

PERSONAL INFORMATION



Dr. Alejandra Sarmiento Soler

I am a biologist with an M.Sc. in Forest Science and Forest Ecology and a Ph.D. in Agricultural Science. My research focuses on the functioning of coffee agroforestry systems along altitude and management gradients and explores climate change adaptation and mitigation opportunities in rural areas. I am interested in the role agroforestry systems have on social, economic, and environmental dimensions. I believe that a complete understanding of the complexity of such agroecosystems can help improve productivity and rural livelihoods while maintaining or enhancing essential ecosystem services.

CONTACT INFORMATION

Address: Turmstraße 1, 37073 Göttingen, Germany

Mobile phone: (+49) 17631284990

E-mail: aless@alesarmientosoler.com

Website: www.alesarmientosoler.com

Nationality: Spanish and Colombian

Date of birth: 16.08.1987

PROFESSIONAL EXPERIENCE

01.01.2021 – Currently

Consultant

- Climate Change Mitigation Strategies at Farm Level
- Visualization and Illustration of Science
- Data analysis and data visualization
- Business Development

01.09.2019 – 14.12.2020

Post-Doc Researcher

Tropical Plant Production and Agricultural Systems Modelling
Georg-August-Universität Göttingen

01.01.2015 – 14.02.2019

Ph.D. Student

Project: “Trade-offs and Synergies in Climate Change Adaptation and Mitigation in Coffee and Cocoa Systems”

Tropical Plant Production and Agricultural Systems Modelling
Georg-August-Universität Göttingen

- Water balance of coffee agroforestry systems
- Coffee productivity at an altitude and management gradient
- Climate change adaptation strategies for rural areas
- Project proposals writing

01.04.2014 – 31.12.2014 **Research assistant** at the German Federation for the Curation of Biological Data (GFBIO)
Centre of Biodiversity and Sustainable Land Use
Georg-August-Universität Göttingen

- Market surveys
- Outreach
- Development of training materials: e-modules, factsheets
- Workshops organization
- Data management and data analysis
- Scientific text writing

01.01.2013 – 01.01.2014 **Student assistant** in the Ph.D. project: “Scales of bacteria interactions on Plant Leave Surfaces.”
Department of Ecosystem Modelling
Georg-August-Universität Göttingen

- Microscopic photographs processing using ImageJ64
- Preparation of datasets and data quality assurance

01.11.2011 – 30.03.2012 **Student assistant** at the Faculty of Forest Science and Forest Ecology
Georg-August-Universität Göttingen

- Support to international students

01.10.2011 – 31.12.2011 **Student assistant** in the Ph.D. project: “Modelling the influence of social and economic factors on the adoption of agricultural innovations and land-use change in culturally diverse Southern Ecuador.”

Department of Agricultural Economy and Rural Development
Georg-August-Universität Göttingen

- Digitalization of interviews
- Data coding and data quality assurance

EDUCATION

01.01.2015 – 14.02.2019 **Ph.D. in Agricultural Science**
Georg-August-Universität Göttingen

Ph.D. thesis: “Coffee Productivity and Water Use in Open vs. Shaded Systems along an Altitudinal Gradient at Mt. Elgon, Uganda.”

01.10.2011 – 31.03.2014 **M.Sc. Forest Science and Forest Ecology** (Tropical and International Forestry)
Georg-August-Universität Göttingen

- Biometrical Research Methods
- Biotechnology and Forest Genetics
- Ecopedology of the Tropics and Subtropics
- Forest Utilization and Wood Processing
- International Forest Policy and Economics

- Monitoring Forest Resources
- Project Planning and Evaluation
- Tropical Forest Ecology and Silviculture

- 15.04.2013 – 15.08.2013 **Visiting researcher** for an MSc thesis in the Siberut Conservation Program, Indonesia
Deutsches Primaten Zentrum (DPZ), Bogor Agricultural University (IPB) and Georg-August-Universität Göttingen
- M.Sc. thesis:** “Comparing the productivity of cacao agroforestry systems in Siberut”
- 01.11.2012 – 12.12.2012 **Project leader and Forest Inventory coordinator**
Student Project: “Sustainable Forest Management Plan of Lowland Dipterocarp Forest and Exotic Plantations in Barangay Puntana, Southern Leyte, Philippines”
German Academic Exchange Service DAAD, Georg-August-Universität Göttingen, and The Visayas State University.
- 01.09.2005 – 30.06.2010 **Degree in Science, Biology, Environmental and Ecological Systems**
Salamanca University (Spain)
Scholarship: Bank Santander full scholarship to study for Latin American students (01.09.2005 – 30.06.2010)

TRAINING

- 13.02.2019 – 14.02.2019
&
06.03.2019 – 07.03.2019 Course in: **“Young Entrepreneurs in Science”**
Falling Walls and Georg-August-Universität Göttingen
- 08.10.2018 – 19.10.2018 Course in: **“Training of trainers.”**
SLE Training for international Development Cooperation, Humboldt University Berlin
Germany
- 20.11.2017 – 24.11.2017 Course in: **“The art of Science: Scientific Illustration.”**
Transmitting Science, Sabadell Spain
- 17.06.2015 – 19.06.2015 Workshop in **“Monitoring tree reactions to environment: tools and their application in forest ecology and urban forestry”**
Annas Koku Skola, Riga Latvia
- 04.08.2014 – 15.08.2014 Course in: **“Disaster Risk Management”**
SLE Training for international Development Cooperation, Humboldt University Berlin
Germany
Scholarship: German Academic Exchange Service (DAAD)
- 15.02.2014 – 27.02.2014 Course in: **“Agent-based modelling for spatial processes in geography with NetLogo”**
Angers University France
- 16.09.2013 – 27.09.2013 Course in: **“Increasing Resilience to Climate Change through Sustainable Resource Management”**

SLE Training for international Development Cooperation, Humboldt University Berlin
Germany

Scholarship: German Academic Exchange Service (DAAD)

SKILLS

Languages

Native	Spanish
Business fluent	English
Proficient	German
Intermediate	Swedish
Basic	French and Bahasa Indonesia

IT-Skills

Computer Skills

Personal Skills

- Excellent command of Microsoft Office, R, EndNote, and Illustrator
- Solid command of GIS tools (QGIS), STATISTICA, ImageJ64, Zotero, NetLogo, APSIM, and WordPress
- Leadership (initiatives & motivational) and teamwork
- Ability to work well in an international and multidisciplinary environment
- Excellent presentation skills
- Solid scientific writing skills
- Fieldwork experienced
- Knowledge about quantitative and qualitative research methods
- Excellent organization and management skills

Social Skills

PUBLICATIONS

Sarmiento-Soler, A., Rötter, R.P., Hoffmann, M.P., Jassogne, L., van Asten, P., Graefe, S., Vaast, P., 2022. Disentangling effects of altitude and shade cover on coffee fruit dynamics and vegetative growth in smallholder coffee systems. *Agriculture, Ecosystems & Environment* 326.

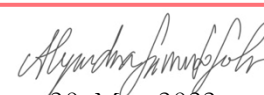
Sarmiento-Soler, Alejandra, Philippe Vaast, Munir P. Hoffmann, Laurence Jassogne, Piet van Asten, Sophie Graefe and Reimund P. Rötter 2020. Effect of cropping system, shade cover, and altitudinal gradient on coffee yield components at Mt. Elgon, Uganda. *Agriculture, Ecosystems & Environment* 295. doi: 10.1016/j.agee.2020.106887

Sarmiento-Soler, A., Vaast, P., Hoffmann, M.P., Rötter, R.P., Jassogne, L., van Asten, P.J.A., Graefe, S., 2019. Water use of *Coffea arabica* in the open versus shaded systems under smallholder's farm conditions in Eastern Uganda. *Agric. For. Meteorol.* 266–267, 231–242. <https://doi.org/10.1016/j.agrformet.2018.12.006>

Hoffmann, M.P., Odhiambo, J.J.O., Koch, M., Ayisi, K.K., Zhao, G., **Soler, A.S.**, Rötter, R.P., 2018. Exploring adaptations of groundnut cropping to prevailing climate variability and extremes in Limpopo Province, South Africa. *Field Crops Res.* 219, 1–13. <https://doi.org/10.1016/j.fcr.2018.01.019>

Rahn, E., Liebig, T., Ghazoul, J., van Asten, P., Läderach, P., Vaast, P., **Sarmiento, A.**, Garcia, C., Jassogne, L., 2018. Opportunities for sustainable intensification of coffee agroecosystems along an altitudinal gradient on Mt. Elgon, Uganda. *Agric. Ecosyst. Environ.* 263, 31–40. <https://doi.org/10.1016/j.agee.2018.04.019>

Sarmiento-Soler, A., Ort, M., Steckel, J., 2016. An Introduction to Data Management. BEFmate, GFBio, Göttingen, Germany.


20. May.2022