LEONARDO VOLPATO

Postdoctoral Research Associate

Michigan State University - East Lansing, MI.
February 2021 to present

CONTACT INFO

✉ volpato1@msu.edu

☎ +1 517-505-8582

🏠 1826 Hamilton Rd Apt A9, Okemos, MI - USA

 github.com/volpatoo

in linkedin.com/LV

📄 cnpq.com/LV

🆔 orcid.org/LV

🎓 EDUCATION

2009

Instituto Federal do Triângulo Mineiro - IFTM
T.E. in Technical Course in Agriculture
📍 Uberlandia, Brazil

2014

Federal University of Viçosa - UFV
B.S. in Agronomy
📍 Viçosa, Brazil

2016

Federal University of Viçosa - UFV
M.S. in Plant Breeding
📍 Viçosa, Brazil

Thesis: Selection of soybean progeny for grain yield with the use of mixed models

2020

Federal University of Viçosa - UFV
Ph. D. in Plant Breeding
📍 Viçosa, Brazil

Thesis: High-throughput phenotyping for soybean plant maturity date and wheat plant height using unmanned aerial system

💻 RESEARCH EXPERIENCE

2018 — 2019

Visiting Student
International Maize and Wheat Improvement Center - CIMMYT
📍 Mexico City, Mexico

· Supported the entire remote sensing components of wheat and maize plant breeding trials.
· Performed drone imagery and software analyses.
· Conducted missions and collected data for HTP using Unmanned Aerial System (UAS).
· Pipeline developed for measuring agronomic trait such as plant height, biomass, lodging and biologic stress using UAS.

2019 — 2020

Visiting Research Scholar
University Of Minnesota - UMN
📍 Minneapolis, USA

· Applied remote sensing approaches in the soybean variety development pipeline.
· Conducted field data analyses using drone imagery.
· Worked collaboratively with other graduate students and technicians.
· Pipeline implemented in R to estimate plant maturity date using HTP/UAS methods

2010 — 2014

Intern
Federal University of Viçosa - UFV
📍 Viçosa, Brazil

· Resistance of Spodoptera frugiperda (Lepidoptera: Noctuidae) to proteins from *Bacillus thuringiensis*
· Evaluation of tropical maize (*Zea mays* L.) lines fornitrogen use efficiency
· Selection within andbetween families of ornamental pepper (*Capsicum* spp.)

💼 PROFESSIONAL/ACADEMIC EXPERIENCE

2011 — 2012

AgroPlan-UFV - Junior Enterprise Agronomy
Federal University of Viçosa - UFV
📍 Viçosa, Brazil

STATISTICAL SOFTWARE

R, Python, and GIS tools.

EXPERIENCED AREAS

Statistical and bioinformatics analysis, mixed models, GxE interaction, Genotyping and Phenotyping in Plant Breeding.

RESEARCH STRENGHTHS

Full experience with remote sensing analysis, drone imagery use and HTP pipelines, Genomic selection and Multi-trait multi-environment models.

2013 — 2014

Teaching assistant in Agriculture Entomology

Federal University of Viçosa - UFV

📍 Viçosa, Brazil

2014

Regulation of seeds and seedlings, Intern

Federal Agriculture, Livestock and Supply - MAPA

📍 Viçosa, Brazil

2015 2017

Academic group coordinator

GenMelhor-UFV - Study Group of Genetics and Breeding

📍 Viçosa, Brazil

📄 SELECTED PUBLICATIONS AND POSTERS

2018

Selection of inbred soybean progeny: an approach with population effect.

Plant Breeding, v. 138, p. i-iv, 451-672.

Volpato, L.; Simiqueli, G.F.; Alves, R.S.; Rocha, J. R. A. S. C.; Del Conte, M. V.; Resende, M. D. V.; Carneiro, P. C. S.; Silva, F. L.

2019

A. Multi-trait multi-environment models in the genetic selection of segregating soybean progeny.

PLoS One, v. 14, p. e0215315.

Volpato, L; Alves, R.S.; Teodoro, P.E.; Resende, V. M. D.; Nascimento, M.; Nascimento, A. C. C.; Ludke, W.H.; Lopes, S. F.

2019

SNP markers associated with soybean partial resistance to Phytophthora sojae.

Crop Breeding and Applied Biotechnology, v. 19, p. 31-39

Ludke, W. H.; Schuster, I.; Nora, T. D.; Oliveira, A. B.; Soares, B. A.; **Volpato, L.**; Silva, F. L.

2020

Inference of population effect and progeny selection via a multi-trait index in soybean breeding.

Acta Scientiarum. Agronomy, v. 43, p. 10.4025/actasci

Volpato, L.; Rocha, J. R. A. S. C.; Alves, R. S.; Ludke, W. H.; Oliveira, A. B.; Silva, F. L.

2021

High Throughput Field Phenotyping for Plant Height Using UAV-Based RGB Imagery in Wheat Breeding Lines: Feasibility and Validation.

Frontiers in Plant Science, v. 12, p. 591587

Volpato, L.; Pinto, F.; González-Pérez, L. ; Thompson, I. G. ; Borem, A.; Reynolds, M.; Gérard, B.; Molero, G.; Rodrigues, F. A.

2021

High Throughput Field Phenotyping for Plant Height Using UAV-Based RGB Imagery in Wheat Breeding Lines: Feasibility and Validation.

The Plant Phenome J.,10.1002/ppj2.20018

Volpato, L.; Dobbels. A.; Borem, A,; Lorenz, A. J.

2021

Genomic selection with rapid cycling: Current insights and future prospects.

Crop Breeding and Applied Biotechnology. 21(S): e394721S14

Volpato, L.; Bernardeli, A.; Gomez, F.

📄 LANGUAGE

Portuguese

Native

English

Fluent

Spanish

Working knowledge