennweg 14, A-1030 Vienna, Austria

Education

2002	Ph.D. Botany/Mycology, University of Vienna, Austria: *Systematic frontiers in ectomycorrhizal symbioses explored with molecular phylogenetic methods*
1998	MSc. Biology/Ecology, University of Vienna, Austria: *Identifizierung und Charakterisierung von Ektomykorrhizen an Eichen.*
1995-1996	Master studies in Ecology, Bordeaux Université II, France, « Maîtrise en sciences de l´environnement »
1993-1998	Biology, Ecology, University of Vienna, Austria
1992	First rigorosum medicine, University of Vienna, Austria
1989-1992	Change over to medicine and ethnology University of Vienna, Austria
1988-1989	Studies mathematics and physics University of Vienna, Austria

Professional Experience

2004-2012	University Assistant (part time) Department for Systematic and Evolutionary Botany Faculty of Life Sciences, University of Vienna, Austria
2003-2004	Foundation of TrüffelGarten Urban & Pla OG, an enterprise dedicated to truffle cultivation
2003-2004	Post Doctoral Fellow, FWF Project B15357 “Rhizospere microbes and metal hyperaccumulation”, Prof. Walter Wenzel, BOKU, Austria
1998-2002	Employment Plant Biotechnology Company “VitroPlant“, Klosterneuburg, Austria
1997-	Student coaching (tutorials) and university teaching positions

Awards and Research Fellowships

2012-2014	Monitoring of Macromycetes in the core protected forest areas of the Biosphere Reserve Wienerwald
2011-2013	Research project on macrofungi and beetles on drifting wood in the NP Donauauen (funded by Interreg/NP Donauauen)
2008-2012	Research project on long-term macrofungal succession and beetle populations on beech and oak logs after windthrow in the Biosphere Reserve Wienerwald (funded by BPWW, ÖBF, Stadt Wien)
2007-2011	FWF Project P 19236-B17: Small mammals as vectors of mycorrhizal fungi. Project leader: Prof. Klaus Hackländer, Institute of Wildlife Biology and Game Management, BOKU
2006	Ecology and molecular systematics of the mycorrhizal genus Sebacina, Hochschuljubiläumsstiftung Wien
2005-2006	Binationally funded research cooperation with Department of Forestry, SAS Zvolen, Slovak Republic
2005	Biodiversity and ecological significance of macrofungi in nature reserves along the border of Austria and Bohemia, Binational Project Austria-Czech Republic
1999-2002	“In vitro mycorrhization of clonally propagated woody plants” funded and awarded (2000) as one of the most innovative projects in food biology by the FFF (Austrian Industrial Research Promotion Fund)

Research Stay in foreign countries

2005-2011	Mycological field research in Czech Republic, France and Italy

Qualifications and skills

2002 PhD in Biology	Systematic frontiers in ectomycorrhizal symbioses explored with molecular phylogenetic methods.
Technical and specialist skills	Extensive research experience on ectomycorrhizal relationships and macrofungal diversity and ecology.
	Identification of fungi involved in ectomycorrhiza formation by classic microscopy and DNA based techniques.
	Specific taxonomic knowledge about some poorly studied, but phylogenetically diverse and ecologically important groups of fungi, particularly hypogeous (truffle-like fungi) and corticioid (crust-like) fungi including heterobasidiomycetes (*Sebacinaceae*).
	Isolation and in-vitro cultivation of ectomycorrhizal fungal species which are difficult to grow.
	DNA lab work: DNA extraction from difficult samples, PCR, cloning, sequencing.
	DNA data analysis: experience with many programs used for DNA data processing and analysis in a phylogenetic context.
Languages	German (native); English and French: fluently; Spanish and Italian: passively;.
Experience in teaching	courses in mycology, coevolution, introductory plant ecology
Scientific managing skills	Writing of research proposals.
	Managing research projects.
	Experience in biological field work (e.g. in Wildnisgebiet Dürrenstein).
Soft skills	Analytic thinking
	I like to cooperate and to work in a team. I appreciate and try to offer good humour, fairness and clarity.
Driving licence	B
General computer skills	MS Windows, basic knowledge of Linux; ability to rapidly learn to use new software applications.

Publications

2011	Gorfer M, Blumhoff M, Klaubauf S, Urban A, Inselsbacher E, Bandian D, Mitter B, Sessitsch A, Wanek W, Strauss J 2011 : Community profiling and gene expression of fungal assimilatory nitrate reductases in agricultural soil. ISME J (May 12, 2011), http://dx.doi.org/10.1038/ismej.2011.53
	Urban A 2011: Metal Elements and the Diversity and Function of Ectomycorrhizal Communities. In: Diversity and Biotechnology of Ectomycorrhiza. Mahendra Rai and Ajit Varma (Eds). Soil Biology series.
2010	Nagy LG, Urban A, Örstadius L, Papp T, Larsson E, Vágvölgyi C 2010: The evolution of autodigestion in the mushroom family Psathyrellaceae (Agaricales) inferred from Maximum Likelihood and Bayesian methods. Molecular Phylogenetics and Evolution 57: 1037-48. Available online 27 August 2010.
	Antonín V, Vašutova M, Urban A 2010: A molecularly supported concept of *Marasmius epiphyllus* (Basidiomycetes, Physalacriaceae). Cryptogamie Mycologie 31: 355-362.

Urban A, Pla T. (2010) Conservation strategies for *T. aestivum*. Austrian Journal of Mycology 19: 273-279.

2009 Lendzemo V., Kuyper T.W., Urban A., Vegvari G., Puschenreiter M., Schickmann S., I. Langer I., Steinkellner S. & Vierheilig H. 2009 The arbuscular mycorrhizal host status of plant cannot be linked with the Striga seed-germination-activity of plant root exudates. Journal of Plant Diseases and Protection 116 (2): 86-89.

2008 Urban A., Puschenreiter M., Strauss J. and Gorfer, M. 2008. Diversity and structure of ectomycorrhizal and co-associated fungal communities in a serpentine soil. Mycorrhiza 18:339–354

2008 Kräutler, K., Schickmann, S., Nopp-Mayr, U., Urban, A., Hackländer, K. (2008): Small mammal mycophagy in mountainous forests in Austria. , Mammalian Biology, 73 (Special Issue), 22-23; ISSN 1616-5047

2008 Vašutová M, Antonín V and Urban A, 2008, Phylogenetic studies in Psathyrella focusing on sections Pennatae and Spadiceae - new evidence for the paraphyly of the genus. Mycological Research 112: 1153-1164.

2007 Jamnická G, Bučinová K, Havranová I and Urban A, 2007. Current state of mineral nutrition and risk elements in a beech ecosystem situated near the aluminium smelter in Žiar nad Hronom, Central Slovakia. Forest Ecology and Management 248: 26-35.

2004 Urban, A., Plattner-Neuner, I., Krisai-Greilhuber, I., Haselwandter, K. (2004) Molecular studies on terricolous microfungi reveal novel anamorphs of two Tuber species. Mycological Research 108: 749-758.

Weiß, M., Selosse, M-A., Rexer, K-H., Urban, A.and Oberwinkler, F. Sebacinales: A hitherto overlooked cosm of heterobasidiomycetes with a broad mycorrhizal potential. Mycological Research 108: 1003-1010.

2003 Urban, A., Weiss, M. & Bauer, R. Ectomycorrhizae involving sebacinoid mycobionts. Mycological research 107: 3-14.

Urban, A. & Mader, A., 2003: Über Trüffelvorkommen (*Tuber aestivum*) im südlichen Niederösterreich: Einfluss des Niederschlags auf die Fundmenge. Austrian Journal of Mycology 12: 193-204.

2002 Urban, A., 2002: Truffle cultivation – potentials for the reconciliation of ecology and economy in an unconventional agroecosystem?. Verhandlungen der Gesellschaft für Ökologie 32: 389.

Urban, A., 2002: Systematic frontiers in ectomycorrhizal symbioses explored with molecular phylogenetic methods. PhD Dissertation. Wien.

2001 Urban, A., & Pla, T. 2001: Edible truffle species in Austria. In Hall, I., Yun, W., Danell, E., & Zambonelli, A., (eds): Proceedings of the Second International Conference on Edible Mycorrhizal Mushrooms. Crop & Food research, Christchurch, New Zealand.

2000 Kovacs, G., Pausch & Urban, A. 2000: Diversity of ectomycorrhizal morphotypes and oak decline. Phyton 40: 109-116.

Urban, A., Ertl, C., & Staribacher 2000: Haselnussanbau in der Praxis. AgrarPlus, Laa/Thaya, Austria.

1998 Urban, A. 1998: Identifizierung und Charakterisierung von Ektomykorrhizen an Eichen. Diplomarbeit zur Erlangung das akademischen Grades Mag. rer. nat. an der Formal- und Naturwissenschaftlichen Fakultät d. Universität Wien.