CURRICULUM VITAE

Personal Data

Full name: Thomas Raimund Jung

Birth place and date: Rosenheim, 27th May 1965

Nationality: German

Status: Married (two daughters)

Institutional addresses: Phytophthora Research Centre
Department of Forest Protection and Wildlife Management
Faculty of Forestry and Wood Technology
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Websites: http://www.phytophthora.org/team/thomas-jung/
Web of Science (ResearcherID F-1665-2013)
Scopus (Author ID 7201389242)
ORCID (0000-0003-2034-0718)
Google Scholar Profile
ResearchGate Profile
http://www.tree-diseases.com

Academic Qualifications

1996 PhD in Forest Sciences – Ludwig-Maximilians-University, Munich.

1993 Graduate Degree in Forest Sciences – Ludwig-Maximilians-University, Munich.

Previous and Current Scientific and Professional Activities

Since 12/2016 Head Scientific Researcher of the Phytophthora Research Centre, Mendel University, Brno, Czech Republic.

07/2016 Approval for funding of a Portuguese Foundation for Science and Technology Investigator Development Grant (IF/00974/2015). (Declined in November 2016).

Since 05/2014: Management committee member of COST Action FP 1401 "A global network of nurseries as early warning system against alien tree pests (Global Warning)".

01/2014 – 12/2016: Leader of Working Package 4 'Detection and early warning of fungal and oomycete pathogens' of BiodivERsA project RESIPATH: Responses of European Forests and Society to Invasive Pathogens.

01/2014 – 12/2016: Member of the Centre for Mediterranean Bioresources and Food (MeditBio), Laboratory of Molecular Biotechnology and Phytopathology, Faculty of Sciences and Technology, University of Algarve, 8005-139 Faro, Portugal.

12/2012 – 12/2016: Invited Researcher at the University of Algarve, Campus Gambelas, 8005-139 Faro, Portugal**.**

Since 09/2012: Co-Chair of IUFRO (International Union of Forest Research Organisations) Unit 7.02.09 "*Phytophthora* in Forests and Natural Ecosystems"

03/2012 – 12/2013: Member of IBB/CGB Plant and Animal Genomic Group, Laboratory of Molecular Biotechnology and Phytopathology, Faculty of Sciences and Technology, University of Algarve, 8005-139 Faro, Portugal.

Since 11/2011: Visiting Professor at the University of Sassari, Italy.

11/2010 – 11/2014: Vice-Chair of COST Action FP 1002 "Pathway Evaluation and Pest Risk Management In Transport (PERMIT)".

10/2010 – 09/2011: Senior Research Associate. Ingeniería Técnica Forestal, Universidad de Extremadura, Avenida Virgen del Puerto 2, 10600 Plasencia, Spain.

09/2009 – 08/2011: Adjunct Senior Lecturer. Centre for *Phytophthora* Science and Management (CPSM), Murdoch University, 90 South Street, Murdoch 6150, Western Australia.

11/2008 – 11/2012: Coordinator of Working Group 4 "Management and Control of *Phytophthora* Diseases" of COST Action FP 0801 "Established and Emerging *Phytophthora*: Increasing Threats to Woodland and Forest Ecosystems in Europe". *Phytophthora* Research and Consultancy, Thomastrasse 75, D-83098 Brannenburg, Germany.

09/2008 – 08/2009: Senior Lecturer. Centre for *Phytophthora* Science and Management (CPSM), Murdoch University, 90 South Street, Murdoch 6150, Western Australia.

05/2002 – 05/2007: Production of nine informative and scientific broadcasts on the involvement of *Phytophthora* species in tree declines in Europe in cooperation with 3 German TV stations (ZDF, BR, SWR). Bavarian State Institute of Forestry (LWF), Section Forest Ecology and Forest Protection in Freising, Germany and since 04/2005 *Phytophthora* Research and Consultancy in Brannenburg, Germany.

Since 04/2005: Independent scientist and consultant for tree diseases. *Phytophthora* Research and Consultancy, Am Rain 9, 83131 Nußdorf, Germany.

07/2003 – 09/2004: Organisation and coordination of the 3rd Workshop of IUFRO Working Party 7.02.09 „*Phytophthora* in Forests and Natural Ecosystems“ in Freising, 11th – 17th September 2004. Bavarian State Institute of Forestry (LWF), Section Forest Ecology and Forest Protection in Freising, Germany.

09/2002: Offer of the advertised permanent position as *Phytophthora* Project Leader at the Forest Research Agency, Farnham, Surrey, UK (declined due to the high costs of living in the southern UK). Bavarian State Institute of Forestry (LWF), Section Forest Ecology and Forest Protection in Freising, Germany.

08/2001 – 05/2002: Organisation and coordination of the statewide survey of *Phytophthora* dieback of alders along more than 20000 river kilometers and in 3300 forest stands in Bavaria, Germany. Bavarian State Institute of Forestry (LWF), Section Forest Ecology and Forest Protection in Freising, Germany.

11/2000 – 03/2005: Senior Post Doctoral Research Fellow. Bavarian State Institute of Forestry (LWF), Section Forest Ecology and Forest Protection in Freising, Germany.

03/1999 – 03/2005: Consultant for tree diseases as sideway. Freelancer.

1998: Arnold Sommerfeld Award of the Bavarian Academy of Sciences, acknowledging works on the clarification of the causes of oak decline.

07/1996 – 10/2000: Post Doctoral Research Fellow. Institute of Forest Botany / Section Phytopathology of the Ludwig-Maximilians-University of Munich (from 10/1999 on Technical University of Munich, due to administrative reorganisations) in Freising, Germany.

07/1996: PhD (Forest Sciences).

03/1993 – 06/1996: PhD student. Institute of Forest Botany / Section Phytopathology of the Ludwig-Maximilians-University of Munich (LMU) in Freising, Germany. Title of thesis: Untersuchungen zur *Phytophthora* – Erkrankung europäischer Eichenarten mit besonderer Berücksichtigung der Stieleiche (*Quercus robur* L.): Ein Beitrag zur Klärung des Phänomens Eichensterben (Investigations on the *Phytophthora* disease of European oak species with special emphasis on pedunculate oak (*Quercus robur* L.): a contribution to clarify the phenomenon oak decline).

06/1990 - 12/1991: Diploma thesis, title: ‘Investigations on in vitro toxigenicity of Ceratocystis/Ophiostoma spp. and Fusarium spp. isolated from oak’. Institute of Forest Botany of the Ludwig-Maximilians-University of Munich (LMU) in Munich, Germany.

11/1986 – 03/1993: Studies in Forest Sciences. Ludwig-Maximilians-University of Munich in Munich and Freising, Germany

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Professional Memberships, Societies and International Networks/Working Units

Co-Chair of IUFRO Unit 7.02.09 '*Phytophthora* in Forests and Natural Ecosystems'.

Member of IUFRO Unit 7.03.12 'Alien Invasive Species and International Trade'.

Member of IUFRO Unit 7.02.06 'Disease/Environment Interactions in Forest Decline'.

Member of the 'European network on emerging diseases and invasive species threats to European Forest Ecosystems (FORTHREATS, 2007-2008)'.

Member of COST Action FP 0801 'Established and Emerging *Phytophthora*: Increasing Threats to Woodland and Forest Ecosystems in Europe'. Coordinator of Working Group 4 'Management and Control of *Phytophthora* Diseases' (2008-2012).

Vice-Chair of COST Action FP 1002 'Pathway Evaluation and Pest Risk Management In Transport (PERMIT, 2010-2014)'.

Member of COST Action FP1103 '*Fraxinus* dieback in Europe: elaborating guidelines and strategies for sustainable management (FRAXBACK, since 2012)' (Management Committee substitute).

Member of COST Action FP 1401 'A global network of nurseries as early warning system against alien tree pests (Global Warning, since 2014)' (Management Committee member).

Awards and honours

Arnold Sommerfeld Award of the Bavarian Academy of Sciences, acknowledging works on the clarification of the causes of oak decline (1998).

General scientific expertise

Role of *Phytophthora* pathogens in tree declines.

Root pathology of trees.

Classical and molecular methods for detection, isolation and identification of *Phytophthora* and *Pythium* spp. from plant tissues, soil and water.

Taxonomy, ecology, pathology and phylogeny of *Phytophthora* species.

Pathways, survival strategies, host specificity and aggressiveness of *Phytophthora* species.

Management and control (including eradication) of *Phytophthora* diseases of trees and forest and riparian ecosystems.

Coordination and practical realisation of large-scale field surveys on soil-borne and water-borne *Phytophthora* pathogens.

Specific scientific expertise

Role of infested nursery stock as primary pathway for *Phytophthora* diseases of trees:

- detection methods;
- distribution of *Phytophthora* spp.;
- association between infested nursery stock and diseases in the field;
- control methods;
- management strategies.

Phytophthora-mediated decline of oaks (*Quercus* spp.):

- distribution, aggressiveness and ecology of the involved soil-borne *Phytophthora* species;
- relationships between site factors, *Phytophthora* population in the rhizosphere, crown condition and fine root condition of trees;
- interaction between site factors, *Phytophthora* fine root damages and insect defoliation;
- interaction with environmental constraints such as nitrogen input and drought.

Phytophthora root and collar rot of alders (*Alnus* spp.):

- distribution of the disease, dissemination of *Phytophthora* x *alni* and infection process;
- influence of site factors on disease incidence and progress;
- role of infested nursery stock in disease spread;
- selection of resistant alder clones;
- management and control;
- taxonomy and evolution of the *Phytophthora x alni* hybrid swarm.

Root and collar rot and aerial bleeding cankers of European beech (*Fagus sylvatica*) caused by *Phytophthora* spp.:

- etiology and symptomatology;
- distribution, aggressiveness and ecology of the involved soil-borne *Phytophthora* species;
- relationships between site factors, *Phytophthora* population in the rhizosphere, crown condition and fine root condition of trees;
- interactions between *Phytophthora* damages and secondary pathogens;
- effect of climate change on disease epidemiology;
- occurrence of *Phytophthora* spp. in beech fields of nurseries.

Involvement of *Phytophthora* root infections in the declines of linden (*Tilia* spp.), maple (*Acer* spp.) and birch (*Betula* spp.) trees in Central Europe.

Littleleaf disease of *Pinus* spp. in the Dominican Republic and in Europe caused by *Phytophthora cinnamomi*.

Survival strategies of *Phytophthora cinnamomi* and other *Phytophthora* species under different environmental conditions.

Potential role of *Phytophthora* species in the declines of natural ecosystems in Australia, Taiwan, Chile, Japan and Vietnam.

Control of the *Phytophthora* dieback of mature trees of European beech, oaks, horse chestnut, maple and linden trees with aerial and stem applications of potassium phosphite.

Current research interests

Factors driving diversity and speciation of the genus *Phytophthora* in different ecosystems and climatic zones.

Detection and description of new *Phytophthora* spp. in Europe and other continents; assessment of their potential host ranges among European tree species.

Roles of introduced and endemic *Phytophthora* species in declines of forest ecosystems on a global scale.

Behaviour and role of invasive *Phytophthora* species in their centres of origin.

The evolutionary adaptability and evolutionary trends in the genus *Phytophthora*.

The evolutionary history of the genus *Phytophthora*.

The role of interspecific hybridisations in the evolution of the genus *Phytophthora*.

Genomic basis of aggressiveness, invasiveness and host ranges of *Phytophthora* spp. and of the resistance of tree species to Phytophthora infections.

Use of transcriptomic approaches for studying susceptible and resistant host - *Phytophthora* interactions

Factors triggering the onset of *Phytophthora* epidemics.

Pathways and survival mechanisms of *Phytophthora* spp..

Control of *Phytophthora* diseases and development of integrated management concepts for natural ecosystems and nurseries.

Halophytophthora spp.: biodiversity, ecological roles and screening for high added-value compounds.

Language skills:

	Reading	Writing	Conversation
German	*Excellent*	*Excellent*	*Excellent*
English	*Excellent*	*Excellent*	*Excellent*
French	*Advanced*	*Elementary*	*Elementary*
Italian	*Elementary*	*Elementary*	*Elementary*
Portuguese	*Elementary*	*Elementary*	*Elementary*
Latin	*Advanced*	*Advanced*	*Elementary*

Teaching experience and student supervision

Classes and laboratories taught

2007 – 2018: Eidgenössische Technische Hochschule (ETH), Zurich, Switzerland: Co-supervisor of the laboratory course ‚Advanced Forest Pathology'.

04/2014: Training course 'Recognition of Disease Symptoms, Isolation and Identification of *Phytophthora* species', Federal Research and Training Centre for Forests, Natural Hazards and Landscape (BFW), Vienna, Austria.

07/2013: Training course 'Recognition of Disease Symptoms, Isolation and Identification of *Phytophthora* species', University of Valladolid, Spain.

07/2011: Training course 'Recognition of Disease Symptoms, Isolation and Identification of *Phytophthora* species', University of Algarve, Portugal.

06/2011: Lecturer and trainer at the COST FP 0801 Training School: Detection and Diagnosis of *Phytophthora* in Forest Ecosystems. Warsaw, Poland.

1993 – 1996: Institute of Forest Botany, Ludwig-Maximilians University (LMU) Munich in Freising, Germany:

Laboratory practicals and field excursions on the identification of flowering plants;

Co-supervisor of laboratory courses on the identification of fungal diseases of trees.

External examiner

Cornelia Siricord, Centre for Phytophthora Science and Management, Murdoch University, Perth, Western Australia. PhD thesis: Detection of *Phytophthora* Species by MALDI-TOF Mass Spectrometry. Published in 2005 by Murdoch University, Perth, Western Australia.

Sarah Collins, Centre for Phytophthora Science and Management, Murdoch University, Perth, Western Australia. PhD thesis: Long term survival of *Phytophthora cinnamomi* in rehabilitated bauxite mines and adjacent jarrah (*Eucalyptus marginata*) forest. Published in 2006 by Murdoch University, Perth, Western Australia.

Anna Rytkönen, Faculty of Agriculture and Forestry, University of Helsinki, Finland. PhD thesis: *Phytophthora* in Finnish nurseries. Published in 2011 as Dissertationes Forestales 137, Helsinki University Print, Finland.

Examiner

Matěj Panek, Department of Forest Protection and Wildlife Management, Faculty of Forestry and Wood Technology, Mendel University, Brno, Czech Republic. PhD thesis: Population structure of *Phytophthora cactorum* complex in Europe. Published in 2017 by Mendel University, Brno, Czech Republic.

Post Graduate student training

Completed

Jan Nechwatal, Institute of Forest Botany, Technical University of Munich, Freising, Germany. PhD thesis: Wurzeluntersuchungen an Fichten und Buchen im Bayerischen Alpenraum: mögliche Beteiligung von Wurzelpathogenen am Krankheitsgeschehen sowie Methoden zu deren Nachweis (Root investigations on spruce and beech trees in the Bavarian Alps: potential involvement of root pathogens in the decline scenario and detection methods). Published in April 2000 by Hieronymus, Munich. Current affiliation: Research Associate at the Bavarian State Institute of Agriculture (LfL), D-85354 Freising, Germany.

Ulrika Jönsson, University of Lund, Department of Plant Ecology, Forest Ecology, Lund, Sweden. PhD thesis: *Phytophthora* and oak decline – impact on seedlings and mature trees in forest soils. Published in October 2004 by Lund University. Current affiliation: Scientific journalist in Seglora, Sweden.

Christoph Ulrich Tellenbach, ETH Zurich, Dept. Forest Pathology and Dendrology, Institute of Integrative Biology (IBZ), PhD thesis: Natural disease control by root endophytes in a changing climate. Published in 2011 as Diss. ETH No. 19714.

Peter Scott, Centre for *Phytophthora* Science and Management (CPSM), Murdoch University, Murdoch, Western Australia. PhD project title: The role of *Phytophthora* species in *Eucalyptus gomphocephala* decline. Published in January 2011.

Alex Rea, Centre for *Phytophthora* Science and Management (CPSM), Murdoch University, Murdoch, Western Australia. PhD project title: Classical and Molecular Taxonomy, Pathogenicity Testing and Evolutionary Biology of *Phytophthora* species. Published in March 2011.

Beatrice Ginetti, University of Florence, Dept. of Agricultural Biotechnology, Section of Plant Protection, Italy. PhD project title: Identity, impact and role of *Phytophthora* species in planted forests of north Italy. Published in March 2013.

Tamara Corcobado, Universidad de Extremadura, Plasençia, Spain. PhD project title: Influencia de "Phytophthora cinnamomi" Rands en el decaimento de "Quercus ilex L." y su relación con las propiedades del suelo y las ectomicorrizas (*Quercus* decay in Extremadura in relation to soil properties and the presence of *Phytophthora cinnamomi* and mycorrhizae). Published in November 2013.

Ivan Milenkovic, Faculty of Forestry, University of Belgrade, Serbia. PhD project title: Diversity of species from the *Phytophthora* genus and their role in the decline of broadleaved forest trees in Serbia. Published in July 2015.

Maria Evoli, Department of Agri-Food and Environmental Systems Management, Plant Pathology Section, University of Catania, 95123 Catania, Italy. PhD project title: Molecular analysis of genetic diversity of *Phytophthora citrophthora* using nuclear and mitochondrial markers. Published in February 2016.

Ongoing

Beatriz Mora Sala, Universidad Politècnica de València, Spain. PhD project title: Aplicacion de tecnicas moleculares para valorar la implicacion de *Phytophthora* spp. en el decaimento de *Quercus ilex*.

Master of Science (M.Sc.) students

Completed

Kirsten Joas, University of Applied Sciences Weihenstephan, Section Forest Sciences. Thesis: Untersuchungen zur Sporangienbildung verschiedener *Phytophthora* – Arten in Abhängigkeit von pH-Wert, Stickstoff- und Aluminiumkonzentrationen (Studies on the effects of pH and different concentrations of nitrogen and aluminium on the production of sporangia by various *Phytophthora* species). July 1998. Current affiliation: Bavarian State Forestry.

Bernd Zolles, University of Applied Sciences Weihenstephan, Section Forest Sciences, Freising, Germany. Thesis: Untersuchungen zur Optimierung der Isolierungsmethoden von Pilzen der Gattung *Phytophthora* aus Böden unter besonderer Berücksichtigung von Waldböden des Buntsandsteins (Studies on the improvement of methods for the isolation of *Phytophthora* species from soils with a spezial emphasis on forest soils derived from sandstone). December 1998. Current affiliation: Bavarian State Forestry.

Sindy Leonhard, Technical University of Dresden, Faculty of Forest Botany and Forest Zoology, Tharandt, Germany. Thesis: Vorkommen und Bedeutung pilzähnlicher Phytopathogene (Abt. Oomycota) in ausgewählten Eichenbeständen des Freistaates Sachsen (Occurrence and importance of fungal-like plant pathogens from the oomycota in selected oak stands in Saxony). March 2004.

Katherine Edwards, Centre for *Phytophthora* Sciences and Management (CPSM), Murdoch University, Murdoch, Western Australia. Master project title: Involvement of *Phytophthora* species in the decline of *Eucalyptus rudis* in riparian ecosystems in Western Australia.

Federico La Spada, Department of Agri-Food and Environmental Systems Management, Plant Pathology Section, University of Catania, Italy. Distribution and impact of *Phytophthora* species in the Sicilian forests. April 2016.

Giuseppe Carella, University of Florence. Specie di *Phytophthora* e *Halophytophthora* degli ambienti salmastri dell'Algarve (Distribution of *Phytophthora* and *Halophytophthora* species in the lagoon ecosystem Ria Formosa in Portugal). December 2017.

Training Courses and Seminars

Training of scientists

Training courses and seminars in recognition of disease symptoms in the field and in methods for the isolation, identification and testing of pathogenicity of *Phytophthora* species for PhD students, Postdoctoral Fellows, Senior Research Fellows and Professors of the 46 institutions listed below.

05-06/2017: Gifu University, Japan.

Tohoku Research Center, FFPRI, Morioka, Japan.

03-04/2016: Forest Protection Research Centre, Vietnamese Academy of Forest Sciences, Hanoi, Vietnam.

10-12/2015: University of Florence, Italy.

05-07/2015: Universidad Politècnica de València, Spain.

11/2014: Universidad de Concepción, Facultad de Ciencias Forestales, Concepción, Chile.

Bioforest, Concepción, Chile.

04/2014: Swedish University of Agricultural Sciences, Uppsala, Sweden,

Mendel University, Brno, Czech Republic,

Federal Research and Training Centre for Forests, Natural Hazards and Landscape (BFW), Vienna, Austria.

03/2014: University of Sassari, Department of Plant Protection, Sassari, Italy.

01/2014: Mendel University, Brno, Czech Republic.

Federal Research and Training Centre for Forests, Natural Hazards and Landscape (BFW), Vienna, Austria.

07/2013: Universidad de Extremadura, Departamento de Ingeniería del Medio Agronómico y Forestal, Plasencia, Spain.

Universidad de Valladolid, Sustainable Forest Management Research Institute, Palencia, Spain.

Universidad de Córdoba, Spain.

Universidad de León, Spain.

Universidad Politècnica de València, Spain.

ICIA_Instituto Canario de Investigaciones Agrarias, Gran Canaria, Spain.

Instituto del Corcho, la Madera y el Carbón Vegetal (IPROCOR), Merida, Spain.

Centro de Sanidad Forestal de Calabazanos, León, Spain.

Empresa de Transformación Agraria (TRAGSA), Spain.

Centro De Investigación Agraria La Orden-Valdesequera, Merida, Spain.

Instituto Madrileño de Investigación y Desarrollo Rural Agrario y Alimentario (IMIDRA), Madrid, Spain.

University of Catania, Italy.

University of Reggio Calabria, Italy.

05/2013: University of Catania, Italy.

07/2012: University of Florence, Agricultural Biotechnology Dept - Plant Protection Section, Italy.

03/2012: University of Valladolid, Palencia, Spain.

02/2012: Southern Swedish Forest Research Centre, Swedish University of Agricultural Sciences, Alnarp, Sweden**.**

12/2011: Faculty of Forestry, University of Belgrade, Serbia.

Forest Research Institute (IBL), Sękocin Stary, Poland.

National Forestry University of Ukraine, Lviv, Ukraine.

11/2011: University of Sassari, Department of Plant Protection, Sassari, Italy.

07/2011: Instituto Nacional de Recursos Biológicos, Unidade de Silvicultura e Produtos Florestais, Oeiras, Portugal.

Universidade de Trás-os-Montes e Alto Douro, Departamento de Ciências Florestais e Arq. Paisagista, Vila Real, Portugal.

Universidade de Évora, Departamento de Fitotecnia, Laboratório de Virologia Vegetal, Évora, Portugal.

Universidade do Algarve, Faculdade de Ciências e Tecnologia, Departamento de Biologia e Bioengenharia, Faro, Portugal.

Universidade do Algarve, IBB-CGB Plant and Animal Genomic Group, Faro, Portugal.

University of Cordoba, Department of Agronomy, Cordoba, Spain.

University of Valladolid, Sustainable Forest Management Research Institute, Valladolid, Spain.

Universidad de Huelva, Department Ciencias Agroflorestales, Huelva, Spain.

Universidad de Extremadura, Departamento de Ingeniería del Medio Agronómico y Forestal, Plasencia, Spain.

University of Florence, Agricultural Biotechnology Department, Plant Protection Section, Florence, Italy.

Suleyman Demirel University, Faculty of Forestry, Forest Pathology, Isparta, Turkey.

05/2011: Faculty of Forestry, University of Belgrade, Serbia.

11/2010 and 09/2009: University of Extremadura, Plasençia, Spain**.**

10/2010 and 09/2009: Instituto Agroforestal Mediterráneo, University of Valencia, Spain.

05/2010: Southern Swedish Forest Research Centre, Swedish University of Agricultural Sciences, Alnarp, Sweden.

05/2010: University of Algarve, Faro, Portugal.

09/2009: University of Valladolid, Palencia, Spain.

12/2007: Department of Forest Sciences, ETH Zurich, Switzerland.

10/2007, 05/2007 and 03/2007: Murdoch University, CPSM, Murdoch, Australia.

10/2007 and 09/2005: Federal Research and Training Centre for Forests, Natural Hazards and Landscape (BFW), Vienna, Austria.

03/2004: Cornell University, Ithaca, USA.

11/2002 and 08/1997: Forest Research Station of Baden-Württemberg, Freiburg, Germany.

11/2002: Technical University of Dresden, Tharandt, Germany.

05/2000 and 10/1999: Lund University, Lund, Sweden.

03/2000: Forest Research Station of Lower Saxony, Göttingen, Germany.

09/1999 and 09/1998: Scottish Crop Research Institute (SCRI), Dundee, UK.

09/1999: Slovenian Forestry Institute, Ljubljana, Slovenia.

09/1999: University for Soil Science (BOKU), Vienna, Austria.

05/1999: Forestry Commission Research Agency, Alice Holt, UK.

04/1998 and 06/2004: University of Tuscia, Viterbo, Italy.

04/1998: University of Bari, Italy.

04/1998: University of Florence, Italy.

04/1998: Oregon State University, Corvallis, USA.

04/1998: INRA Nancy, Champenoux, France.

10/1995: CNR, Florence, Italy.

Training of foresters and biologists

Nine seminars and field exercises (between March 2001 and March 2002) in order to train more than 250 foresters from the Bavarian State Forestry and 30 biologists from the Bavarian river authorities in the detection of *Phytophthora* root and collar rot symptoms of alders, and in the biology, pathways and control of *Phytophthora alni*. These training units were the basis for the state-wide survey of the disease in forest and riparian ecosystems performed in Bavaria between August 2001 and May 2002.

Training of practitioners

Twenty-three seminars (between February 2007 and April 2014) on the detection and management of *Phytophthora* diseases of trees for more than 900 practicioners from different garden and environmental authorities, landscape and garden companies, and nursery owner associations in Austria, Germany, Serbia and Slovakia.

Research and Professional Services

Participation in R&D projects and cooperation

11/2016 – 10/2022: Phytophthora Research Centre - Mendel University, Brno, Czech Republic. (Project registration no. CZ.02.1.01/0.0/0.0/15_003/0000453; Project Reference no. MSMT-15932/2016-1. Head Scientific Researcher. Funded by Ministry of Education, Youth and Sports, Czech Republic.

11/2015 – 10/2019: Horizon 2020 project POnTE 'Pest Organisms Threatening Europe'. Beneficiary with own budget. Funded by the European Commission.

05/2014 – 04/2018: COST Action FP 1401 "A global network of nurseries as early warning system against alien tree pests (Global Warning)". Management committee member. Funded by the European Commission.

01/2014 – 12/2016: BiodivERsA project RESIPATH: Responses of European Forests and Society to Invasive Pathogens. Leader of Working Party 4 'Detection and early warning of fungal and oomycete pathogens'. Member of the Portuguese team of the University of Algarve. Funded by the Portuguese Foundation for Science and Technology (FCT).

07/2013 – 06/2014: Exploratory project QuerResist 'Screening of Asian oak species for potential resistance to *Phytophthora* spp.' (EXPL/AGR-FOR/1304/2012). Principal Investigator. Funded by the Portuguese Foundation for Science and Technology (FCT).

01/2012 – 11/2014: COST Action FP1103 '*Fraxinus* Dieback in Europe: Elaborating Guidelines and Strategies for Sustainable Management (FRAXBACK)'. Management Committee substitute. Funded by the European Commission.

01/2012 – 12/2014: Project 'Hacia una posible coexistencia entre *Quercus ilex* y nuevas especies de *Phytophthora* detectadas en el ámbito forestal', Grupo de Investigación en Hongos Fitopatógenos del Instituto Agroforestal del Mediterráneo de la Universidad Politécnica de Valencia, Spain. External consultant. Funded by 'el Programa Nacional de Proyectos de Investigación Fundamental convocado por el Ministerio de Ciencia e Innovación', Madrid, Spain.

01/2012 – 12/2014: Project **'**Regeneración de *Quercus ilex* ante nuevas especies de *Phytophthora* detectadas en el ámbito forestal', Universidad de Extremadura in Plasençia, Spain. External consultant. Funded by 'el Programa Nacional de Proyectos de Investigación Fundamental convocado por el Ministerio de Ciencia e Innovación', Madrid, Spain.

Since 10/2011: Project NR12-0098-10/2011: 'Application of phosphites as elicitors of tree resistance against root pathogens in nurseries and forest stands (Stosowanie fosforynów jako elicytorów odporności na patogeny korzeni w szkółkach leśnych i drzewostanach)', Forest Research Institute (Instytut Badawczy Leśnictwa IBL), Raszyn, Poland. External consultant. Funded by the National Centre for Research and Development.

11/2010 – 11/2014: COST Action FP 1002 "Pathway Evaluation and Pest Risk Management In Transport (PERMIT)". Vice-Chair of the Action. Funded by the European Commission.

08/2009 – 08/2011: 'Involvement of *Phytophthora* species in the decline of *Eucalyptus rudis* in riparian ecosystems in Western Australia'. Consultant and Supervisor of the Centre for *Phytophthora* Science and Management (CPSM), Murdoch University, Murdoch, Western Australia. Funded by Murdoch University and the State Centre of Excellence on Climate change and Woodland and Forest Health, Western Australia.

01/2009– 01/2012: 'Identification and characterisation of *Phytophthora* isolates associated with alder decline in Spain'. External consultant and Supervisor of the Universidad de Valladolid, Departamento de Producción Vegetal y Recursos Forestales, Spain. Funded by the Universidad de Valladolid.

11/2008 – 11/2012: COST Action FP 0801 "Established and Emerging *Phytophthora*: Increasing Threats to Woodland and Forest Ecosystems in Europe". Coordinator of Working Group 4 "Management and Control of *Phytophthora* Diseases". Funded by the European Commission.

01/2008 – 12/2010: 'Monitoring *Quercus* decay in Extremadura to check its relation with soil properties and the presence of *Phytophthora cinnamomi* and mycorrhizae'. External consultant and Supervisor of the Universidad de Extremadura in Plasençia, Spain. Funded by the Consejería de Industria, Energía y Medio Ambiente, Junta de Extremadura, Spain.

01/2008 – 12/2009: Bilateral project between Spain and Portugal '*Quercus* decay in the Iberian Peninsula: analysis of a cross-border problem'. External consultant and Supervisor of the Universidad de Extremadura in Plasençia, Spain. Funded by the UE - Ministerio de Educación y Ciencia (Acción Integrada España-Portugal), Madrid, Spain.

09/2008 – 08/2011: Project 'Survival strategies of *Phytophthora cinnamomi* and other *Phytophthora* species in the Jarrah and Tingle Forest, the Banksia Woodlands and heathlands of Western Australia and potential eradication techniques'. Senior Research Associate (until 08/2009) and Adjunct Senior Lecturer (since 09/2009) at the Centre for *Phytophthora* Science and Management (CPSM), Murdoch University, Murdoch, Western Australia.

08/2008 - 12/2010: Project 'CODIBE - Complex disease of beech – root and stem diseases of beech in deciduous stands of Lower Austria after climatic extremes'. Senior Researcher and external contractor of the Federal Research and Training Centre for Forests, Natural Hazards and Landscape (BFW), Vienna, Austria.

05/2007 – present: 'Potential role of *Phytophthora* species in the decline of *Eucalyptus gomphocephala* (tuart forest)'. Consultant and Supervisor of the Centre for *Phytophthora* Science and Management (CPSM), Murdoch University, Murdoch, Western Australia. Funded by Murdoch University, the Australian Research Council and industry partners.

04/2007 – 06/2011: Classical and Molecular Taxonomy, Pathogenicity Testing and Evolutionary Biology of *Phytophthora* species. Consultant and Supervisor of the Centre for *Phytophthora* Science and Management (CPSM), Murdoch University, Murdoch, Western Australia. Funded by Murdoch University, the Cooperative Research Centre for National Plant Biosecurity, and the Department of Environment and Conservation of Western Australia.

05/2007 – present: 'Efficacy of potassium phosphite in controlling soilborne and airborne *Phytophthora* species'. Ongoing cooperation with the University of Kiel, the Bavarian Castle Administration and the agrochemical company Agroplanta GmbH in Germany.

01/2007 – 12/2008: Coordination Action '044436' 'European network on emerging diseases and invasive species threats to European Forest Ecosystems (FORTHREATS)'. Team member. Funded by the European Commission.

09/2006 – 12/2008: Project 'Sviluppo e validazione di metodi molecolari per il monitoraggio di specie di *Phytophtora* nelle faggete e nei vivai di piante forestali (Development and validation of molecular methods aimed at the monitoring of *Phytophthora* species of beech stands and forest nurseries)' within the project 'Difesa e gestione delle faggete mediterranee (DIGESFAM) (Protection and management of mediterranean beech forests)'. External consultant and contractor of the Dipartimento di Gestione dei Sistemi Agrari e Forestali, Università Mediterranea di Reggio Calabria, Reggio Calabria, Italy. Funded by the Italian Ministry for Agriculture and Forestry (MIPAF).

01/2006 – present: 'Control of the *Phytophthora* dieback of mature trees of European beech, oaks and linden trees with aerial and stem applications of potassium phosphite'. Principal Researcher. Funded by the Bavarian Administration of Castles, Gardens and Lakes, the city of Augsburg, Shelton Technologies, UK, Agrichem Ltd., Australia and Agroplanta GmbH, Germany.

06/2005 – 12/2007: 'Modelling the susceptibility of the USA to *Phytophthora alni*.' Senior Researcher and external contractor of the Forest Health Technology Enterprise Team, Forest Health Protection, USDA Forest Service, Fort Collins, Colorado, USA and the University of Colorado. Funded by the USDA Forest Service.

05/2005 – 12/2005: '*Phytophthora* disease of alder – distribution and disease intensity in alder stands in Vienna, Austria'. Senior Researcher and external contractor of the Federal Research and Training Centre for Forests, Natural Hazards and Landscape (BFW), Vienna, Austria. Funded by the River Authorities of the City of Vienna.

07/2004 - 03/2005: Project F47 'Damages on beech in Bavaria – investigation of selected stands on potential infections by *Phytophthora* and risk assessment of the danger of disease spread via infested nursery stock'. Principal Researcher. Funded by the Bavarian State Ministry for Agriculture and Forestry, Munich, Germany.

01/2001 – 12/2004: 'Investigations on the new alder mortality in the biosphere reserve Spreewald (causes, distribution, implications and control'. External consultant of the Technical University of Dresden, Faculty of Forest Botany and Forest Zoology, Tharandt, Germany. Funded by the Brandenburg Ministry for Agriculture, Conservation and Development.

01/2001 – 06/2004: Project F45 II 'Development of a management concept for the *Phytophthora* disease of alders in Bavaria'. Principal Researcher. Funded by the Bavarian State Ministry for Agriculture and Forestry, Munich, Germany.

01/2001 – 12/2002: 'Investigations on fungal and fungal-like plant pathogenic microorganisms involved in oak decline in Saxony'. External consultant of the Technical University of Dresden, Faculty of Forest Botany and Forest Zoology, Tharandt, Germany. Funded by the Saxon Ministry for Environment, Agriculture, Food and Forestry (SML).

10/1999 – 10/2004: 'Importance of *Phytophthora* spp. and nutrient availability for root vitality of pedunculate oak (*Quercus robur*)'. External Consultant and Supervisor of the University of Lund, Department of Plant Ecology, Forest Ecology, Lund, Sweden. Funded by AB Gustaf Kähr, Gustafsborgs Säteri AB, the National Board of Forestry, Region Skånes Miljövårdsfond, the Regional Board of Forestry, Sparbanksstiftelsen Kronan and Tarkett Sommer.

06/1999 – 02/2001: Concerted Action 'FAIR 5 CT97 3615' '*Phytophthora* disease of alder in Europe: potential for damage; opportunities for limitation of pathogen spread, and for management and control'. Team member. Funded by the European Commission.

04/1999 – 04/2000: Project F45 'Investigations on the *Phytophthora* disease of common alder and grey alder in Bavaria: occurrence of the alder pathogen in nurseries'. Research Associate. Funded by the Bavarian State Ministry for Food, Agriculture and Forestry, Munich, Germany.

01/1998 – 03/2001: Project PATHOAK, 'FAIR CT97 3926' 'Long term dynamics of oak ecosystems: Assessment of the role of root pathogens and environmental constraints as interacting decline inducing factors'. Postdoctoral Research Fellow. Funded by the European Commission.

07/1997 – 06/2000: ARC Project 901 'Development of molecular diagnostics for detecting and identifying *Phytophthora* species involved in oak decline in Europe' (07/1997-06/1999), 'Development of molecular diagnostics for detecting and identifying oak and beech root pathogens *Phytophthora syringae* and *P. undulata*, and AFLP analyses of *P. quercina* isolates.' (prolongation period 07/1999-06/2000). Team member. Cooperation with the Scottish Crop Research Institute, Dundee, UK. Funded by the Deutscher Akademischer Austauschdienst (DAAD) (British-German Academic Research Collaboration Program ARC).

01/1997 – 03/1999: Project F44 'Screening for *Phytophthora* in stands of pedunculate and sessile oak in Bavaria on the basis of the Assessment of Forest Condition 1994: attempted correlation with crown transparency, root damages and site factors'. Postdoctoral Research Fellow. Funded by the Bavarian State Ministry for Food, Agriculture and Forestry, Munich, Germany.

04/1993 – 06/1997: 'The *Phytophthora* disease of European oak species'. PhD student. Funded by the Allianz Foundation for the Protection of Environment, Munich, Germany.

Scientific research in foreign countries

2018: **Norway** (project POnTE and Phytophthora Research Centre: survey of *Phytophthora* species in natural forests and riparian ecosystems).

Sumatra (project Phytophthora Research Centre: survey of *Phytophthora* species in natural forests and riparian ecosystems).

2017: **Vietnam** (projects POnTE and Phytophthora Research Centre: survey of *Phytophthora* species in natural forests and riparian ecosystems).

Japan (project Phytophthora Research Centre: survey of *Phytophthora* species in natural forests and riparian ecosystems).

Portugal (project RESIPATH: survey of *Phytophthora* and *Halophytophthora* diversity in estuarine ecosystems).

2016: **Portugal** (project RESIPATH: survey of *Phytophthora* diversity in forests, rivers and nurseries).

Vietnam (project POnTE: survey of *Phytophthora* species in natural forests and riparian ecosystems).

2015: **Portugal** (project RESIPATH: survey of *Phytophthora* diversity in forests, rivers and nurseries).

Italy (diversity and impact of *Phytophthora* species in forest and riparian ecosystems in Sicily).

Slovakia and Morocco (studies on the nursery pathway and on the control of *Phytophthora* diseases).

2014: **Chile** (survey of *Phytophthora* species in natural forests and riparian ecosystems in Valdivia).

Austria, Italy, Slovakia and Morocco (studies on the nursery pathway and on the control of *Phytophthora* diseases**).**

Hungary (project QuerResist: phylogenetic studies of new *Phytophthora* species from Asia).

Portugal (project RESIPATH: survey of *Phytophthora* diversity in forests, rivers and nurseries; Project QuerResist: testing of Asian *Quercus* spp. for resistance to *P. cinnamomi*).

2013: **Taiwan** (project QuerResist: search for *Phytophthora*-resistant Fagaceae species and survey of *Phytophthora* species in natural forest and riparian ecosystems).

Italy (studies on the involvement of *Phytophthora* species in beech and oak decline in Sicily and Sardinia; morphological, physiological and phylogenetic studies of new *Phytophthora* spp.).

Spain (studies on the involvement of *Phytophthora* species in the decline of *Pinus pinaster* forests).

Slovakia (studies on the nursery pathway and on the control of *Phytophthora* diseases).

2012: **Morocco** (studies on the nursery pathway and on the control of *Phytophthora* diseases).

Italy (studies for the description of *Phytophthora acerina* sp. nov. at the University of Florence and of *Phytophthora parvispora* sp. nov. at the University of Sassari; studies on *Phytophthora* infestations of heathland ecosystems in Sardinia).

Portugal (studies on *Phytophthora* populations in river systems; studies on the nursery pathway of *Phytophthora* diseases into forest ecosystems).

Spain (studies on *Phytophthora*-mediated decline of *Quercus faginea* and *Quercus pyrenaica*).

Sweden (studies on *Phytophthora*-mediated decline of beech forests and on the nursery pathway of *Phytophthora* diseases in cooperation with the Southern Swedish Forestry Institute of SLU in Alnarp).

2011: **Serbia** (studies on the nursery pathway of *Phytophthora* diseases into forest ecosystems; studies on the involvement of *Phytophthora* species in oak decline in three National Parks).

Poland (studies on *Phytophthora*-mediated oak and ash decline and on *Phytophthora* infestation of alder plantings; phosphite trials in mature oak forests to control *Phytophthora*-mediated oak decline).

Portugal (studies on *Phytophthora* populations in river systems; studies on the nursery pathway of *Phytophthora* diseases into forest ecosystems).

Italy (studies on *Phytophthora* infestations of nursery stock, forest and amenity plantings, mature cork oak, holm oak and chestnut forests, and heathland ecosystems in Sardinia).

Spain (studies on the nursery pathway of *Phytophthora* diseases into forest ecosystems; studies on *Phytophthora* populations of aquatic habitats; studies on the involvement of *Phytophthora* species in the decline of *Quercus ilex* and *Quercus suber*).

Sweden (studies on *Phytophthora*-mediated decline of beech forests in cooperation with the Southern Swedish Forestry Institute of SLU in Alnarp).

Australia: (studies on the survival strategies of *Phytophthora cinnamomi* under controlled conditions at the CPSM in Murdoch; morphological studies of Phytophthora hybrids from natural ecosystems in Western Australia, Victoria and Tasmania).

2010: **Portugal** (studies on the involvement of *Phytophthora* species in the decline of cork oak in the South of Portugal; studies on *Phytophthora* populations in rivers in the South of Portugal; studies on dieback of riparian *Alnus glutinosa* caused by *Phytophthora alni* in the North of Portugal, all in cooperation with the University of Algarve in Faro).

Spain (studies on the involvement of *Phytophthora* species in the decline of *Quercus faginea* and *Q. ilex* in the Valencian region, and studies on the characterisation and pathogenicity of several new *Phytophthora* species at the Instituto Agroforestal Mediterráneo, Universidad Politécnica de Valencia; studies on *Phytophthora* infestations of nurseries and oak plantations in Extremadura, and studies on the involvement of *Phytophthora* species in the decline of *Q. ilex* in Extremadura and La Mancha, at the Ingeniería Técnica Forestal, Universidad de Extremadura, in Plasencia).

Australia (studies on the survival strategies of *Phytophthora cinnamomi* and other *Phytophthora* species in different ecosystems at the CPSM in Murdoch).

Austria (studies on beech decline at the BFW in Vienna).

Italy (studies on *Phytophthora* infestations of horticultural plants).

Sweden (studies of beech decline in cooperation with the Southern Swedish Forestry Institute of SLU in Alnarp).

2009: **Australia** (studies on the survival strategies of *Phytophthora cinnamomi* and other *Phytophthora* species in different ecosystems, and studies on the decline of tuart and rudis forests at the CPSM in Murdoch).

Austria (studies on beech decline at the BFW in Vienna).

Italy (studies on *Phytophthora* infestations of horticultural plants).

Spain (studies on oak decline, ink disease of chestnut and mortality of alders in cooperation with the Universities of Plasençia, Palençia and Valencia).

2008: **Australia** (studies on the survival strategies of *Phytophthora cinnamomi* and other *Phytophthora* species in different ecosystems at the CPSM in Murdoch).

Austria (studies on beech at the BFW in Vienna).

2007: **Australia** (studies on decline of tuart forests at the Centre for *Phytophthora* Science and Management (CPSM) in Murdoch).

Italy (studies on *Phytophthora* infestations of horticultural plants).

2006: **Switzerland** (studies on oak decline).

Italy (studies on nursery infestations).

2005: **Austria** (studies on alder mortality caused by *Phytophthora alni* at the Federal Research and Training Centre for Forests, Natural Hazards and Landscape (BFW) in Vienna),

the Netherlands (studies on decline of horse chestnuts in cooperation with the Dutch Plant Protection Service in Wageningen).

2004: **Italy** (studies on beech decline at the University of Tuscia in Viterbo).

Sweden (studies on oak decline at Lund University).

Switzerland (studies on oak decline).

2002: **Sweden** (studies on oak decline at Lund University).

Dominican Republic (studies on littleleaf disease of pines).

2000: **Luxembourg** and **Sweden** (studies on oak decline at Lund University).

1999: **Scotland** (development of genetical markers for the detection of *Phytophthora quercina*, *Phytophthora cambivora* and *Phytophthora citricola* at the SCRI).

England (studies on oak decline at the Forest Research Agency in Farnham, Surrey).

1998: **Scotland** (studies on oak decline and molecular studies of the genetic variability of *Phytophthora cambivora* and *Phytophthora citricola* at the SCRI).

France (studies on oak decline at INRA Nancy).

1997: **Scotland** (molecular studies of the genetic variability of a European population of *Phytophthora quercina* at the Scottish Crop Research Institute SCRI in Dundee).

1995: **Slovenia, Switzerland and Italy** (studies on oak decline in cooperation with the Slovenian Forestry Institute in Ljubljana, the ETH Zurich and the CNR in Florence).

Symposia and Congress Sessions Convened or Chaired

Member of the scientific committee of the 7th Workshop of the IUFRO Unit 7.02.09 '*Phytophthora* in Forests and Natural Ecosystems' in Esquel, Argentina, November 2014.

Member of the scientific committee and co-organiser of the 6th Workshop of the IUFRO Unit 7.02.09 '*Phytophthora* in Forests and Natural Ecosystems' in Cordoba, Spain, September 2012.

Member of the scientific committee for the 5th Workshop of the IUFRO Unit 7.02.09 '*Phytophthora* in Forests and Natural Ecosystems' in Rotorua, New Zealand, March 2010.

Organiser of the 3rd Workshop of the IUFRO Unit 7.02.09 '*Phytophthora* in Forests and Natural Ecosystems', Freising, Germany, September 2004.

Referee for Journals

Annals of Forest Science.

Baltic Forestry

Biology and Environment: Proceedings of the Royal Irish Academy

Biological Invasions.

European Journal of Plant Pathology.

FEMS Microbiology Letters.

Forest Pathology.

IMA Fungus.

Journal of Ecology.

Journal of Microbiological Methods.

Journal of Phytopathology.

Journal of Plant Pathology.

Mycologia.

New Phytologist.

Fungal Biology.

New Zealand Journal of Forestry Science.

Persoonia.

Plant Disease.

Plant Pathology.

Editor

2015-2016: Forest Pathology.

Editorial board

Journal of Plant Protection Research.

2012-2017: Journal of Plant Pathology.

Guest Editor

2018-2019: Special Issue of Forests '*Phytophthora* Infestations in Forest Ecosystems'

Publications

Peer reviewed journal articles

Publications, citations, *h* Index, *g* Index and *i10* Index updated on 14/05/2020.

- 65 scientific articles published in peer reviewed journals: 61 indexed to Web of Science (WoS) Core Collection and 63 indexed to Scopus.
- 2988 total citations of 61 articles in WoS; average citations per article 49.8
  - *h* Index = 29; *g* Index = 54; *i10* Index = 44
- 3208 total citations of 63 articles in Scopus; average citations per article 50,9
  - *h* Index = 30; *g* Index = 56; *i10* Index = 45
- 4876 total citations in Google Scholar; *h* Index = 36; *i10* Index = 48

1. Jung, T., Scanu, B., Brasier, C.M., Webber, J., Milenković, I., Corcobado, T., Tomšovský, T., Pánek, M., Bakonyi, J., Maia, C., Bačová, A., Raco, M., Rees, H., Pérez-Sierra, A., Horta Jung, M. (2020). A survey in natural forest ecosystems of Vietnam reveals high diversity of both new and described *Phytophthora* taxa including *P. ramorum*. *Forests*, 11, 93.
DOI: 10.3390/f11010093 WoS citations: 0. Scopus citations: 0.

2. Vemić, A., Tomšovský, M. Jung, T., Milenković, I. (2019). Pathogenicity of fungi associated with ash dieback symptoms of one-year-old *Fraxinus excelsior* in Montenegro. *Forest Pathology* 49: e12539.
DOI: 10.1111/efp.12539 WoS citations: 0. Scopus citations: 0.

3. Jung, T., La Spada, F., Pane, A.; Aloi, F., Evoli, M., Horta Jung, M., Scanu, B., Faedda, R., Rizza, C., Puglisi, I., Magnano di San Lio, G., Schena, L., Cacciola, S.O. (2019). Diversity and Distribution of *Phytophthora* Species in Protected Natural Areas in Sicily. *Forests* 10: 259.
DOI: 10.3390/f10030259 WoS citations: 4. Scopus citations: 3.

4. Eriksson, L., Boberg, J., Cech, T.L., Corcobado, T., Desprez-Loustau, M.-L., Hietala, A.M., Horta Jung, M., Jung, T., Doğmuş Lehtijärvi, H.T., Oskay, F., Slavov, S., Solheim, H., Stenlid, J., Oliva, J. (2019) Invasive forest pathogens in Europe: Cross-country variation in public awareness but consistency in policy acceptability. *Ambio* 48: 1-12.
DOI:10.1007/s13280-018-1046-7 WoS citations: 1. Scopus citations: 2.

5. Desprez-Loustau, M.-L., Massot, M., Toïgo, M., Fort, T., Aday Kaya, A.A., Boberg, J., Braun, U., Capdevielle, X., Cech, T., Chandelier, A., Christova, P, Corcobado, T., Dogmus, T, Dutech, C., Fabreguettes, O., Faivre d'Arcier, J., Gross, A., Horta Jung, M., Iturritxa, E., Jung, T., Junker, C., Kiss, L., Kostov, K., Lehtijarvi, A., Lyubenova, A., Marçais, B., Oliva, J., Oskay, F., Pastirčák, M., Pastirčáková, K., Piou, D., Saint-Jean, G., Sallafranque, A., Slavov, S., Stenlid, J., Talgø, V., Takamatsu, S., Tack, A.J.M. (2018). From leaf to continent: The multi-scale distribution of an invasive cryptic pathogen complex on oak. *Fungal Ecology* 36: 39-50.
DOI: 10.1016/j.funeco.2018.08.001. WoS citations: 5. Scopus citations: 5.

6. Milenković, I., Keča, N., Karadžić, D., Radulović, Z., Nowakowska, J.A., Oszako, T., Sikora, K., Corcobado, T., Jung, T. (2018) Isolation and pathogenicity of *Phytophthora* species from poplar plantations in Serbia. *Forests* 9: 330
DOI: 10.3390/f9060330 WoS citations: 1. Scopus citations: 3.

7. Jung, T., Pérez–Sierra, A., Durán, A., Horta Jung, M., Balci, Y., Scanu, B. (2018) Canker and decline diseases caused by soil- and airborne *Phytophthora* species in forests and woodlands. *Persoonia - Molecular Phylogeny and Evolution of Fungi* 40: 182-220.
DOI:10.3767/persoonia.2018.40.08 WoS citations: 28. Scopus citations: 28.

8. Jung, T., Durán, A., Sanfuentes von Stowasser, E., Schena, L., Mosca, S., Fajardo, S., González, M., Navarro Ortega, A. D., Bakonyi, J., Seress, D., Tomšovský, M., Cravador, A., Maia, C., Horta Jung, M. (2018) Diversity of *Phytophthora* species in Valdivian rainforests and association with severe dieback symptoms. *Forest Pathology* 48: e12443.
DOI: 10.1111/efp.12443 WoS citations: 5. Scopus citations: 5.

9. Milenković, I., Keča, N., Karadžić, D., Radulović, Z., Tomšovský, M., Jung, T. (2018) Occurrence and pathogenicity of *Phytophthora* ×*cambivora* on *Prunus laurocerasus* in Serbia. *Forest Pathology* 48: e12436.
DOI:10.1111/efp.12436 WoS citations: 0. Scopus citations: 0.

10. Jung, T., Horta Jung, M., Cacciola, S.O., Cech, T., Bakonyi, J., Seress, D., Mosca, S., Schena, L., Seddaiu, S., Pane, A., Magnano di San Lio, G., Maia, C., Cravador, C., Franceschini, A., Scanu, B. (2017) Multiple new cryptic pathogenic *Phytophthora* species from Fagaceae forests in Austria, Italy and Portugal. *IMA Fungus* 8 (2): 219-244.
DOI:10.5598/imafungus.2017.08.02.02 WoS citations: 14. Scopus citations: 12.

11. Puglisi, I., De Patrizio, A., Schena, L., Jung, T., Evoli, M., Pane, A., Van Hoa, N., Van Tri, M., Wright, S., Ramstedt, M., Olsson, C., Faedda, R., Magnano di San Lio, G., Cacciola, S.O. (2017) Two previously unknown *Phytophthora* species associated with brown rot of Pomelo (*Citrus grandis*) fruits in Vietnam. PLoS ONE 12(2): e0172085.
DOI: 10.1371/journal.pone.0172085 WoS citations: 8. Scopus citations: 9.

12. Lehtijärvi, A., Aday Kaya, A.G., Woodward, S., Jung, T., Doğmuş Lehtijärvi, H.T. (2017) Oomycota species associated with deciduous and coniferous seedlings in forest tree nurseries of Western Turkey. *Forest Pathology* 47: e12363.
DOI: 10.1111/efp.12363 WoS citations: 3. Scopus citations: 4.

13. Crous, P.W., Wingfield, M.J., Burgess, T.I., Hardy, G.E.St.J., Barber, P.A., Alvarado, P., Barnes, C.W., Buchanan, P.K., Heykoop, M., Moreno, G., Thangavel, R., Spuy, S., Barili, A., Barrett, S., Cacciola, S.O., Cano-Lira, J.F., Crane, C., Decock, C., Gibertoni, T.B., Guarro, J., Guevara-Suarez, M., Hubka, V., Kolařík, M., Lira, C.R.S., Ordoñez, M.E., Padamsee, M., Ryvarden, L., Soares, A.M., Stchigel, A.M., Sutton, D.A., Vizzini, A., Weir, B.S., Acharya, K., Aloi, F., Baseia, I.G., Blanchette, R.A., Bordallo, J.J., Bratek, Z., Butler, T., Cano-Canals, J., Carlavilla, J.R., Chander, J., Cheewangkoon, R., Cruz, R.H.S.F., da Silva, M., Dutta, A.K., Ercole, E., Escobio, V., Esteve-Raventós, F., Flores, J.A., Gené, J., Góis, J.S., Haines, L., Held, B.W., Horta Jung, M., Hosaka, K., Jung, T., Jurjević, Ž., Kautman, V., Kautmanova, I., Kiyashko, A.A., Kozanek, M., Kubátová, A., Lafourcade, M., La Spada, F., Latha, K.P.D., Madrid, H., Malysheva, E.F., Manimohan, P., Manjón, J.L., Martín, M.P., Mata, M., Merényi, Z., Morte, A., Nagy, I., Normand, A.-C., Paloi, S., Pattison, N., Pawłowska, J., Pereira, O.L., Petterson, M.E., Picillo, B., Raj, K.N.A., Roberts, A., Rodríguez, A., Rodríguez-Campo, F.J., Romański, M., Ruszkiewicz-Michalska, M., Scanu, B., Schena, L., Semelbauer, M., Sharma, R., Shouche, Y.S., Silva, V., Staniaszek-Kik, M., Stielow, J.B., Tapia, C., Taylor, P.W.J., Toome-Heller, M., Vabeikhokhei, J.M.C., van Diepeningen, A.D., Van Hoa, N., Van Tri, M., Wiederhold, N.P., Wrzosek, M., Zothanzama, J., Groenewald, J.Z. (2017) Fungal Planet description sheets: 558–624. *Persoonia* 38: 240-384.
Cacciola, S.O., Aloi, F., Tri, M.V., Jung, T., Schena, L. (2017) *Phytophthora prodigiosa* Cacciola & M.V. Tri, sp. nov. Fungal Planet 616. *Persoonia - Molecular Phylogeny and Evolution of Fungi* 38: 364-365.
DOI: 10.3767/003158517X698941. WoS citations: 49. Scopus citations: 44

14. Milenković, I., Jung, T., Stanivuković, Z., Karadžić, D. (2017) First report of *Hymenoscyphus fraxineus* on *Fraxinus excelsior* in Montenegro. *Forest Pathology* 47: e12359.
DOI: 10.1111/efp.12359 WoS citations: 3. Scopus citations: 4.

15. Jung, T., Scanu, B., Bakonyi, J., Seress, D., Kovács, G.M., Durán, A., Sanfuentes von Stowasser, E., Schena, L., Mosca, S., Thu, P.Q., Nguyen, C.M., Fajardo, S., González, M., Pérez-Sierra, A., Rees, H., Cravador, A., Maia, C., Horta Jung, M. (2017) *Nothophytophthora* gen. nov., a new sister genus of *Phytophthora* from natural and semi–natural ecosystems. *Persoonia - Molecular Phylogeny and Evolution of Fungi* 39: 143-174.
DOI: 10.3767/persoonia.2017.39.07 WoS citations: 5. Scopus citations: 6.

16. Jung, T., Horta Jung, M., Scanu, B., Seress, D., Kovács, D.M., Maia, C., Pérez-Sierra, A., Chang, T.-T., Chandelier, A., Heungens, A., van Poucke, K., Abad-Campos, P., Léon, M., Cacciola, S.O., Bakonyi, J. (2017) Six new *Phytophthora* species from ITS Clade 7a including two sexually functional heterothallic hybrid species detected in natural ecosystems in Taiwan. *Persoonia - Molecular Phylogeny and Evolution of Fungi* 38: 100-135.
DOI: 10.3767/003158517X693615. WoS citations: 21. Scopus citations: 22.

17. Jung, T., Chang, T.-T., Bakonyi, J., Seress, D., Pérez-Sierra, A., Yang, X., Hong, C., Scanu, B., Fu, C.H., Hsueh, K.-L, Maia, C., Abad-Campos, P., Léon, M. & Horta Jung, M. (2017) Diversity of *Phytophthora* species in natural ecosystems of Taiwan and association with disease symptoms. *Plant Pathology* 66: 194-211.
DOI: 10.1111/ppa.12564. WoS citations: 25. Scopus citations: 26.

18. Corcobado, T., Miranda-Torres, J. J., Martín-García, J., Jung, T. and Solla, A. (2017) Early survival of *Quercus ilex* subspecies from different populations after infections and co-infections by multiple *Phytophthora* species. *Plant Pathology* 66: 792-804.
DOI:10.1111/ppa.12627. WoS citations: 15. Scopus citations: 15

19. Jung, T., Orlikowski, L., Henricot, B., Abad-Campos, P., Aday, A.G., Aguín Casal, O., Bakonyi, J., Cacciola, S.O., Cech, T., Chavarriaga, D., Corcobado, T., Cravador, A., Decourcelle, T., Denton, G., Diamandis, S., Dogmus-Lehtijärvi, H.T., Franceschini, A., Ginetti, B., Glavendekić, M., Green, S., Hantula, J., Hartmann, G., Herrero, M., Ivic, D., Horta Jung, M., Lilja, A., Keca, N., Kramarets, V., Lyubenova, A., Machado, H., Magnano di San Lio, G., Mansilla Vázquez, P.J., Marçais, B., Matsiakh, I., Milenkovic, I., Moricca, S., Nagy, Z. Á., Nechwatal, J., Olsson, C., Oszako, T., Pane, A., Paplomatas, E.J., Pintos Varela, C., Prospero, S., Rial Martínez, C., Rigling, D., Robin, C., Rytkönen, A., Sánchez, M.E., Sanz Ros, A.V., Scanu, B., Schlenzig, A., Schumacher, J., Slavov, S., Solla, A., Sousa, E., Stenlid, J., Talgø, V., Tomic, Z., Tsopelas, P., Vannini, A., Vettraino, A.M., Wenneker, M., Woodward, S. & Peréz-Sierra, A. (2016) Widespread *Phytophthora* infestations in European nurseries put forest, semi-natural and horticultural ecosystems at high risk of *Phytophthora* diseases. *Forest Pathology* 46: 134–163.
DOI: 10.1111/efp.12239. WoS citations: 97. Scopus citations: 106.

20. Scanu, B., Linaldeddu, B.T., Deidda, A. & Jung, T. (2015) Diversity of *Phytophthora* species from declining Mediterranean maquis vegetation, including two new species, *Phytophthora crassamura* and *P. ornamentata* sp. nov. PLoS ONE 10(12): e0143234
DOI: 10.1371/journal.pone.0143234. WoS citations: 19. Scopus citations: 19.

21. Oßwald, W., Fleischmann, F., Rigling, D., Coelho, A. C., Cravador, A., Diez, J., Dalio, R. J., Horta Jung, M., Pfanz, H., Robin, C., Sipos, G., Solla, A., Cech, T., Chambery, A., Diamandis, S., Hansen, E., Jung, T., Orlikowski, L. B., Parke, J., Prospero, S. & Werres, S. (2014) Strategies of attack and defence in woody plant–*Phytophthora* interactions. *Forest Pathology* 44: 169-190.
DOI:10.1111/efp.12096. WoS citations: 56. Scopus citations: 62.

22. Doğmuş-Lehtijärvi, T., Aday Kaya, A. G., Lehtijärvi, A. & Jung, T. (2014) First report of *Phytophthora syringae* on *Cedrus libani* in Turkey. *Plant Disease* 98: 846.
DOI: 10.1094/PDIS-09-13-0962-PDN. WoS citations: 1. Scopus citations: 1.

23. Henricot, B., Pérez-Sierra, A. & Jung, T. (2014) *Phytophthora pachypleura* sp. nov., a new species causing root rot of *Aucuba japonica* and other ornamentals in the United Kingdom. *Plant Pathology* 63: 1095-1109.
DOI: 10.1111/ppa.12194. WoS citations: 20. Scopus citations: 20.

24. Ginetti, B., Moricca, S., Squires, J.N., Cooke, D.E.L., Ragazzi, A. & Jung, T. (2014) *Phytophthora acerina* sp. nov., a new species causing bleeding cankers and dieback of *Acer pseudoplatanus* trees in planted forests in Northern Italy. *Plant Pathology* 63: 858-876.
DOI: 10.1111/ppa.12153. WoS citations: 17. Scopus citations: 18.

25. Scanu, B., Hunter, G.C., Linaldeddu, B.T., Franceschini, A., Maddau, L., Jung, T. & Denman, S. (2014) A taxonomic re-evaluation reveals that *Phytophthora cinnamomi* and *P. cinnamomi* var. *parvispora* are separate species. *Forest Pathology* 44: 1-20.
DOI: 10.1111/efp.12064. WoS citations: 30. Scopus citations: 32.

26. Jung, T., Colquhoun, I.J. & Hardy, G.E.S.t.J. (2013) New insights into the survival strategy of the invasive soilborne pathogen *Phytophthora cinnamomi* in different natural ecosystems in Western Australia. *Forest Pathology* 43*:* 266-288.
DOI: 10.1111/efp.12025. WoS citations: 49. Scopus citations: 51.

27. Pérez-Sierra, A., López-García, C., León, M., García-Jiménez, J., Abad-Campos, P. & Jung, T. (2013) Previously unrecorded low temperature *Phytophthora* species associated with *Quercus* decline in a Mediterranean forest in Eastern Spain. *Forest Pathology* 43*:* 331-339.
DOI: 10.1111/efp.12037. WoS citations: 43. Scopus citations: 42.

28. Santini, A., Ghelardini, L., De Pace, C., Desprez-Loustau, M.L., Capretti, P., Chandelier, A., Cech, T., Chira, D., Diamandis, S., Gaitniekis, T., Hantula, J., Holdenrieder, O., Jankovsky, L., Jung, T., Jurc, D., Kirisits, T., Kunca, A., Lygis, V., Malecka, M., Marcais, B., Schmitz, S., Schumacher, J., Solheim, H., Solla, A., Szabò, I., Tsopelas, P., Vannini, A., Vettraino, A.M., Woodward, S., Webber, J. & Stenlid, J. (2013) Biogeographic patterns and determinants of invasion by alien forest pathogens in Europe. *New Phytologist* 197: 238-250.
DOI: 0.1111/j.1469-8137.2012.04364.x. WoS citations: 237. Scopus citations: 262.

29. Nechwatal, J., Bakonyi, J., Cacciola, S.O., Cooke, D.E.L., Jung, T., Nagy, Z.A., Vannini, A., Vettraino, A.M. & Brasier, C.M. (2013) The morphology, behaviour and molecular phylogeny of *Phytophthora* taxon Salixsoil and its redesignation as *Phytophthora lacustris* sp. nov. *Plant Pathology* 62: 355-369.
DOI: 10.1111/j.1365-3059.2012.02638.x. WoS citations: 43. Scopus citations: 49.

30. Crous, P.W., Summerell, B.A., Shivas, R.G., Burgess, T.I., Decock, C.A.,Dreyer, L.L., Granke, L.L., Guest, D.I., Hardy, G.E.S.t.J., Hausbeck, M.K., Hüberli, D., Jung, T., Koukol, O., Lennox, C.L., Liew, E.C.Y., Lombard, L., McTaggart, A.R., Pryke, J.S., Roets, F., Saude, C., Shuttleworth, L.A., Stukely, M.J.C., Vánky, K., Webster, B.J.Wndstam, S.T. & Groenewald, J.Z. (2012) Fungal Planet description sheets: 107-127. *Persoonia - Molecular Phylogeny and Evolution of Fungi* 28: 138-182.
Burgess, T.I., Hüberli, D., Hardy, G.E.St.J., Stukely, M.J.C. & Jung, T. (2012): *Phytophthora amnicola* T.I. Burgess & T. Jung, sp. nov. Fungal Planet 107. *Persoonia* 28: 140-141.
DOI: 10.3767/003158512X652633. WoS citations: 127. Scopus citations: 100.

31. Ginetti, B., Ucello, A., Bracalini, L., Ragazzi, A., Jung, T. & Moricca, S. (2012) Root rot and dieback of *Pinus pinea* caused by *Phytophthora humicola* in Tuscany, central Italy. *Plant Disease* 96: 1694.
DOI: 10.1094/PDIS-05-12-0451-PDN. WoS citations: 0. Scopus citations: 1.

32. Scott, P.M., Jung, T., Shearer, B.L., Barber, P.A., Calver, M. & Hardy, G.E.St.J. (2012) Pathogenicity of *Phytophthora multivora* to *Eucalyptus gomphocephala* and *E. marginata*. *Forest Pathology* 42: 289-298.
DOI: 10.1111/j.1439-0329.2011.00753.x. WoS citations: 15. Scopus citations: 17.

33. Crous, P.W., Groenewald, J.Z., Shivas, R.G., Edwards, J., Seifert, K.A., Alfenas, A.C., Alfenas, R.F., Burgess, T.I., Carnegie, A.J., Hardy, G.E.S.t.J., Hiscock, N., Hüberli, D., Jung, T., Louis-Seize, G., Okada, G., Pereira, O.L., Stukely, M.J.C., Wang, W., White, G.P., Young, A.J., McTaggart, A.R., Pascoe, I.G., Porter, I.J. & Quaedvlieg, W. (2011) Fungal Planet description sheets: 69-91. *Persoonia - Molecular Phylogeny and Evolution of Fungi* 26: 108-156.
Jung, T., Stukely, M.J.C., Hardy, G.E.St.J., Hüberli, D. & Burgess, T.I. (2011) *Phytophthora fluvialis* T. Jung & T.I. Burgess, sp. nov. Fungal Planet 87. *Persoonia* 26: 146-147.
DOI: 10.3767/003158511X581723. WoS citations: 64. Scopus citations: 83.

34. Jung, T., Stukely, M.J.C., Hardy, G.E.St.J., White, D., Paap, T., Dunstan, W.A. & Burgess, T.I. (2011) Multiple new *Phytophthora* species from ITS Clade 6 associated with natural ecosystems in Australia: evolutionary and ecological implications. *Persoonia - Molecular Phylogeny and Evolution of Fungi* 26: 13-39.
DOI: 10.3767/003158511X557577. WoS citations: 107. Scopus citations: 105.

35. Orlikowski, L.B., Ptaszek, M., Rodziewicz, A., Nechwatal, J., Thinggaard, K. & Jung, T. (2011) *Phytophthora* root and collar rot of mature *Fraxinus excelsior* in forest stands in Poland and Denmark. *Forest Pathology* 41: 510-519.
DOI: 10.1111/j.1439-0329.2011.00714.x. WoS citations: 40. Scopus citations: 42.

36. Rea, A.J., Burgess, T.I., Hardy, G.E.St.J., Stukely, M.J.C. & Jung, T. (2011) Two novel and potentially endemic species of *Phytophthora* associated with episodic dieback of kwongan vegetation in the south-west of Western Australia. *Plant Pathology* 60: 1055-1068.
DOI: 10.1111/j.1365-3059.2011.02463.x. WoS citations: 32. Scopus citations: 34.

37. Woodward, S., Vannini, A., Werres, S., Oßwald, W., Bonants, P. & Jung, T. (2011) COST Action FP0801 – Established and emerging *Phytophthora*: increasing threats to woodland and forest ecosystems in Europe. *New Zealand Journal of Forestry Science* 41S: S7-S13.
ISSN 1179-5395. Scopus citations: 1.

38. Corcobado, T., Cubera, E., Pérez-Sierra, A., Jung, T. & Solla, A. (2010) First report of *Phytophthora gonapodyides* involved in the decline of *Quercus ilex* in xeric conditions in Spain. *New Disease Reports*, 22: 33.
DOI:10.5197/j.2044-0588.2010.022.033. Google Scholar citations: 45.

39. Rea, A., Jung, T., Burgess, T.I., Stukely, M.J.C. & Hardy, G.E.St.J. (2010) *Phytophthora elongata* sp. nov. a novel pathogen from the *Eucalyptus marginata* forest of Western Australia. *Australasian Plant Pathology* 39: 477-491.
DOI: 10.1071/AP10014. WoS citations: 28. Scopus citations: 26.

40. Solla, A., Pérez-Sierra, A., Corcobado, T., Haque, M.M., Diez, J.J. & Jung, T. (2010) *Phytophthora alni* on *Alnus glutinosa* reported for the first time in Spain. *Plant Pathology* 59: 798.
DOI: 10.1111/j.1365-3059.2009.02254.x. WoS citations: 15. Scopus citations: 13.

41. Nechwatal, J., Haug, P., Huber, C.V. & Jung, T. (2010) Studien zur Bekämpfung von *Phytophthora ramorum* an *Rhododendron* im Rahmen der Entwicklung eines Behandlungskonzeptes für Park- und Gartenanlagen ('Studies on the control of *Phytophthora ramorum* on *Rhododendron* for the development of management strategies in parks and gardens)'. *Gesunde Pflanzen* 62: 53-62.
DOI: 10.1007/s10343-010-0221-y. WoS citations: 2. Scopus citations: 2.

42. Jung, T. & Burgess T.I. (2009) Re-evaluation of *Phytophthora citricola* isolates from multiple woody hosts in Europe and North America reveals a new species, *Phytophthora plurivora* sp. nov. *Persoonia - Molecular Phylogeny and Evolution of Fungi* 22, 95-110.
DOI: 10.3767/003158509X442612. WoS citations: 146. Scopus citations: 154.

43. Jung, T., (2009) Beech decline in Central Europe driven by the interaction between *Phytophthora* infections and climatic extremes. *Forest Pathology* 39: 73-94.
DOI: 10.1111/j.1439-0329.2008.00566.x. WoS citations: 114. Scopus citations: 125.

44. Scott, P.M., Burgess, T.I., Barber, P.A., Shearer, B.L., Stukely, M.J.C., Hardy, G.E.St.J. & Jung, T. (2009) *Phytophthora multivora* sp. nov., a new species recovered from declining *Eucalyptus, Banksia*, *Agonis* and other plant species in Western Australia. *Persoonia - Molecular Phylogeny and Evolution of Fungi* 22: 1-13.
DOI: 10.3767/003158509X415450. WoS citations: 96. Scopus citations: 99.

45. Vettraino, A.M., Jung, T. & Vannini, A. (2008) First Report of *Phytophthora cactorum* associated with beech decline in Italy. *Plant Disease* 92: 1708.
DOI: 10.1094/PDIS-92-12-1708A. WoS citations: 6. Scopus citations: 4.

46. Jung, T. & Nechwatal, J., (2008) *Phytophthora gallica* sp. nov., a new species from rhizosphere soil of declining oak and reed stands in France and Germany. *Mycological Research* 112: 1195-1205.
DOI: 10.1016/j.mycres.2008.04.007. WoS citations: 45. Scopus citations: 49.

47. Jung, T., Hudler, G.W., Jensen-Tracy, S.L., Griffiths, H.M., Fleischmann, F. & Oßwald, W. (2005) Involvement of *Phytophthora* species in the decline of European beech in Europe and the USA. *Mycologist* 19: 159-166.
DOI: 10.1017/S0269915X05004052. Scopus citations: 75.

48. Jönsson, U., Jung, T., Sonesson, K. & Rosengren, U. (2005) Relationships between health of *Quercus robur*, occurrence of *Phytophthora* species and site conditions in southern Sweden. *Plant Pathology* 54: 502-511.
DOI: 10.1111/j.1365-3059.2005.01228.x. WoS citations: 46. Scopus citations: 46.

49. Cooke, D.E.L., Jung, T., Williams, N.A., Schubert, R., Oßwald, W. & Duncan, J. (2005) Genetic diversity of European populations of the oak fine-root pathogen *Phytophthora quercina*. *Forest Pathology* 35: 1-14.
DOI: 10.1111/j.1439-0329.2004.00384.x. WoS citations: 30. Scopus citations: 30.

50. Brasier, C.M., Kirk, S.A., Delcan, J., Cooke, D.E.L., Jung, T. & Man in't Veld, W.A. (2004) *Phytophthora alni* sp. nov. and its variants: designation of emerging heteroploid hybrid pathogens spreading on *Alnus* trees. *Mycological Research* 108: 1172-1184.
DOI: 10.1017/S0953756204001005. WoS citations: 208. Scopus citations: 197.

51. Jung, T. & Blaschke, M (2004) *Phytophthora* root and collar rot of alders in Bavaria: distribution, modes of spread, and possible management strategies. *Plant Pathology* 53: 197-208.
DOI: 10.1111/j.0032-0862.2004.00957.x. WoS citations: 118. Scopus citations: 126.

52. Jung, T., Nechwatal, J., Cooke, D.E.L., Hartmann, G., Blaschke, M., Oßwald, W.F., Duncan, J.M. & Delatour, C. (2003) *Phytophthora pseudosyringae* sp. nov., a new species causing root and collar rot of deciduous tree species in Europe. *Mycological Research* 107: 772-789.
DOI: 10.1017/S0953756203008074. WoS citations: 104. Scopus citations: 106.

53. Jönsson, U., Lundberg, L., Sonesson, K. & Jung, T (2003) First records of soilborne *Phytophthora* species in Swedish oak forests. *Forest Pathology* 33: 175-179.
DOI: 10.1046/j.1439-0329.2003.00320.x. WoS citations: 27. Scopus citations: 33.

54. Jönsson, U., Jung, T., Rosengren, U., Nihlgard, B. & Sonesson, K. (2003) Pathogenicity of Swedish isolates of *Phytophthora quercina* to *Quercus robur* in two different soils. *New Phytologist* 158: 355-364.
DOI: 10.1046/j.1469-8137.2003.00734.x. WoS citations: 26. Scopus citations: 30.

55. Jung, T. & Dobler, G. (2002) First report of littleleaf disease caused by *Phytophthora cinnamomi* on *Pinus occidentalis* in the Dominican Republic. *Plant Disease* 86: 1275.
DOI: 10.1094/PDIS.2002.86.11.1275C. WoS citations: 5. Scopus citations: 6.

56. Jung, T., Hansen, E.M., Winton, L., Oßwald, W. & Delatour, C. (2002) Three new species of *Phytophthora* from European oak forests. *Mycological Research* 106: 397-411.
DOI: 10.1017/S0953756202005622. WoS citations: 91. Scopus citations: 98.

57. Oßwald, W.F., Jung, T., Nechwatal, J., Schlenzig, A. & Fleischmann, F. (2001) Significance of *Phytophthora*s and *Pythium* for oak, alder and spruce decline. *Journal of Forest Science* 47: 96-103 (Special Issue). ISSN 1212-4834.
Google Scholar citations: 4.

58. Nechwatal, J., Schlenzig, A., Jung, T., Cooke, D.E.L., Duncan, J.M. & Oßwald, W.F. (2001) A combination of baiting and PCR techniques for the detection of *Phytophthora quercina* and *P. citricola* in soil samples from oak stands. *Forest Pathology* 31: 85-97.
DOI: 10.1046/j.1439-0329.2001.00232.x. WoS citations: 25. Scopus citations: 28.

59. Jung, T., Blaschke H. & Oßwald, W. (2000) Involvement of *Phytophthora* species in Central European oak decline and the effect of site factors on the disease. *Plant Pathology* 49: 706-718.
DOI: 10.1046/j.1365-3059.2000.00521.x. WoS citations: 196. Scopus citations: 212.

60. Schubert, R., Bahnweg, G., Nechwatal, J., Jung, T., Cooke, D.E.L., Duncan, J.M., Müller-Starck, G., Langebartels, C., Sandermann, H. Jr. & Oßwald, W. (1999) Detection and quantification of *Phytophthora* species which are associated with root-rot diseases in European deciduous forests by species-specific polymerase chain reaction. *European Journal of Forest Pathology* 29: 169-188.
DOI: 10.1046/j.1439-0329.1999.00141.x. WoS citations: 53. Scopus citations: 57.

61. Jung, T., Cooke, D.E.L., Blaschke, H., Duncan, J.M. & Osswald, W. (1999) *Phytophthora quercina* sp. nov., causing root rot of European oaks. *Mycological Research* 103: 785-798.
DOI: 10.1017/S0953756298007734. WoS citations: 135. Scopus Citations: 147.

62. Heiser, I., Fromm, J., Giefing, M., Koehl, J., Jung, T. & Oßwald, W. (1999) Investigations on the action of *Phytophthora quercina, P. citricola* and *P. gonapodyides* toxins on tobacco plants. *Plant Physiology and Biochemistry* 37: 73-81.
DOI: 10.1016/S0981-9428(99)80069-2. WoS citations: 17. Scopus citations: 17.

63. Cooke, D. E. L., Jung, T., Williams, N. A., Schubert, R., Bahnweg, G., Osswald, W. & Duncan, J. M. (1999) Molecular evidence supports *Phytophthora quercina* as a distinct species. *Mycological Research* 103: 799-804.
DOI: 10.1017/S0953756299008606. WoS citations: 29. Scopus citations: 30.

64. Jung, T., Blaschke, H. & Neumann, P. (1996) Isolation, identification and pathogenicity of *Phytophthora* species from declining oak stands. *European Journal of Forest Pathology* 26: 253-272.
DOI: 10.1111/j.1439-0329.1996.tb00846.x. WoS citations: 199. Scopus citations: 214.

65. Jung, T. & Blaschke, H. (1996) *Phytophthora* root rot in declining forest trees. *Phyton (Horn, Austria)* 36: 95-102 (Special Issue).
WoS citations: 43. Scopus citations: 50.

Dissertations

1. Jung, T. (1996) Untersuchungen zur *Phytophthora* – Erkrankung europäischer Eichenarten mit besonderer Berücksichtigung der Stieleiche (*Quercus* robur L.): Ein Beitrag zur Klärung des Phänomens Eichensterben (Investigations on the *Phytophthora* disease of European oak species with special emphasis on pedunculate oak (*Quercus* robur L.): a contribution to clarify the phenomenon oak decline). PhD thesis, Institute of Forest Botany, Ludwig Maximilians University, Munich, pp. 138.

2. Jung, T. (1991) Untersuchungen zur *in vitro* - Toxigenität aus Eiche isolierter Arten der Gattungen *Ceratocystis* / *Ophiostoma* und *Fusarium* (Investigations on *in vitro* toxigenicity of *Ceratocystis* / *Ophiostoma* and *Fusarium* species from oak). Diploma thesis, Institute of Forest Botany, Ludwig Maximilians University, Munich, pp. 118.

Books (Author)

1. Jung, T. (1998) Die *Phytophthora* – Erkrankung der europäischen Eichenarten - wurzelzerstörende Pilze als Ursache des Eichensterbens (The *Phytophthora* disease of European oak species – root destroying fungi as cause of oak decline). Lincom Europe, Munich, pp. 143.

Books (Editor)

1. Brasier, C.M., Jung, T. & Oßwald, W. (eds) (2006) Progress in Research on *Phytophthora* Diseases of Forest Trees. *Proceedings of the 3rd International IUFRO Working Party 7.02.09 Meeting*, 11th –17th Sept. 2004, Freising, Germany. Forest Research, Farnham, Surrey, UK: pp. 181.

2. Jung, T., Brasier, C.M., Sánchez, M.E. & Pérez-Sierra A. (eds) (2014) Phytophthoras in forests and natural ecosystems. Proceedings of the 6th *International IUFRO Working Party 7.02.09 Meeting*, 9th–14th Sept. 2012, Cordoba, Andalusia, Spain: pp. 202. http://forestphytophthoras.org/sites/default/files/proceedings/IUFRO%202014%20final%2023.8MB.pdf.

Chapters in Books

1. Jung, T., Vettraino, A.M., Cech, T.L. & Vannini, A. (2013) The impact of invasive *Phytophthora* species on European forests. In: *Phytophthora*: A global perspective. (Lamour, K, ed), CABI, Wallingford, UK: 146-158. WoS citations: 33.

2. Pérez-Sierra, A. & Jung, T. (2013) *Phytophthora* in woody ornamental nurseries. In: *Phytophthora*: A global perspective. (Lamour, K, ed), CABI, Wallingford, UK: 166-177. WoS citations: 18.

3. Gibbs, J.N., Cech, T., Jung, T. & Streito, J.-C. (2003) Field studies on dissemination of the alder *Phytophthora* and disease development. In: *Phytophthora* disease of alder in Europe. (Gibbs, JN, Van Dijk, C and Webber, JF, eds), *Forestry Commission Bulletin* **126:** 55-64. Edinburgh, UK.

Online publications

1. Jung, T. (2011) Decline of European beech caused by invasive *Phytophthora* species. In: Examples of pathogens and pests introduced by international trade of plants and plant products, Supplement to the 'Montesclaros Declaration': 5-6. http://www.iufro.org/download/file/7876/5170/montesclaros-declaration-supplement_pdf/.

Not peer reviewed publications

1. Schuster, T. & Jung, T. (2010) *Phytophthora* – eine neue Bedrohung für den Obstbau ('*Phytophthora* – a new threat to pomiculture'). Obstbau 6/2011: 339-340.

2. Jung, T. & Blaschke, M. (2005) *Phytophthora* an Waldbäumen (*Phytophthora* in forest trees). *AFZ - Der Wald* 8/2005: 394-396.

3. Jung, T. (2005) Wurzel- und Stammschäden an Buchen (*Fagus sylvatica* L.) durch bodenbürtige *Phytophthora* - Arten in Bayern: Schadbilder, Verbreitung und Standortbezüge (*Phytophthora* root and collar rot and aerial bleeding cankers of beech (*Fagus sylvatica* L.) in Bavaria: symptoms, distribution and site relations). *Forst und Holz* 60: 131-139.

4. Jung, T. & Blaschke, M. (2005) Internationale Forstliche *Phytophthora* – Tagung in Freising (International conference in Freising on *Phytophthora* in forests). *Forst und Holz* 60: 28-31.

5. Cech, T. L. & Jung, T. (2005) *Phytophthora* – Wurzelhalsfäulen an Buchen nehmen auch in Österreich zu (*Phytophthora*-disease of European beech – an increasing problem in Austria). *Forstschutz Aktuell* 34, 2005: 7-8.

6. Jung, T. & Blaschke, M. (2004) Eichen und Buchen sind von eingeschlepptem Pilz bedroht (Oak and beech trees are endangered by an introduced fungus). *LWF aktuell* 45/2004: 27-28.

7. Jung, T. & Blaschke, M. (2004) Die *Phytophthora*-Wurzelhalsfäule in Bayern: Krankheitsverbreitung, Ausbreitungswege und Gegenmaßnahmen (*Phytophthora* root and collar rot of alders in Bavaria: distribution, pathways and management options). In: Beiträge zur Schwarzerle (Contributions to Black alder). (Bavarian State Institute of Forestry, ed), *LWF-Bericht* 42: 35-41. Freising, Germany.

8. Jung, T. (2004) *Phytophthora* schädigt Buchenbestände in ganz Bayern (*Phytophthora* is damaging beech stands all across Bavaria). *LWF aktuell* 43/2004: 36-37.

9. Jung, T. & Blaschke, M. (2003) Erfassung der Schäden durch die *Phytophthora*-Wurzelhalsfäule der Erle in forstlichen Beständen in Bayern (assessment of damages caused by *Phytophthora* root and collar rot of alders in forest stands in Bavaria). *LWF aktuell* 38/2003: 14-16.

10. Jung, T. & Blaschke, M. (2003) Ausmaß und Verbreitung der *Phytophthora* – Erkrankung der Erlen in Bayern, Ausbreitungswege und mögliche Gegenmaßnahmen (extent and distribution of the *Phytophthora* disease of alders in Bavaria, modes of spread and possible management strategy). *Forst und Holz* 58: 246-251.

11. Jung, T. & Blaschke, M. (2002) Schäden an Erlen (damages on alders). Deutsche Gesellschaft für Mykologie (German Mycological Society DGfM): Online publication: http://dgfm-ev.de/www/eng/aktuelles/erlen.php3, pp. 2.

12. Jung, T. & Blaschke, M. (2001) *Phytophthora* –Wurzelhalsfäule der Erlen (*Phytophthora* collar rot of alders). LWF Merkblatt (LWF leaflet) No. 6, Bavarian State Institute of Forestry (LWF), Freising, Germany, pp. 2 (http://www.lwf.bayern.de/publikationen/daten/merkblatt/p_33141.pdf).

13. Jung, T. & Blaschke, M. (2001) Gefahr für Erlen (Alders under threat). *Deutsche Baumschule* 10/2001: 42-43.

14. Jung, T., Blaschke, M., Schlenzig, A. & Oßwald, W. (2001) Mögliche Verbreitung der *Phytophthora*-Wurzelhalsfäule der Erlen mit infiziertem Baumschulmaterial? (Possible spread of *Phytophthora* root rot of alders via infected nursery stock?). Bund Deutscher Baumschulen e.V., *Verbandsorgan Grün* 04/2001.

15. Delatour, C., Desprez-Loustau, M.-L., Robin, C., Hansen, E.M., Brasier, C.M., Blaschke, H., Jung, T., Anselmi, P., Vannini, A., Vettraino, A.M., Bianco, M.C., Luisi, N., Paoletti, E., Barzanti, P., Capretti, P. & Ragazzi, A. (2001) Occurrence of *Phytophthora*s in oak stands. Chapter 2 in: '*Long term dynamics of oak ecosystems: assessment of the role of root pathogens and environmental constraints as interacting decline inducing factors*', Final report of the EU project PATHOAK (FAIR CT 97-3926) (Delatour, C., ed), pp 21.

16. Delatour, C., Desprez-Loustau, M.-L., Robin, C., Marçais, B., Brasier, C.M., Blaschke, H., Jung, T., Oßwald, W., Anselmi, P., Vannini, A., Vettraino, A.M., Bianco, M.C., Luisi, N., Paoletti, E., Barzanti, P., Capretti, P. & Ragazzi, A. (2001) Pathogenicity of *Phytophthora* spp. and host susceptibility. Chapter 3 in: '*Long term dynamics of oak ecosystems: assessment of the role of root pathogens and environmental constraints as interacting decline inducing factors*', Final report of the EU project PATHOAK (FAIR CT 97-3926) (Delatour, C., ed), pp 22.

17. Blaschke, M. & Jung, T. (2001) Die *Phytophthora*-Wurzelhalsfäule der Erlen (*Phytophthora* root rot of alders). *Jahrbuch des Vereins zum Schutz der Bergwelt* 66: 99-102.

18. Jung, T. (2000) Das Eichensterben (Oak decline). *Der praktische Gartenratgeber* 9/2000: 280-281.

19. Jung, T., Schlenzig, A., Blaschke, M., Adolf, B. & Oßwald, W. (2000) Erlensterben durch *Phytophthora* - Droht Bayerns Erlen eine Epidemie? (Alder mortality caused by *Phytophthora* – are Bavarian' s alders endangered by an epidemic?). *LWF aktuell* 24/2000: 22-25.

20. Jung, T., Blaschke, H., Lang, K.J. & Oßwald, W.F. (1996) *Phytophthora*-Wurzelfäule der Stiel- und Traubeneiche (*Phytophthora* root rot of pedunculate and sessile oak). *Allgemeine Forstzeitschrift* 26: 1470-1474.

21. Blaschke, H. & Jung, T. (1996) Symptome und Nachweis eines *Phytophthora*-Befalls an Eichen (Symptoms and identification of *Phytophthora* infections of oaks). In: Eichensterben in Deutschland (Oak decline in Germany). *Mitteilungen der Biologischen Bundesanstalt für Land- und Forstwirtschaft*, Berlin-Dahlem, Volume 318: 61-78.

22. Blaschke, H., Jung, T., Paoletti, E. & Bussotti, F. (1995) First reports of *Phytophthora* on roots of declining *Quercus ilex* in Central Italy. *Giornale Botanico Italiano* 129: 132.

Papers in conference proceedings

1. Shakya, S., Grunwald, N., Weiland, J.E., Fieland, V., Knaus, B.J., Horta Jung, M., Maia, C., Drenth, A, Guest, D.I., Liew, E.C.Y, Crane, Colin, Scanu, B., Jung, T. (2018) Analysis of global populations of *Phytophthora cinnamomi* suggests presence of two dominant clonal lineages and evidence of sex in Southeast Asia. Poster communication in the "11th International Congress of Plant Pathology", Boston, Massachusetts (USA), July 29–August 3, Poster 435P, Digital Book, pp 79.

2. Jung, T., Horta Jung, M., Cacciola, S.O., Cech, T., Bakonyi, J., Seress, D., Mosca, S., Schena, L., Seddaiu, S., Pane, A., Magnano di San Lio, G., Maia, C., Cravador, C., Franceschini, A., Scanu,

B. (2017) Multiple new cryptic pathogenic *Phytophthora* species from Fagaceae forests in Austria, Italy and Portugal. In: Proceedings of the eighth meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 18th-25th March 2017, Sapa, Vietnam: 21.

3. Horta Jung, M., Cravador, A., Maia, C., Schena, L., Mosca, S., Mora Sala, B., Carella, G., Moricca, S., Bakonyi, J., Seress, D., Scanu, B., Dionísio, L., Jung, T. (2017) Diversity of *Phytophthora* species in forests, forest nurseries and riparian ecosystems of Portugal. In: Proceedings of the eighth meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 18th-25th March 2017, Sapa, Vietnam: 22.

4. Biasi, A., Abdelfattah, A., Cacciola, S.O., Jung, T., Abad, G., Cooke, D.E.L., Randall, E., Horta Jung, M., Magnano di San Lio, G. Schena, L. (2017) Development and application of an amplicon metagenomics approach based on the ras-related Ypt1 gene for the detection of *Phytophthora* species. In: Proceedings of the eighth meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 18th-25th March 2017, Sapa, Vietnam: 37.

5. Milenković, I., Keča, N., Karadžić, D., Milanović, S., Sikora, K., Oszako, T., Nowakowska, J.A., Perez-Sierra, A., Jung, T. (2017) Pathogenicity of *Phyophthora* × *serendipita* to *Quercus robur* and *Q. petraea* in Serbia. In: Proceedings of the eighth meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 18th-25th March 2017, Sapa, Vietnam: 41.

6. Dam, V.T., Dang, N.Q., Nguyen, M.C., Jung, T., Horta Jung, M., Pérez-Sierra, A., Rees, H., Thu P.Q. (2017) Biological characteristics of Pythiaceae species isolated from soil of *Hevea brasiliensis* plantations in the South of Vietnam. In: Proceedings of the eighth meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 18th-25th March 2017, Sapa, Vietnam: 44.

7. Jung, T., Durán, A., Sanfuentes von Stowasser, E., Schena, L., Mosca, S., Fajardo, S., González, M., Bakonyi, J., Seress, D., Scanu, B., Cravador, A., Maia, C., Horta Jung, M. (2017) Diversity of *Phytophthora* species in Valdivian rainforests and their association with severe dieback. In: Proceedings of the eighth meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 18th-25th March 2017, Sapa, Vietnam: 55.

8. Jung, T., Pérez-Sierra, A., Rees, H., Scanu, B., Bakonyi, J., Seress, D., Maia, C., Harris, A., Webber, J., Brasier, C., Horta Jung, M. (2017) Diversity of *Phytophthora* species in natural forests and streams and in rubber plantations in Vietnam. In: Proceedings of the eighth meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 18th-25th March 2017, Sapa, Vietnam: 56.

9. Jung, T., Scanu, B., Bakonyi, J., Seress, D., Kovács, G.M., Durán, A., Sanfuentes von Stowasser, E., Schena, L., Mosca, S., Thu, P.Q., Nguyen, C.M., Fajardo, S., González, M., Pérez-Sierra, A., Rees, H., Maia, C., Horta Jung, M. (2017) *Nothophytophthora* prov. nom., a new sister genus of *Phytophthora* from natural and semi–natural ecosystems in Europe, Chile and Vietnam. In: Proceedings of the eighth meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 18th-25th March 2017, Sapa, Vietnam: 57.

10. Milenković, I., Keča, N., Karadžić, D., Pérez-Sierra, A., Jung, T. (2017) Occurrence and pathogenicity of *Phytophthora* ×*cambivora* on *Prunus laurocerasus* in Serbia. In: Proceedings of the eighth meeting of the International Union of Forest Research Organizations (IUFRO) Working

Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 18th-25th March 2017, Sapa, Vietnam: 74.

11. Jung, T., Scanu, B., Bakonyi, J., Seress, D., Durán, A., von Stowasser, E.S., Schena, L., Mosca, S., Thu, P.Q., Minh, C.N., Fajardo, S., González, M., Pérez-Sierra, A., Rees, H., Maia, C., Sala, B.M., Carella, G., Moricca, S., Cravador, A., Horta Jung, M. (2017) Diversity of *Phytophthora* species from natural and semi-natural ecosystems in Portugal, Chile and Vietnam. In: Book of Abstracts of the 18th Meeting of the Oomycete Molecular Genetics Network, Pacific Grove, California (USA), 11 to 14 March, 2017: 26.

12. Jung, T., Scanu, B., Bakonyi, J., Seress, D., Kovács, G., Durán, A., von Stowasser, E.S., Schena, L., Mosca, S., Thu, P.Q., Minh, C.N., Fajardo, S., González, M., Pérez-Sierra, A., Rees, H., Cravador, A., Maia, C., Horta Jung, M. (2017) *Nothophytophthora* prov. nom., a new sister genus of *Phytophthora*. In: Book of Abstracts of the 18th Meeting of the Oomycete Molecular Genetics Network, Pacific Grove, California (USA), 11 to 14 March, 2017: 31.

13. Jung, T., Scanu, B., Bakonyi, J., Seress, D., Kovács, G., Durán, A., von Stowasser, E.S., Schena, L., Mosca, S., Thu, P.Q., Minh, C.N., Fajardo, S., González, M., Pérez-Sierra, A., Rees, H., Cravador, A., Maia, C., Horta Jung, M. (2017) *Nothophytophthora* prov. nom., a new sister genus of *Phytophthora*. In: Book of Abstracts of the 29th Fungal Genetics Conference, Pacific Grove, California (USA), 14 to 19 March 2017: 185.

14. Jung, T., Scanu, B., Bakonyi, J., Seress, D., Durán, A., von Stowasser, E.S., Schena, L., Mosca, S., Thu, P.Q., Minh, C.N., Fajardo, S., González, M., Pérez-Sierra, A., Rees, H., Maia, C., Sala, B.M., Carella, G., Moricca, S., Cravador, A., Horta Jung, M. (2017) Diversity of *Phytophthora* species from natural and semi-natural ecosystems in Portugal, Chile and Vietnam. In: Book of Abstracts of the 29th Fungal Genetics Conference, Pacific Grove, California (USA), 14 to 19 March 2017: 185-186.

15. Jung T., Jung M. H., Scanu B., Seress D., Kovács G. M., Maia C., Pérez-Sierra A., Chang T-T., Chandelier A., Heungens K., van Pouckei K., Abad-Campos P., Léon M., Cacciola S. O., Bakonyi J. (2017). Hat új fitoftórafaj természetes ökösziszténákból [Six new *Phytophthora* species from natural ecosystems]. In: Horváth, J., Haltrich, A. és Molnár, J. (szerk.) 63. Növényvédelmi Tudományos Napok, Budapest, Hungary, 21 to 22 February 2017: 90.

16. Jung, T., Horta Jung, M., Scanu, B., Pérez-Sierra, A., Chang, T., Abad-Campos, P., Léon, M., Kovács, G.M., Husson, C. & Bakonyi, J. (2015) Six new *Phytophthora* species from ITS Clade 7a including two sexually functional heterothallic hybrid species detected in natural ecosystems in Taiwan. In: Sutton, W., Reeser, P.W. & Hansen, E.M. (technical coordinators), Proceedings of the seventh meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 10th-14th November 2014, Esquel, Argentina: 1.

17. Cech, T.L., Jung, T., Corcobado Sanchez, T. & Daxer A. (2015) Involvement of *Phytophthora* species in beech decline in Lower Austria. In: Sutton, W., Reeser, P.W. & Hansen, E.M. (technical coordinators), Proceedings of the seventh meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 10th-14th November 2014, Esquel, Argentina: 10.

18. Horta Jung, M., Cravador, A., Maia C. & Jung T. (2015) Diversity of *Phytophthora* species in forests, forest nurseries and riparian ecosystems of Portugal. In: Sutton, W., Reeser, P.W. & Hansen, E.M. (technical coordinators), Proceedings of the seventh meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 10th-14th November 2014, Esquel, Argentina: 39.

19. Scanu, B., Linaldeddu, B.T., Deidda, A., Maddau, L., Franceschini, A. & Jung, T. (2015) Multiple new and invasive alien *Phytophthora* taxa from Mediterranean maquis ecosystems in Italy. In: Sutton, W., Reeser, P.W. & Hansen, E.M. (technical coordinators), Proceedings of the seventh

meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 10th-14th November 2014, Esquel, Argentina: 42.

20. Jung, T., Chang, T., Pérez-Sierra, A., Hsueh, K., Fu, C., Abad-Campos, P., Léon, M. & M. Horta Jung (2015) Diversity and impact of *Phytophthora* spp. in natural ecosystems of Taiwan. In: Sutton, W., Reeser, P.W. & Hansen, E.M. (technical coordinators), Proceedings of the seventh meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 10th-14th November 2014, Esquel, Argentina: 46.

21. Horta Jung, M., Maia, C., Chang,T., Hsueh, K. & Jung, T. (2015) Screening of Asian oak species for potential resistance to *Phytophthora cinnamomi*. In: Sutton, W., Reeser, P.W. & Hansen, E.M. (technical coordinators), Proceedings of the seventh meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 10th-14th November 2014, Esquel, Argentina: 77.

22. Pérez-Sierra, A., López-García, C., León, M., García-Jiménez, J., Abad-Campos, P. & Jung, T. (2014) Species of *Phytophthora* associated with *Quercus* decline in the Mediterranean Park 'Carrascar de la Font Roja' (Spain). In: Jung T., Brasier C.M., Sánchez M.E. & Pérez-Sierra A. (eds), Proceedings of the sixth meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 9th-14th September 2012, Cordoba, Spain: 23.

23. Ginetti, B., Moricca, S., Ragazzi, A. & Jung, T. (2014) *Phytophthora acerina* prov. nom., a new species from the *P. citricola* complex causing aerial cankers on *Acer pseudoplatanus* in Italy. In: Jung T., Brasier C.M., Sánchez M.E. & Pérez-Sierra A. (eds), Proceedings of the sixth meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 9th-14th September 2012, Cordoba, Spain: 29-30.

24. Milenkovic, I., N. Keca, N., Nowakowska, J., Sikora, K., Borys, M., Oszako, T. & Jung T. (2014) *Phytophthora* species in Serbia. In: Jung T., Brasier C.M., Sánchez M.E. & Pérez-Sierra A. (eds), Proceedings of the sixth meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 9th-14th September 2012, Cordoba, Spain: 49.

25. Oßwald, W., Fleischmann, F., Cech, T., Chambery, A., Cravador, A., Diamandis, S., Díez Casero, J., Coelho, A.C., Hansen, E., Horta Jung, M., Jung, T., Massola, N.S. Orlikowski, L.B., Prospero, S., Ptaszek, M., Rigling, D., Robin, C., Solla, A., Sipos, G., Trzewik, A. & Werres, S. (2014) How do *Phytophthora* spp. harm woody plants? In: Jung T., Brasier C.M., Sánchez M.E. & Pérez-Sierra A. (eds), Proceedings of the sixth meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 9th-14th September 2012, Cordoba, Spain: 57.

26. Jung, T. (2014) Morphological and physiological adaptability of the genus *Phytophthora*. In: Jung T., Brasier C.M., Sánchez M.E. & Pérez-Sierra A. (eds), Proceedings of the sixth meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 9th-14th September 2012, Cordoba, Spain: 81.

27. Bakonyi, J., Nagy, Z.Á., Burgess, T., Szigethy, A., Nechwatal, J., Koltay, A., Woodward, S., Belbahri, L. & Jung T. (2014) Characterisation of the two informally designated ITS Clade 6 taxa *Phytophthora* taxon Forestsoil and *P.* sp. hungarica. In: Jung T., Brasier C.M., Sánchez M.E. & Pérez-Sierra A. (eds), Proceedings of the sixth meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural

ecosystems. 9th-14th September 2012, Cordoba, Spain: 107.

28. Jung, T., Orlikowski, L., Henricot, B., Abad-Campos, P., Aday, A.G., Aguín Casal, O., Bakonyi, J., Cacciola, S.O., Cech, T., Corcobado, T., Cravador, A., Denton, G., Diamandis, S., Dogmus-Lehtijärvi, H.T., Ginetti, B., Hantula, J., Hartmann, G., Herrero, M., Lilja, A., Horta, M., Keca, N., Kramarets, V., Lyubenova, A., Machado, H., Magnano di San Lio, G., Mansilla Vázquez, P.J., Marçais, B., Matsiakh, I., Milenkovic, I., Moricca, S., Nechwatal, J., Oszako, T., Pane, A., Paplomatas, E.J., Pintos Varela, C., Rial Martínez, C., Robin, C., Rytkönen, A., Sánchez, M.E., Scanu, B., Schlenzig, A., Schumacher, J., Solla, A., Sousa, E., Talgø, V., Tsopelas, P., Vannini, A., Vettraino, A.M., Wenneker, M. & Peréz-Sierra, A. (2014) Ubiquitious *Phytophthora* infestations of nurseries and plantings in Europe demonstrate major failure of plant biosecurity. In: Jung T., Brasier C.M., Sánchez M.E. & Pérez-Sierra A. (eds), Proceedings of the sixth meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 9th-14th September 2012, Cordoba, Spain: 86-88.

29. Doğmuş-Lehtijärvi, H.T., Aday, A.G., Lehtijärvi, A. & Jung T. (2014) Pathogenicity of *Phytophthora* species on *Liquidambar orientalis* and *Castanea sativa* seedlings. In: Jung T., Brasier C.M., Sánchez M.E. & Pérez-Sierra A. (eds), Proceedings of the sixth meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 9th-14th September 2012, Cordoba, Spain: 115-117.

30. Lyubenova, A., Kostov, K., Tsvetkov, I., Oszako, T., Borys, M., Sikora, K., Jung, T. & Slavov, S. (2014) Diversity of *Phytophthora* species in forest ecosystems of Bulgaria. In: Jung T., Brasier C.M., Sánchez M.E. & Pérez-Sierra A. (eds), Proceedings of the sixth meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 9th-14th September 2012, Cordoba, Spain: 133.

31. Miranda, J., Corcobado, T., Jung, T., Martín-García, J., Pérez-Sierra, A., Abad-Campos, P. & Solla, A. (2014) Susceptibility of *Quercus ilex* to mixed infections by multiple *Phytophthora* species. In: Jung T., Brasier C.M., Sánchez M.E. & Pérez-Sierra A. (eds), Proceedings of the sixth meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 9th-14th September 2012, Cordoba, Spain: 138-139.

32. Miranda, J., Corcobado, T., Pérez, A., Martín-García, J., Cubera, E., Jung, T. & Solla, A. (2014) Effect of *Phytophthora quercina*, *P. gonapodyides* and *P. cinnamomi* on germination of *Quercus ilex* acorns and seedling establishment in infested soils. In: Jung T., Brasier C.M., Sánchez M.E. & Pérez-Sierra A. (eds), Proceedings of the sixth meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 9th-14th September 2012, Cordoba, Spain: 140-141.

33. Olejarski, I., Kubiak, K., Nowakowska, J., Jung, T. & Oszako, T. (2014) The occurrence of *Phytophthora* species in European Ecological Network NATURA 2000 in Poland. In: Jung T., Brasier C.M., Sánchez M.E. & Pérez-Sierra A. (eds), Proceedings of the sixth meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 9th-14th September 2012, Cordoba, Spain: 148.

34. Scanu, B., Linaldeddu, B., Jung, T., Maddau, L. & Franceschini, A. (2014) *Phytophthora* species occurring in declining oak ecosystems in Sardinia (Italy). In: Jung T., Brasier C.M., Sánchez M.E. & Pérez-Sierra A. (eds), Proceedings of the sixth meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 9th-14th September 2012, Cordoba, Spain: 157.

35. Horta Jung, M., Pèrez-Sierra, A., Solla, A., Cravador, A. & Jung T. (2014) Biological pollution: *Phytophthora* species threatening forest nurseries and natural ecosystems in Portugal. In: Jung T., Brasier C.M., Sánchez M.E. & Pérez-Sierra A. (eds), Proceedings of the sixth meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 9th-14th September 2012, Cordoba, Spain: 167-168.

36. Horta, M., Pèrez-Sierra, A., Cravador, A. & Jung, T. (2012) Involvement of *Phytophthora* species in the decline disease of cork oak. In: Oliveira MM, Matos J, Saibo N, Miguel C, Gil L (eds), Present and future of cork oak in Portugal, Proceedings of a scientific workshop, Oeiras, Portugal, October 2011, Sociedade Portuguesa de Fisiologia Vegetal: 45-47.'

37. Jung, T., Vannini, A. & Brasier, C.M. (2009) Progress in understanding *Phytophthora* diseases of trees in Europe 2004-2007. In: Goheen EM, Frankel SJ. (eds), Proceedings of the fourth meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. Gen. Tech. Rep. PSW-GTR-221. Albany, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station: 3-24.

38. Jung, T., Schumacher, J., Leonhard, S., Hartmann, G. & Cech, T. (2009) Widespread *Phytophthora* infestations of nurseries in Germany and Austria and their role as primary pathway of *Phytophthora* diseases of trees. In: Goheen EM, Frankel SJ. (eds), Proceedings of the fourth meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. Gen. Tech. Rep. PSW-GTR-221. Albany, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station: 140-141.

39. Scott, P.M., Barber, P., Jung, T., Shearer, B.L., Hardy, G.E.St.J. & Burgess, T.I. (2009) Pathogenicity of *Phytophthora multivora* to *Eucalyptus gomphocephala* and *E. marginata*. In: APPS 2009 Plant Health Management: An Integrated Approach, 29 Sept - 1 Oct, Newcastle: 37.

40. Jung, T., Downing, M., Thomas, V., Blaschke, M., Tuffly, M.F. & Reich, R. (2009) Modelling the potential distribution of *Phytophthora alni* root and collar rot of alders in Bavaria and preliminary application of the model to estimate the US susceptibility to *P. alni*. In: Goheen EM, Frankel SJ. (eds), Proceedings of the fourth meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. Gen. Tech. Rep. PSW-GTR-221. Albany, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station: 136.

41. Jung, T., Downing, M., Blaschke, M. & Vernon, T. (2007) *Phytophthora* root and collar rot of alders caused by the invasive *Phytophthora alni*: actual distribution, pathways, and modelled potential distribution in Bavaria. In: Alien Invasive Species and International Trade. (Evans, HF & Oszako, T, eds). *Proceedings of the 1st International IUFRO Unit 7.03.12 Meeting*, 3rd – 7th July 2006, Forest Research Institute, Warsaw: 10-18.

42. Jung, T. (2006) Root and collar rot and aerial bleeding cankers of beech in Bavaria caused by *Phytophthora* spp. In: Progress in Research on *Phytophthora* Diseases of Forest Trees. (Brasier, CM, Jung, T & Oßwald, W, eds). *Proceedings of the 3rd International IUFRO Working Party 7.02.09 Meeting*, 11th –17th Sept. 2004, Freising, Germany. Forest Research, Farnham, Surrey, UK: 129-134.

43. Jung, T. & Blaschke, M. (2006) Management strategies for the *Phytophthora* root and collar rot epidemic of alders in Bavaria. In: Progress in Research on *Phytophthora* Diseases of Forest Trees. (Brasier, CM, Jung, T & Oßwald, W, eds). *Proceedings of the 3rd International IUFRO Working Party 7.02.09 Meeting*, 11th –17th Sept. 2004, Freising, Germany. Forest Research, Farnham, Surrey, UK: 61-66.

44. Jung, T. & Dobler, G. (2006) Littleleaf Disease caused by *Phytophthora cinnamomi* on *Pinus occidentalis* and *Pinus caribaea* in the Dominican Republic. Poster No. 28 in: Progress in Research on *Phytophthora* Diseases of Forest Trees. (Brasier, CM, Jung, T & Oßwald, W, eds). *Proceedings of the 3rd International IUFRO Working Party 7.02.09 Meeting*, 11th –17th Sept. 2004, Freising, Germany. Forest Research, Farnham, Surrey, UK.

45. Brasier, C.M. & Jung, T. (2006) Recent developments in *Phytophthora* diseases of trees and natural ecosystems in Europe. In: Progress in Research on *Phytophthora* Diseases of Forest Trees. (Brasier, CM, Jung, T & Oßwald, W, eds). *Proceedings of the 3rd International IUFRO Working Party 7.02.09 Meeting*, 11th –17th Sept. 2004, Freising, Germany. Forest Research, Farnham, Surrey, UK: 5-16.

46. Jung, T. & Blaschke, M. (2005) Die *Phytophthora* – Erkrankung der Erlen in Bayern: Erste Empfehlungen zum Umgang mit der Erkrankung (*Phytophthora* disease of alders in Bavaria: first recommendations on disease management). In: Jahrbuch der Baumpflege 2005. (Dujesiefken, D & Kockerbeck, P, eds.). *Proceedings of the 13th Augsburger Baumpflegetage*, 19th – 21st April 2005, Augsburg, Germany. Thalacker Medien, Braunschweig, 228-232.

47. Jung, T., Blaschke H. & Oßwald, W. (2003) Effect of environmental constraints on *Phytophthora* - mediated oak decline in Central Europe. In: *Phytophthora* in Forests and Natural Ecosystems. (McComb, JA, Hardy, G and Tommerup, I, eds). *Proceedings of the 2nd International IUFRO Working Party 7.02.09 Meeting*, 30th Sept. - 5th Oct. 2001, Albany, Western Australia: 89-98. Murdoch University Print, Perth.

48. Jung, T., Blaschke, M., Schlenzig, A., Oßwald, W. & Gulder, H.-J. (2003) *Phytophthora* disease of alders in Bavaria: extent of damage, mode of spread, and management strategies. In: *Phytophthora* in Forests and Natural Ecosystems. (McComb, JA, Hardy, G and Tommerup, I, eds). *Proceedings of the 2nd International IUFRO Working Party 7.02.09 Meeting*, 30th Sept. - 5th Oct. 2001, Albany, Western Australia: 226-234. Murdoch University Print, Perth.

49. Brasier, C. M. & Jung, T. (2003) Progress in understanding *Phytophthora* diseases of trees in Europe. In: *Phytophthora* in Forests and Natural Ecosystems. (McComb, JA, Hardy, G and Tommerup, I, eds). *Proceedings of the 2nd International IUFRO Working Party 7.02.09 Meeting*, 30th Sept. – 5th Oct. 2001, Albany, Western Australia: 4-18. Murdoch University Print, Perth.

50. Delatour, C., Anselmi, P., Barzanti, P., Bianco, M.C., Blaschke, H., Brasier, C.M., Capretti, P., Desprez-Loustau, M.-L., Dreyer, E., Hansen, E.M., Heyne, C., Jung, T., Luisi, N., Marçais, B., Matyssek, R., Maurel, M., Oßwald, W., Paoletti, E., Ragazzi, A., Robin, C., Vannini, A., Vettraino, A.M. (2003) *Phytophthora*s and oaks in Europe. In: *Phytophthora* in Forests and Natural Ecosystems. (McComb, JA, Hardy, G and Tommerup, I, eds). *Proceedings of the 2nd International IUFRO Working Party 7.02.09 Meeting*, 30th Sept. - 5th Oct. 2001, Albany, Western Australia: 78-88. Murdoch University Print, Perth.

51. Jung, T., Blaschke H. & Oßwald, W. (2002) Die Rolle von *Phytophthora* - Arten im Krankheitskomplex Eichensterben unter besonderer Berücksichtigung verschiedener Standortsfaktoren (Involvement of *Phytophthora* species in oak decline and the influence of site factors on the disease). Abstract in: Waldumbau im globalen Wandel (Rebuilding forests under globale change). *Proceedings of the Forstwissenschaftliche Tagung (Conference of Forest Science) 2002*, 9th - 11th Oct. 2002, Göttingen, Germany. Forest Faculties of the Universities of Dresden, Freiburg, Göttingen and Munich: 15.

52. Jung, T., Blaschke H. & Oßwald, W. (2000) Involvement of *Phytophthora* species in Central and Western European oak decline and the influence of site factors and nitrogen input on the disease. In: *Phytophthora* Diseases of Forest Trees. *Proceedings of the 'First International Meeting on Phytophthora's in Forest and Wildland Ecosystems'* (Hansen, EM and Sutton, W, eds) 30th Aug. – 3rd Sept. 1999, Grants Pass, Oregon: 28-33, Oregon State University, Corvallis, OR.

53. Cooke, D.E.L., Jung, T., Williams, N.A., Schubert, R., Oßwald, W. & Duncan, J.M. (2000) A comparison of AFLP diversity in *Phytophthora quercina* and *Phytophthora citricola* populations. Abstract in: *Phytophthora* Diseases of Forest Trees. *Proceedings of the 'First International Meeting on Phytophthora's in Forest and Wildland Ecosystems'* (Hansen, EM and Sutton, W, eds) 30th Aug. - 3rd Sept. 1999, Grants Pass, Oregon: 101, Oregon State University, Corvallis, OR.

54. Oßwald, W., Brummer, M., Schlenzig, A., Koehl, J., Jung, T., Heiser, I. & Matyssek, R. (2000) Investigations on photosynthesis of oak seedlings infected with *Phytophthora quercina* and characterization of the *P. quercina* toxin quercinin. In: *Phytophthora* Diseases of Forest Trees. *Proceedings of the 'First International Meeting on Phytophthora's in Forest and Wildland Ecosystems'* (Hansen, EM and Sutton, W, eds) 30th Aug. - 3rd Sept. 1999, Grants Pass, Oregon: 67-70, Oregon State University, Corvallis, OR.

55. Schlenzig, A., Nechwatal, J., Jung, T., Cooke, D., Duncan, J. & Oßwald, W.F. (2000) Detection of *Phytophthora quercina* and *Phytophthora citricola* in field soil samples and in infected baiting leaves with PCR and specific primers. Abstract in: *Phytophthora* Diseases of Forest Trees. *Proceedings of the 'First International Meeting on Phytophthora's in Forest and Wildland Ecosystems'* (Hansen, EM and Sutton, W, eds) 30th Aug. - 3rd Sept. 1999, Grants Pass, Oregon: 137, Oregon State University, Corvallis, OR.

56. Jung, T., Blaschke H. & Oßwald, W. (2000) Die Rolle von *Phytophthora* – Arten im Krankheitskomplex Eichensterben unter besonderer Berücksichtigung verschiedener Standortsfaktoren (Involvement of *Phytophthora* species in oak decline and the influence of site factors on the disease). Abstract in: Forstwissenschaft - Modell für Interdisziplinarität (Forest science - model for multidisciplinarity). *Proceedings of the Forstwissenschaftliche Tagung (Conference of Forest Science) 2000*, 11th - 15th Oct. 2000, Freiburg, Germany. Forest Faculties of the Universities of Dresden, Freiburg, Göttingen and Munich: 84.

57. Jung, T., Blaschke, M., Schlenzig, A., Oßwald, W. (2000) Verbreitung des neuartigen Erlensterbens durch *Phytophthora* spp. in Bayern (Distribution of *Phytophthora* related alder mortality in Bavaria). Abstract in: 52. Deutsche Pflanzenschutztagung (52nd German Plant Protection Conference), 9th -12th Oct. 2000, Freising, Germany. *Mitteilungen der Biologischen Bundesanstalt für Land- und Forstwirtschaft*, Berlin-Dahlem, Volume 376: 381.

58. Jung, T., Blaschke H. & Oßwald, W. (2000) Die Rolle von *Phytophthora* – Arten im Krankheitskomplex Eichensterben unter besonderer Berücksichtigung verschiedener Standortsfaktoren (Involvement of *Phytophthora* species in oak decline and the influence of site factors on the disease). Abstract in: 52. Deutsche Pflanzenschutztagung (52nd German Plant Protection Conference), 9th -12th Oct. 2000, Freising, Germany. *Mitteilungen der Biologischen Bundesanstalt für Land- und Forstwirtschaft*, Berlin-Dahlem, Volume 376: 249.

59. Jung, T. (1999) Die Rolle von *Phytophthora*-Arten im Krankheitskomplex Eichensterben (Role of *Phytophthora* species in the disease complex oak decline). In: *Proceedings of the 4th Westdeutsche Baumpflegetage*. 3rd – 4th Nov. 1999, Cologne, Germany: 12 pp, AG Westdeutsche Baumpflegetage, Cologne, Germany.

60. Blaschke, H., Jung, T., Heyne, C., Oßwald, W. & Matyssek, R. (1999) The relationships between the health status of oaks and the presence of *Phytophthora* spp. in the soil: a field assessment at sites in Bavaria. Poster presented at the workshop of the COST E6 / EUROSILVA Working Group III 'Biotic and abiotic interactions', 9th-12th Sept. 1999, Gozd Matuljek, Slovenia.

61. Heiser, I., Fromm, J., Giefing, M., Koehl, J., Jung, T. & Oßwald, W. (1999) Mechanismus der Schädigung von Tabakpflanzen durch Toxine von *Phytophthora quercina, P. citricola* und *P. gonapodyides.* In: Bielefelder Ökologische Beiträge Volume 14. Ökophysiologie pflanzlicher Interaktionen. Ergebnisse der 3. Jahrestagung des Arbeitskreises "Experimentelle Ökologie der Pflanzen" in der GfÖ (Ecophysiology of plant interactions. Results of the 3rd annual meeting of the workshop 'experimental ecology of plants' of the Ecological Society).(Beyschlag W and Steinlin T, eds), Bielefeld, 8th-9th May 1998, Issue 1, 103-115.

62. Schubert, R., Bahnweg, G., Nechwatal, J., Jung, T., Müller-Starck, G., T., Langebartels, C., Sandermann, H. Jr., Cooke, D.E.L., Duncan, J.M. & Oßwald, W. (1998) Detection and quantification of *Phytophthora* species which are associated with root-rot diseases in European deciduous forests by species-specific PCR. Abstract in: Forest growth responses to the pollution climate of the 21st Century. *Proceedings of the 18th International IUFRO Meeting for Specialists in Air Pollution Effects on Forest Ecosystems*. 21st – 23rd Sept. 1998, Edinburgh, UK: 100, Heriot-Watt University, Edinburgh, UK.

63. Jung, T., Blaschke H. & Oßwald, W. (1998) Involvement of *Phytophthora* species in Central European oak decline and the influence of site factors and nitrogen input on the disease. Abstract in: Forest growth responses to the pollution climate of the 21st Century. *Proceedings of the 18th International IUFRO Meeting for Specialists in Air Pollution Effects on Forest Ecosystems*. 21st - 23rd Sept. 1998, Edinburgh, UK: 46, Heriot-Watt University, Edinburgh, UK.

64. Jung, T., Blaschke H. & Oßwald, W. (1998) Isolation, identification, geographical distribution and pathogenicity of *Phytophthora* species from declining oak and beech stands in Europe. Abstract in: Disease / Environment Interactions in Forest Decline. *Proceedings of a workshop of the IUFRO Working Party 'Disease / Environment Interactions in Forest Decline'.* (Cech TL, Hartmann G and Tomiczek C, eds), 16th-21st March 1998, Vienna, Austria: 200, Federal Forest Research Centre, Vienna, Austria.

65. Blaschke H. & Jung T. (1998) Decline symptoms on root systems of European beech and oak species caused by *Phytophthora* spp. In: Disease / Environment Interactions in Forest Decline. *Proceedings of a workshop of the IUFRO Working Party 'Disease / Environment Interactions in Forest Decline'.* (Cech TL, Hartmann G and Tomiczek C, eds), 16th-21st March 1998, Vienna, Austria: 9-13, Federal Forest Research Centre, Vienna, Austria.

66. Jung, T. & Paoletti, E. (1997) Cambiamento globale e deperimento del leccio: il caso di *Phytophthora quercina*. Poster presented at "Primo Congresso SISEF'La Ricerca Italiana per le foreste e la selvicoltura'", 4th-6th June 1997, Agripolis, Legnaro (PD), Italy.

67. Oßwald, W.F., Heiser ,I., Albrecht, A., Giefing, M., Baker, R., Jung, T., Matyssek, R. & Elstner, E.F. (1997) Investigations on the action of fungal toxins on plants (A mechanism also relevant for decling oak trees?) Poster presented at the workshop of the COST E6 / EUROSILVA Working Group III 'Biotic and abiotic interactions', 1997, Oulu, Finland.

68. Jung, T. & Blaschke, H. (1996) *Phytophthora* root rot in declining forest trees. In: *Proceedings of the International Colloquium on 'Bioindication of Forest Site Pollution: Development of Methodology and Training BIOFOSP'.* (Kraigher H, Batič F, Hanke DE, Agerer R and Grill D, eds), 22nd-31st Aug. 1995, Ljubljana, Slovenia: 153-157, Slovenian Forestry Institute, Ljubljana, Slovenia.

Communications

Oral communications in conferences

03/2017: Eighth meeting of the International Union of Forest Research Organizations (IUFRO) Working Party S07.02.09, *Phytophthora*s in forests and natural ecosystems. 18th-25th March 2017, Sapa, Vietnam:

'Horta Jung, M., Cravador, A., Maia, C., Schena, L., Mosca, S., Mora Sala, B., Carella, G., Moricca, S., Bakonyi, J., Seress, D., Scanu, B., Dionísio, L., Jung, T. Diversity of *Phytophthora* species in forests, forest nurseries and riparian ecosystems of Portugal',

'Jung, T., Durán, A., Sanfuentes von Stowasser, E., Schena, L., Mosca, S., Fajardo, S., González, M., Bakonyi, J., Seress, D., Scanu, B., Cravador, A., Maia, C., Horta Jung, M. Diversity of *Phytophthora* species in Valdivian rainforests and their association with severe dieback',

'Jung, T., Pérez-Sierra, A., Rees, H., Scanu, B., Bakonyi, J., Seress, D., Maia, C., Harris, A., Webber, J., Brasier, C., Horta Jung, M. Diversity of *Phytophthora* species in natural forests and streams and in rubber plantations in Vietnam',

'Jung, T., Scanu, B., Bakonyi, J., Seress, D., Kovács, G.M., Durán, A., Sanfuentes von Stowasser, E., Schena, L., Mosca, S., Thu, P.Q., Nguyen, C.M., Fajardo, S., González, M., Pérez-Sierra, A., Rees, H., Maia, C., Horta Jung, M. *Nothophytophthora* prov. nom., a new sister genus of *Phytophthora* from natural and semi–natural ecosystems in Europe, Chile and Vietnam'.

Co-author of the oral presentations:

'Jung, T., Horta Jung, M., Cacciola, S.O., Cech, T., Bakonyi, J., Seress, D., Mosca, S., Schena, L., Seddaiu, S., Pane, A., Magnano di San Lio, G., Maia, C., Cravador, C., Franceschini, A., Scanu, B. Multiple new cryptic pathogenic *Phytophthora* species from Fagaceae forests in Austria, Italy and Portugal',

'Biasi, A., Abdelfattah, A., Cacciola, S.O., Jung, T., Abad, G., Cooke, D.E.L., Randall, E., Horta Jung, M., Magnano di San Lio, G. Schena, L. Development and application of an amplicon metagenomics approach based on the ras-related Ypt1 gene for the detection of *Phytophthora* species',

'Milenković, I., Keča, N., Karadžić, D., Milanović, S., Sikora, K., Oszako, T., Nowakowska, J.A., Perez-Sierra, A., Jung, T. Pathogenicity of *Phyophthora* × *serendipita* to *Quercus robur* and *Q. petraea* in Serbia',

'Dam, V.T., Dang, N.Q., Nguyen, M.C., Jung, T. , Horta Jung, M., Pérez-Sierra, A., Rees, H., Thu P.Q. Biological characteristics of Pythiaceae species isolated from soil of *Hevea brasiliensis* plantations in the South of Vietnam'.

03/2017: 29th Fungal Genetics Conference, Pacific Grove, California (USA), 14th-19 th March 2017, co-author of the oral presentations:

'Jung, T., Scanu, B., Bakonyi, J., Seress, D., Durán, A., von Stowasser, E.S., Schena, L., Mosca, S., Thu, P.Q., Minh, C.N., Fajardo, S., González, M., Pérez-Sierra, A., Rees, H., Maia, C., Sala, B.M., Carella, G., Moricca, S., Cravador, A., Horta Jung, M. Diversity of *Phytophthora* species from natural and semi-natural ecosystems in Portugal, Chile and Vietnam',

'Jung, T., Scanu, B., Bakonyi, J., Seress, D., Kovács, G., Durán, A., von Stowasser, E.S., Schena, L., Mosca, S., Thu, P.Q., Minh, C.N., Fajardo, S., González, M., Pérez-Sierra, A.,

Rees, H., Cravador, A., Maia, C., Horta Jung, M. *Nothophytophthora* prov. nom., a new sister genus of *Phytophthora*'.

11/2014: Keynote speaker at the 7th International IUFRO Unit 7.02.09 Meeting on '*Phytophthora* in Forests and Natural Ecosystems' in Esquel, Argentina:

'Jung T., Horta Jung M., Scanu B., Pérez-Sierra A., Chang T., Abad-Campos P., Léon M., Kovács G.M., Husson C. and Bakonyi J. Six new *Phytophthora* species from ITS Clade 7a including two sexually functional heterothallic hybrid species detected in natural ecosystems in Taiwan';

'Jung T., Chang T., Pérez-Sierra A., Hsueh K., Fu C., Abad-Campos P., Léon M. and Horta Jung, M. Diversity and impact of *Phytophthora* spp. in natural ecosystems of Taiwan'.

Co-author of the oral presentations:

'Horta Jung M., Cravador A., Maia C. and Jung T. Diversity of *Phytophthora* species in forests, forest nurseries and riparian ecosystems of Portugal';

'Horta Jung M., Maia C., Chang T., Hsueh K. and Jung T. Screening of Asian oak species for potential resistance to *Phytophthora cinnamomi*';

'Cech T.L., Jung T., Corcobado Sanchez T. and Daxer A. Involvement of *Phytophthora* species in beech decline in Lower Austria'.

'Scanu B, Linaldeddu B.T., Deidda A., Maddau L., Franceschini A., Jung T. Multiple new and invasive alien *Phytophthora* taxa from Mediterranean maquis ecosystems in Italy'.

10/2014: Final conference of COST Action FP 1002 "Pathway Evaluation and Pest Risk Management In Transport (PERMIT)" in Estoril, Portugal: Ubiquitous *Phytophthora* infestations of nurseries and plantings in Europe: the importance of the nursery pathway.

10/2014: Keynote speaker at the 17th congress of the Spanish Society of Phytopathology in Lleida, Spain: 'Ubiquitous *Phytophthora* infestations of nurseries and plantings in Europe: the importance of the nursery pathway'.

03/2014: 24. Baum- und Bodenseminar in Jena ('24th Tree and Soil seminar Jena'), Jena, Germany: *Phytophthora* und Möglichkeiten der Bekämpfung ('*Phytophthora* and possibilities of control').

04/2013: Conference 'Strategien der Gehölzverwendung im Landschaftgarten ('Strategies for the use of woody plants in landscape gardens') in Regensburg, Germany: 'Bedrohung von Parkanlagen durch eingeschleppte invasive *Phytophthora*-Erreger ('Invasive *Phytophthora* species - a serious threat for parks')'.

12/2012: COST Action FP 1002 meeting in Uppsala, Sweden: Ubiquitious *Phytophthora* infestations of nurseries and plantings in Europe demonstrate major failure of plant biosecurity'.

11/2012: COST FP 0801 meeting in Brussels, Belgium: 'Ubiquitious *Phytophthora* infestations of nurseries and plantings in Europe demonstrate major failure of plant biosecurity'; 'Results from phosphite trials for control of *Phytophthora* diseases in forests and natural ecosystems'; 'Results from WG 4 on Management and Control'.

09/2012: Keynote speaker at the 6th International IUFRO Unit 7.02.09 Meeting on '*Phytophthora* in Forests and Natural Ecosystems' in Cordoba, Spain: 'Ubiquitious *Phytophthora* infestations of nurseries and plantings in Europe demonstrate major failure of plant biosecurity'; **'**Morphological and physiological adaptability of the genus *Phytophthora*'; *'Involvement of Phytophthora species in European oak declines'*. Co-author of the oral presentations:

'Ginetti B., Moricca S., Ragazzi A. & Jung T.: *Phytophthora acerina* sp. nov., a new species from the *P. citricola* complex causing aerial cankers on *Acer pseudoplatanus* in Italy',

'Milenkovic I., Keca N., Nowakowska J., Sikora K., Borys M., Oszako T. & Jung T.: *Phytophthora* species in Serbia',

Oßwald W., Fleischmann F., Cech T., Chambery A., Cravador A., Diamandis S., Diéz Casero J., Coelho A.C., Hansen E., Horta M., Jung T., Massola N.S., Orlikowski L.B., Prospero S., Ptaszek M., Rigling D., Robin C., Solla A., Sipos G., Trzewik A. & Werres S.: How do *Phytophthora* spp. harm woody plants?',

Pèrez-Sierra A., López-García C., León M., García-Jiménez J., Abad-Campos P. & Jung T.: Species of *Phytophthora* associated with *Quercus* decline in the Mediterranean Park 'Carrascar de la Font Roja' (Spain)'.

07/2012: Invited discussant at the 'Seminar on International Trade and Invasive Alien Species', Geneva, Switzerland, organised by the Secretariat of the Standards and Trade Development Facility (STDF) of the World Trade Organization (WTO) in collaboration with the International Plant Protection Convention (IPPC) and the World Organisation for Animal Health (OIE).'

03/2012: Invited speaker at the VI Jornadas de Jóvenes Investigadores en Conservación y Uso Sostenible de Sistemas Forestales, Valsain, Spain: 'The genus *Phytophthora*: life cycle, ecology and evolutionary trends, and notorious tree diseases caused in the Americas and Australasia'.

02/2012: Invited speaker at the 1st meeting of SNS-EFINORD network '*Phytophthora* -diseases of deciduous forest trees in Nordic and North-European regions', Malmö, Sweden: 'The genus *Phytophthora*: life cycle, ecology and evolutionary trends'.

11/2011: COST FP 0801 meeting in Budapest, Hungary: 'Multiple new *Phytophthora* species associated with natural ecosystems in Australia; evolutionary and ecological implications'.

09/2011: Invited speaker at the 2nd 'Reunión Científica de Sanidad Forestal Sociedad Española de Ciencias Forestales', Plasencia, Spain: '*Phytophthora* diseases of trees: an increasing threat to forestry, horticulture and nurseries in the world'.

06/2011: COST FP 0801 Training School on "Detection and Diagnosis of *Phytophthora* in Forest Ecosystems". Warsaw, Poland: 'Ecology, survival and evolutionary trends in *Phytophthora*'.

05/2011: 1st full meeting of COST Action FP 1002 "Pathway Evaluation and Pest Risk Management In Transport (PERMIT)", Belgrade, Serbia: 'Ubiquitious *Phytophthora* infestation of nurseries is spreading these aggressive tree pathogens into European forests and seminatural ecosystems at high frequency'.

06/2010: 2nd full meeting of COST Action FP 0801 "Established and Emerging *Phytophthora*: Increasing Threats to Woodland and Forest Ecosystems in Europe", in Viterbo, Italy: **'**Efficacy of potassium phosphite in controlling *Phytophthora*-mediated decline of mature *Fagus sylvatica*, *Quercus robur* and *Tilia cordata*, and shoot dieback of *Rhododendron*'.

03/2010: Keynote speaker at the 5th International IUFRO Unit 7.02.09 Meeting on '*Phytophthora* in Forests and Natural Ecosystems' in Rotorua, New Zealand: 'Progress in understanding *Phytophthora* diseases of trees in Europe 2008-2010' ;**'**New insights into the survival strategy of *Phytophthora cinnamomi* in forests, woodlands and heathlands in Western Australia'.

09/2009: 2nd Workshop of Working Group 3 'Diagnostics of *Phytophthora* species' and Working Group 4 'Management and Control of *Phytophthora* Diseases', Faro, Portugal: 'Widespread *Phytophthora* infestations of nurseries in Central Europe and their role as primary pathway of *Phytophthora* diseases of trees','Management of *Phytophthora* diseases in forests and natural ecosystems in Australia'.

08/2008: 9th International Congress of Plant Pathology, Turin, Italy: 'Involvement of *Phytophthora* root and bark infections in the widespread decline of European beech in Bavaria'.

08/2008: 3rd International *Phytophthora*, *Pythium* and related genera Workshop, Turin, Italy: 'Widespread *Phytophthora* infestations of nursery stock in Central Europe as major pathway of *Phytophthora* diseases of forests and semi-natural ecosystems'.

08/2007: 4th International IUFRO Unit 7.02.09 Meeting on '*Phytophthora* in Forests and Natural Ecosystems', Monterrey, California: Keynote presentation: 'Further progress in understanding *Phytophthora* diseases of trees in Europe', 'Widespread *Phytophthora* infestations of nurseries in Germany and Austria and their role as primary pathway of *Phytophthora* diseases of trees', 'Modelling the potential distribution of *Phytophthora alni* root and collar rot of alders in Bavaria and preliminary application of the model to estimate the US susceptibility to *P. alni*'.

02/2007: First meeting of the 'European network on emerging diseases and invasive species threats to European Forest Ecosystems (FORTHREATS)', Uppsala, Sweden: '*Phytophthora* diseases of trees – an increasing threat to European forests'.

07/2006: First International IUFRO Unit 7.03.12 Meeting on Alien Invasive Species and International Trade, Jedlnia, Poland: '*Phytophthora* root and collar rot of alders by the invasive *Phytophthora alni*: actual distribution, pathways, and modeled potential distribution in Bavaria.'

11/2005: International Conference "Possible limitation of dieback phenomena in broadleaved stands through silvicultural and protective measures", Puszczykowo, Poland: 'Involvement of *Phytophthora* species in the decline of broadleaved stands in Germany'.

09/2004: Third International IUFRO Unit 7.02.09 Meeting on *Phytophthora* in Forests and Natural Ecosystems, Freising, Germany: '*Phytophthora* dieback of alders in Bavaria: distribution, pathways and management strategies', 'Root and collar rot and aerial bleeding cankers of beech in Bavaria caused by *Phytophthora* spp.'.

05/2003: Conference „black alder - tree of the year 2003", Rott / Inn, Germany: '*Phytophthora* root and collar rot of alders in Bavaria: distribution, pathways and management options'.

05/2003: Conference „black alder tree of the year 2003", Burg im Spreewald, Germany: 'Extent and distribution of the *Phytophthora* disease of alders in Bavaria, modes of spread and possible management strategy'.

10/2002: Forstwissenschaftliche Tagung (Conference of Forest Sciences) 2002, University of Göttingen, Germany: 'Involvement of *Phytophthora* species in oak decline and the influence of site factors on the disease'.

10/2001: Second International IUFRO Unit 7.02.09 Meeting on *Phytophthora* in Forests and Natural Ecosystems, Murdoch University, Albany, West-Australian: '*Phytophthora* disease of alders in Bavaria: extent of damage, mode of spread, and management strategies', 'Effect of environmental constraints on *Phytophthora* – mediated oak decline in Central Europe'.

10/2000: Forstwissenschaftliche Tagung (Conference of Forest Sciences) 2000, University of Freiburg, Germany: 'Involvement of *Phytophthora* species in oak decline and the influence of site factors on the disease'.

10/2000: 52nd German Plant Protection Conference, German Phytomedical Society, Freising, Germany: 'Involvement of *Phytophthora* species in oak decline and the influence of site factors on the disease'.

11/1999: 4th Westdeutsche Baumpflegetage (4th Western German Meeting on Arboriculture), Cologne, Germany: 'Role of *Phytophthora* species in the disease complex oak decline'.

09/1999: First International IUFRO Unit 7.02.09 Meeting on *Phytophthora*'s in Forest and Wildland Ecosystems, Oregon State University, Grants Pass, Oregon: 'Involvement of *Phytophthora* species in Central and Western European oak decline and the influence of site factors and nitrogen input on the disease'.

09/1998: 18th International IUFRO Meeting for Specialists in Air Pollution Effects on Forest Ecosystems, Heriot-Watt University, Edinburgh, UK: 'Involvement of *Phytophthora* species in Central European oak decline and the influence of site factors and nitrogen input on the disease'.

05/1998: 3rd annual meeting of the Working Party 'Experimental Ecology of Plants' of the Ecological Society, Bielefeld, Germany: 'Involvement of root pathogenic *Phytophthora* species in European oak decline'.

03/1998: Workshop of the IUFRO Working Party 'Disease / Environment Interactions in Forest Decline', Federal Office and Research Centre for Forests (BFW), Vienna, Austria: 'Isolation, identification, geographical distribution and pathogenicity of *Phytophthora* species from declining oak and beech stands in Europe'.

09/1995: Eichensterben in Deutschland: Situation, Ursachenforschung und Bewertung (Oak decline in Germany: situation, causes and evaluation). Symposium at the Forest Research Station of Lower-Saxony in Göttingen, Germany: 'Symptome und Nachweis eines *Phytophthora*-Befalls an Eichen (symptoms and detection of *Phytophthora* infections in oaks)'.

08/1995: International Colloquium on 'Bioindication of Forest Site Pollution: Development of Methodology and Training BIOFOSP', Slovenian Forestry Institute, Ljubljana, Slovenia: **'***Phytophthora* root rot in declining forest trees'.

Posters in conferences

03/2017: 8th International IUFRO Unit 7.02.09 Meeting on '*Phytophthora* in Forests and Natural Ecosystems'. 18th-25th March 2017, Sapa, Vietnam:

'Milenković, I., Keča, N., Karadžić, D., Pérez-Sierra, A., Jung, T. Occurrence and pathogenicity of *Phytophthora ×cambivora* on *Prunus laurocerasus* in Serbia'.

09/2012: 6th International IUFRO Unit 7.02.09 Meeting on '*Phytophthora* in Forests and Natural Ecosystems' in Cordoba, Spain:

'Milenkovic I., Keca N., Nowakowska J., Sikora K., Borys M., Oszako T. & Jung T.: *Phytophthora* species in Serbia',

'Ginetti B., Moricca S., Ragazzi A. & Jung T.: *Phytophthora acerina* sp. nov., a new species from the *P. citricola* complex causing aerial cankers on *Acer pseudoplatanus* in Italy',

'Bakonyi J., Nagy Z.A., Burgess T., Szigethy A., Nechwatal J., Koltay A., Woodward S., Belbahri L. & Jung T.: Characterisation of the two informally designated ITS Clade 6 taxa *Phytophthora* taxon Forestsoil and *P. sp.* hungarica',

'Doğmuş – Lehtijarvi T., Gülden Aday A., Lehtijarvi A. & Jung T.: Pathogenicity of *Phytophthora* species on *Liquidambar orientalis* Mill. and *Castanea sativa* seedlings',

'Lyubenova A., Kostov K., Tsvetkov I., Oszako T., Borys M., Sikora K., Jung T. & Slavov S.: Diversity of Phytophthora species in forest ecosystems in Bulgaria',

'Miranda J., Corcobado T., Jung T., Martin-Garcia J., Pèrez-Sierra A., Abad-Campos P. & Solla A.: Susceptibility of *Quercus ilex* to mixed infections by multiple *Phytophthora* species.',

'Solla A., Miranda J., Corcobado T., Martin-Garcia J., Cubera E., Pèrez A. & Jung T.: Effect of *Phytophthora quercina*, *P. gonapodyides* and *P. cinnamomi* on germination of *Quercus ilex* acorns and seedling establishment in infested soils',

'Olejarski I., Kubiak K., Nowakowska J., Jung T. and Oszako T.: The occurrence of *Phytophthora* species in European Ecological Network NATURA 2000 in Poland',

'Scanu B., Linaldeddu B., Jung T., Maddau L. & Franceschini A.: *Phytophthora* species occurring in declining oak ecosystems in Sardinia (Italy)'.

11/2011: COST FP 0801 meeting in Budapest, Hungary:

'Cech T. & Jung T.: Involvement of *Phytophthora* species in beech decline in Lower Austria'.

'Milenkovic I., Keca N. & Jung T.: Symptoms associated with *Phytophthora* species in forest ecosystems in Serbia'.

'Doğmuş – Lehtijarvi T., Gülden Aday A., Lehtijarvi A. & Jung T.: *Phytophthora* species from declining *Liquidambar orientalis* Mill. and *Castanea sativa* Mill. trees in south eastern part of Turkey'.

10/2011: Conference 'Floresta 2050 – Pensar o Futuro', Oeiras, Portugal:

'Horta M., Solla A., Pèrez-Sierra A., Cravador A. & Jung T.: A preliminary survey indicates a high diversity of *Phytophthora* species threatening forest nurseries and natural ecosystems in Portugal.'

03/2010: 5th International IUFRO Unit 7.02.09 Meeting on '*Phytophthora* in Forests and Natural Ecosystems' in Rotorua, New Zealand:

'Rea A., Jung T., Stukely M., Burgess T. & Hardy G.: Three new pathogenic *Phytophthora* species from natural ecosystems in the southwest of Western Australia',

'Edwards K., Dunstan W., Jung T. & Hardy G.: *Phytophthora* species associated with declining *Eucalyptus rudis* (Flooded Gum) in Western Australia',

'Corcobado T., Pérez-Sierra A., Haque M.M., Diez J.J., Jung T. & Solla A.: *Phytophthora* collar rot of alders in the Iberian Peninsula',

'Solla A., Pérez-Sierra A., Corcobado T., Haque M.M., Diez J.J. & Jung T.: First report of *Phytophthora alni* on *Alnus glutinosa* in Spain'.

08/2008: 9th International Congress of Plant Pathology, Turin, Italy:

'Jung T.: Involvement of *Phytophthora* root and bark infections in the widespread decline of European beech in Bavaria'.

'Scott, P.M., Jung, T., Shearer, B.L., Barber, P.A. & Hardy, G.E.St.J. (2008): Potential role of *Phytophthora* species in *Eucalyptus gomphocephala* (tuart) decline. In: Third International Workshop on *Phytophthora/Pythium* and Related Genera, Ninth International Congress of Plant Pathology, 23 - 24 August, Turin, Italy'.

09/2004: Third International IUFRO Unit 7.02.09 Meeting on *Phytophthora* in Forests and Natural Ecosystems, Freising, Germany:

'Jung, T. & Dobler, G.: Littleleaf Disease caused by *Phytophthora cinnamomi* on *Pinus occidentalis* and *Pinus caribaea* in the Dominican Republic'.

04/2005: 13th Augsburger Baumpflegetage (13th Augsburg Meeting on Arboriculture), Augsburg, Germany:

'Jung, T. & Blaschke, M.: Die *Phytophthora* – Erkrankung der Erlen in Bayern: Erste Empfehlungen zum Umgang mit der Erkrankung (*Phytophthora* disease of alders in Bavaria: preliminary recommendations on disease management)'.

10/2000: 52nd German Plant Protection Conference), 9th -12th Oct. 2000, Freising, Germany:

'Jung, T., Blaschke, M., Schlenzig, A., Oßwald, W.: Verbreitung des neuartigen Erlensterbens durch *Phytophthora* spp. in Bayern (distribution of *Phytophthora* related alder mortality in Bavaria).'

09/1999: Workshop of the COST E6 / EUROSILVA Working Group III 'Biotic and abiotic interactions', Gozd Matuljek, Slovenia:

'Blaschke, H., Jung, T., Heyne, C., Oßwald, W. & Matyssek, R.: The relationships between the health status of oaks and the presence of *Phytophthora* spp. in the soil: a field assessment at sites in Bavaria.'

06/1997: Primo Congresso SISEF 'La Ricerca Italiana per le foreste e la selvicoltura', Agripolis, Legnaro (PD), Italy:

'Jung, T. & Paoletti, E.: Cambiamento globale e deperimento del leccio: il caso di *Phytophthora quercina* (Global change and the decay of holm oak: the case of *Phytophthora quercina*).'

09/1997: Workshop of COST E6 / EUROSILVA Working Group III 'Biotic and abiotic interactions', 1997, Oulu, Finland:

'Oßwald, W.F., Heiser ,I., Albrecht, A., Giefing, M., Baker, R., Jung, T., Matyssek, R. & Elstner, E.F.: Investigations on the action of fungal toxins on plants (A mechanism also relevant for decling oak trees?).'

Non-published oral presentations on Phytophthora as invited speaker

2017: Centre of Marine Sciences CCMAR, Faro, Portugal.

Gifu University, Japan.

Department of Forest Sciences, ETH Zurich, Switzerland.

2016: Department of Forest Sciences, ETH Zurich, Switzerland.

2015: University of Catania, Italy.

Department of Forest Sciences, ETH Zurich, Switzerland.

2014: University of Concepcion, Chile.

Department of Forest Sciences, ETH Zurich, Switzerland.

Federal Research and Training Centre for Forests, Natural Hazards and Landscape (BFW), Vienna, Austria.

Hungarian Academy of Sciences, Budapest, Hungary.

Mendel University, Brno, Czech Republic..

2013: Department of Forest Sciences, ETH Zurich, Switzerland.

Taiwanese Forestry Research Institute, Taipei, Taiwan.

University of Sassari, Sardinia, Italy.

Slovak University of Agriculture, Nitra, Republic of Slovakia.

University of Valladolid, Palencia, Spain.

2012: Department of Forest Sciences, ETH Zurich, Switzerland.

University of Sassari, Sardinia, Italy.

University of Florence, Italy.

University of Tuscia, Viterbo, Italy.

Finnish Forest Research Institute (Metla), Vantaa Unit, Jokiniemi, Finland.

Finnish Forest Research Institute (Metla), Suonenjoki Unit, Suonenjoki, Finland.

2011: Department of Plant Protection, University of Sassari, Italy.

Department of Forest Sciences, ETH Zurich, Switzerland.

University of Algarve, Faro, Portugal.

Zoological Garden Nuremberg, Germany.

2010: Department of Forest Sciences, ETH Zurich, Switzerland.

Murdoch University, Perth, Western Australia.

University of Algarve, Faro, Portugal.

Southern Swedish Forest Research Centre, Swedish University of Agricultural Sciences, Alnarp, Sweden.

2009: Department of Forest Sciences, ETH Zurich, Switzerland.

University of Extremadura, Plasencia, Spain.

Akademie Landschaftsbau Weihenstephan GmbH (Academy for Landscaping Weihenstephan), Freising, Germany.

2008: Christian-Albrechts-Universität, Kiel.

Forestry and Agricultural Biotechnology Institute (FABI), University of Pretoria, South Africa.

Department of Forest Sciences, ETH Zurich, Switzerland.

Annual meeting of the Bund Deutscher Baumschulen (Association of German Nurseries) BdB in Bonn, Germany.

2007: Murdoch University, Perth, Western Australia.

Australasian Plant Pathology Society, Perth, Western Australia.

Department of Forest Sciences, ETH Zurich, Switzerland.

2006: Bavarian State Institute for Agriculture, Freising, Germany.

2005: University of Konstanz, Germany.

Annual Meeting of the Schutzgemeinschaft Deutscher Wald SDW, Ratzeburg, Germany.

2004: Federal Office and Research Centre for Forests, Vienna, Austria.

University of Tuscia, Viterbo, Italy.

2003: First Göttinger Colloquium for Forest Protection, Forest Research Station of Lower Saxony, Göttingen, Germany.

Forest Research Station of Baden-Württemberg, Freiburg, Germany.

2002: Department of Plant Ecology, Lund University, Sweden.

Institute for Forest Botany and Forest Entomology, Technical University Dresden, Germany.

Forest Research Agency, Farnham, UK.

2001: Institute of Forest Entomology, Forest Pathology and Forest Protection, University for Soil Science (BOKU), Vienna, Austria.

2000: Department of Plant Ecology, Lund University, Sweden.

Annual meeting of the Erzeugergemeinschaft Forstbaumschulen Süddeutschland (Association of Forest Nurseries Southern Germany) EZG in Ulm, Germany.

1999: Forest Research Agency, Farnham, UK.

Plant Protection Service, Wageningen, Netherlands.

1998: Scottish Crop Research Institute, Dundee, UK.

1997: Scottish Crop Research Institute, Dundee, UK.

1996: INRA Nancy, Champenoux, France.

Institute of Forest Protection and Dendrology, ETH Zürich, Switzerland.

1995: Institute of Specific Botany and Mycology, University of Tübingen, Germany.

Participation in Conferences and other Scientific Meetings

Scientific meetings with published papers (see list of publications)

03/2017: Eighth International IUFRO Unit 7.02.09 Meeting on '*Phytophthora* in Forests and Natural Ecosystems' in Sapa, Vietnam.

11/2014: Keynote speaker at the 7th International IUFRO Unit 7.02.09 Meeting on '*Phytophthora* in Forests and Natural Ecosystems' in Esquel, Argentina.

10/2014: Keynote speaker at the 17th congress of the Spanish Society of Phytopathology in Lleida, Spain.

09/2012: Keynote speaker at the 6th International IUFRO Unit 7.02.09 Meeting on '*Phytophthora* in Forests and Natural Ecosystems' in Cordoba, Spain.

03/2010: Keynote speaker at the 5th International IUFRO Unit 7.02.09 Meeting on '*Phytophthora* in Forests and Natural Ecosystems' in Rotorua, New Zealand.

08/2007: Keynote speaker at the 4th International IUFRO Unit 7.02.09 Meeting on '*Phytophthora* in Forests and Natural Ecosystems' in Monterey, California.

07/2006: First International IUFRO Unit 7.03.12 Meeting on Alien Invasive Species and International Trade, Jedlnia, Poland.

11/2005: International Conference "Possible limitation of dieback phenomena in broadleaved stands through silvicultural and protective measures", Puszczykowo, Poland.

04/2005: 13th Augsburger Baumpflegetage (13th Augsburg Meeting on Arboriculture), Augsburg, Germany.

09/2004: Third International IUFRO Unit 7.02.09 Meeting on *Phytophthora* in Forests and Natural Ecosystems, Freising, Germany.

05/2003: Conference „black alder - tree of the year 2003", Rott / Inn, Germany (published in Beiträge zur Schwarzerle, *LWF-Bericht* **42)**.

05/2003: Conference „black alder tree of the year 2003", Burg im Spreewald, Germany (published in *Forst und Holz* **58)**.

10/2002: Forstwissenschaftliche Tagung (Conference of Forest Science) 2002, Göttingen, Germany.

10/2001: Second International IUFRO Unit 7.02.09 Meeting on *Phytophthora* in Forests and Natural Ecosystems, Murdoch University, Albany, West-Australien.

10/2000: 52nd German Plant Protection Conference, German Phytomedical Society, Freising, Germany.

10/2000: Forstwissenschaftliche Tagung (Conference of Forest Science) 2000, Freiburg, Germany.

11/1999: 4th Westdeutsche Baumpflegetage, Cologne, Germany.

09/1999: First International IUFRO Unit 7.02.09 Meeting on *Phytophthora*'s in Forest and Wildland Ecosystems, Oregon State University, Grants Pass, Oregon.

09/1998: 18th International IUFRO Meeting for Specialists in Air Pollution Effects on Forest Ecosystems, Heriot-Watt University, Edinburgh, UK.

05/1998: 3rd annual meeting of the working party 'experimental ecology of plants' of the Ecological Society, Bielefeld, Germany.

03/1998: Workshop of the IUFRO Working Party 'Disease / Environment Interactions in Forest Decline', Federal Forest Research Centre, Vienna, Austria.

09/1995: Eichensterben in Deutschland: Situation, Ursachenforschung und Bewertung (Oak decline in Germany. Situation, causes and evaluation.) Symposium at the Forest Research Station of Lower-Saxony in Göttingen, Germany (published in *Mitteilungen der Biologischen Bundesanstalt für Land- und Forstwirtschaft*, Berlin-Dahlem, Volume **318)**.

08/1995: International Colloquium on 'Bioindication of Forest Site Pollution: Development of Methodology and Training BIOFOSP', Slovenian Forestry Institute, Ljubljana, Slovenia.

Scientific meetings with summarizing reports

11/2012: 4th full meeting of COST Action FP 0801 "Established and Emerging *Phytophthora*: Increasing Threats to Woodland and Forest Ecosystems in Europe", Brussels, Belgium.

12/2011: 2nd full meeting of COST Action FP 1002 "Pathway Evaluation and Pest Risk Management In Transport (PERMIT)", Warsaw, Poland.

11/2011: 3rd full meeting of COST Action FP 0801 "Established and Emerging *Phytophthora*: Increasing Threats to Woodland and Forest Ecosystems in Europe", Budapest, Hungary.

05/2011: 1st full meeting of COST Action FP 1002 "Pathway Evaluation and Pest Risk Management In Transport (PERMIT)", Belgrade, Serbia.

06/2010: 2nd full meeting of COST Action FP 0801 "Established and Emerging *Phytophthora*: Increasing Threats to Woodland and Forest Ecosystems in Europe", Viterbo, Italy.

09/2009: 2nd Workshop of Working Group 3 'Diagnostics of *Phytophthora* species' and Working Group 4 'Management and Control of *Phytophthora* Diseases', of COST Action FP 0801 "Established and Emerging *Phytophthora*: Increasing Threats to Woodland and Forest Ecosystems in Europe", Faro, Portugal.

08/2008: 3rd International *Phytophthora*, *Pythium* and related genera Workshop, Turin, Italy.

08/2008: 9th International Congress of Plant Pathology, Turin, Italy.

02/2007: First meeting of the 'European network on emerging diseases and invasive species threats to European Forest Ecosystems (FORTHREATS)', Uppsala, Sweden.

11/2000: Meeting of Task Leaders of the EU Concerted Action "*Phytophthora* disease of alder", Gembloux, Belgium.

06/2000: Meeting of Task Leaders of the EU Concerted Action "*Phytophthora* disease of alder", Stourport on Severn, UK.

1998-2001: Four workshops of the EU project „Long term dynamics of oak ecosystems: Assessment of the role of root pathogens and environmental constraints as interacting decline inducing factors", (Project PATHOAK, „FAIRCT973926"), in Freising (Germany), Nancy (France), Viterbo (Italy) and Bordeaux (France).

Scientific meetings with non-published oral presentations

11/2017: Joint annual meeting of Horizon 2020 projects POnTE: Pest organisms threatening Europe, and XFactors: *Xylella fastidiosa* active containment through a multidisciplinary - oriented research strategy, University of the Balearic Islands, Palma de Mallorca, Spain.

12/2016: 2nd meeting of Horizon 2020 project POnTE: Pest organisms threatening Europe, Agricultural Sciences Institute, Spanish National Research Council Madrid, Spain.

12/2016: 3rd meeting of Biodiversa project RESIPATH: Responses of European Forests and Society to Invasive Pathogens, INRA, Bordeaux, France.

02/2015: 2nd meeting of Biodiversa project RESIPATH: Responses of European Forests and Society to Invasive Pathogens, University of Lleida, Spain.

03/2014: Invited speaker at the 24. Baum- und Bodenseminar in Jena ('24th Tree and Soil seminar Jena'), Jena, Germany.

01/2014: Inaugural meeting of Biodiversa project RESIPATH: Responses of European Forests and Society to Invasive Pathogens, Swedish Agricultural University (SLU), Uppsala, Sweden.

03/2012: VI Jornadas de Jóvenes Investigadores en Conservación y Uso Sostenible de Sistemas Forestales, Valsain, Spain.

02/2012: 1st meeting of SNS-EFINORD network '*Phytophthora* -diseases of deciduous forest trees in Nordic and North-European regions', Malmö, Sweden.

09/2011: Invited speaker at the 2nd 'Reunión Científica de Sanidad Forestal Sociedad Española de Ciencias Forestales', Plasencia, Spain.

03/2010: Keyspeaker at the 5th International IUFRO Unit 7.02.09 Meeting on '*Phytophthora* in Forests and Natural Ecosystems' in Rotorua, New Zealand.

Scientific meetings without oral presentations

11/2015: 1st full meeting of Horizon 2020 project POnTE "Pest Organisms Threatening Europe", Rome, Italy.

10/2015: 2nd full meeting of COST Action FP 1401 "A global network of nurseries as early warning system against alien tree pests (Global Warning)", Freising, Germany.

03/2015: 1st full meeting of COST Action FP 1401 "A global network of nurseries as early warning system against alien tree pests (Global Warning)", Trabzon, Turkey.

01/2014: 1st meeting of Biodiversa project RESIPATH: Responses of European Forests and Society to Invasive Pathogens, Uppsala, Sweden.

10/2013: 4th full meeting of COST Action FP 1002 "Pathway Evaluation and Pest Risk Management In Transport (PERMIT)", Treviso, Italy.

09/2012: 3rd full meeting of COST Action FP 1002 "Pathway Evaluation and Pest Risk Management In Transport (PERMIT)", Antalya, Turkey.

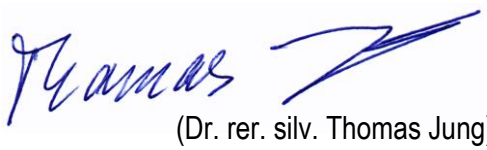
10/2011: Conference 'Floresta 2050 – Pensar o Futuro', Oeiras, Portugal.

11/2008: 4th meeting of the 'European network on emerging diseases and invasive species threats to European Forest Ecosystems (FORTHREATS)', Florence, Italy.

05/2008: 3rd meeting of the 'European network on emerging diseases and invasive species threats to European Forest Ecosystems (FORTHREATS)', Vilnius and Palanga, Lithuania.

09/2007: 2nd meeting of the 'European network on emerging diseases and invasive species threats to European Forest Ecosystems (FORTHREATS)', Brno, Czech Republic.

Brno, 14th May 2020



(Dr. rer. silv. Thomas Jung)