

## **Curriculum vitae Corentin DOURMAP**

**Nationality** French  
**Address** UMR IRHS, 42 rue Georges Maurel, 49070 BEAUCOUZE  
Email : [corentin.dourmap@univ-angers.fr](mailto:corentin.dourmap@univ-angers.fr)

### **EDUCATION**

**2017** Bachelor degree, Molecular and Cell Biology, University of Rennes 1, Rennes, FRANCE  
**2019** Master degree, Plant Molecular Biology, Agrocampus Ouest, Rennes, France  
**2022** PhD degree, Plant molecular Physiology, Sorbonne Université, Paris, France

### **POSITIONS AND SCIENTIFIC EXPERIENCE**

**2017** Intern, Institute of Plant Science of Paris-Saclay, Orsay, FRANCE

- Study of an UDP-glucosyltransferase involved in the detoxification of deoxynivalenol produced by the phytopathogenic fungi *Fusarium graminearum* causing Fusarium Head Blight in wheat (*Triticum aestivum*)
- Keywords: Phytopathology, *Brachypodium distachyon*, molecular biology, biochemistry.

**2018** Intern, Umeå Plant Science Centre, Umeå, SWEDEN

- Screening for key genes regulating early lateral root development in *Arabidopsis thaliana*
- Keywords: RNAseq, FACS, auxins, cytokinins, molecular biology, lateral root development

**2019** Intern, Institute of Ecology and Environmental Science, Paris, FRANCE

- Study of the consequences of nitrates excess on reproductive development in *Arabidopsis thaliana*.
- Keywords: Proline metabolism, nitrogen, seed development, microscopy, molecular biology

**2019-2022** PhD Student, Sorbonne Université, Paris, France

- Study of the interactions between proline catabolism and nitrogen metabolism in the seed development of *Arabidopsis thaliana*
- Keywords: Proline catabolism, nitrogen metabolism, seed development, metabolomics, proteomics, molecular biology, microscopy, genetics, breeding
- Labs stay: Hanover (Germany), Temuco (Chile), Versailles (France), Rennes (France).

**2023-today** Post-doctoral researcher, University of Angers, Beaucouzé, FRANCE

- Study of metabolic adjustments and protein turn-over in sunflower leaves subjected to variation of photosynthesis intensity.
- Study of the metabolization pathways of D-amino acids in seedlings.
- Study of metabolic physiology of source-sink relations in white lupin (seed maturation, cluster root exudation, phloem transport)
- Keywords: metabolomics (GC-MS, RMN), proteomics, isotopic labelling, photosynthesis, source-sink relations

## 8 publications in international peer-reviewed journals.

For complete list of publication see :

[https://scholar.google.com/citations?view\\_op=list\\_works&hl=fr&user=a54Bvg0AAAAJ](https://scholar.google.com/citations?view_op=list_works&hl=fr&user=a54Bvg0AAAAJ)

- **Dourmap C**, Roque S, Morin A, Caubrière D, Kerdiles M, Béguin K, Perdoux R, Reynoud N, Bourdet L, Audebert PA, Le Moullec J, Couée I. (2020). Stress signalling dynamics of the mitochondrial electron transport chain and oxidative phosphorylation système in higher plants. *Annals of Botany*. 125 (5), 721-736.
- **Dourmap C**, Marmagne A, Lebreton S, Clément G, Guivarc'h A, Savouré A, Masclaux-Daubresse C. (2023). Carbon and nitrogen remobilization during seed filling in Arabidopsis is strongly impaired in the pyrroline-5-carboxylate dehydrogenase mutant. *Journal of Experimental Botany*. 74 (5), 1489-1500.
- Zheng Y, Cabassa-Hourton C, Planchais S, Crilat E, Clément G, Dacher M, Durand N, Bordenave-Jacquemin M, Guivarc'h A, **Dourmap C**, Carol P, Lebreton S, Savouré A. (2023). Pyrroline-5-carboxylate dehydrogenase is an essential enzyme for proline dehydrogenase function during dark-induced senescence in Arabidopsis thaliana. *Plant, Cell & Environment*. 46 (3), 901-917.
- Abadie C, Lalande J, **Dourmap C**, Limami AM, Tcherkez G. (2024). Leaf day respiration involves multiple carbon sources and depends on previous dark metabolism. *Plant, Cell & Environment*. 47 (6), 2146-2162.
- Tcherkez G, Abadie C, **Dourmap C**, Lalande J, Limami AM. (2024). Leaf day respiration: More than just catabolic CO<sub>2</sub> production in the light. *Plant, Cell & Environment*. 47 (7), 2631:2639.
- **Dourmap C**, Fustec J, Naudin C, Carton N, Tcherkez G. (2025). White lupin : improving legume-based protein production via intercropping. *Journal of Experimental Botany*. 76 (10), 2673-2687.
- Tcherkez G, Broussard L, **Dourmap C**, Abadie C, Gomes E, Dinant S, Doidy J, Pourtau N, Ball M. (2025). Experimental evidence for photosynthetic dependency of phloem sap generation in minor veins. *Plant, Cell & Environment*. 49 (2), 1037:1049.
- **Dourmap C**, Baud S, Eubel H, Rugen N, Crilat E, Berardocco S, Marnet N, Clément G, Tcherkez G, Planchais S, Cabassa C, Lebreton S, Bordenave-Jacquemin M, Maldiney R, Carol P, Braun HP, Masclaux-Daubresse C, Bouchereau A, Savouré A, Guivarc'h A. (2026). Pyrroline-5-carboxylate dehydrogenase is a key actor of nitrogen metabolism in maturing seeds of Arabidopsis thaliana. *Journal of experimental botany*. Eraf542