

Dr Jordi Luque

Ctra. de Cabrils km 2, 08348 Cabrils, Barcelona, Spain

Phone: +34 937 507 511 xt 1204

Cell: +34 661 705 569

jordi.luque@irta.cat

Current Position:

Researcher, INSTITUTE FOR FOOD AND AGRICULTURAL RESEARCH AND TECHNOLOGY (IRTA), Centre de Cabrils, Dep of Plant Pathology

Education:

Ph.D., Biology, Universitat Autònoma de Barcelona (Spain), 1997

Concentrations: Mycology

Dissertation: Biology and etiology of pathogenic fungi of cork oak (*Quercus suber*) in Catalonia, NE Spain.

Master in Mycology, Universitat Autònoma de Barcelona, 1989

Thesis: The "escaldat" disease of cork oak

M.Sc., Biology, Universitat Autònoma de Barcelona (Spain), 1986

Concentrations: Botany

Experience:

Researcher, 1999 to date

IRTA

Research Assistant, 1992 - 1999

IRTA

Technician, 1987-1989

Universitat Autònoma de Barcelona (Spain), Dep. Botany

Research Skills:

Fungal Taxonomy

Molecular techniques

Research Publications, Impact factor (last 5 years, 2010-2014): 6

Luque, J.; Elena, G.; García-Figueres, F.; Reyes, J.; Barrios, G.; Legorburu, F.J. (2014). Natural infections of pruning wounds by fungal trunk pathogens in mature grapevines in Catalonia (Northeast Spain). *Australian Journal of Grape and Wine Research* 20, 134-143.

Luque, J.; Garcia-Figueres, F.; Legorburu, F.J.; Muruamendaraz, A.; Armengol, J.; Trouillas, F.P. (2012). Species of Diatrypaceae associated with grapevine trunk diseases in Eastern Spain. *Phytopathologia Mediterranea* 51, 528-540.

Andolfi, A.; Mugnai, L.; Luque, J.; Surico, G.; Cimmino, A.; Evidente, A. (2011). Phytotoxins produced by fungi associated with grapevine trunk diseases. *Toxins* 3, 1569-1605.

- Martos, S.; Torres, E.; El Bakali, M.A.; Raposo, R.; Gramaje, D.; Armengol, J.; Luque, J. (2011). Co-operational PCR coupled with dot blot hybridization for the detection of *Phaeomoniella chlamydospora* on infected grapevine wood. *Journal of Phytopathology* 159, 247-254.
- Sosnowski, M.R.; Luque, J.; Loschiavo, A.P.; Martos, S.; Garcia-Figueres, F.; Wicks, T.J.; Scott, E.S. (2011). Studies on the effect of water and temperature stress on grapevines inoculated with *Eutypa lata*. *Phytopathologia Mediterranea* 50 (suppl.), S127-S138.
- Evidente, A.; Punzo, B.; Andolfi, A.; Cimmino, A.; Melck, D.; Luque, J. (2010). Lipophilic phytotoxins produced by *Neofusicoccum parvum*, a grapevine canker agent. *Phytopathologia Mediterranea* 49, 74-79.

Other Publications, no Impact factor (last 5 years, 2010-2014): 5

Presentations (last 5 years, 2010-2014): 17

National research projects

- 2014-2017 Fruit tree diseases: biology, epidemiology, new control methods (RTA2013-00004-C03). Funding: INIA, ERDF
- 2010-2013 Grapevine Trunk Diseases: biology, epidemiology, new control methods (RTA2010-00009-C03). Funding: INIA, ERDF
- 2007-2010 Grapevine Trunk Diseases: biology, epidemiology (RTA2007-00023-C04). Funding: INIA, ERDF
- 2004-2007 Grapevine Trunk Diseases: biology (RTA03-058-C2). Funding: INIA
- 1999-2001 The oak decline ("seca") in Spain (1FD97-0911-C03). Funding: CICyT, ERDF

International research projects

- 2012-2016 Developing a pool of novel and eco-efficient applications of zeolite for the agriculture sector (ECO-ZEO). Funding: European Union (FP7.ENV.2011.3.1.9-1. Project no. 282865)

R+D contracts with private companies (last 5 years, 2010-2014): 10

Professional memberships:

- American Phytopathological Society (APS), USA
- Mediterranean Phytopathological Union (MPU), Italy
- Sociedad Española de Fitopatología (SEF), Spain

Research interest

I am interested in the biology and control of fungal diseases of Mediterranean woody species, specially in forest and horticultural species (mainly *Quercus* and *Vitis*). Since 2003 my research interest has focused on the main grapevine trunk diseases: esca, *Eutypa* dieback and *Botryosphaeria* dieback. These destructive diseases, which are a serious threat to the world grape and wine industry, have increased their incidence in Spain in the last decades. Since 2012, diseases of *Prunus* species such almond and peach trees have also been included in my research line. Main topics of my current research include:

- Biology: pathogen identification and detection, characterization of pathogenicity and virulence.
- Epidemiology: pathogen propagation, infection and colonization processes.
- Control: development of new control methods (chemical, biological) against diseases.