

Guillaume Daverdin

Crop Breeding Manager Spinach

Doctor in biology (Genetics and Plant Breeding)

Phone: +31 6 5568 0232

Email: g.daverdin@enzazaden.nl

Enza Zaden Research & Development B.V. Haling 1E. 1602 DB Enkhuizen. The Netherlands

EDUCATION

- 2011** PhD in Molecular Biology / Plant pathology, University Paris XI, France
- 2007** Master's degree (2nd year of French Master degree) in Plant Science, University Paris XI, France
- 2006** Master's degree in Crop Protection, Imperial College of London, United Kingdom
- 2005** Bachelor's in Biology, University Paris XI, France

EXPERIENCE

- 2022-now** Crop breeding manager spinach **Enza Zaden B.V., Enkhuizen, NL**
- Team lead Enza Zaden's spinach breeding program
- 2017-2022** Molecular breeder/Rubus breeder **Edward Vinson Ltd., Faversham, UK**
- Molecular breeder: Implement molecular breeding at EV (Raspberry focus)
- Rubus breeder: Raspberry and Blackberry traditional breeding selection
- 2014-17** Postdoctoral associate **Rutgers University, Chatsworth, USA**
- Plant breeding and genetic studies of *V. macrocarpon*
- 2011-14** Postdoctoral associate **3 years, University of Georgia, Athens, USA**
- *P. virgatum* and *S. italica* genetic analyses (Genome analysis and traits QTL discovery)
- 2007-11** PhD Project **3 years, INRA BIOGER-CPP Versailles – Grignon, France**
-Molecular evolution of a *L. maculans* avirulence gene under selection pressure
- 2007-10** Graduate Teaching Assistant **3 years, University Paris XI, France**
-Teaching: systematic (botany), plant cellular biology, plant physiology, plant pathology
- 2007** Master internship (2nd year) **6 months, INRA BIOGER-CPP Versailles – Grignon, France**
-Cloning and targeted mutation of a *L. maculans* avirulence gene
- 2006** Master internship **4 months, Allen Lab. University of Wisconsin – Madison, USA**
-Study of the bacterial wilt pathogen *R. solanacearum* quorum sensing regulation

SKILLS

Extensive experience in plant and plant pathogen genetics, plant breeding and molecular biology. Experienced in project and team management.

Languages: **French:** Native speaker, **English:** Fluent

Publications:

(2020) Bahri B.A., **Daverdin G.**, Xu X., Cheng J.F., Barry K.W., Brummer, E.C., Missaoui A. Devos K.M. Natural variation in lignin and pectin biosynthesis-related genes in switchgrass (*Panicum virgatum L.*) and association of SNP variants with dry matter traits. *BioEnergy Research*; 11/2020; DOI:10.1007/s12155-020-10090-2

(2018) Bahri B.A., **Daverdin G.**, Xu X., Cheng J.F., Barry K.W., Brummer, E.C., Devos K.M. Natural variation in genes potentially involved in plant architecture and adaptation in switchgrass (*Panicum virgatum L.*). *BMC evolutionary biology*; 12/2018; DOI:10.1186/s12862-018-1193-2

(2017) **Daverdin. G.**, Johnson-Cicalese J., Zalapa J., Vorsa. N., Polashock J. Identification and mapping of fruit rot resistance QTL in American cranberry using GBS. *Molecular breeding*; 03/2017; DOI:10.1007/s11032-017-0639-3

(2016) Serba, D., Sykes R., Gjersing E., Decker S., **Daverdin G.**, Devos, K., Brummer E., and Saha, M. Cell wall composition and underlying QTL in an F1 Pseudo-testcross population of switchgrass. *BioEnergy Research*; 09/2016; DOI:10.1007/s12155-016-9733-3

(2015) Plissonneau C., **Daverdin G.**, Ollivier B., Fudal I., Blaise F., Degrave A., Rouxel T. and Balesdent M.H. A game of hide and seek between the avirulence genes *AvrLm4-7* and *AvrLm3* in *Leptosphaeria maculans*. *New Phytologist*; 11/2015; DOI: 10.1111/nph.13736

(2015) Blondeau K., Blaise F., Graille M., Kale S.D., Linglin J., Ollivier B., Labarde A., Lazar N., **Daverdin G.**, Balesdent M.H., Choi D.H.Y., Tyler B.M., Rouxel T., Tilbeurgh H., Fudal I. Crystal structure of the effector *AvrLm4-7* of *Leptosphaeria maculans* reveals insights into its translocation into plant cell and recognition by resistance proteins. *The Plant Journal*; 06/2015; DOI:10.1111/tpj.12913

(2014) **Daverdin G.**, Bahri B.A., Xiaomei W., Serba D.D., Christian T., Saha M.C., Devos K.M. Comparative Relationships and Chromosome Evolution in Switchgrass (*Panicum virgatum*) and its Genomic Model, Foxtail Millet (*Setaria italica*). *BioEnergy Research*; 03/2014; DOI:10.1007/s12155-014-9508-7

(2014) Desalegn S., **Daverdin G.**, Bouton J., Devos K.M., Brummer E., Saha M. Quantitative trait loci (QTL) underlying biomass yield and plant height in switchgrass (*Panicum virgatum*). *BioEnergy Research*; 12/2014; DOI:10.1007/s12155-014-9523-8

(2014) Carpezat J., Bothorel S., **Daverdin G.**, Balesdent M.H., Leflon M. Use of High Resolution Melting (HRM) analysis to genotype the avirulence *AvrLm4-7* gene of *Leptosphaeria maculans*, a fungal pathogen of *Brassica napus*. *Annals of Applied Biology*; DOI: 10.1111/aab.12112.

(2013) **(Co-first author)**: Serba D.D., Wu L., **Daverdin G.**, Bahri B.A., Wang X., Kilian A., Bouton J.H., Brummer E.C., Saha M.C., Devos K.M. Linkage maps of lowland and upland tetraploid switchgrass ecotypes. *BioEnergy Research*; DOI: 10.1007/s12155-013-9315-6.

(2012) **Daverdin G.**, Rouxel T., Gout L., Aubertot J.N., Fudal I., Meyer M., Parlange F., Carpezat J., Balesdent M.H. Genome structure and reproductive behaviour influence the evolutionary potential of a fungal phytopathogen. *PLoS Pathog*; DOI: 10.1371/journal.ppat.1003020.

(2009) Parlange F., **Daverdin G.**, Fudal I., Kuhn M.L., Balesdent M.H., Blaise F., Grezes-Besset B., Rouxel T. *Leptosphaeria maculans* avirulence gene *AvrLm4-7* confers a dual recognition specificity by the *Rlm4* and *Rlm7* resistance genes of oilseed rape, and circumvents *Rlm4*-mediated recognition through a single amino acid change. *Mol Microbiol*; DOI: 10.1111/j.1365-2958.2008.06547.