

short CV

QUILOT-TURION, Bénédicte

Researcher, Unit Deputy Director

GAFL, INRAE

Avignon, France

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Education

- 2013 **HDR, Accreditation** to supervise research in life sciences, Avignon University
- 2003 **PhD** in Ecophysiology and genetics modelling. AgroParisTech, Paris
- 2000 National Institute of Agronomy Paris-Grignon (Paris, France), Engineer diploma in Agronomy, Master degree

Professional experiences

- 2019 **Deputy Director** of GAFL INRAE Research Unit, Genetics and Breeding of fruit and vegetables
- 2017 **Research Director**
Student, doctoral and post-doctoral supervising and teaching
Referee for scientific journals _ expert for project reviewing
Jury member in recruitment panel of scientists on permanent positions
- 2011 Prunus team leader at GAFL, INRAE
- Since 2004 **Researcher** at Institut National de recherche pour l'agriculture, l'alimentation et l'environnement (INRAE)
- 2004-2005 **Postdoc**, Genetics of adaptive variations of *Arabidopsis lyrata*. Plant Genetics team, University of Oulu, Finland
- 2000-2003 **PhD**, Exploitation of knowledge and models from genetics and ecophysiology in order to identify QTLs of model parameters involved in peach quality. INRA, Avignon, France

Selected projects funded and managed:

- 2019-2022 Freeclimb. *PRIMA*. Fruit crops adaptation to climate change in the Mediterranean basin. 15 partners
- 2018-2021 ReXapPech. *CASDAR 'Semences – Sélection végétale'*. Résistance à *Xanthomonas arboricola pv. pruni* chez le pêcher. **Leader**
- 2017-2020 CaResPrunus. *CASDAR 'Semences – Sélection végétale'*. Caractérisation des Ressources Génétiques Prunus pour les stress Biotiques et Abiotiques. 6 partners. **WP leader**
- 2016-2018 MoniBreF. Agropolis Fondation-EMBRAPA 2016. Study of the link between fruit epidermis compounds and susceptibility to brown rot in 2 populations. **Leader**
- 2011-2015 FruitBreedomics. *Large Collaborative Project EU FP7 KBBE-2010-4*. Bridging the gap between genomics and fruit breeding. **Responsible of Work-Package 5** (10 partners involved) and **member of the Scientific Executive Committee**

Number of publications in international journals: 42

Hirsch index (Web of Science ResearcherID AAT-2958-2020): 23

Significant publications in the last 4 years:

Mustafa MH, Bassi D, Corre M-N, Lino LO, Signoret V, **Quilot-Turion B**, Cirilli M. **2021**. Phenotyping Brown Rot Susceptibility in Stone Fruit: A Literature Review with Emphasis on Peach. *Horticulturae*, 7(5):115. <https://doi.org/10.3390/horticulturae7050115>

Cirilli M, Gattolin S, Chiozzotto R, Baccichet I, Pascal T, **Quilot-Turion B**, Rossini L, Bassi D. **2021** The Di2/pet variant in PETALOSA gene underlies a major heat requirement-related QTL for blooming date in peach (*P. persica* L. Batsch). *Plant and Cell Physiology*, 62(2):356-365. <https://doi.org/10.1093/pcp/pcaa166>

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Cirilli M, Micali S, Aranzana MJ, Arus P, Babini A, Barreneche T, Bink MC, Cantin CM, Ciacciulli A, Cos-Terrer J, Drogoudi P, Eduardo I, Foschi S, Giovannini D, Guerra W, Liverani A, Pacheco I, Pascal T, **Quilot-Turion B**, Verde I, Rossini L, Bassi D. **2020**. The multi-site PeachRefPop collection: a true cultural heritage and international scientific tool for fruit trees. *Plant Physiology*, 184: 632-646.

Lino OL, **Quilot-Turion B**, Dufour C, Corre MN, Lessire R, Génard M, Poëssel JL. **2020**. Cuticular waxes of nectarines (*Prunus persica* L. Batsch) during fruit development in relation to surface conductance and susceptibility to *Monilinia laxa*. *Journal of Experimental Botany*, 71(18): 5521-5537. *PhD Student supervisor*

Kanso H, **Quilot-Turion B**, Memah MM, Bernard O, Gouzé J-L, Baldazzi V. **2020**. Reducing a model of sugar metabolism in peach to catch different patterns among genotypes. *Mathematical Biosciences*, 321: 108321. *PhD Student supervisor*

Barrasso C, Memah MM, Génard M, **Quilot-Turion B**. **2019**. Model-based QTL detection is sensitive to slight modifications in model formulation. *PLOS ONE* 14(10): e0222764. *Student supervisor*

Laurens F, Aranzana MJ, Arus P, Bassi D, Bink M, Bonany J, Caprera A, Corelli-Grappadelli L, Costes E, Durel C-E, Mauroux J-B, Muranty H, Nazzicari N, Pascal T, Patocchi A, Peil A, **Quilot-Turion B**, Rossini L, Stella A, Troggio M, Velasco R, van de Weg E. **2018**. An integrated approach for increasing breeding efficiency in apple and peach in Europe. *Horticulture Research* 5(1): 11. *International collaboration*

Desnoues E, Génard M, **Quilot-Turion B**, Baldazzi V. **2018**. A kinetic model of sugar metabolism in peach fruit reveals a functional hypothesis for a particular low fructose-to-glucose ratio phenotype. *Plant Journal* 94(4): 685-698. *PhD Student supervisor*

Bellingeri M, **Quilot-Turion B**, Oliveira Lino L, Bevacqua D. **2018**. The Crop Load Affects Brown Rot Progression in Fruit Orchards: High Fruit Densities Facilitate Fruit Exposure to Spores but Reduce the Infection Rate by Decreasing Fruit Growth and Cuticle Cracking. *Frontiers in Ecology and Evolution* 5(170).