

VINÍCIUS BARROS RODRIGUES

## 2-PAGE CV AND PUBLICATIONS

*Personal details*

- **Name:** Vinícius Barros Rodrigues
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- **Phone:** +55 31 9 9428 6126
- **Current city:** Viçosa, MG - Brazil
- **Date of the CV:** 2023-01-05

*Topics of interest and experience*

- **Biology:** Ecology, Entomology, Social Insects, Quantitative Ecology, Community Ecology, Ecological Interactions, Population Dynamics and Wildfires
- **Computer Science:** R, Biostatistics, Machine Learning, Linux, LaTeX, Processing, p5.js, Lua, html
- **Education:** Science Education, Active Methodologies, Educational Robotics, Didactics

*Degrees*

- **Ph.D. in Entomology** (2013 - 2017) – Departament of Entomology<sup>1</sup>, Termitology Lab, Federal University of Viçosa (Viçosa - MG, Brazil) with *exchange program* at Center for Biorobotics<sup>2</sup> in the Syddansk Universitet (Odense, Denmark)
- **M.Sc. in Entomology** (2011 - 2013) – Departament of Entomology, Federal University of Viçosa (Viçosa - MG, Brazil)
- **B.Sc. Biology** (2007 - 2010) – License Course – Department of Biology, Integrated Colleges of Cataguases (Cataguases - MG, Brazil)

<sup>1</sup> <http://www.pos.entomologia.ufv.br/> – [ent@ufv.br](mailto:ent@ufv.br)

<sup>2</sup> [https://www.sdu.dk/en/forskning/sdu\\_biorobotics](https://www.sdu.dk/en/forskning/sdu_biorobotics) – [secretary@mmmi.sdu.dk](mailto:secretary@mmmi.sdu.dk)

*Other education and expertise*

- **Post-doctoral** (2018 - 2019) – Department of Forest Engineering, Laboratory of Forest Fires and Nature Conservation, Federal University of Viçosa (Viçosa - MG, Brazil)
- **Technical License in Business Administration** (2004 - 2006) – SEBRAE “Brazilian Micro and Small Business Support Service” (Cataguases - MG, Brazil)

*Language skills*

- Native language: Portuguese

- Other language skills: English, Spanish

### *Current employment and education*

- **Nossa Senhora do Carmo School** (Since 2017) – High School Teacher (Disciplines: Biology, Science, Educational Robotics, Educational Programming, Scientific Method) (Viçosa - MG, Brazil)
- **Forest Fire and Nature Conservation Laboratory** (Since 2018) – Researcher in the project “*Use of Artificial Intelligence to Develop Methodologies to Protect and Recover Springs in Degraded Areas in the Aquifers of Hydroelectrics Furnas and Peixoto*” (Viçosa - MG, Brazil)
- **M.Sc. in Science and Mathematics Education** (Since 2022) – Departament of Biology, Federal University of Viçosa (Viçosa - MG, Brazil)

### *Previous work experience*

- **Federal Institute of Education** (2017 - 2018) – Professor of undergraduate, professional, and postgraduate courses (Disciplines: Biology, Microbiology and Environmental Restoration) (Ouro Preto - MG, Brazil)
- **Santana de Cataguases Municipal Government** (2010) – Biologist (Environmental consultant for public policies for environmental protection) (Santana de Cataguases - MG, Brazil)

### *Research supervision and leadership experience*

- Number of supervisees (co-supervisor) of undergraduate students – Biology Program at Federal University of Viçosa: 01
- Number of supervisees (co-supervisor) of postgraduate students – Forest Science Program at Federal University of Viçosa: 03

### *Other key academic merits*

- **Memberships in doctoral dissertation committees:** 10
- **Memberships in masters committees:** 5
- **Minicourses taught:** 22
- **Participation in events:** 32
- **Organization of scientific events:** 4
- **Number of citations from Google Scholar**<sup>3</sup>: 117
- **H-index:** 5

<sup>3</sup><https://scholar.google.com/citations?user=PTZ8RJAAAAAJ&hl>

*List of publications*

1. COSTA, A. G.; TORRES, F. T. P.; LIMA, G. S.; MELO, F. R.; RODRIGUES, V. B.; SANTANA NETO, V. P.; FERNANDES, T. V. 2022. Fire Influence on the Ants Community in Savanic and Forest Environments of the Cerrado Biome. **FLORAM 29:1-10**<sup>4</sup>
2. SOUZA, F. M. S. ; TORRES, F. T. P. ; RODRIGUES, V. B. 2022. Fire Effects on Natural Regeneration in Sesonal Semideciduous Forest. **Revista Árvore 46:e4614**<sup>5</sup>
3. SILVA, F. A.; VIEIRA, V. O.; CARRENHO, R.; RODRIGUES, V. B.; LOBO JUNIOR, M.; SILVA, G. F. 2021. Influence of the biocontrol agents *Trichoderma* spp. on the structure and functionality of the edaphic microbial community in common bean cultivars (*Phaseolus vulgaris* L.) inoculated with *Sclerotinia sclerotiorum* (Lib.) de Bary. **Applied Soil Ecology 168:104190**<sup>6</sup>
4. RODRIGUES, V. B.; TUCI, E.; HOLSTEIN, H.; BOWEN, M. S.; COSTA, D. A.; TAKAHASHI, L. T.; CRISTALDO, P. F. ; DESOUSA, O. 2021. Macro-symbiosis triggered by a defence-reproduction tradeoff in a social insect. **Ecological Modelling 462:109780**<sup>7</sup>
5. RODRIGUES, V. B.; TORRES, F. T. P. 2020. Fire Behavior Prediction Using Machine Learning Algorithms. **Revista Brasileira de Biometria 38:343-452**<sup>8</sup>
6. PUKER, A.; RODRIGUES, V. B.; CORREA, C. M. A.; KORASAKI, V.; MOTTA, P. C. 2020. Minimizing the Wallacean shortfall: a small sample reveals new occurrences of ground-dwelling spiders in native Cerrado and exotic pastures in the Midwestern Brazil. **International Journal of Tropical Insect Science (Online) 1:1-8**<sup>9</sup>
7. RODRIGUES, V. B.; JESUS, F. M.; CAMPOS, R. I. 2017. Local habitat disturbance increases bird nest predation in the Brazilian Atlantic rainforest. **Animal Biodiversity and Conservation 41(1): 117-120**<sup>10</sup>
8. FIALHO, V. S; RODRIGUES, V. B.; ELLIOT, S. L. 2018. Nesting strategies and disease risk in necrophagous beetles. **Ecology and Evolution 8(6): 3296-3310**<sup>11</sup>
9. RODRIGUES, V. B.; COSTA, D. A.; CRISTALDO, P. F. 2018. Lagged population growth in a termite host colony: cause or consequence of inquilinism? **Neotropical Entomology 47(6): 815-820**<sup>12</sup>

<sup>4</sup> <https://doi.org/10.1590/2179-8087-FLORAM-2022-0025>

<sup>5</sup> <https://doi.org/10.1590/1806-908820220000014>

<sup>6</sup> <https://doi.org/10.1016/j.apsoil.2021.104190>

<sup>7</sup> <https://doi.org/10.1016/j.ecolmodel.2021.109780>

<sup>8</sup> <https://doi.org/10.28951/rbb.v38i3.452>

<sup>9</sup> <https://link.springer.com/article/10.1007/s42690-020-00197-6>

<sup>10</sup> <https://doi.org/10.32800/abc.2018.41.0117>

<sup>11</sup> <https://doi.org/10.1002/ece3.3919>

<sup>12</sup> <https://link.springer.com/article/10.1007/s13744-018-0634-3>

10. DESOUZA, O.; CRISTALDO, P. F.; ARAUJO, A. P. A.; FLORENCIO, D. F.; ROSA, C. S.; MARINS, A.; COSTA, D. A.; RODRIGUES, V. B.; CRISTALDO, P. F. 2016. Allometric Scaling of Patrolling Rate and Nest Volume in *Constrictotermes cyphergaster* Termites: Hints on the Settlement of Inquilines. **PloS One** **11(1): e0147594**<sup>13</sup>
11. CRISTALDO, P. F.; RODRIGUES, V. B.; ARAUJO, A. P. A.; ELLIOT, S. L.; DESOUZA, O. 2016. Heterospecific detection of host alarm cues by an inquiline termite species (Blattodea: Isoptera: Termitidae). **Animal Behaviour** **120: 43-49**<sup>14</sup>
12. CRISTALDO, P. F.; JANDÁK, V.; KUTALOVÁ, K.; RODRIGUES, V. B.; BROTHÁNEK, M.; JIRÍČEK, O.; DESOUZA, O.; SOBOTNÍK, J. 2015. The nature of alarm communication in *Constrictotermes cyphergaster* (Blattodea: Termitoidea: Termitidae): the integration of chemical and vibroacoustic signals. **Biology Open** **4: 1649-1659**<sup>15</sup>
13. RODRIGUES, V. B.; CAVALARI, D. C.; VIANA, A. C.; JÚNIOR, E. R. N. 2011. Preferência de aranhas do gênero *Aglaoctenus* (Araneae) Tullgren, 1905 por *Astrocaryum aculeatissimum* (Schott) Burret (Arecaceae). **Revista Biociências** **17:50-56**<sup>16</sup>
  - *Publications in review process*: 02
  - *Accepted*: 01: RODRIGUES, V. B. The preferences of teaching methodologies of high school students in Biology<sup>17</sup>

<sup>13</sup> <https://doi.org/10.1371/journal.pone.0147594>

<sup>14</sup> <https://doi.org/10.1016/j.anbehav.2016.07.025>

<sup>15</sup> <https://doi.org/10.1242/bio.014084>

<sup>16</sup> <http://periodicos.unitau.br/ojs/index.php/biociencias/article/view/1238/849>

<sup>17</sup> Accepted in the Luminária journal - 2023

#### Publications in conference proceedings:

- MIRANDA, L. L.; MENDONCA, C. H.; RODRIGUES, V. B.; SANTOS, S. C. . Tendências em pesquisas sobre tecnologias digitais no ensino de ciências e matemática na educação básica. In: Simpósio de Interação Acadêmica, 2021, Viçosa - MG
- RODRIGUES, V. B.; TUCI, E.; BOWEN, M. S.; HOLSTEIN, H.; DESOUZA, O. Soldiers, alates or both? Bang-bang strategy for allocation of resources in termites. In: III Simpósio de Termitologia, 2015, João Pessoa - PB
- FIALHO, V. S.; RODRIGUES, V. B.; CRISTALDO, P. F.; DESOUZA, O.; ELLIOT, S. L. Differences in the immune response between host and obligatory inquiline. In: III Simpósio de Termitologia, 2015, João Pessoa - PB
- RODRIGUES, V. B.; CRISTALDO, P. F.; COSTA, D. A.; DESOUZA, O. Host's reproductive status affecting the colonization of obligatory inquilines in termite nests. In: II International Symposium of Ecology and Evolution, 2014, Viçosa - MG

- NUNES, L.; MARINHO, R.; DALSIN JUNIOR, A.; RODRIGUES, V. B.; COSTA, D. R.; REIS JUNIOR, R.; DESOUSA, O. Meu vizinho é meu amigo? Padrões de tolerância de *Constrictotermes cyphergaster* a seu inquilino. In: II Simpósio Brasileiro de Termittologia, 2013, Brasília - DF
- RODRIGUES, V. B.; PUKER, A. ; CORREA, C. M. A. ; KORASAKI, V. ; MOTTA, P. C. Soil spiders of deployed and native ecosystems in the Cerrado-Pantanal ecotone. In: XI Congresso de Ecologia do Brasil, 2013, Porto Seguro - PB
- RODRIGUES, V. B.; OLIVEIRA, M. Efeitos da estrutura de *Yucca* sp. (Asparagales, Agavaceae) na distribuição de *Argiope argentata* (Araneae, Araneidae). In: XXIX Congresso Brasileiro de Zoologia, 2012, Salvador - BA
- JESUS, F. M.; RODRIGUES, V. B.; CAMPOS, R. I. Effect of habitat conservation in predation of artificial nests. In: 49th Annual Meeting of the Association for Tropical Biology & Conservation, 2012, Bonito - MS
- RODRIGUES, V. B.; FARIA, O.; SOUZA, F. A.; JUSTINO, L. L. Notas sobre a ocorrência de *Jacamaralcyon tridactyla* (Vieillot) (Piciformes, Galbulidae) em Minas Gerais, Brasil. In: VI Simpósio de Meio Ambiente, 2010, Viçosa - MG
- NETTO, T. R.; BRAGA, J. R.; RODRIGUES, V. B. Polinização de *Psidium guajava* L. In: XXVII Encontro Anual de Etologia, 2010, Alfenas - MG
- RODRIGUES, V. B.; JÚNIOR, E. R. N.; CAVALARI, D. C.; VIANA, A. C. Fatores influenciadores da distribuição e diversidade das aranhas orbitelas do sub-bosque na Estação Ecológica Água Limpa, Cataguases, MG, Brasil. In: XXVIII Encontro Anual de Etologia, 2010, Alfenas - MG
- RODRIGUES, V. B.; VIANA, A. C.; CAVALARI, D. C.; JÚNIOR, E. R. N. ; SILVA, L. D. Levantamento preliminar da araneofauna do sub-bosque Estação Ecológica Água Limpa, Cataguases, MG. In: VI Simpósio de Meio Ambiente, 2010, Viçosa - MG
- SOUZA, F. A.; MACHADO, F. C.; RODRIGUES, V. B.; THOME, M. O. Capacidade de cargas antrópicas das principais trilhas da Estação Ecológica Água Limpa? Cataguases, MG.. In: VI Simpósio de Meio Ambiente, 2010, Viçosa - MG
- COSTA, D. R.; CÂNDIDO, J. R.; RODRIGUES, V. B.; MELO, R. S.; ROCHA, G. N.; SIQUEIRA, E. V.; DUTRA, M. D.; GON-

ZAGA, M. A. O perfil e as tendências do aluno de Ciências Biológicas das Faculdades Integradas de Cataguases, Minas Gerais, Brasil. In: Caderno de resumos, 2010, Alfenas - MG

- RODRIGUES, V. B.; CAVALARI, D. C. ; COSTA, D. R. Araneofauna (arachnida: araneae) da Estação Ecológica Água Limpa. In: IX Congresso de Ecologia do Brasil, 2008, São Lourenço - MG