

Pedro Henrique Pezzi

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Postdoctoral Fellow
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University of Arkansas
Department of Biological Sciences
Fayetteville, AR, USA

EDUCATION

2019 – 2023 Ph.D. in Genetics and Molecular Biology

Federal University of Rio Grande do Sul

Visiting student at the University of Colorado at Boulder (CAPES-PrInt scholarship). Stacey Smith's lab.

Project Title: Híbridação e especiação em *Petunia* e grupos relacionados: uma abordagem filogenômica.

Advisor: Loreta Brandão de Freitas

2018 – 2019 Bachelor of Science, Biology

Federal University of Rio Grande do Sul

Advisor: Paula Beatriz de Araujo

2013 – 2018 Bachelor of Education, Biology

Federal University of Rio Grande do Sul

Visiting student at the California State University, Fullerton (Science without Borders/CAPES scholarship)

Advisor: Heloisa Junqueira

PROFESSIONAL EXPERIENCE

2024 Postdoctoral Fellow - University of Arkansas (Latvis Lab)

PUBLICATIONS

Google Scholar: Citations: 49; h-index 4. [[link](#)] **Web of Science:** Citations: 40; h-index 4. [[link](#)]

Pezzi, P. H., Gonçalves, L. T., Backes, A., Giudicelli, G. C., Turchetto, C., Bombarely, A., & Freitas, L. B. *submitted*. Evaluating the evolutionary origin of atypical *Petunia* populations in a hybridization hotspot.

Giudicelli, G. C.*, **Pezzi, P. H.***, Guzmán-Rodríguez, S., Turchetto, C., Bombarely, A., & Freitas, L. B. *submitted*. Natural hybridization and the evolutionary dynamics of southern South American grasslands species under climate changes and habitat fragmentation. *These authors contributed equally to this work.

Pezzi, P. H., Wheeler, L. C., Freitas, L. B., & Smith, S. D. (2024). Incomplete lineage sorting and hybridization underlie tree discordance in *Petunia* and related genera (Petunieae, Solanaceae). *Molecular Phylogenetics and Evolution*, 198, 108136. <https://doi.org/10.1016/j.ympev.2024.108136>

Souza, A. C., Soares, L. S., Backes, A., Simon, L., **Pezzi, P. H.**, Turchetto, C., & Freitas, L. B. (2024). Unraveling the genetic diversity and taxonomic ambiguities of endemic *Petunia* species from subtropical highland grasslands. *Botanical Journal of the Linnean Society*, 204, boae016. <https://doi.org/10.1093/botlinnean/boae016>

- Backes, A., **Pezzi, P. H.**, Gonçalves, L. T., Greppi, J. A. & Freitas, L. B. (2023).. Integrating morphology, niche modelling, and molecular data to disentangle taxonomic challenges in a species complex of *Calibrachoa* (Solanaceae). *Plant Ecology and Diversity*, *16*, 165-77. <https://doi.org/10.1080/17550874.2023.2274842>
- Pezzi, P. H.***, Gonçalves, L. T.*, Deprá, M., & Freitas, L. B. (2023). Evolution and diversification of the O-methyltransferase (OMT) gene family in Solanaceae. *Genetics and Molecular Biology*, *46*, e20230121. <https://doi.org/10.1590/1678-4685-GMB-2023-0121> *These authors contributed equally to this work.
- Pezzi, P. H.**, Guzmán-Rodríguez, S., Giudicelli, G. C., Turchetto, C., Bombarely, A., & Freitas, L. B. (2022). A convoluted tale of hybridization between two *Petunia* species from a transitional zone in South America. *Perspectives in Plant Ecology, Evolution and Systematics*, *56*, 125688. <https://doi.org/10.1016/j.ppees.2022.125688>
- Gonçalves, L. T., **Pezzi, P. H.**, & Bianchi F. M. (2022). Four new stink bug mitogenomes corroborate the internal inconsistencies in the classification of Pentatomidae (Hemiptera). *Zootaxa*, *5120*, 128-142. <https://doi.org/10.11646/zootaxa.5120.1.8>
- Wheeler, L. C., Walker, J. F., Ng, J., Deanna, R., Dunbar-Wallis, A., Backes, A., **Pezzi, P. H.**, Palchetti, M. V., Robertson, H. M., Monaghan, A., Freitas, L. B., Barboza, G. E., Moyroud, E., & Smith, S. D. (2022). Transcription factors evolve faster than their structural gene targets in the flavonoid pigment pathway. *Molecular biology and evolution*, *39*, msac044. <https://doi.org/10.1093/molbev/msac044>
- Zimmermann, B. L., Cardoso, G. M., Bouchon, D., **Pezzi, P. H.**, Palaoro, A. V., & Araujo, P. B. (2021). Supergroup F *Wolbachia* in terrestrial isopods: Horizontal transmission from termites?. *Evolutionary ecology*, *35*, 165-182. <https://doi.org/10.1007/s10682-021-10101-4>
- Pezzi, P. H.**, Araujo, P. B., & Wood, C. T. (2019). Coprophagy in detritivores: methodological design for feeding studies in terrestrial isopods (Crustacea, Isopoda, Oniscidea). *Nauplius*, *27*. <https://doi.org/10.1590/2358-2936e2019010>

GRANTS AND AWARDS

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| 2024 | BSA Professional Member Travel Grants – \$500 |
| 2023 | Godfrey Hewitt Mobility Award, European Society for Evolutionary Biology – €1,822 |
| 2022 | CAPES, Brazilian Ministry of Education. Visiting PhD student at CU Boulder – \$10,900 |
| 2022 | Emergency Degree Continuation Award, Society for the Study of Evolution – \$500 |
| 2022 | Productivity award from the PPGBM/UFRGS graduate program – R\$1,200 |
| 2022 | ESEB Conference Travel Award, European Society for Evolutionary Biology – €1,340 |
| 2019 | CNPq, Brazilian Ministry of Science, Technology and Innovation. Doctoral Scholarship. |
| 2015 | CAPES, Brazilian Ministry of Education. Visiting student at CSUF – \$13,628 |

RECENT EVENTS AND PRESENTATIONS

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| 2024 | Evolution – Montreal, QC, Canada
The implications of hybridization and rapid diversification in the species delimitation of <i>Petunia</i> [link] |
| 2024 | Botany – Grand Rapids, MI, USA
Rapid speciation and hybridization contribute to high levels of tree discordance in <i>Petunia</i> and related genera |
| 2023 | BIO-Wallace – Porto Alegre, RS, Brazil
<i>Petunia</i> : um modelo para especiação rápida com fluxo gênico |
| 2023 | Evolution – Albuquerque, NM, USA |

- How do novel species arise in a highly endemic biodiversity hotspot? Insights from *Petunia*. [[link](#)]
- 2022** SolSeminars – virtual
The role of hybridization in the diversification of *Petunia* species. [[link](#)]
- 2022** ESEB 2022 – Prague, Czech Republic
Petunia species in the making: consequences of hybridization between two *P. axillaris* subspecies
- 2021** Botany – virtual
A convoluted tale of hybridization between two *Petunia* species
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TEACHING EXPERIENCE

- 2021** Teaching Assistant, Federal University of Rio Grande do Sul
Class: Introduction to Phylogeography
Brazil - Porto Alegre, RS
- 2020** Teaching Assistant, Federal University of Rio Grande do Sul
Class: Biodiversity
Brazil - Porto Alegre, RS
- 2019** Guest Lecturer, CESUCA University Center
Lecture: Fundamentals of Genetics
Brazil - Cachoeirinha, RS
- 2018** Teaching Assistant, Federal University of Rio Grande do Sul
Class: Invertebrate Zoology II
Brazil - Porto Alegre, RS
- 2018** Teaching Assistant, Federal University of Rio Grande do Sul
Class: Biochemistry II
Brazil - Porto Alegre, RS
- 2017** Teaching Assistant, Federal University of Rio Grande do Sul
Class: Genetics I
Brazil - Porto Alegre, RS
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REVIEWER ACTIVITIES

- AoB Plants (1)
Journal of Evolutionary Biology (1)
Plant Biosystems (1)
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OUTREACH ACTIVITIES

- 2024** PLANTS program, Botanical Society of America

PLANTS established mentor at BOTANY 2024
USA - Grand Rapids, MI

2020 School Outreach Project, Pan American School of Porto Alegre.
Evaluator of scientific projects at the 10th Science Fair
Brazil - Porto Alegre, RS

LANGUAGE SKILLS

Portuguese: mother tongue

Spanish: B2

English: C2