Laurine Lambelin

PhD student in Plant Genetics, Genomics and Bioinformatics

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My fields are plant genetics and pathology. My work as a PhD student is focusing on the mechanisms underlying the resistance of rose to a foliar disease, black spot disease, caused by a widespread fungus.

SKILLS

- Biology and pathology, quantitative genetics
- **Bioinformatics**: R, Linux (Bash, AWK)
- **Languages**: French (native), English (fluent), Spanish (intermediary)

EDUCATION

2018 – 2021	**Institut Agro Rennes** – Master Degree in Agronomy, specialization Plant Genetics and Breeding
2016 – 2018	Preparatory Classes in Biology, Chemistry, Physics, and Geology
2016	Baccalaureate Diploma in Sciences – Top grades

PROFESSIONAL EXPERIENCE

PhD student
Oct 2021 – Present
Expected graduation date: December 2024

« Identification of candidate genes for quantitative resistance of rose to black spot disease, caused by the fungus *Diplocarpon rosae* »

IRHS Angers – Team 'Genetics and Diversity of Ornamental plants'

Aims: Characterizing a resistant rose genotype, widely used in breeding programs, from the phenotypic level to the functional level, and getting a better understanding of plant-pathogen interactions. RNAseq data analysis (fastp, fastQC, Salmon, R packages DESeq2, DEGreport), design of KASP markers, QTL analysis (JoinMap, R/qtl), microscopy

Teaching experience
2021 – 2023

Genetics classes for Bachelor students (University of Angers)

Mendelian genetics, molecular genetics, population genetics. Total of 64 hours

Internship
2nd year of Master
Feb – Aug 2021

« Fine mapping of the QTL region associated with flowering date in sweet cherry and marker-assisted selection for this trait »

INRAE Bordeaux – Team 'Adaptation of Cherry tree to Climate Change'

QTL mapping, test of KASP markers for use in breeding programs

Internship abroad
1st year of Master
Sep 2019 – Feb 2020

« Detection of viral and fungal pathogens affecting potato and barley crops »

Teagasc Crops Research Centre, Oak Park, Carlow, IRELAND

DNA extractions, PCR, qPCR, data analysis with R software

AWARDS AND RECOGNITIONS

- Fulbright Foreign Student Program grantee (2023-2024) for a collaboration with the University of Minnesota (USA)
- Laureate of the PhD program of Agreenium international research facility, EIR-A (promotion 2021-2022)

PUBLICATIONS

Lambelin L, Thouroude T, Jeauffre J, Chameau J, Boursier C, Aubourg S, Pelletier S, Lopez Arias DC, Hibrand-Saint Oyant L, Foucher F, Soufflet-Freslon V, Paillard S (in prep) Towards the identification of quantitative resistance mechanisms of rose to black spot disease, *Acta Horticulturae*

Branchereau C, Quero-García J, Zaracho-Echagüe NH, **Lambelin L**, Fouché M, Wenden B, Donkpegan A, Le Dantec L, Barreneche T, Alletru D, Parmentier J, Dirlewanger E (2022) New insights into flowering date in *Prunus*: fine mapping of a major QTL in sweet cherry, *Horticulture Research*, 9: uhac042

COMMUNITY SERVICES

2022 – 2024 Doctoral student representative at the Federative Research Structure "Plant Health and Quality" (SFR QuaSaV)
Organization of the PhD students Day of SFR QuaSaV

ADDITIONAL QUALIFICATIONS

Driving License
Emergency First Aid Certificate (PSC1)

INTERESTS, ACTIVITIES

Fitness, hiking, skiing
Reading, drawing, crafting