# **RESUME**

# **TANIA ZAVIEZO**

# Departamento de Fruticultura y Enología – Facultad de Agronomía e Ingeniería Forestal (Department of Fruit Crops and Enology - College of Agriculture and Forest Sciences)

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**EDUCATION**

**B.S. in Agricultural Sciences**, College of Agriculture and Forest Sciences, P. Universidad Católica, Chile, 1990.

**Ph.D. in Entomology**, University of California at Berkeley, Department of Environmental Science, Policy and Management, Insect Biology Division, 1997.

**PRESENT OCUPATION and RESPONSABILITIES**

**Full Professor. College of Agriculture and Forest Sciences, P. Universidad Católica de Chile.**

My current responsibilities include teaching, research, and extension in the area of Fruit Crops Pest Management and Insect Ecology. I teach at undergraduate and graduate level, including *Fruit Crops Pest Management*, *Integrated Pest Management*, *Insect Monitoring and Identification* and *Graduate Seminar (Scientific writing and communication*). My research focus in biological and integrated pest control, insect natural enemy biology and ecology, and landscape ecology.

**PROFESSIONAL RECORD IN HIGHER EDUCATION**

Position Institution, Co., or Agency Dates

 Instructor P. Universidad Católica de Chile 1991-1997

 Graduate Research Assistant University of California, Berkeley 1995-1997

Assistant Professor P. Universidad Católica de Chile 1997-2002

Associate Professor P. Universidad Católica de Chile 2002-2011

 Departamental Chair P. Universidad Católica de Chile 2004-2010

Full Professor P. Universidad Católica de Chile 2011-present

**HONORS, AND AWARDS**

Acknowledgment in Research Excellence (PREI), P. Universidad Católica de Chile, yearly since 1999

New Research Ideas Award, College of Agriculture and Forest Sciences, P. Universidad Católica de Chile, 1999

Julius H. Freitag Memorial Award, UC Berkeley, May 1996.

Johannes Joos Memorial Award, UC Berkeley, May 1996.

Presidential Fellowship for Graduate Studies Abroad, Chilean Government, 1992-1995.

**STUDENT ADVISING**

Currently advisor of 5 BS, 2 MS and 2 Ph.D students. Advised 9 MS students and 37 BS students (Ingeniero Agrónomo).

Served on over 15 graduate committees

**INVOLMENT IN RESEARH PROJECTS**

2013 – 2017. Genetic and demographic effects in the establishment success of introduced biological control agents: *Mastrus ridens*, a parasitoid of *Cydia pomonella* as a case study. FONDECYT-Chile. Principal Investigator.

2012 – 2016. “COLBICS” Intersectoral Collaborations to Boost Research and Development Dynamics in Biological Control of Agricultural pests. European Commission (FP7-PEOPLE-2012-IAPP). Co- investigator.

2012 – 2015. Pheromone development for the management of mealybugs (Pseudococcidae) in fruit crops. FONDEF-Chile. Principal Investigator.

2011-2012. The importance of competition in an agroecosystem of two pests and two crops: role of direct and indirect interactions. DIPUC (Pontificia Universidad Católica de Chile). Principal Investigator.

2010 – 2012. Determining lepidopteran pests associated with walnuts, and phenological studies. SAG (Chilean Phytosanitary Agency) – AGCI (International Development Agency-Chile). Principal Investigator.

2010-2014. Integrating new practices in programs of Biological Control against Agricultural pests. European Commission (FP7-PEOPLE-2010-IRSES). Co- investigator.

2010-2014. Influence of landscape diversification on the co-existence of native and exotic coccinellids and its effect on biological control of aphids associated with alfalfa fields.FONDECYT-Chile. Co- investigator

2008-2011. Development of a monitoring technique for mealybugs in grapes using pheromones. FONDECYT-Chile. Principal Investigator.

2007-2010. Aphid predators in alfalfa: effects of edge vegetation and other predator’s presence on their dispersal and aphid control. FONDECYT-Chile. Co- investigator.

2007 - 2008. Incorporating pheromones in mealybug (Hemiptera: Pseudococcidae) Integrated Pest Management in grapes. DIPUC (Pontificia Universidad Católica de Chile). Principal Investigator.

2006-2010. Biological control strategies for *Cydia pomonella* in the VII y XI regions of Chile. National Phytosanitary Fund (FONDOSAG-Chile). Co- investigator.

2003 – 2008. Mealybug monitoring in grapes. Principal Investigator.

2001- 2004. Effects of fragmentation, habitat loss and differential isolation on insect population and community dynamics in alfalfa: an experimental approach. FONDECYT (National Fund for the Development of Science and Technology), Chile. Co- investigator.

1999 - 2002. Organic production of wine grapes. FONTEC – VIÑA CARMEN. Principal Investigator.

1997 - 2000. Disease and insect forecasting models and its use through a network of modular weather sensors. FONDEF (Fund for the Promotion of Scientific and Technological Development), Chile. Co- investigator.

RECENT PUBLICATIONS (2010-2013)

Khidr, S.K., Hardy, I.C.W., **Zaviezo, T**., & S. Mayes. 2013. Development of microsatellite markers and detection of genetic variation between *Goniozus* wasp populations. Journal of Insect Science (in press).

Grez, A., T.A. Rand, **T. Zaviezo** & F. Castillo. 2013. Land-use intensification differentially benefits exotic over native predators in agricultural landscape mosaics. Diversity and Distributions 19 (7): 749 – 759. DOI: 10.1111/ddi.12027.

Jara, V., F.J. Meza, **T. Zaviezo** & R. Chorbadjian. 2012. Climate change impacts on invasive potential of pink hibiscus mealybug, *Maconellicoccus hirsutus* (Green), in Chile. Climatic Change 117 (1-2): 305 - 317. DOI 10.1007/s10584-012-0542-1.

Correa, M., J-F. Germain, T. Malausa & **T. Zaviezo**. 2012. Molecular and morphological characterization of mealybugs (Hemiptera: Pseudococcidae) from Chilean vineyards. Bulletin of Entomological Research 102: 524-530.

Bordeu, E., D. O. Troncoso & **T. Zaviezo**. 2012. Impact of mealybug (*Pseudococcus* spp.) infested bunches on wine quality in Carmenere and Chardonnay grapes. International Journal of Food Science and Technology 47: 232–239.

Daane, K.M., R. P. P. Almeida, V.A. Bell, J.T. S. Walker, M. Botton, M. Fallahzadeh, M. Mani, J. L. Miano, R. Sforza, V. M. Walton, T. Zaviezo. 2012. Biology and Management of Mealybugs in Vineyards. En: N. J. Bostanian, C. Vincent, R. Isaacs (eds,), Arthropod Management in Vineyards: Pests, Approaches, and Future Directions. Springer. New York. pp 271-307.

Daane, K.M., C.M. Middleton, R. Sforza, M.L. Cooper, V. M. Walton, D. B. Walsh, **T. Zaviezo**, & R. P. P. Almeida. 2011. Development of a multiplex PCR for identification of vineyard mealybugs. Environmental Entomology 40:1595-1603.

Correa, M., C. Aguirre, J.F. Germain, P. Hinrichsen, **T. Zaviezo**, T. Malausa and E. Prado. 2011. A new species of *Pseudococcus* (Hemiptera: Pseudococcidae) belonging to the “*Pseudococcus maritimus*” complex from Chile: morphological and molecular description. Zootaxa 2926: 46–54.

Rosenheim, J.A., S. Parsa, A.A. Forbes, W.A. Krimmel, Y.H. Law, M. Segoli, M. Segoli, F.J. Sivakoff, **T. Zaviezo**, and K. Gross. 2011. Ecoinformatics for integrated pest management: expanding the applied insect ecologist’s tool-kit. Journal of Economic Entomology 104(2): 331-342.

Unelius C.R., A.M. El-Sayed, A. Twidle, B. Bunn, **T. Zaviezo**, M. F. Flores, V. Bell and J. Bergmann. 2011. The absolute configuration of the sex pheromone of the Citrophilous Mealybug, *Pseudococcus calceolariae*. Journal of Chemical Ecology 37:166-172.

Grez, A.A., **T. Zaviezo** & A. Mancilla. 2011. Effect of prey density on the intra-guild interactions among foliar and ground-foraging predators of aphids associated with alfalfa crops in Chile: a laboratory assessment. Entomologia Experimentalis et Applicata 139: 1-7.

Grez, A.A., **T. Zaviezo**, G. González y S. Rothmann. 2010. *Harmonia axyridis* in Chile: a new threat. Ciencia e Investigación Agraria 37: 145-149.

**Zaviezo, T.**, E. Cadena, M. F. Flores & J. Bergmann. 2010. Influence of different substrates on development and reproduction in laboratory rearing of *Pseudococcus calceolariae* (Maskell) (Hemiptera: Pseudococcidae). Ciencia e Investigación Agraria (In Press)

El-Sayed, A.M., C.R. Unelius, A. Twidle, V. Mitchell, L.A. Manning, L. Cole, D. M. Suckling, M. F. Flores, **T. Zaviezo**, & J. Bergmann. 2010. Chrysanthemyl 2-acetoxy-3-methylbutanoate: The sex pheromone of the citrophilous mealybug, *Pseudococcus calceolariae*. Tetrahedron Letters 51: 1075–1078.