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Professional appointments

2022 – 2025, Postdoctoral research fellow in Macroecology (PI), University of São Paulo (Funding: *Estonian Research Council*)
2021 – 2022, Postdoctoral research fellow in Environmental Technology, Instituto Tecnológico Vale (Funding: *FUNDEP*)
2018 – 2018, Fieldwork specialist, Department of Botany, University of Tartu
2016 – 2018, Teaching Assistant, Department of Botany, University of Tartu

Education

2016 – 2021, **Ph.D.** Institute of Ecology and Earth Sciences, University of Tartu, Estonia.

Thesis: *Phylogenetic structure of plant communities along environmental gradients: a macroecological and evolutionary approach.* Supervisor: Dr. Pille Gerhold

2014 – 2016, **M.S.** Marine Biology and Coastal Environments, Fluminense Federal University, Brazil.

2007 – 2013, **B.S.** Biology, State University of Rio de Janeiro, Brazil.

Supervising

2022 – 2024, Larissa Lotti (M.S), "What factors influence the differential representation of lineages between plant communities in the Atlantic Forest? " (University of São Paulo; co-supervisor)
2017 – 2017, Annika Kumar (B.S.), "Variation in ecological and evolutionary drivers of phylogenetic beta diversity in plant communities" (University of Tartu, co-supervisor).

Peer-reviewed publications

11. **Massante, J.C.**, Neri, A., Villa, P.M., Fialho, I., Pontara, V., Bueno, M., Gastauer, M. (2023) Looking similar but all different: phylogenetic signature of Brazilian rocky outcrops and the influence of temperature variability on their phylogenetic structure. *Journal of Ecology (In Press)*.

10. Galván-Cisneros, C.M., Gastauer, M., **Massante, J.C.**, Villa, P.M., Meira-Neto, J.A.A. (2023) Simultaneous competition and environmental filtering in woody communities of the understory of Eucalyptus plantations in the Cerrado. *Perspectives in Plant Ecology, Evolution and Systematics*, 125731.

9. **Massante, J.C.** and Gastauer, M. (2023) Evolutionary history of marginal habitats regulates the diversity of tree communities in the Atlantic Forest. *Annals of Botany*, 131(2), 261-274.

8. Gastauer, M., **Massante, J.C.**, Ramos, S.J., Ailva, R.S.S., Boanares, D., Guedes, R.S., Caldeira, C.F., Medeiros-Sarmento, P.S., Castro, A.F., Prado, I.G.O., Cardoso, A.L.R., Maurity, C., Ribeiro, P.G. (2022). Revegetation on tropical steep slopes after mining and infrastructure projects: Challenges and solutions. *Sustainability*, 14(24), 17003.

7. Mendes, G. et al. (including **Massante, J.C.**, 38/48). (2021). How much leaf area do insects eat? A dataset of insect herbivory sampled globally with a standardized protocol. *Ecology*, 102(4), e03301.

6. **Massante, J.C.**, Kobel, M., Pinho, P., Gerhold, P., Branquinho, C., Nunes, A. (2021). Phylogenetic structure of understorey annual and perennial plant species reveals opposing responses to aridity in a Mediterranean biodiversity hotspot. *Science of The Total Environment*, 761, 144018.

5. Blaus, A., Reitalu, T., Gerhold, P., Hiiesalu, H., **Massante, J.C.**, Veski, S. (2020). Modern pollen-plant diversity relationships inform palaeoecological reconstructions of functional and phylogenetic diversity in Calcareous fens. Frontiers in Ecology and Evolution, vol. 8, article 207.

4. **Massante, J.C.** and Gerhold, P. (2020). Environment and evolutionary history depict phylogenetic alpha and beta diversity in the Atlantic coastal white-sand woodlands. *Journal of Vegetation Science, 31 (4).*

3. Brown, J.J., Mennicken, S., **Massante, J.C.**, Dijoux, S., Telea, A., Benedek, A.M., Götzenberger, L., Májeková, M., Lepš, J., Šmilauer, P., Hrček, J., de Bello, F. (2019). A novel method to predict dark diversity using unconstrained ordination analysis. *Journal of Vegetation Science, 30 (4).*

2. **Massante, J.C.**, Götzenberger, L., Takkis, K., Hallikma, T., Kaasik, A., Laanisto, L. Hutchings, M.J., Gerhold, P. (2019). Contrasting latitudinal patterns in phylogenetic diversity between woody and herbaceous communities. *Scientific Reports, vol: 9, article 6443.*

1. **Massante, J.C.** Mining disaster: restore habitats now. (2015). *Nature, 528 (7580).* (not peer-reviewed but relevant)

Manuscript under review: **Massante, J.C.**, Castro, A.F., Medeiros-Sarmento, P.S., Silva, G.M., Caldeira, C.F., Ramos, S.J. Species selection for optimising mine land rehabilitation: integrating functional traits with the minimum set prioritisation technique.

Book chapters (in Portuguese)

Knoechelmann, Clarissa; Vieira, Ligia A.F.; Ortíz-Cordero, Maira; **Massante, J.C.**; Andrade, Janete F.; Sena, Pedro Henrique A. (2019). Estrutura de uma rede de

interações mutualísticas entre plantas com nectários extra-florais e formigas na Caatinga. Siqueira, F.F.S; Oliveira, F.M.P; Neto, J.D.R.; Barros, M.F.; Specht, M.J.; Sena, P.H.A; Melo, F.P.L; Tabarelli, M; Leal, I.. Ecologia e conservação da Caatinga - curso de campo 2015 (115−124). Recife - Brazil: Ed. UFPE.

Massante, J.C. (2019). Interações positivas entre plantas podem aumentar nichos de regeneração na Caatinga. Siqueira, F.F.S; Oliveira, F.M.P; Neto, J.D.R.; Barros, M.F.; Specht, M.J.; Sena, P.H.A; Melo, F.P.L; Tabarelli, M; Leal, I.. Ecologia e conservação da Caatinga - curso de campo 2015 (359−373). Recife - Brazil: Ed. UFPE.

Massante, J. C.; Knoechelmann, Clarissa; Andrade, Janete F.; Vieira, Ligia A.F.; Ortíz-Cordero, Maira; Sena, Pedro Henrique A. (2019). Ninhos de formigas cortadeiras influenciam o recrutamentode plantas lenhosas na Caatinga? Siqueira, F.F.S; Oliveira, F.M.P; Neto, J.D.R.; Barros, M.F.; Specht, M.J.; Sena, P.H.A; Melo, F.P.L; Tabarelli, M; Leal, I.. Ecologia e conservação da Caatinga - curso de campo 2015 (78−87). Recife - Brazil: Ed. UFPE.

Vieira, Ligia A.F.; Knoechelmann, Clarissa M.; Andrade, Janete F.; **Massante, J. C.**; Ortiz- Cordeiro, Maira A.; Sena, Pedro Henrique A. 2019). Existe efeito da sucessão secundária na estruturação da comunidade de herbáceas na Caatinga? Siqueira, F.F.S; Oliveira, F.M.P; Neto, J.D.R.; Barros, M.F.; Specht, M.J.; Sena, P.H.A; Melo, F.P.L; Tabarelli, M; Leal, I.. Ecologia e conservação da Caatinga - curso de campo 2015 (43−51). Recife - Brazil: Ed.UFPE.

Knoechelmann, Clarissa M.; Lima-Júnior, Francisco C.; Santos-Neto, Pedro E.; Trindade, Diego; **Massante, J. C.** (2019). Formiga-Leão (Neuroptera: Myrmeleontidae) associada com ninhos de Dorymyrmex thoracicus (Hymenoptera: Formicidae): Testando a teoria do forrageamento ótimo. Siqueira, F.F.S; Oliveira, F.M.P; Neto, J.D.R.; Barros, M.F.; Specht, M.J.; Sena, P.H.A; Melo, F.P.L; Tabarelli, M; Leal, I.. Ecologia e conservação da Caatinga - curso de campo 2015 (201−202). Recife - Brazil: Ed. UFPE.

Ortíz-Cordero, Maira A.; D'Amico, Ana Rafaela; Zorger, Bianca B.; **Massante, J. C.**; Delgado- Jaramillo, Mariana; Santos-Neto, Pedro E. (2019). A presença de galhas inibe ou facilita a chegada de herbívoros mastigadores nas folhas? Siqueira, F.F.S; Oliveira, F.M.P; Neto, J.D.R.; Barros, M.F.; Specht, M.J.; Sena, P.H.A; Melo, F.P.L; Tabarelli, M; Leal, I.. Ecologia e conservação da Caatinga - curso de campo 2015 (125−134). Recife - Brazil: Ed.UFPE.

D'Amico, Ana Rafaela; Santos-Neto, Pedro E.; **Massante, J. C.** Delgado-Jaramillo, Mariana; Zorger, Bianca B.; Ortíz-Cordero, Maira A. (2019). Maior disponibilidade hídrica pode diminuir a diversidade beta na Caatinga? Siqueira, F.F.S; Oliveira, F.M.P; Neto, J.D.R.; Barros, M.F.; Specht, M.J.; Sena, P.H.A; Melo, F.P.L; Tabarelli, M; Leal, I.. Ecologia e conservação da Caatinga - curso de campo 2015 (162−173). Recife - Brazil: Ed. UFPE.

Outreaching

Latitudinal gradient of plant phylogenetic diversity explained (https://www.eurekalert.org/news-releases/504532)

Environment and evolutionary history depict phylogenetic alpha and beta diversity in the Atlantic coastal white-sand woodlands (https://vegsciblog.org/2020/04/29/environment-and-evolutionary-history-white-sand-woodlands/)

Grants

2021 Postdoctoral research grant (PI) to develop the project: "*Macroecology of rare species: Global phylogenetic and functional patterns*" at University of São Paulo (Estonian Research Council; 157 590,00 EUR; July 2022 – June 2025).

2020 Erasmus+ traineeship to work on *phylogenetic structure of semi-natural and restored plant communities in Mediterranean drylands* - Erasmus+ Programme of the European Union (2,880 EUR; granted but not used).

2019 Dora Plus activity 1.2 (PhD student mobility) to visit the University of Lisbon for a collaboration of 10 months - European Regional Development Fund and Archimedes Foundation (8,852 EUR).

2019 IAVS Travel grant, International Association for the Vegetation Science (550 EUR).

2019 Kristjan Jaak Scholarship for short study visits to attend the 15th European Ecological Federation Congress in Lisbon, Portugal - European Regional Development Fund and Archimedes Foundation (1,114 EUR).

2018 Doctoral Expedition to Reunion Island, University of Tartu (selected with the project: "*Phylogenetic structure of plant communities along an elevational gradient in the tropical Reunion Island*".

2018 Dora Plus activity 1.1 grant (short study visits) to attend the Meta-Analysis course delivered by dr. Wolfgang Viechtbauer at Maastricht University, The Netherlands - European Regional Development Fund and Archimedes Foundation (1,284 EUR).

2018 Dora Plus activity 1.1 grant (short study visits) to attend the Climate Change Biogeography meeting promoted by the International Biogeography Society in Évora, Portugal - European Regional Development Fund and Archimedes Foundation (1.355 EUR).

2017 Erasmus+ grant student mobility to attend the Quantitative Ecology Module at the University of South Bohemia, Czech Republic - Erasmus+ Programme of the European Union (1,983 EUR).

2017 IAVS Travel grant, International Association for the Vegetation Science (550 EUR).

2015 Field course: Ecology and Conservation the Brazilian Seasonally Dry Tropical Forest (Caatinga). Selected with the project: "*Positive interactions among plants can increase regeneration niches in the Caatinga*". (21 days of intensive training on sampling design, data analysis, scientific writing, and scientific presentation).

Selected presentations at Internationa Conferences

Massante, J.C., Neves, D., Gerhold, P. (July 2019). Environment and evolutionary history control phylogenetic turnover in Atlantic white-sand plant communities. *European Ecological Federation Congress - Ecology across borders: Embedding ecology in sustainable development goals*, Lisbon, Portugal. (Oral presentation).

Brown, J. J.; Mennicken, S.; **Massante, J. C.**; Dijoux, S.; Telea, A.; Benedek, A; Ochiana, S.; Majekova, M.; Gotzenberger, L.; Leps, J.; Smilauer, P.; Hrcek, J.; de Bello, F. (2018). Testing a novel method for predicting dark diversity. 2018 IAVS 61st ANNUAL SYMPOSIUM. Bozeman, United States of America: International Association of Vegetation Science, 23.

Massante, J.C., Götzenberger, L., Takkis, K., Hallikma, T., Laanisto L., Hutchings, M.J., Gerhold, P. (March 2018). Contrasting latitudinal patterns in phylogenetic diversity between woody and herbaceous communities. *Climate Change Biogeography - International Biogeographical Society meeting*, Évora, Portugal. (Poster).

Reitalu, T.; Birks, J.H.B.; Bjune, A.E.; Blaus, A.; Gerhold, P.; Giesecke, T.; Helm, A.; **Massante, J.C.**; Matthias, I.; Salonen, J.S.; Seppä, H.; Väli, V. (2017). Patterns of pollen diversity as a proxy for large- scale plant diversity across Europe. 60th Annual Symposium of the IAVS. Palermo, Italy. International Association of Vegetation Science, p.288

Journal Reviewer

Manuscript reviewer, 2019 -

Nature Ecology and Evolution, Restoration Ecology, Journal of Biogeography, Journal of Ecology, Journal of Applied Ecology, Scientific Reports, Journal of Vegetation Science (certified review record available at https://publons.com/researcher/3411727/jhonny-massante/peer-review/), *Ecological Indicators, Agronomy Research, Biodiversidade Brasileira.*

Positions in Professional Societies

International Society for Biogeography, Member; 2022 to the present
Internation Association for Vegetation Science; 2017 to the present (with a few gaps in between).