## Ana Cláudia Pereira de Oliveira

+44 7473 513535

#### **Profile**

Ph.D. in Biology and Ecology of Global Change (areas of specialization in Ecology and Functional Biodiversity) at the University of Lisbon and MSc degree in Development and Environment and BSc in Biology in Brazil. I started my BSc with the exercise of plant identification, going through the assessment of composition and taxonomic diversity in Brazilian ecosystems. In the MSc degree, I incorporated structural (phytosociology) and biogeographical issues. Finally, in my Ph.D. I explored the functional understanding of plant communities, associating it with the issue of the climate crisis. During my academic journey, I took some breaks to develop technical activities in the same institutions that I was already developing the researches, namely, i) Plant Ecology and Forest Restoration Laboratory (LERF) and Herbarium ESA both of University of São Paulo (from 2004 to 2007; 2013), ii) Federal University of Rio Grande do Norte (2007 – 2009) and iii) Center for Ecology and Environmental Monitoring (NEMA) of the Federal University of São Francisco Valley (UNIVASF) (from 2012 to current), respectively. Then, my CV is divided in General information, Research experiences and Technical experiences.

## 1. General information

# 1.1 Areas of Expertise

Tropical dry forest (Caatinga), Savannah (Cerrado) and Rainforest (Amazon) Desertification, Functional Diversity, Restoration Ecology, and Taxonomic Diversity

## 1.2. Awards

**2022** - Best thesis written by Portuguese or Latin American researchers (Technologies and Natural Sciences Category) - Latin America House Award 2022 edition

**2019** - First place Green Discoveries Sustainability Award (Stand up – Ideator) Alenquer/Portugal

2009 - First place in Master's Development and Environment

## 1.3 Periodical reviewer

2021 Journal of Biogeography2020 Ecological Restoration

# 2. Research Experience

**2.1 University of Lisbon – Portugal (**Supervisors Dra. Cristina Branquinho and Dra. Alice Nunes)

2015 – 2021 (**Ph.D. Project**) – title: Ecological indicators as tools to monitor the effects of climate change on Tropical dry forest.

Scholarship: National Council for Scientific and Technological Development/CNPq (2015-2016) and FCiências.ID Associations for Research and Development of Sciences (2017-2019)

2015 - Current: Collaborator of projects:

2020 – Current Renewal - Promoting the resilience of agroforestry systems in drylands to a more arid future ensuring ecosystem functions and services". This project is composed of an interdisciplinary team of South American and European researchers.

2016 – 2019 Change Tracker – Tracking climate change in drylands based on ecological indicators.

2015 – 2018 Adapt for Change - Improve the success of reforestation in semi-arid areas.

# **2.2 Federal University of Rio Grande do Norte – UFRN – Natal/Rio Grande do Norte/Brazil** Supervisor Ph.D. Maria Iracema Loiola

2009 – 2012 (**MSc degree**) - tittle: Characterization and floristic composition of the savanna community in the Rio Grande do Norte: conservation support

#### 2007 – 2012 Collaborator of Herbarium UFRN

Activities included: i) Scientific and administrative staff of projects;

- ii) managing and curating a research database namely BRAHMS software;
- iii) co-supervised eight graduation students;
- iv) organization of national and international congresses (59° National Congress of Botanic that occurred together with 4° Congress Latin-american of Caribe's Cactaceae and others Succulent and 30<sup>th</sup> Congress of International Organization for Succulent Plant Study);
  - v) write identification keys and flora (species/genera/family) descriptions
- 2005 2011 Collaborator of projects:
- 2008 2011 Long-Term Ecological Researches (PELD): northeast savannas (Cerrado).
- 2008 2010 Savanna of Rio Grande do Norte: is it landscape evolution or climate fluctuations?
- 2008 2009 Program for Research in Biodiversity (PPBIO) in the Brazilian Semiarid.
  - 2005 2009 Flora Potiguar: Floristic diversity and distribution patterns for conservation.

# 2.2 - Centre for Functional Ecology at the University of Coimbra in Portugal

2011 (Oct) – 2012 (Jan) Scholarship to develop the analyses of my thesis in collaboration with Dra. Helena Freitas.

# 2.4 Luiz de Queiroz College of Agriculture (ESALQ), University of São Paulo (USP)

**2.4.1** 1998 – 2000 - Herbarium ESA – Supervisor Ph.D. Vinicius Castro Souza

**Activities included:** i) write identification keys and flora (species/genera/family) descriptions, namely: a) Flora of the National Park of Caparaó: Lamiaceae; b) Flora of the States of Mato Grosso and Mato Grosso do Sul: Scrophulariaceae, and c) Flora of Natural Reserve of Vale do Rio Doce: <u>Lecythidaceae</u>.

- ii) techniques and procedures for collecting, preserving, processing and storing botanical species
- **2.4.2** 2000 2007 Forest Ecology and Restoration laboratory (LERF) Supervisor Ph.D. Ricardo Ribeiro Rodrigues

**Activities included:** Collaborator of projects

i) Permanent Plots that comprehended assessments of the flora in permanent plots (i.e., 41 ha; ca. 65 000 wood individuals of plant; 570 plant species) allocated in the Atlantic Forest and Cerrado ecosystems, aiming to gain knowledge on forest dynamics and to scientifically support flora conservation and restoration, and ii) *Mother Plants* aimed to promote the floristic and genetic diversity of native plant species to be used in forest restoration projects.

During this period, he also voluntarily contributed to the field work of several doctoral students associated with the LERF.

#### 2.5 Biodiversitas Foundation

2006 Collaborator of Review of the list of threatened species of Brazilian flora project

# 2.6 Scientific results most relevant 2.6.1 Reports and Books

**Oliveira, A.C.P.**; Nunes, A.; Oliveira, M.A.; Rodrigues, R.G.; Branquinho, C. How do taxonomic and functional diversity metrics change along an aridity gradient in a Tropical dry forest? **2021**. *Frontiers Plant Sci. Sec. Functional Plant Ecology* https://doi.org/10.3389/fpls.2022.923219

Catarino, L. **Oliveira, A.C.P.** et al. Trees, Shrubs, Lianas and Palm trees in the Serra dos Martírios-Andorinhas State Park. **2022**. *ISBN* 978-85-92612-17-7.

**Oliveira, A.C.P.**; Nunes, A.; Rodrigues, R.G.; Branquinho, C. The response of plant functional traits to aridity in a tropical dry forest. **2020**. *Science of the Total Environment* https://doi.org/10.1016/j.scitotenv.2020.141177.

**Oliveira, A.C.P.**; Nunes, A.; Pinho, P.; Matos, P.; Rodrigues, R.G.; Branquinho, C. From species presences to abundances: Using unevenly collectec plant species presences to disclose the structure and functioning of a dryland ecosystem. **2020**. *Ecological Indicators* https://doi.org/10.1016/j.ecolind.2020.

Romão, G.O.; Martins, C.H.C.; Lima, M.T.G.; Alves, F.M.; Fernandes, T.M.; Galvão, J.K.; Faraco, A.G.; **Oliveira, A.C.P.**; Souza, V.C. Phanerogamic Flora of the State of Caparaó National Park: Lamiaceae. *Pabstia (Carangola)*, v.21, p.9-37, **2012**.

**Oliveira, A.C.P.;** Penha, A.S.; Souza, R.F.; Loiola, M.I.B. Floristic composition of a savana community in Rio Grande do Norte, northeastern Brazil. *Acta Botanica Brasilica*, v.26, n.3, p.559-569, **2012**.

**Oliveira, A.C.P.;** Mota, M.L.; Loiola, M.I.B. Floristic diversity and identification key of climbers in a semideciduous forest in Parnamirim – RN, Brazil. *Revista Caatinga*, v.25, n.2, p.153-158, **2012**.

**Oliveira, A.C.P.** Characterization and floristic composition of the savanna community in the Rio Grande do Norte: conservation support. *Revista da Sociedade Portuguesa de Ecologia,* v.4, p.78-79, **2012**.

Loiola, M.I.B.; Oliveira, A.C.P.; Sampaio, D. Savanna of Rio Grande do Norte: is it landscape evolution or climate fluctuations? *Revista Fapern*, v.21, p.45-46, **2011**.

Viana, R.A.G.; Costa, J.C.; Rozza, A.F.; Bufo, L.V.; **Oliveira, A.C.P.** Floristic and structural characterization of forest remnants in Quedas do Iguaçu, Southeastern Paraná. *Biota Neotropica*, v.11, n.1, p.115-128, **2011**.

Latansio-Aidar, S.R.; **Oliveira, A.C.P**; Rocha, H.R.; Aidar, M.P.M. Phytossociology of a dense Cerrado on the footprint of a carbon flux tower, Pé-de-Gigante, Vassunung State Park, SP. *Biota Neotropica*, v.10, n.1, p.195-207, **2010**.

Loiola, M.I.B.; Paterno, G.B.C.; Diniz, J.A.; Calado, J.F.; **Oliveira, A.C.P.** Leguminosae and its potencial of use in the rural communities of São Miguel do Gostoso, RN. *Revista Caatinga*, v.23, n.3, 59-10, **2010**.

## 2.6.2 Congress abstracts

**Oliveira, A.C.P.;** Nunes, A.; Oliveira, M.A.; Oliveira, R.S; Rodrigues, R.G.; Branquinho, C. Using plant functional groups as ecological indicators to track the effects of aridity in dryland ecosystems. XX National Ecology Meeting, 2021.

**Oliveira, A.C.P.**; Nunes, A.; Correa, C.E., Rodrigues, R.G.; Branquinho, C. Ecological Indicators: From Early-Warning to Preventive and Corrective Actions. VII Word Conference on Ecological Restoration (...), 2017.

Silva, H.C.; Lima, J.L.C.; Roque, A.A.; **Oliveira, A.C.P.**; Loiola, M.I.B. Flora of the RPPN Stoessel de Brito: Fabaceae-Faboideae. 59º National Botanical Congress (...), 2008.

Azevedo, N.G.; Roque, A.A.; **Oliveira, A.C.P.**; Loiola, M.I.B. Flora of the RPPN Stoessel de Brito/RN: *Croton* L. 59º National Botanical Congress (...), 2008.

Silva, M.A.E.; Coelho, M.A.N.; Roque, A.A.; **Oliveira, A.C.P.**; Loiola, M.I.B. Flora of the RPPN Stoessel de Brito/RN: Araceae. 59º National Botanical Congress (...), 2008.

**Oliveira, A.C.P.;** Costa, R.A.; Sena, V.R.R.; Loiola, M.I.B; Herbarium UFRN: collection characterization. XXX Northeastern Meeting of Botany, 2007.

Sampaio, D.; Oliveira, A.C.P.; Souza, V.C. Lecythidaceae of Vale do Rio Doce Nature Reserve. LVII National Botanical Congress, 2006.

**Oliveira, A.C.P.;** Souza, V.C. Flora of Campos de Altitude of of the State of Caparaó National Park: Lamiaceae. 520 National Botanical Congress, 2001.

Souza, V.C.; Oliveira, A.C.P. Flora of the States of Mato Grosso and Mato Grosso do Sul: Scrophulariaceae. L National Botanical Congress, 1999.

**Oliveira, A.C.P.**; Souza, V.C. Herbarium ESA: collection characterization. XII Congress of the Society of Botanica of São Paulo.

## 3 Research Experience

3.1 Federal University of Vale do São Francisco – UNIVASF – Petrolina/Pernambuco/Brazil 2012 – Current : Supervisor Ph.D. Renato Garcia Rodrigues Activities included:

- i) 2021 Current: External researcher
- ii) 2012 2015: Environmental Analyst of São Francisco Transposition Project

  Activities included: i) supervision field work activities; ii) administrative, academic and financial reports, ii) Floristic inventory, collecting, preserving and identification specimens of

Caatinga flora along of the construction, and iii) techniques and procedures preserving, processing and storing botanical specimens at the Herbarium HVASF

# 3.2 Luiz de Queiroz College of Agriculture (ESALQ), University of São Paulo

**2000 - 2007 and 2013** Supervisor Ph.D. Ricardo Ribeiro Rodrigues — Forest Ecology and Restoration laboratory (LERF)

**Activities included:** i) 2013 - Coordinator and organization of restoration in the Amazon forest – Paragominas/Pará/Brazil;

iii) 2004 - 2007 - Coordinator of floristic activities: organization and responsible for field work team as well as of preparation of technical and financial reports and co-supervision of graduation students.