

Curriculum Vitae

Ana María Bedoya

Assistant Curator
Center for Biodiversity & Evolution
The New York Botanical Garden
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EDUCATION

2015–2021	Ph.D. Biology Department, University of Washington, Seattle, WA. Dissertation: Evolution of aquatic plants in rivers and wetlands across the Andes in northern South America. Faculty mentor: Richard G. Olmstead
2013	M.Sc. Biological Sciences, Universidad de los Andes Bogotá, Colombia
2011	B.Sc. Biology, Universidad de los Andes, Bogotá, Colombia

APPOINTMENTS

2024–Present	Assistant Curator, New York Botanical Garden
2024–Present	Adjunct Professor, The City University of New York
2026–Present	Research Associate, Smithsonian Tropical Research Institute
2025–Present	Courtesy Research Assistant Professor, Florida International University
2021–2024	Postdoctoral researcher, Louisiana State University, US
2023–2024	Research Affiliate, University of Rhode Island, US
2020–2021	Research Assistant. Department of Biology, University of Washington, US
2020	Instructor of record. Plant identification and Classification. Department of Biology, University of Washington, US

GRANTS, FELLOWSHIPS & AWARDS

2025	NSF award - \$1'253,790 (796,540 awarded to Bedoya-Lead PI)
2025	Pilot Project Award, New York Botanical Garden - \$5,500
2021	Denton Writing Fellowship, University of Washington - \$16,000
2020	George R. Cooley Award. Awarded by the American Society of Plant Taxonomists for best contributed paper in Plant Systematics. Botany conference - \$500
2020	Denton Writing Fellowship, University of Washington - \$16,000
2019	Delzie Demaree Travel Award. 66 th Fall Symposium at the Missouri Botanical Garden - \$250
2018	Boeing International Fellowship. Graduate school at the University of Washington - \$16,000
2017	Exploration fund grant. The Explorers Club, US - \$2,000
2017	Giles Botanical Field Research Award. University of Washington - \$3,500
2016	American Society of Plant Taxonomists (ASPT) Graduate student Award - \$750
2016	Botanical Society of America (BSA) Graduate Student Research Award - \$500
2015–2019	COLCIENCIAS fellowship for graduate studies, Colombia - \$38,000
2015	WRF Hall International Endowed Fellowship. University of Washington - \$48,000

2015	Best contributed Paper–Graduate Student. VIII Colombian Congress of Botany, Colombia
2014–2015	Fellowship award for young researchers funded by COLCIENCIAS and the Botany and Systematics Laboratory. Universidad de los Andes, Colombia - \$5,500
2013	Funding for graduate research-Proyecto Semilla, Universidad de los Andes - \$1,750
	Total: \$1'408,040

PUBLICATIONS

Peer-reviewed, Accepted, and In Press

**Student author *Co-first author

22. Paredes-Burneo, D.; **A.M. Bedoya**, F.A. Michelangeli, L.C. Majure, C. Ulloa-Ulloa, L.P. Lagomarsino. *In press*. Evidence of introgression amid phylogenetic conflict in *Brachyotum*, a plant radiation from the Tropical Andes. *American Journal of Botany*.
21. **Bedoya, A.M.**, E. Sessa., A.D. Leaché. 2026. Isolation in motion: how riverscape bridges and barriers shape the evolution of plants in fast-flowing river archipelagos *Molecular Ecology* 35: e70356.
20. Sparreo, L.**; **A.M. Bedoya**. 2025. Interaction of biological data and paleogeographic priors in biogeographic dating: How can biological data inform time-constrained geological models? *Journal of Biogeography* 52: e70098.
19. **Bedoya, A.M.**, F. Zapata, M.J. Sanín. 2025. Plant genome sequencing needs to go tropical. *Nature Reviews Biodiversity*. <https://doi.org/10.1038/s44358-025-00083-4>
18. Ball, L.D., **A.M. Bedoya**, C.M. Taylor, L.P. Lagomarsino. 2025. Phylogenomics and macroevolution of a florally diverse Neotropical plant clade. *Evolution* 79: 1583–1596.
17. Mansaray, J.K., **A.M. Bedoya**, L.A. Frost, O.C. Degreenia, L.P. Lagomarsino. 2025. Phylogenetic relationships and the repeated loss of traits associated with sicklebill pollination in *Centropogon* subgenus *Centropogon* (Campanulaceae). *American Journal of Botany*. e70016.
16. Brightly, W., **A.M. Bedoya**, M. Carlson, M.G. Rottersman, and C.A.E. Strömberg. 2024. Correlated evolution of dispersal traits and habitat preference in the melicgrasses (Poaceae: Meliceae). *American Journal of Botany*. e16406.
15. **Bedoya, A.M.** 2024. Botany and Geogenomics: constraining geological hypotheses in the neotropics with large-scale genetic data derived from plant DNA. *American Journal of Botany*. e16306 <https://bsapubs.onlinelibrary.wiley.com/doi/10.1002/ajb2.16306>
14. Frost, L., **A.M. Bedoya***, and L. Lagomarsino. 2024. Artifactual Orthologs and the Need for Diligent Data Exploration in Complex Phylogenomic Datasets: A museomic case study from the Andean flora. *Systematic Biology*, syad076
13. Ball, L., **A.M. Bedoya**, L. Lagomarsino. 2023. A target enrichment probe set for resolving phylogenetic relationships in the coffee family, Rubiaceae. *Applications in Plant Sciences* 11:e11554.
12. **Bedoya, A.M.** and A.J. Pérez-Castañeda. 2023. New records of riverweeds (Podostemaceae) from the tropical Andes (Colombia and Ecuador): getting our feet wet to bypass collection bias in Neotropical rivers. *Phytotaxa* 585: 274–280.
11. Muñoz-Sánchez, A.M.**; L. Rojas-Castellanos, M. Medina-Merchán, and **A.M. Bedoya**. 2023. Plants associated with humid environments of the Coroncoro wetland (Villavicencio, Colombia). *Field Museum Field Guides*. 1303.
10. O’Leary, N., P. Lu-Irving, F.R.G. Salimena, T.R. dos Santos Silva, P.H. Cardoso, F. Mirra, J. Schaefer, P. Moroni, **A.M. Bedoya**, L.F. Viccini, C. Bitencourt, V.A. Thode, and R.G. Olmstead. 2023. Making Lantaneae (Verbenaceae) taxonomy useful: A phylogenetic classification. *TAXON* 72: 572–589.
9. **Bedoya, A.M.**, and R.G. Olmstead. 2022. Strange but common in isolated environments: new records of *Marathrum* (Podostemaceae) in rivers of Colombia. *Aquatic Botany* 177: 103483.
8. **Bedoya, A.M.**, A.D. Leaché, and R.G. Olmstead. 2021. Andean uplift, drainage basin formation, and the evolution of plants living in fast-flowing aquatic ecosystems in northern South America. *New Phytologist* 232: 2175–2190.

Media coverage: Villanueva-Almanza, L. 2021. A new study reveals how the Andes have shaped the history of aquatic plants. *Botany One*. <https://www.botany.one/2021/08/a-new-study-r>

reveals-how-the-andes-have-shaped-the-history-of-aquatic-plants/. Spanish version: <https://www.botany.one/es/2021/08/un-nuevo-estudio-muestra-como-los-andes-han-determinado-la-historia-de-plantas-acuaticas/>

Media coverage: Quintero-Díaz, D. 2021. Las plantas que esconden en su ADN los cambios de los ríos de Colombia. <https://www.elespectador.com/ambiente/blog-el-rio/las-plantas-que-esconden-en-su-adn-los-cambios-de-los-rios-de-colombia/>

7. Lu-Irving, P., **A.M. Bedoya**, F.R. Salimena, T.R. Dos Santos Silva, L.V. Viccini, R.G. Olmstead. 2021. Phylogeny and biogeography in *Lantana* and *Lippia* (Verbenaceae). *American Journal of Botany* 108: 1354–1373.
6. **Bedoya, A.M.**, and A.D. Leaché. 2021. Characterization of a pericentric inversion in Plateau Fence Lizards (*Sceloporus tristichus*): Evidence from chromosome-scale genomes. *G3: Genes, Genomes, Genetics* 11, jkab036.
5. **Bedoya, A.M.**, B.R. Ruhfel, C.T. Philbrick, S. Madriñán, C.P. Bove, A. Mesterházy, and R.G. Olmstead. 2019. Plastid genomes of five species of riverweeds (Podostemaceae): structural organization and comparative analysis in Malpighiales. *Frontiers in Plant Science* 10: 1035.
4. Olmstead, R.G., and **A.M. Bedoya**. 2019. Whole genomes: the holy grail. A commentary on: ‘Molecular phylogenomics of tribe Shoreae (Dipterocarpaceae) using whole plastid genomes.’ *Annals of Botany* 123, iv–v.
3. Madriñán, S., Rial, A., **A.M. Bedoya**, M. Fernández. 2017. Plantas acuáticas de la Orinoquia Colombiana. Ediciones Uniandes. ISBN: 978-958-774-526-9. pp. 656. <https://www.jstor.org/stable/10.7440/j.ctv11vcdzh>
2. Fernández, M., **A.M. Bedoya**, S. Madriñán, 2015. Plantas acuáticas de las planicies inundables de la Orinoquia colombiana. *Biota Colombiana* 16: 96–105.
1. **Bedoya, A.M.**, and S. Madriñán. 2015. Evolution of the aquatic habit in *Ludwigia* (Onagraceae): morpho-anatomical adaptive strategies in the Neotropics. *Aquatic Botany* 120: 352–362.

Preprints/In Review

23. Yang, L., L. Trottier, L. Bastrup-Sporh, Y. Pan, Y. Cao, O. Pedersen, D.J. Perleberg, J. Yoon, H. Xu, **A.M. Bedoya** et al. *In review*. A continuous trait-based framework for aquatic macrophyte life forms: The Emergent-Floating-Submerged (EFS) continuum. *Journal of Ecology*.
24. **Bedoya, A.M.**, C.M. Taylor, A. Mumford, L.D. Ball, and L.P. Lagomarsino. *In Prep*. The interplay of biogeographic history, floral morphology, and climatic niche in a hyperdiverse Neotropical plant radiation. <https://ecoevorxiv.org/repository/view/5924/>
25. Schwartz, R., C. Breusing, **A.M. Bedoya**, K. Arango-Gomez, C. Charpentier, N. White, L. Lagomarsino. *In Prep*. Rapid identification of taxon-specific phylogenetically-informative loci. *Methods in Ecology and Evolution*.

HERBARIUM CURATION

New York Botanical Garden — Curator of Aquatic Plants

Herbaria Visited

Colombian National Herbarium (COL), Universidad de los Andes, Colombia (ANDES), New York Botanical Garden (NY), Missouri Botanical Garden (MO), UW Herbarium at Burke Museum (WTU), Universidad de Antioquia (HUA), University of Massachusetts Herbarium (MASS), Instituto de Investigación de Recursos Biológicos Alexander von Humboldt Herbarium (FMB), Jardín Botánico José Celestino Mutis Herbarium (JBB), Instituto Amazónico de Investigaciones Científicas SINCHI (COAH), Louisiana State University (LSU), Herbario Universidad de Panamá (PMA), Smithsonian Tropical Research Institute (STRI).

Curatorial Activities

Field collection and exploration
 Specimen identification
 Voucher Annotation
 Accessioning
 Creation of a silica-dried companion collection
 Processing of governmental collection and export permits
 Processing of memoradums of understanding for exchange of samples across herbaria

TEACHING EXPERIENCE

Instructor

2020 Plant identification and classification. Department of Biology, University of Washington, US

Guest Lecturer

2026 Trends in land plant evolution. New York Botanical Garden
 2023 Allopatric speciation. Evolution. Louisiana State University
 2022 Plantas acuáticas: Biología y Evolución. Universidad del Rosario, Colombia
 2021 Plantas acuáticas: Biología y Evolución. Universidad EAFIT, Colombia

Graduate Teaching Assistant

2016–2021 Plant identification and classification. Department of Biology, University of Washington, US
 2019 Applied Phylogenetics. Department of Biology, University of Washington, US
 2017–2018 Trends in Land Plant Evolution. Department of Biology, University of Washington, US
 2016–2017 Introductory Biology. Department of Biology, University of Washington, US
 2012–2013 Botany. Departamento de Ciencias Biológicas, Universidad de los Andes, Colombia

Undergraduate Teaching Assistant

2010–2011 Botany. Departamento de Ciencias Biológicas, Universidad de los Andes, Colombia

MENTORING

Postdocs

Kelly Bocanegra. NYBG

Students

Maria Camila Rueda. Graduate student (NYBG-CUNY)
 Alejandra Carvajal. Graduate student (NYBG-FIU)
 Luke Sparreo. Graduate student (NYBG-CUNY)
 Aislinn Mumford. Graduate student (LSU)
 Katherin Arango. Graduate student (LSU)
 Diego Paredes-Burneo. Graduate student (LSU)
 Janet Masaray. Graduate student (LSU)
 Laymon Ball. Graduate student (LSU)
 Ana María Muñoz. Undergraduate student (Universidad de Los Llanos, Colombia)
 Samuel Peláez Vélez. Undergraduate student (EAFIT, Colombia)
 Tomás Pinzón. Undergraduate student (Universidad de los Andes, Colombia)

Student Committees

Luke Sparreo. PhD program (CUNY-NYBG) Zacc Ramn. Masters program (The University of South Alabama)
 Ana María Rueda Urrego. Honors thesis (Universidad EAFIT, Colombia)

SELECTED CONTRIBUTED PAPERS & POSTERS

- 2024 **Bedoya, A.M.**. Botany and Geogenomics: constraining geological hypotheses in the Neotropics with large-scale genetic data derived from plants *International Botanical Conference, Madrid, Spain. Oral presentation*
- 2023 **Bedoya, A.M.**, C. Taylor, A. Mumford, L. Lagomarsino. Biogeographic history, floral morphology, and the realized climatic niche of *Palicourea* *Botany conference, US. Oral presentation*
- 2023 **Bedoya, A.M.**, A.J. Pérez-Castañeda, and R.G. Olmstead. 2023. Getting our feet wet to bypass collection bias in Neotropical rivers. *Botany conference, US. Oral presentation*
- 2022 **Bedoya, A.M.**, and R.G. Olmstead. Andean uplift, drainage basin connections through time, and the evolution of plants in rivers in northern South America. *ATBC Conference, Colombia. Oral presentation*
- 2021 **Bedoya, A.M.**, A.D. Leaché, and R.G. Olmstead. Evolution of aquatic plants in rivers and wetlands of northern South America: what have we learned from getting out feet wet? *Evolution meetings, virtual. Oral presentation*
- 2021 **Bedoya, A.M.**, A.D. Leaché, and R.G. Olmstead. Evolution of aquatic plants in rivers and wetlands of northern South America: what have we learned from getting out feet wet? *Botany conference, virtual. Oral presentation*
- 2021 Carlson, M., M. Rottersman, **A.M. Bedoya**, W. Brightly, C. Strömberg. Habitat-driven evolution of seed dispersal strategies in onion grasses. *Botany conference, virtual. Poster presentation*
- 2020 **Bedoya, A.M.**, and R.G. Olmstead. Andean uplift, drainage basin formation and the evolution of riverweeds (Podostemaceae). *Botany conference, virtual. Oral presentation*
- 2019 **Bedoya, A.M.**, and R.G. Olmstead. Evolutionary processes in aquatic plants in the dynamic landscape of northern South America. *66th Annual Fall Symposium at the Missouri Botanical Garden, US. Poster presentation*
- 2019 **Bedoya, A.M.**, B. Ruhfel, S. Madriñán, C. Bove, A. Mesterházy, and R.G. Olmstead. Structural organization of plastid genomes of five species of riverweeds (Podostemaceae) and comparative analysis in Malpighiales. *Botany conference, US. Oral presentation*
- 2019 **Bedoya, A.M.**, and R.G. Olmstead. Phylogenetics and species delimitation in *Marathrum* (riverweeds-Podostemaceae). *Botany conference, US. Oral presentation*
- 2019 **Bedoya, A.M.**, and R.G. Olmstead. Investigating the evolution of aquatic plants in northern South America: a preliminary look at preliminary data. *Graduate student symposium at the University of Washington, US. Oral presentation*
- 2018 **Bedoya, A.M.**, and R.G. Olmstead. Investigating the evolution of aquatic plants in northern South America: phylogenetics, population genetics, and a sequenced genome. *XII Latin American Botanical Conference, Ecuador. Oral presentation*
- 2017 **Bedoya, A.M.**, S. Madriñán, and R.G. Olmstead. Reconstructing the evolution of the aquatic habit in *Ludwigia* (Onagraceae). What could this group tell us about the impact of Andean uplift on the evolution of aquatic plants in northern South America? *Botany conference, US. Oral presentation*
- 2015 **Bedoya, A.M.**, and S. Madriñán. Evolución del hábito acuático en *Ludwigia* (Onagraceae): estrategias morfo-anatómicas en el Neotrópico. *VIII Congreso Colombiano de Botánica, Colombia. Oral presentation*
- 2013 Fernández-Lucero, **Bedoya, A.M.**, A. Rial, A. S. Madriñán. Plantas acuáticas de la Orinoquia Colombiana. *VII Congreso Colombiano de Botánica, Colombia. Poster presentation*
- 2013 **Bedoya, A.M.**, Fernández, M., Rial, A., S. Madriñán. Aquatic plants of the Orinoco basin of Colombia: Inventory, plant communities, and their habitats. *Botany conference, US. Poster presentation*

INVITED TALKS

2026	Fordham University. Biology Department Colloquium. Scheduled
2026	Florida International University. Plant talk
2025	City College of New York. Biology Colloquium series
2025	The College of New Jersey. Department of Biology Seminar
2025	Universidad de los Andes. Departamento de Ciencias Biológicas
2025	University of Wisconsin-Madison. Botany department Seminar
2024	Tupper Seminar. Smithsonian Tropical Research Institute
2024	Lake Forest College
2024	Kennesaw state University
2024	Seminarios Asociación Latinoamericana de Botánica
2024	New York Botanical Garden Seminar
2024	Cornell University Plant Biology Seminar
2024	Wake Forest University Biology Seminar
2023	UT Austin Integrative Biology Seminar
2023	UMass Amherst Life Sciences Seminar
2023	Cal Poly Humboldt University. Department of Biological Sciences seminar
2023	1st Podostemaceae regional workshop. Universidad Nacional de Misiones, Argentina
2023	Chicago Botanical Garden Seminar
2023	University of Washington. Department of Biology Seminar
2022	Biological diversification in Andean-Amazon biomes Symposium. Association for Tropical Biology and Conservation Conference. Cartagena, Colombia
2022	SUNY Oswego, USA. Department of Biological Sciencesw
2022	University of Wisconsin-Madison, USA. Department of Botany Seminar
2022	Smithsonian Tropical Research Institute Seminar
2021	University of Hawai'i at Mānoa, USA. Department of Biology Seminar
2021	Louisiana State University, USA. Department of Biology Seminar
2021	Universidad del Rosario, Colombia. Department of Biology Seminar
2021	Universidad EAFIT, Colombia. Ciclo de charlas Colombia Biodiversa

PROFESSIONAL SERVICE

Journal peer-review

American Journal of Botany
 Annals of Botany
 Botanical Journal of the Linnean Society
 Ecology and Evolution
 Frontiers in Plant Science
 Geology
 Industrial Crops and Products
 Journal of Ecology and the Natural Environment
 Mitochondrial DNA Part B
 Molecular Phylogenetics and Evolution
 Nature Ecology & Evolution
 Nature Scientific Reports
 New Phytologist
 Novon

Systematic Biology

Editorial dutiesAssociate Editor of *Brittonia*NSF

2026. Panelist. LS/BIO.

2022. Ad hoc reviewer. DEB-SBS.

Committees

2023	Reviewer ASPT Graduate Student Grants
2021–2024	American Society of Plant Taxonomists DEI Committee
2020–2024	American Society of Plant Taxonomists Publications Committee
2018–2019	Student member of the Graduate and Postdoc committee. Department of Biology, University of Washington
2017	Student member of the Seminar committee. Department of Biology, University of Washington

OUTREACH

2026	In Defense of Plants podcast. https://www.indefenseofplants.com/podcast/2026/6/11/ep-582-extreme-aquatic-plants
2025	New York Botanical Garden Science Webinar. <i>Extreme Botany and the Study of Botanical Oddities: An Insight into our Planet's Past</i>
2025	Career Discovery Day. Led in co-partnership with the Green School at NYBG.
2023	Science on-tap. Using plant DNA to travel back in time. Tin Roof Brewery. Louisiana State University
2023	Las Bio-Charlas. Botánica y Geogenómica. Louisiana State University.
2023	Girls' Day at the Museum. Louisiana State University Natural History Museum. Chat Leader.
2022	Contributing to building the Molecular Laboratory facilities that the Colombian National University and training students in wet-lab techniques for DNA extraction
2022	Podcast interview: Historiadoras de La Tierra: viajes en el tiempo para entender la biodiversidad. Shots de Ciencia https://www.shotsdeciencia.com/podcast/episode/8ff8e270/e17-historiadoras-de-la-tierra-viajes-en-el-tiempo-para-entender-la-biodiversidad
2021	Invited speaker for a broad audience. GIZ Colombia, Asociación Tonina, Proyecto Triángulo del Puma de la Reserva Natural Yarumí. https://www.youtube.com/watch?v=8a2kLpk67Wo
2020	Science for the public. Plantas acuáticas. Ciencia Café pa' sumeré. https://www.youtube.com/watch?v=mD8uL77ie0A
2020	Science for the public. Research featured in the documentary 'Plantas de Río'. Vencejo Films
2019	Girls in Science. Assistant for Paleobotany course. Fall
2019	'Scientist of the month program'. Education through interviews for 7 th grade students. Evergreen high school, Seattle, WA. Fall
2019	Girls in Science. Development and implementation of a program for an herbarium inspired course. Six-week duration. Burke Museum. Winter
2018	Science writing for the public. Post on the Burke Museum blog. 'Returning to Colombia in search of river-weed plants.' https://www.burkemuseum.org/news/returning-colombia-search-river-weed-plants
2017	Creepy crawly cocktails. Showcase of creepy cool plants
2017	Girls in Science. Assistant for plant physiology exercises
2017	Behind the Scenes at the Burke museum. Showcase of herbarium collections from Colombia

2017 Science writing for the public. Post on the Burke museum blog. 'Searching for river-weed plants in Northern South America.' <https://www.burkemuseum.org/news/searching-river-weed-plants-northern-south-america>

PROFESSIONAL SOCIETY MEMBERSHIP

American Society of Plant Taxonomists (ASPT)
Association for Tropical Biology and Conservation (ATBC)
Botanical Society of America (BSA)
Society of Systematic Biologists (SSB)