

**Nathaly R. Guerrero Ramírez**

### **Personal information**

**Nationality** Colombian

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**Webpage** <https://nathalyguerrero.weebly.com>

### **Education**

- 2018** **Dr. rer. nat at Universität Leipzig:** "Disentangling the influence of above-ground interactions on temporal changes in the biodiversity-ecosystem functioning relationship" *Summa cum laude*. Advisor: Nico Eisenhauer
- 2014** **Master of Biology at Université du Québec à Montréal:** "Influences of tropical tree diversity on tree root decomposition". Advisors: Tanya Handa & Christian Messier
- 2009** **Bachelor of Science (Environmental Biology) at Universidad de Bogotá Jorge Tadeo Lozano, Colombia:** "Soil and microbial characteristics of high-altitude ecosystems of Volcan Baru National Park as a basis for predicting the effects of global warming". Advisor: Valeria Pizarro

### **Grants & Fellowships**

- 2020** **Gender equality fund,** Faculty of Forest Sciences and Forest Ecology, Georg-August-Universität Göttingen, €2500
- 2019** **Dorothea Schlözer Postdoctoral Programme,** Georg-August-Universität Göttingen, Germany, ~€150.000
- 2018** **Scholarship, Cost Action KEYSOM Training School,** €860
- 2015** **Scholarship, Research Academy Leipzig,** Universität Leipzig, Germany, €800
- 2011-2013** **Scholarship of academic excellence FARE-UQAM,** Université du Québec à Montréal, Québec, \$10000
- 2011** **Scholarship of academic excellence,** Centre de la Science de la Biodiversité au Québec, Québec, \$2500
- 2007-2008** **Short-term Research Fellowship,** Smithsonian Tropical Research Institute, Panama, \$3970

### **Proposals**

**BIOMONI:** Biodiversity monitoring of island ecosystems (member of the coordination team, invited to submit full proposal April 2023). Biodiversa+.

**sMultiMulti:** Across multiple-taxa and multiple-facets: Towards a multidimensional approach of biodiversity (co-PI, invited to submit full proposal April 2023). ECR sDIV Working Group. German Centre for Integrative Biodiversity Research. Germany

### **Working groups**

- 2020-** **Tropical Root Trait Initiative ([TropiRoot](#)).** Organizers: Daniela Cusack, Amanda Longhi Cordeiro, Kelly Andersen, Kristine Cabugao, Rich Norby, S. Joe Wright. Participants: Liz Agee, Marie Arnaud, Mauro Brum, Brad

Christoffersen, Shalom D. Addo-Danso, Lee Dietterich, Cecile Giardin, **Nathaly Guerrero-Ramírez**, Walter Huasco, Colleen Iversen, Deliang Kong, Martyna Kotowska, Laynara Lugli, Luke McCormack, Rafael Oliveira, Jennifer Powers, Chris Smith-Martin, Stuart Smith, Laura Toro, Maria Natalia Umaña, Oscar Valverde-Barrantes, Cynthia Wright, Daniela Yaffar, Lee Ming Yang

**2018-2021 Towards understanding root trait variation and ecosystem functioning ([sROOT](#)).** Participants: Liesje Mommer, Alex Weigelt, Joana Bergmann, Helge Bruelheide, Grégoire Freschet, **Nathaly Guerrero-Ramírez**, Colleen Iversen, Jens Kattge, Thomas Kuyper, Daniel Laughlin, Luke McCormack, Ina Meier, Hendrik Pooter, Catherine Roumet, Marina Semchenko, Chris Sweeney, Oscar Valverde-Barrantes, Alfons van der Plas, Larry York

**2018 From predictive modelling to global scale monitoring of soil biodiversity and ecosystem function dynamics.** Participants: Alberto Orgiazzi, Anna Heintz-Buschart, Antonis Chatzinotas, Brajesh Singh, Carlos Guerra, César Marín, Diana Wall, Dmitry Schigel, Don Cowan, Erin Cameron, Fernando Maestre, Franciska De Vries, Guillaume Patoine, Johannes Sikorski, Léa Beaumelle, Manuel Delgado-Baquerizo, **Nathaly Guerrero-Ramírez**, Nico Eisenhauer, Richard Bardgett, Simone Cesarz, Tesfaye Wubet, Tine Grebenc

### Leadership, Honors & Awards

**2023- Data representative and steering committee member,** EnriCo: Enrichment of European beech forests with conifers: impacts of functional traits on ecosystem functioning. Georg-August-Universität Göttingen

**2019- Associated researcher,** Collaborative Research Center 990: Ecological and socioeconomic functions of tropical lowland rainforest transformation systems Sumatra (Indonesia) – Efforts. Georg-August-Universität Göttingen

**Nov 2017 Co-organizer, Two-day workshop on “Female careers and role models: Crucial factors for success, managing conflicts, and developing your career”.** Co-organizers: Katharina Grosser, Anja Worrich, Simone Cesarz, **Nathaly Guerrero**. German Centre for Integrative Biodiversity Research, Germany. Funded by the female career fund, € 2400

**2015, 2017 Organizer, Role model events with successful female scientists: Gretchen Daily and Diana Wall.** German Centre for Integrative Biodiversity Research, Germany. Supported by the female career fund

**08/2016 Visiting researcher,** University of Copenhagen, Natural History Museum of Denmark, Denmark. Host: Aimée T. Classen

**2015-2017 Doctoral students’ representative,** Equal Opportunity Committee. German Centre for Integrative Biodiversity Research (iDiv) Germany

**2004, 2005 Volunteer park ranger,** El Tuparro National Park and La Paya National Park, Colombia

**2003, 2005 Award for academic excellence,** Universidad Jorge Tadeo Lozano, Colombia, \$5000

### Professional experience

**2023- Postdoctoral researcher** at Georg-August-Universität Göttingen, EnriCo: Enrichment of European beech forest with conifers: impacts of functional traits on ecosystem functioning. Department of Silviculture and Forest Ecology of the Temperate Zones, Germany. Supervisor: Christian Ammer

- 2019-2022 Postdoctoral researcher** at Georg-August-Universität Göttingen, Biodiversity, Macroecology and Biogeography, Germany. Host: Holger Kreft
- 2018-2019 Postdoctoral researcher** with sDiv working group on "Towards understanding root trait variation and ecosystem functioning (sROOT)". German Centre for Integrative Biodiversity Research (iDiv), Germany. Supervisors: Alexandra Weigelt & Liesje Mommer
- 2014-2017 Doctoral researcher** at German Centre for Integrative Biodiversity Research (iDiv) and Universität Leipzig, Germany. Supervisor: Nico Eisenhauer
- 2013-2014 Doctoral researcher** at Friedrich-Schiller-Universität Jena, Germany. Supervisor: Nico Eisenhauer
- 2006-2010 Research intern** with Ipeti Carbon Project, REDD+ and Avoided Deforestation Project; Understorey Plant Distribution Project; Agua Salud Project; Traditional Agricultural Systems Project and Soil ecology. Smithsonian Tropical Research Institute (STRI), Panama. Advisors: Catherine Potvin, Ignacia Holmes, Johanne Pelletier, Mirkka Jones, James E. Watkins, Jefferson S. Hall, Kathryn Kirby, Ben Turner.

### **Supervision & Mentorship**

#### **Bachelor, Master & Doctoral students**

- 2023-** Axel Gualdoni Becerra. Connecting landscape fragmentation, changes in land use and remote sensing indices to understand multifaceted plant diversity and ecosystem functioning in the Dry Chaco Forest Georg-August-Universität Göttingen. Germany. Committee member (starting July 2023)
- 2023-** Jacob Schmidt. Interaction between non-native tree species and Beech on nutrients and ectomycorrhizal fungi. Georg-August-Universität Göttingen. Germany. Committee member
- 2023-** Michela Audisio. Role of ectomycorrhizal fungi in pure and mixed beech-conifer forests under climate change. Georg-August-Universität Göttingen. Germany. Committee member
- 2023-** Thomas Durner. Vergleich der Wurzelsysteme von Buche (*Fagus sylvatica*), Fichte (*Picea abies*) und Douglasie (*Pseudotsuga menziesii*) unter Berücksichtigung einer Fallstudie in niedersächsischen Wäldern (Comparison of the root systems of beech, spruce and douglas fir considering a study in Lower Saxony forests). Georg-August-Universität Göttingen. Germany
- 2022-** Fernanda Cantillo Rodriguez. Landscape restoration in tropical and subtropical mountain ecosystems. Georg-August-Universität Göttingen. Germany. Committee member
- 2022-** Maria Laura Tolmos. Multifaceted plant diversity on islands and island-like ecosystems. Georg-August-Universität Göttingen. Germany
- 2022** Aneli Auguis. Chilean multi-taxonomic diversity patterns and its conservation implications. Georg-August-Universität Göttingen. Germany
- 2022** Silva Weiken. Susceptibility of root trait variation to environmental factors in three orchid species on the Western Canary Islands. Georg-August-Universität Göttingen. Germany
- 2021-** Thalita Ferreira Arruda. Functional traits of vascular plants on islands across spatial scales. Georg-August-Universität Göttingen. Germany

- 2021-2022** Justus Presse. Plant diversity and ecosystem functioning in a Finish Lappish Lacustrine Island system. Georg-August-Universität Göttingen. Germany
- 2021-2022** Marc Tagne. Influence of land-use changes on multi-taxa diversity along spatial scales in Sumatra. Georg-August-Universität Göttingen. Germany
- 2021-2022** Jacob Sax. Variation in orchid root functional traits across an oceanic archipelago. Georg-August-Universität Göttingen. Germany
- 2021** Denver Cayetano. Landscape effects on multi-taxa diversity in experimental tree islands: a multi-scale analysis. Georg-August-Universität Göttingen. Germany (Masterpreis des Göttinger Preises Waldökosystemforschung 2022)
- 2020** Vannesa Montoya. Beta-diversity patterns and multi-trophic interactions in an enriched oil palm plantation (Sumatra, Indonesia). Georg-August-Universität Göttingen. Germany
- 2018-2020** Valeria Guzman. Diversity and functional traits of vascular epiphytes along elevation and forest-use intensity gradients. Georg-August-Universität Göttingen. Germany
- 2018-2020** Maria Leticia Monge-Gonzalez. Response of tree diversity, functional diversity and redundancy to forest-use intensity along a tropical elevational gradient. Georg-August-Universität Göttingen. Germany
- 2015** Anne Helling. How does decomposer diversity affect mass loss of standardized root litter? Universität Leipzig. Germany
- 2014** Annabell Richter. Influence of plant diversity and soil animals on microbial communities in the soil. Friedrich-Schiller-Universität Jena and Ernst-Abbe Fachhochschule in Jena. Germany

### Teaching

- 2020-2022** **Biodiversity and ecosystem functioning.** Course for the Forest Sciences and Forest Ecology master program. Georg-August-Universität, Göttingen. Responsible for the module, co-lecturer. Lectures & Seminar [6 Credits/ 4 semester hours per week]
- 2019, 2021** **Scientific writing and you.** Course for doctoral students. Georg-August-Universität, Göttingen. Co-lecturer. Seminar [3 Credits/ 2 semester hours per week]
- 2017** **Course on scientific methods for bachelor and master students.** Modules on: data management and introduction to R and tables and figures. German Centre for Integrative Biodiversity Research (iDiv), Germany

### Publications

(*h-index: 13, i10-index: 15, total citations: 1088, first-author: 7, second-author: 4, preprints: 2*)

- 24.** Weigelt A, Mommer L, Andraczek K, Iversen C.M, Bergmann J, Bruelheide H, Freschet G.T, **Guerrero-Ramírez N**, Kattge J, Kuyper T.W, Laughlin D.C, Meier I.C, van der Plas F, Poorter H, Roumet C, van Ruijven J, Sabatini F.M, Semchenko M, Sweeney C.J, Valverde-Barrantes O.J, York L.M, McCormack M.L. The importance of trait selection in ecology, *Accepted Nature*
- 23.** Zemp D.C, **Guerrero-Ramírez N**, Brambach F, Darras K, Grass I, Potapov A, Röhl A, Arimond I, Ballauff J, Behling H, Berkelmann D, Biagioni S, Buchori D, Craven D, Daniel R, Gailing O, Ellsäßer F, Fardiansah R, Hennings N, Irawan B, Khokthong W, Krashevskaya V, Krause A, Kückes J, Li K, Lorenz H, Maraun M, Merk M.S, Moura

- C.C.M, Mulyani Y.A, Paterno G, Pebrianti H.D, Polle A, Prameswari D.A, Sachsenmaier L, Scheu S, Schneider D, Setiajiati F, Setyaningsih C.A, Sundawati L, Tschardt T, Wollni M, Hölscher D, Kreft. H. Tree islands enhance biodiversity and functioning in oil palm landscapes, *Accepted Nature*
22. Isbell F, Balvanera P, Mori A.S, He J-S, Bullock J.M, Regmi G.M, Seabloom E.W, Ferrier S, Sala O.E, **Guerrero-Ramírez N**, Tavella J, Larkin D.J, Schmid B, Outhwaite C.L, Pramual P, Borer E.T, Loreau M, Omotoriogun T.C, Obura D.O, Anderson M, Portales-Reyes C, Kirkman K, Vergara P.M, Clark A.T, Komatsu K.J, Petchey O.L, Weiskopf S.R, Williams L.J, Collins S.L, Eisenhauer N, Trisos C.H, Renard D, Wright A.J, Tripathi P, Cowles J, Byrnes J.E.K, Reich P.B, Purvis A, Sharip Z, O'Connor M.I, Kazanski C.E, Haddad N.M, Soto E.H, Dee L.E, Díaz S, Zirbel C.R, Avolio M.L, Wang S, Ma Z, Liang J, Farah H.C, Johnson J.A, Miller B.W, Hautier Y, Smith M.D, Knops J.M.C, Myers B.J.E, Harmáčková Z.V, Cortés J, Harfoot M.B.J, Gonzalez A, Newbold T, Oehri J, Mazón M, Dobbs C, Palmer M.S. 2023. Expert perspectives on global biodiversity loss and its drivers and impacts on people. **Frontiers in Ecology and the Environment**, 21(2): 94-103
  21. Wurz A, Tschardt T, Martin D.A, Osen K, Raveloaritiana E, Andriafanomezantsoa R, Andrianisaina F, Fulgence T.R, Dröge S, Rakotomalala A.A.N.A, Randriamanantena R, Sozafy M.R, Andrianarimisa A, Babarezoto F.S, Barkmann J, Hänke H, Hölscher D, Kreft H, Rakouth B, **Guerrero-Ramírez N**, Ranarijaona H.L.T, Ratsoavina F.M, Raveloson L.H, Grass I. 2022. Win-win opportunities combining high yields with high multi-taxa biodiversity in tropical agroforestry. **Nature Communications**, 13:4127
  20. Guzmán-Jacob V, **Guerrero-Ramírez N**, Craven D, Paterno G.B, Taylor A, Krömer T, Wanek W, Zotz G, Kreft H. 2022. Broad- and small-scale environmental gradients drive variation in chemical, but not morphological, leaf traits of vascular epiphytes. **Functional Ecology**, 36(8): 1858-1872
  19. Ferreira-Arruda T, **Guerrero-Ramírez N**, Denelle P, Weigelt P, Kleyer M, Kreft H. 2022. Island area and historical geomorphological dynamics shapes multifaceted diversity of barrier island floras. **Ecography**, 8: e06238
  18. Martin D.A, Andrianisaina F, Fulgence T.R, Osen K, Rakotomalala A.A.N.A, Raveloaritiana E, Sozafy M.R, Wurz A, Andriafanomezantsoa R, Andriamaniraka H, Andrianarimisa A, Barkmann J, Dröge S, Grass I, **Guerrero-Ramírez N**, Hänke H, Hölscher D, Rakouth B, Ranarijaona H.L.T, Randriamanantena R, Ratsoavina F.M, Ravaomanarivo L.H.R, Schwab D, Tschardt T, Zemp D.C, Kreft H. 2022. Land use trajectories for sustainable land system transformations: identifying leverage points in a global biodiversity hotspot. **PNAS**, 119(7): e2107747119
  17. **Guerrero-Ramírez N**. 2021. Functional forests restoration. **Nature Ecology & Evolution**, 5: 1572-1573
  16. Cusack D.F, Addo-Danso S.D, Agee E.A, Andersen K.M, Arnaud M, Batterman S.A, Brearley F.Q, Ciochina M.I, Cordeiro A.L, Dallstream C, Diaz-Toribio M.H, Dietterich L.H, Fisher J.B, Fleischer K, Fortunel C, Fuchslueger L, **Guerrero-Ramírez N**, Kotowska M.M, Lugli L.F, Marín C, McCulloch L.A, Maeght J.L, Metcalf D, Norby R.J, Oliveira R.S, Powers J.S, Reichert T, Smith S.W, Smith-Martin C.M, Soper F.M, Toro L, Umaña M.N, Valverde-Barrantes O, Weemstra M, Werden L.K, Wong M, Wright S.J, Yaffar D. 2021. Tradeoffs and synergies in tropical forest root traits and dynamics for nutrient and water acquisition: Field and modeling advances. **Frontiers in Forest and Global Change**, 4: 704469
  15. Weigelt A, Mommer L, Andrzejek K, Iversen C.M, Bergmann J, Bruelheide H, Freschet G.T, **Guerrero-Ramírez N**, Kattge J, Kuyper T.W, Laughlin D.C, Meier I.C, van der Plas F, Poorter H, Fan Y, Roumet C, van Ruijven J, Sabatini F.M, Semchenko M, Sweeney C.J, Valverde-Barrantes O.J, York L.M, McCormack M.L.

2021. An integrated framework of plant form and function: The belowground perspective. **New Phytologist**, 232(1): 42-59
14. Monge-González M.L, Weigelt P, **Guerrero-Ramírez N**, Craven D, Castillo-Campos G, Krömer T, Kreft H. 2021. BIOVERA-Tree: tree diversity, community composition, forest structure and functional traits along gradients of forest-use intensity and elevation in Veracruz, Mexico. **Biodiversity Data Journal**, 9: e69560
  13. Monge-González M.L, **Guerrero-Ramírez N**, Krömer T, Kreft H, Craven D. 2021. Functional diversity and redundancy of tropical forests shift with elevation and forest-use intensity. **Journal of Applied Ecology**, 58(9): 1827-1837
  12. Laughlin D.C, Mommer L, Sabatini F.M, Bruelheide H, Kuyper T.W, McCormack M.L, Bergmann J, Freschet G.T, **Guerrero-Ramírez N**, Iversen C.M, Kattge J, Meier I.C, Poorter H, Roumet C, Semchenko M, Sweeney C.J, Valverde-Barrantes O.J, van der Plas F, van Ruijven J, York L.M, Aubin I, Burge O.R, Byun C, Čuštěrevska R, Dengler J, Forey E, Guerin G.R, Herault B, Jackson R.B, Karger D.N, Lenoir J, Lysenko T, Meir P, Niinemets U, Ozinga W.A, Penuelas J, Reich P.B, Schmidt M, Schrodte F, Velazquez E, Weigelt A. 2021. Root traits explain plant species distributions along climatic gradients yet challenge the nature of ecological trade-offs. **Nature Ecology & Evolution**, 5: 1123 - 1134
  11. **Guerrero-Ramírez N**, Mommer L, Freschet G.T, Iversen C.M, McCormack M.L, Kattge J, Poorter H, van der Plas A, Bergmann J, Kuyper T.W, York L.M, Bruehlheide H, Laughlin D.C, Meier I.C, Roumet C, Semchenko M, Sweeney C.J, van Ruijven J, Valverde-Barrantes O.J, Aubin I, Catford J.A, Manning P, Martin A, Milla R, Minden V, Pausas J.G, Smith S.W, Soudzilovskaia N.A, Ammer C, Butterfield B, Craine J.M, Cornelissen J.H.C, de Vries F, Hickler T, Isaac M.E, Kramer K, König C, Lamb E, Medlyn B, Onipchenko V.G, Read Q, Reich P.B, Rillig M.C, Sack L, Shipley B, Tedersoo L, Valladares F, van Bodegom P, Weigelt P, Wright J, Weigelt A. 2021. Global root traits (GRooT) database. **Global Ecology and Biogeography**, 30(1): 25-37. GRooT Website: <https://groot-database.github.io/GRooT/>, GRooT Data: <https://github.com/GRooT-Database/GRooT-Data>
  10. **Guerrero-Ramírez N**, Pizarro V, Turner B.L. 2020. Soil and microbial nutrient status are heterogeneous within an elevational belt on a neotropical mountain. **Pedobiologia**, 83: 150689
  9. Guerra C, Heintz-Buschart A, Sikorski J, Chatzinotas A, **Guerrero-Ramírez N**, Cesarz Simone, Beaumelle L, Rillig M. C, Maestre F.T, Delgado-Baquerizo M, Buscot F, Overmann J, Patoine G, Phillips H. R. P, Winter M, Wubet T, Küssel K, Bardgett R. D, Cameron E. K, Cowan D, Grebenc T, Marín C, Orgiazzi A, Singh B.K, Wall D.H, Eisenhauer N. 2020. Blind spots in global soil biodiversity and ecosystem function research. **Nature Communications**, 11(1): 3870
  8. Bergmann J, Weigelt A, van der Plas F, Laughlin D.C, Kuyper T.W, **Guerrero-Ramírez N**, Valverde-Barrantes O.J, Bruelheide H, Freschet G.T, Iversen C.M, Kattge J, McCormack M.L, Meier I.C, Rillig M, Roumet C, Semchenko M, Sweeney C.J, van Ruijven J, York L.M, Mommer L. 2020. The fungal collaboration gradient dominates the root economics space in plants. **Science Advances**, 6(27): eaba3756
  7. Monge-González M.L, Craven D, Krömer T, Castillo-Campos G, Hernández-Sánchez A, Guzmán-Jacob V, **Guerrero-Ramírez N**, Kreft H. 2020. Response of tree diversity and community composition to forest-use intensity along a tropical elevational gradient. **Applied Vegetation Science**, 23(1): 69-79
  6. **Guerrero-Ramírez N**, Reich P, Ciobanu M, Wagg C, Eisenhauer N. 2019. Diversity-dependent plant soil feedbacks underlying long-term plant diversity effects on primary productivity. **Ecosphere**, 10(4): 1-14

5. Siebert J, Suenneman M, Auge H, Berger S, Cesarz S, Ciobanu M, **Guerrero-Ramírez N**, Eisenhauer N. 2019. The effects of drought and nutrient addition on soil organism vary across taxonomic groups, but are constant across seasons. **Scientific Reports**, 9: 639
4. **Guerrero-Ramírez N**, Craven D, Reich P.B, Ewel J.J, Isbell F, Koricheva J, Parrotta J.A, Auge H, Erickson, H. E, Forrester D.I, Hector A, Joshi J, Montagnini F, Palmborg C, Piotta D, Potvin C, Roscher C, van Ruijven J, Tilman D, Wilsey B, Eisenhauer N. 2017. Diversity-dependent temporal divergence of ecosystem functioning in experimental ecosystems. **Nature Ecology and Evolution**, 1: 1639-1642
3. **Guerrero-Ramírez N**, Eisenhauer N. 2017. Trophic and non-trophic interactions influence the mechanisms underlying biodiversity-ecosystem functioning relationships under different abiotic conditions. **Oikos**, 126(12): 1748-1759
2. **Guerrero-Ramírez N**, Craven D, Messier C, Potvin C, Turner B.L, Handa I.T. 2016. Root quality, but not tree species richness, drives decomposition in tropical forests. **Plant Soil**, 404(1): 125-139
1. Thakur M.P, Milcu A, Manning P, Niklaus P.A, Roscher C, Power S, Reich P.B, Scheu S, Tilman D, Ai F, Guo H, Ji R, Pierce S, **Guerrero-Ramírez N**, Richter A.N, Steinauer K, Strecker T, Vogel A, Eisenhauer N. 2015. Plant diversity drives soil microbial biomass carbon in grasslands irrespective of global environmental change factors. **Global Change Biology**, 21(11): 4076-4085

### **Preprints**

2. Zhou T, Craven D, Kreft H, Zhang J, Wang X, Lian J, Ye W, Jin G, Mi X, Yao Y, Ren H, Yang J, Cao M, Wang C, Qin Y, Zhou G, Fei Y, Xu Y, Qiao X, Jiang M, **Guerrero-Ramírez N**. 2022. Latitude influences stability via stabilizing mechanisms in naturally-assembled forest ecosystems at different spatial grains. bioRxiv
1. Montoya-Sánchez V, Kreft H, Arimond I, Ballauff J, Berkelmann D, Brambach F, Daniel R, Grass I, Hines J, Hölscher D, Irawan B, Krause A, Polle A, Potapov A, Sachsenmaier L, Scheu S, Sundawati L, Tschardt T, Zemp D.C, **Guerrero-Ramírez N**. 2022. Landscape heterogeneity and soil biota are central to multi-taxa diversity for landscape restoration. bioRxiv

### **Publications (in preparation & in revision)**

4. Cayetano D, Zemp D.C, Weigelt P, Arimond I, Ballauff J, Berkelmann D, Brambach F, Daniel R, Darras K, Grass I, Irawan B, Korol Y, Krause A, Khokthong W, Paterno G, Polle A, Potapov A, Sachsenmaier L, Sundawati L, Scheu S, Tschardt T, Kreft H, **Guerrero-Ramírez N**. Scale-dependent landscape-biodiversity relationships shape ecological restoration in productive landscapes, in preparation
3. **Guerrero-Ramírez N**, Weemstra M, Andersen K, Arnaud M, Cordeiro A.L, Cusack D.F, Kotowska M.M, Lee M.Y, Leroy C, Lugli L.F, Pierick K, Smith-Martin C.M, Toro L, Umaña M.N, Valverde-Barrantes O.J, Wong M, Fortunel C. Contributions of subtropical and tropical species to belowground plant ecological strategies, in preparation
2. **Guerrero-Ramírez N**, Hines J, Korell L, Eisenhauer N, Auge H. Disturbance, not herbivory, moderates belowground response to assembly of native and exotic plant communities, in preparation
1. Zheng L, Barry K.E, **Guerrero-Ramírez N**, Craven D, Reich P.B, Verheyen K, Scherer-Lorenzen M, Eisenhauer N, Barsoum N, Bauhus J, Bruelheide H, Cavender-Bares J, Dolezal J, Auge H, Fagundes M.V, Ferlian O, Fiedler S, Forrester D.I, Ganade G, Gebauer T, Haase J, Hajek P, Hector A, Herault B, Hölscher D, Hulvey K.B, Irawan B, Jactel H, Koricheva J, Kreft H, Lanta V, Leps J, Mereu S, Messier C,

Montagnini F, Mörsdorf M, Müller S, Muys B, Nock C, Paquette A, Parker B, Parker J.D, Parrotta J.A, Paterno G, Perring M.P, Piotto D, Polley H.W, Ponette Q, Potvin C, Quosh J, Rewald B, van Ruijven J, Standish R, Stefanski A, Sundawati L, Tilman D, Urgoiti J, Williams L.J, Wilsey B.J, Yang B, Zhang L, Zhao Z, Godbold D.L, Sandén H, Ebeling A, Schmid B, Fischer M, Yan E, Hautier Y. Effect of plant diversity on productivity strengthen over time due to trait-dependent shifts in species overyielding, submitted to *Nature Ecology and Evolution*

### **Invited lectures & conferences**

- 2023** The entangled bank of biodiversity in a changing world. Kalko Lecture, Biodiversity Exploratories. Wernigerode. Germany
- 2022** The entangled bank of biodiversity in a changing world. DyAFor - Dynamics and community assembly of tropical forests, AMAP. Montpellier
- 2022** European Conference of Tropical Ecology. Montpellier
- 2020** Quantitative Ecology Virtual Conference. British Ecological Society
- 2017** Temporal changes on plant diversity effects on ecosystem functioning. Annual meeting of The Jena Experiment, Jena, Germany
- 2014** Temporal changes on diversity effects: the role of monocultures and polycultures. German Centre for Integrative Biodiversity Research – working group on “Using tree diversity as an insurance for the stable functioning of forest ecosystems”, Leipzig, Germany
- 2013** Temporal changes on diversity effects: the role of monocultures and polycultures. German Centre for Integrative Biodiversity Research – working group on “Plant diversity effects on ecosystem resistance to and recovery from perturbations”, Leipzig, Germany
- 2013** Influence of tropical tree diversity on tree root decomposition. Centre for Forest Research 7<sup>th</sup> Annual Conference, Montebello, Quebec, Canada
- 2009** Microbial enzymatic activity in soils from high altitude systems. Second World Congress of Paramos: Life at High Altitudes, Loja, Ecuador

### **Professional skills and services**

- Languages** Spanish (native), English (fluent), German (basic)
- Peer reviewer** Functional Ecology; Plant and Soil; Basic and Applied Ecology; Scientific Reports; Environmental Microbiology; Agriculture, Ecosystems & Environment; Archives of Agronomy and Soil Science; Forest Ecology and Management; Ecology Letters; Ecology; Global Ecology and Conservation; Global Ecology and Biogeography; Journal of Applied Ecology; Journal of Forestry Research; New Phytologist; Nature; Nature Ecology & Evolution; Journal of Ecology; Soil Organisms; Journal of Tropical Ecology
- Grant reviewer** Invited by the National Fund for Scientific and Technological Development (FONDACYT), Chile; EJP Soil European Joint Programme
- Memberships** British Ecological Society, Gesellschaft für Tropenökologie (gtö), SoilBON, WOCinEEB, TreeDivNet