

## Biographical Sketch

### Personal Information:

Véronique DECROOCQ, maiden name : Ferrant

Senior scientist at the Institute for Agronomical Research (INRA Institut National de la Recherche Agronomique) in Plant Breeding and Virology

UMR BFP “Biologie du Fruit et Pathologie” INRA-Université de Bordeaux, Equipe de Virologie, 71 Avenue Edouard Bourleaux, CS20032

F-33882 Villenave d’Ornon

Phone: (+33) 55712-2383

Fax: (+33) 55712-2384

e-mail: decroocq@bordeaux.inra.fr

### Education:

Institut Supérieur d'Agriculture (Lille, France), 1984-1988, Ingenieur diploma in Agriculture.

Research Experience: Honors thesis in Pr. Chris Bornman’s laboratory (Hilleshög, Lansdkrona, Sweden / University of Lund) on the physiological and histological consequences of vitrification in *Beta vulgaris*.

Leuven University (Louvain la Neuve, Belgique) 1989, Master degree (DEA) in Molecular genetics.

Honors thesis in Pr Bouharmont’s laboratory on the female gametophyte and gynogenetic development in *Beta vulgaris*. "Graduated with the highest honors Paris XI Orsay University (France), Dec. 1990-1994, Ph.D. thesis with European label, prepared in two European universities, Paris XI and Wageningen (The Netherlands).

Ph.D. thesis research in Pr Martin Kreis’ (Paris) and Dr Sacco de Vries’ (Wageningen) laboratories on the molecular mechanism of gametogenesis in *Petunia hybrida*. Graduated with the highest honors.

### Positions:

1. Predoctoral fellow, Faculté d’Agronomie, Leuven, Belgique. Worked with Dr M. Boutry, Laboratory of physiological biochemistry, 1990.
2. Postdoctoral Fellow, CSIRO, Canberra, Australia. Worked with Dr Liz Dennis and Jim Peacock, Department of Plant Industry. June 1995- April 1997.
3. Junior Scientist position at INRA, Department of Plant Breeding, U.R.E.F.V, Villenave d’Ornon, France. May 1997 – March 2002.
4. Senior Scientist position at INRA, Department of Plant Pathology, UMR GDPP, Villenave d’Ornon, France. March 2002 - current.
5. OECD Sabbatical Fellowship (visiting scientist), Clemson University, Department of Biochemistry and Genetics, South Carolina (USA). May 2007 – October 2007.

### Current Professional activity:

Program leader at INRA on the topic “Genetics of the interactions of *Plum Pox Virus* with its host plants, *Prunus* spp. and *Arabidopsis thaliana*”. Co-ordinator of a national network at INRA on sharka disease, leader of two regional, one national and three bilateral (France-Spain, France-Poland, France-Czech Republic) projects on “Resistance to sharka disease in stone fruit species”, Coordinator of two European collaborative research projects (acronym “SharCo” for Sharka Containment 2008-2012 and “MARS” for Marker Assisted Resistance to Sharka, 2014-2016) and one European IRSES Marie Curie network (“STONE”

for Genetic Diversity of Stone Fruit trees (Apricot, Peach and Cherry) in Europe, Caucasus and Central Asia). Coordinator of trans-national collaborative research project (Plant-KBBE) between France, Germany and Spain and called “COBRA” for A COmbination of systems Biology and experimental high-throughput approaches to engineer durable Resistance against plant viruses in crops (2014-2017).

### **Synergistic Activities:**

1. Member of the Advisory board of the European Centre d'Excellence ‘PomoCentre’ (Skierniewice, Poland) and member since 2008 of the experts’ group (GREX) on stone fruit at the Agricultural division of the European Commission (Brussels).
2. Associate editor of the journal *Tree Genetics and Genome*
3. Serve on Ph.D. committees of students outside of Bordeaux University and trained 4 PhD students since 2006.
4. Host researchers and postdoctoral fellows from other countries for cellular and genetic studies of PPV and virus infection, especially from third countries (Chile, China, Turkey, Azerbaijan).

### **Refereed Publications in the last four years:**

- Pilařová P., Marandel G., Decroocq V., Salava J. Krška B., A. G. Abbott (2010) Quantitative trait analysis of resistance to plum pox virus in the apricot F1 progeny “Harlayne” × “Vestar”. *Tree Genetics & Genomes*, 6:467–475.
- Arunyawat, U.; Capdeville, G.; Decroocq, V.; Mariette, S. (2012) Linkage disequilibrium in French wild cherry germplasm and worldwide sweet cherry germplasm. *Tree Genetics & Genomes*. 2012, 8, 737-755.
- Pagny G., Paulstephenraj P.S., Poque S. \*, Sicard O., Cosson P., Eyquard J-P, Caballero M., Chague A., Gourdon G., Negrel L., Candresse T., Mariette S., Decroocq V. 2012. Family based linkage and association mapping reveals novel genes affecting Plum Pox Virus infection in *Arabidopsis thaliana*. *The New Phytologist*, 196, 873–886.
- Verde, I., A. G. Abbott, S. Scalabrin, S. Jung, S. Q. Shu, F. Marroni, T. Zhebentyayeva, M. T. Dettori, J. Grimwood, F. Cattonaro, A. Zuccolo, L. Rossini, J. Jenkins, E. Vendramin, L. A. Meisel, V. Decroocq, B. Sosinski, S. Prochnik, T. Mitros, A. Policriti, G. Cipriani, L. Dondini, S. Ficklin, D. M. Goodstein, P. F. Xuan, C. Del Fabbro, V. Aramini, D. Copetti, S. Gonzalez, D. S. Horner, R. Falchi, S. Lucas, E. Mica, J. Maldonado, B. Lazzari, D. Bielenberg, R. Pirona, M. Miculan, A. Barakat, R. Testolin, A. Stella, S. Tartarini, P. Tonutti, P. Arus, A. Orellana, C. Wells, D. Main, G. Vizzotto, H. Silva, F. Salamini, J. Schmutz, M. Morgante, D. S. Rokhsar and I. Int Peach Genome (2013). The high-quality draft genome of peach (*Prunus persica*) identifies unique patterns of genetic diversity, domestication and genome evolution. *Nature Genetics* 45(5): 487-U447.
- Cosson P., Decroocq V. and Revers F. (2014) Development and characterization of 96 microsatellite markers suitable for QTL mapping and accession control in an *Arabidopsis* core collection. *Plant Methods* 10 (1) 2:1-6.
- Montes C., Castro A., Barba P., Rubio J., Sánchez E., Carvajal D., Aguirre C., Tapia E., Dell’Orto D., Decroocq V. and Prieto H. (2014) Differential RNAi responses of *Nicotiana benthamiana* individuals transformed with a hairpin-inducing construct during Plum pox virus challenge. *Virus Genes*, DOI 10.1007/s11262.
- Ouibrahim, L., Mazier, M., Estevan, J., Pagny, G., Decroocq, V., Desbiez, C., Moretti, A., Gallois, J.L. & Caranta, C. (2014). Cloning of the *Arabidopsis rwm1* gene for resistance to Watermelon mosaic virus points to a new function for natural virus resistance genes. *The Plant Journal*, 79, 5: 705-716.
- Decroocq, S, Chague, A, Lambert, P, Roch, G, Audergon, JM, Geuna, F, Chiozzotto, R, Bassi, D, Dondini, L, Tartarini, S, Salava, J, Krska, B, Palmisano, F, Karayiannis, I, Decroocq, V (2014) Selecting with markers linked to the PPVres major QTL is not sufficient, to predict resistance to Plum Pox Virus (PPV) in apricot. *Tree Genetics & Genomes*, 10 (5):1161-1170.

- Rimbaud L., Dallot S., Gottwald T., Decroocq V., Jacquot E., Soubeyrand S., Thébaud G. (2015) Sharka Epidemiology and Worldwide Management Strategies: Learning Lessons to Optimize Disease Control in Perennial Plants. *Ann. Rev; Phytopath.* 53:357–78.
- Poque S., G. Pagny, L. Ouibrahim, A. Chague, J-P Eyquard, T. Candresse, C. Caranta, S. Mariette, V. Decroocq (2015) Allelic variation at the *rpv1* locus is controlling partial restriction of Plum pox virus early infection in *Arabidopsis thaliana*. *BMC Plant Biology* 15 (159):1-14. DOI 10.1186/s12870-015-0559-5.
- Mariette S., Wong Jun Tai F., Roch G., Barre A., Chague A., Decroocq S., Groppi A., Laizet Y., Lambert P., Tricon D., Nikolski M., Audergon J-M, Abbott AG, Decroocq V (2015) Genome wide association links specific genes to resistance to Plum Pox Virus in apricot (*Prunus armeniaca*). *The New Phytologist*. DOI: 10.1111/nph.13627.