## Rodrigo Rampazo Amadeu

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Nationality: Brazilian

#### Current position

**Graduate Research Assistant**, Blueberry Breeding & Genomics Lab, University of Florida Analysis of genomic and agricultural data & development of Statistical-Genetics software

#### Education

Current	Рн.D. student in Horticultural Sciences, IFAS, University of Florida, USA Advisor Dr. Patricio Munoz, Blueberry Breeding & Genomics Lab
2018	M.S. in Plant Genetics and Breeding, ESALQ, University of São Paulo, Brazil Advisor Dr. Antonio Augusto Franco Garcia, Statistical-Genetics Lab
2016	B.Eng. in Agriculture, ESALQ, University of São Paulo, Brazil Advisor Dr. Antonio Augusto Franco Garcia, Minor: Biotechnology
2016	B.Edu. in Agricultural Sciences, ESALQ, University of São Paulo, Brazil

### Awards & Scholarships

2020	Scholarship, Murial Rumsey Scholarship, CALS, University of Florida
2019	Scholarship, Outstanding Teaching Assistanship, University of Florida
2019	Award, Poster Competition Plant Science Symposium, University of Florida - 1st Place Winner
2016	Award, Prof Friedrich Gustav Brieger Prize - Best graduating student of Department of Genetics
2013	Scholarship, Science without Borders - CAPES - 1yr at University of Florida
2012	Scholarship, Scientific Initiation - PIBIC/CNPq - 1yr
2011	Scholarship, Scientific Initiation - Santander - 1yr

### Journal Articles

2020

2020

2020

2020

- Cappai, F; **Amadeu, RR** (*co-first author*); Benevenuto, J; Cullen, R; Garcia, AL; Grossman, AY; Ferrão, LFV; Munoz, PR. "High-resolution linkage map and QTL analyses of fruit firmness in autotetraploid blueberry". *Front. Plant Sci.*, 11(532171), link
- de Bem Oliveira, I; **Amadeu, RR**; Ferrão, LFV; Munoz, PR. "Optimizing whole-genomic prediction for autotetraploid blueberry breeding". *Heredity*, 125, link
- Amadeu, RR; Lara, LADC; Munoz, PR; Garcia, AAF. "Estimation of molecular pairwise relatedness in autopolyploid crops". *G*<sub>3</sub>, 10(12), link
  - de Oliveira, AA; Resende, MFR; Ferrão, LFV; **Amadeu, RR**; Guimarães, LJM; Guimarães, CT; Pastina, MM; Margarido, GRA. "Genomic prediction applied to multiple traits and environments in second season maize hybrids". *Heredity*, 125, link
  - **Amadeu, RR**; Ferrão, LFV; de Bem Oliveira, I; Benevenuto, J; Endelman, JB; Munoz, PR. "Impact of dominance effects on autotetraploid genomic prediction". *Crop Science*, 60(2), link

- Estrada-Reyes, ZM; Tsukahara, Y; **Amadeu, RR**; Goetsch, AL; Gipson, TA; Sahlu, T; Puchala, R; Wang, Z; Hart, ST; Mateescu, RG. "Signatures of selection for resistance to *Haemonchus contortus* in sheep and goats". *BMC Genomics*, 20(1), link
- Lara, LADC; Santos, MF; Jank, L; Chiari, L; Vilela, MDM; **Amadeu, RR**; dos Santos, JP; Pereira, GDS; Zeng, ZB; Garcia, AAF. "Genomic selection with allele dosage in *Panicum maximum* Jacq.". *G*3, 9(8) link
- Benevenuto, J; Ferrão, LFV; **Amadeu, RR**; Munoz, P. "How can a high-quality genome assembly help plant breeders?". *GigaScience*, 8(6), link
- de Bem Oliveira, I; Resende Jr, MFR; Ferrao, LFV; **Amadeu, RR**; Endelman, JB; Kirst, M; Coelho, ASG; Munoz, PR. "Genomic prediction of autotetraploids; influence of relationship matrices, allele Dosage, and continuous genotyping calls in phenotype prediction". *G*<sub>3</sub>, 9(4), link
- Conson, ARO; Taniguti, CH; **Amadeu, RR** (*co-first author*); Andreotti, IAA; de Souza, LM; dos Santos, LHB; Rosa, JRBF; Mantello, CC; da Silva, CC; Scaloppi Jr, EJ; Ribeiro, RV; Le Guen, V; Garcia, AAF; Gonçalves, PS; Souza, AP. "High-resolution genetic map and QTL analysis of growth-related traits of *Hevea brasiliensis*". *Front. Plant Sci.*, 9(1255), link
- Ferreira, DA; Abreu, GF; Cheavegatti-Gianotto, A; Soldi, MCM; Carneiro, MS; **Amadeu, RR**; Hoffmann, HP; Aricetti, JA; Wolf, LD; Caldana, C. "Metabolite profiles of sugarcane culm reveal the relationship among metabolism and axillary bud outgrowth in genetically related sugarcane commercial cultivars". *Front. Plant Sci.*, 9(857), link
- Cellon, C; **Amadeu, RR**; Olmstead, JW; Mattia, MR; Ferrao, LFV; Munoz, PR. "Estimation of genetic parameters and prediction of breeding values in an autotetraploid blueberry breeding population with extensive pedigree data". *Euphytica*, 214(87), link
- Amadeu, RR; Cellon, C; Olmstead, JW; Garcia, AAF; Resende, MF; Munoz, PR. "AGHmatrix: R package to construct relationship matrices for autotetraploid and diploid Species, a blueberry example". *The Plant Genome*, 9(3), link

#### Presentations

2020

- **Amadeu, RR**; Munoz, PR; Chaozhi, Z; Endelman, J. "QTL mapping in auotetraploid multi-parent populations". *The 6<sup>th</sup> International Conference of Quantitative Genetics (ICQG6)*. Virtual conference. Oral session. link
- Amadeu, RR. "Relationship coefficient in autopolyploid crops". *Graduate Course: Special Topics in Genetics and Breeding*, LGN/ESALQ, Piracicaba, Brazil. Invited Speaker.

### Software development

author, compute relationship matrices for diploid and autopolyploid species, link contributor, build genetic maps in experimental crosses, link author, onemap extension to build multi-family genetic maps in outcrossing species, link co-author, QTL mapping in outcrossing species using composite interval mapping, link co-author, QTL mapping in multiparent and autopolyploid populations, link

## Skills

 ${}_{programming} \quad R \ (advanced): package \ development, \ tidyverse, \ shiny/plotly \ app, \ parallelization$ 

programming shell/bash script, ASReml, 上下X statistics analysis of genetic & agricultural data

language Portuguese (native) & English (high proficiency)

## Teaching

2020	TA of Field Plot Techniques, grad level, University of Florida
2019	TA of Molecular Marker Assisted Plant Breeding, grad level, University of Florida
2019	TA of Field Plot Techniques, grad level, University of Florida
2018	TA of Field Plot Techniques, grad level, University of Florida
2015	TA of Calculus I, undergrad level, University of Sao Paulo
2012	TA of Genetics, undergrad level, University of Sao Paulo
2011-2015	Algebra instructor in a college prep school

# Leadership

2010-2011	Student representative in the B.Edu. in Agr Sciences Committee, University of Sao Paulo
2011-2012	Student representative in the B.Eng. in Agriculture Committee, University of Sao Paulo
2010-2012	Student union member, University of Sao Paulo