DEREK MICHAEL WRIGHT

I graduated with a BSc in Biology from the University of Regina in 2012, followed by a MSc in Agrobiotechnology from Justus-Liebig-Universität Gießen (University of Giessen, Germany) in 2015. I now work in the Plant Sciences department at the University of Saskatchewan and have been involved in three research projects (AGILE, EVOLVES & P2IRC) with lentil (Lens culinaris).

I have done extensive work with a lentil diversity panel, NAM and inter-specific RIL populations. I am very fluent in **Q** and have plenty of experience with data analysis such as PCA, GWAS and QTL analysis. I have recently been working with data acquisition from UAV and seed imaging systems and can handle data wrangling and visualization of large, high-throughput data sets.



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RESEARCH EXPERIENCE & EDUCATION

Current 2015

University of Saskatchewan

Research Assistant

- · Coordinate field trials
- · Seed setup
- · Post-harvest processing
- Saskatoon, Saskatchewan, Canada
- Data collection & analysis
- Presentations
- Collaborations

2015

Cargil Specialty Seeds and Oils

Research Assistant (Internship)

- · Data collection & analysis
- Aberdeen, Saskatchewan, Canada
- Pathology (blackleg)

2015 2013

M.Sc. in Agrobiotechnology

University of Giessen

- · Biotechnology and Genomics
- · Molecular Phytopathology
- · Plant Microbe Interactions
- · Plant Protection and Bioengeneering
- · Microbial-Food-Biotechnology
- Applied Statistics and **Bioinformatics**

Giessen, Hesse, Germany

- · Risk Assessment, Bio-safety and Patent Law
- Molecular Plant Breeding
- · Microbial Diagnostics
- · Plant Pathogens and Symbionts
- Molecular Entomology
- Tissue Culturing and Genetic Transformation

2012 2007

B.Sc. Biology

University of Regina

- Limnology
- Environmental Microbiology
- · Global Biogeochemistry
- · Stable Isotope Ecology

Regina, Saskatchewan, Canada

- Vertebrate Animal Biology
- Advanced Plant Physiology
- · Molecular Genetics
- · Bacterial Genetics

▲ SKILLS

- Photography
- Biology
- Genomics
- Data Analytics
- Data Visualization
- The R Project

四 Contact Info

- wrightmderek@gmail.com
- derek.wright@usask.ca
- +1 306-220-0645

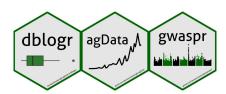
Social Media

- @DerekMWright
- github.com/derekmichaelwright

Website

www.dblogr.com/ or

derekmichaelwright.github.io/dblogr/



</> R PACKAGES

agData: an R package containing agricultural data sets https://derekmichaelwright.github.io/agData/

devtools::install_github("derekmichaelwright/agData")

gwaspr: an R package for plotting GWAS results

https://derekmichaelwright.github.io/gwaspr/

devtools::install_github("derekmichaelwright/gwaspr")



2023 Mass Spectrometry-Based Untargeted Metabolomics
Reveals the Importance of Glycosylated Flavones in
Patterned Lentil Seed Coats

Journal of Agricultural and Food Chemistry. 71(7): 3541–3549

Elessawy F, Wright D, et al.

Focusing the GWAS *Lens* on days to flower using latent variable phenotypes derived from global multi-environment trials

The Plant Genome. e20269.

Neupane S, Wright D, et al.

Strategic Identification of New Genetic Diversity to Expand Lentil (Lens culinaris Medik.) Production (Using Nepal as an Example)

Agronomy. 11(10): 1933.

Neupane S, Dhakal R, Wright D, et al.

Genomic selection for lentil breeding: Empirical evidence

The Plant Genome. 13(1):e20002.

Haile TA, Heidecker T, Wright D, et al.

Understanding photothermal interactions can help expand production range and increase genetic diversity of lentil

(*Lens culinari*s Medik.)

Plants, People, Planet. 3(2): 171-181.

Wright D, et al.

Influence of heterozygosity on nitrogen use efficiency in hybrid and purebred lines of *Brassica napus* (L.)

MSc Thesis

Wright D

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UNPUBLISHED WORK

Dissecting lentil crop growth across multi-environment trials using unoccupied aerial vehicles and genome-wide

association studies

GWAS of predicted protein and amino acid content in lentil

using near-infrared reflectance spectroscopy

Investigating seed size, shape, color, and patterning in a lentil diversity panel and inter-specific RIL populations

data collection

data collection data analysis data visualization

manuscript writing

data analysis data visualization

data visualization

data collection data analysis data visualization manuscript writing

data analysis data visualization manuscript writing

data analysis data visualization

data analysis data visualization

2015

2022

2021

2020

2020

PHOTOGRAPHY

Saskatchewan Field Trials



Bangladesh Field Trials



Lentil Seed Diversity

