

CURRICULUM VITAE (5 PAGE)

WILLIAM WAYT THOMAS

ELIZABETH G. BRITTON CURATOR OF BOTANY

INSTITUTE OF SYSTEMATIC BOTANY

THE NEW YORK BOTANICAL GARDEN

BRONX, NEW YORK 10458-5126, USA

TELEPHONE, OFFICE: (718) 817-8625, FAX: 562-6780, EMAIL: WTHOMAS@NYBG.ORG

ORCID ID: [HTTP://ORCID.ORG/0000-0002-4996-536X](http://ORCID.ORG/0000-0002-4996-536X)

Education:

The University of North Carolina at Chapel Hill B.A. Botany 1973

The University of Michigan, Ann Arbor M. S. Botany 1976

The University of Michigan, Ann Arbor Ph.D. Botany 1982

Positions Held:

Collection Manager, Herbarium, Carnegie Museum of Natural History, Pittsburgh, PA, 1982-83

B. A. Krukoff Research Associate, The New York Botanical Garden, 1983-1986

Assistant Curator, The New York Botanical Garden, 1986-1992

Associate Curator, The New York Botanical Garden, 1992-2000

The Elizabeth G. Britton Curator, The New York Botanical Garden, 2000-Present

Other Positions:

Member of the Doctoral Faculty in the Plant Sciences Ph.D. Program of City Univ. of New York, 1987- Present

Adjunct Research Scientist, Center for Environmental Research and Conservation, Columbia University, 1997- Present

Adjunct Professor, Fordham University, 2008 – Present

Member of the Doctoral Faculty of the Plant Biology Ph.D. Program of the Federal University of Pernambuco, Brazil, 2012 - Present

Service (selected):

Board of Directors, International Pernambuco Conservation Initiative – U.S., 2007 – present

Board of Directors and Secretary, Rainforest Trust, 2007 – present

Doctoral Committee Chair/Co-Chair (Selected):

Current:

Philippe Alexandre Pereira Weber, Doctoral Program in Botany, Federal University of Rio Grande do Sul, Brazil

Former:

Marccus Vinícius Alves: Universidade de São Paulo, São Paulo, Brazil; defended in March, 2003.

Carolina Galindo da Costa, Doctoral Program in Plant Biology, Federal University of Pernambuco, Brazil: defended February, 2017.

Suzana Maria dos Santos Costa, Doctoral Program in Botany, Universidade Estadual de Campinas, São Paulo, Brazil; defended March, 2018.

Marcelo Fernando Devecchi, Doctoral Program in Botany, University of São Paulo, Brazil, defended in July, 2017

Seth Ganzhorn, Department of Biology, Fordham University, New York, defended July, 2014

Meghan McGinty, Dept. of Ecology, Evolution and Environmental Biology, Columbia University, New York, defended May, 2011.

Ana Paula Prata: Universidade de São Paulo, São Paulo, Brazil; defended in April, 2004.

Daniel Piotto, School of Forestry and Environment, Yale University, New Haven, Connecticut; defended, Feb., 2011.

Pedro Joel Silva da Silva Filho, Doctoral Program in Botany, Federal University of Rio Grande do Sul, Brazil; defended May, 2018.

Raimundo Luciano Soares Neto, Doctoral Program in Plant Biology, Federal University of Pernambuco, Brazil; defended Feb., 2019.

Research Grants (selected):

John D. and Catherine T. MacArthur Foundation grants for "Botanical Diversity of the Atlantic Coastal Forests of Brazil," 1989-1999

National Science Foundation grant for "The Assessment of the Needs of Free-Standing Museums for the Computerization of Collections Management and Related Research," BSR-9118843, 1991-1993

American Philosophical Society grant for "The Natural History and Conservation of the Atlantic Coastal Forests of Northeastern Brazil," 1999-2000

National Science Foundation grant for "Plant Diversity in Three Reserves in Southern Bahia, Brazil," DEB 9972116, 1999-2002.

National Geographic Society grant for "The Flora of the Dry Forests of Coastal Bahia, Brazil," 1999-2000.

Fulbright Scholarship Program: Fulbright Senior Specialists grant in Environmental Science at the Federal University of Paraíba, Brazil. 2005

National Science Foundation grant for "Plant Diversity in the Montane and Submontane Forests of Southern Bahia and Northern Espírito Santo, Brazil," 2005-2008.

National Science Foundation grant for "Collaborative Digitization of New York Botanical Garden Herbarium Specimens from Amazonian Brazil." 2008-2011 (B. Thiers, PI; W. Thomas Co-PI).

National Science Foundation. "Coastal Forest Plant Diversity in Northeastern Brazil." DEB 0946618, 2010-2012. (M. R. Barbosa Co-PI).

Science Without Borders, Special Visiting Researcher Program, Brazil: MEC/MCTI/CAPES/CNPq/FAPs and the Graduate Program in Plant Biology of the Federal University of Pernambuco. 2012-2014.

National Science Foundation. "A multidisciplinary framework for biodiversity prediction in the Brazilian Atlantic forest hotspot." DEB1343578 Dimensions US-BIOTA-São Paulo. 2013-2018. (F. Michelangeli PI, W. Thomas Co-PI)

Alfred P. Sloan Foundation. "Development of the World Flora Online: An Open Access Resource for All the Earth's Plants," 2012-2014 (M. Tulig Co-PI)

- Google, Inc. "Support for the Development of the World Flora Online Project," 2012-2015 (M. Tulig Co-PI)
- Fulbright Distinguished Chair in STEM Fellowship in partnership with FACEPE (Fundação de Amparo à Ciência e Tecnologia do Estado de Pernambuco) and the Federal University of Pernambuco. 2018-2019.
- Fondation Franklinia. "Conservation of Atlantic Forest's endangered tree species in southern Bahia, Brazil," 2020-2021 (D. Piotto Co-PI)

Research Interests:

Plant Diversity and Conservation of Brazil's Atlantic Coastal Forest
Systematics and evolution of the Cyperaceae, especially *Rhynchospora*
Systematics of the New World species of Simaroubaceae and Picramniaceae

Selected Publications:

- Thomas, W. W. 1984. The systematics of *Rhynchospora* section *Dichromena* (Cyperaceae). Mem. New York Bot. Gard. 37: 1-116.
- Thomas, W. W. and G. Davidse. 1989. *Koyamaea neblinensis*, a new genus and species of Cyperaceae (Sclerioideae) from Cerro de la Neblina, Venezuela and Brazil. Syst. Bot. 14(2): 189-196.
- Thomas, W. W. 1992. A synopsis of *Rhynchospora* (Cyperaceae) in Mesoamerica. Brittonia 44(1): 14-44.
- Brown, I. F., L. A. Martinelli, M. Z. Moreira, W. W. Thomas, C. A. C. Ferreira, and R. A. Victoria. 1995. Uncertainty in the Biomass of Amazonian Forests: An Example from Rondônia, Brazil. Forest Ecology and Management 75: 175-189.
- Thomas, W. W. 1997. A new species of *Picramnia* (Picramniaceae) from the Atlantic coastal forest of southern Bahia, Brazil. Brittonia 49: 380-383.
- Thomas, W. W., A. M. de Carvalho, A. M. Amorim, J. Garrison, and A. L. Arbeláez. 1998. Plant endemism in two forests in southern Bahia, Brazil. Biodiversity and Conservation 7(3): 311-322.
- Thomas, W. W. 2003 (2004). Natural Vegetation Types in Southern Bahia. In: Prado, P.I., E. C. Landau, R. T. Moura, L. P. S. Pinto, G. A. B. Fonseca and K. Alger (orgs.), Corredor da Biodiversidade da Mata Atlântica do Sul da Bahia, Brasil. CD-ROM: IESB/CI/CABS/UFMG/UNICAMP.
- Thomas, W. W. 2007. Survival of the Rarest. Natural History (June) 116 (5): 24-27).
- Thomas, W. W. (ed.). 2008. The Atlantic Coastal Forest of Northeastern Brazil. Memoirs New York Botanical Garden 100: 1-586
- Amorim, A. M., W. W. Thomas, A. M. de Carvalho and J. G. Jardim. 2008. Floristics of the Una Biological Reserve, Bahia, Brazil. In: W. Thomas (ed.), The Atlantic Coastal Forest of Northeastern Brazil. Memoirs of the New York Botanical Garden 100: 67-146.
- Thomas, W. W. and M. R. V. Barbosa. 2008. Natural Vegetation Types in the Brazilian Atlantic Coastal Forest North of the Rio Doce. In: W. Thomas (ed.), The Atlantic Coastal Forest of Northeastern Brazil. Memoirs of the New York Botanical Garden 100: 6-20.
- Thomas, W. W., A. M. de Carvalho, A. M. A. Amorim, J. Garrison, T. S. dos Santos. 2008. Diversity of Woody Plants in the Atlantic Coastal Forest of Southern

- Bahia, Brazil. In: W. Thomas (ed.), *The Atlantic Coastal Forest of Northeastern Brazil*. *Memoirs of the New York Botanical Garden* 100: 21-66.
- Rodal, M. J., M. R. Barbosa and W. W. Thomas. 2008. Do The Seasonal Forests in Northeastern Brazil Represent a Single Floristic Unit? *Brazilian Journal of Biology* 68 (3): 467-475.
- Thomas, W. W., Araújo, A. C., and M. Alves. 2009 (2008 online). A Preliminary Molecular Phylogeny of the Rhynchosporae (Cyperaceae). In: W. W. Thomas, D. A. Simpson, A. A. Reznicek and J. R. Starr (eds.), *Cyperaceae – Special Issue*. *Botanical Review* 75: 22-29, DOI 10.1007/s12229-008-9023-7.
- Thomas, W. W., J. G. Jardim, P. Fiaschi, M. Mariano-Neto and A. M. Amorim. 2009. Composição Florística e Estrutura do Componente Arbóreo de uma Área Transicional de Floresta Atlântica no Sul da Bahia, Brasil. *Revista Brasileira de Botânica* 32 (1): 41-54.
- Piotto, D., F. Montagnini, W. Thomas, M. Ashton and C. Oliver. 2009. Forest recovery after swidden cultivation across a 40-year chronosequence in the Atlantic forest of southern Bahia, Brazil. *Plant Ecology* 205: 261-272. DOI 10.1007/s11258-009-9615-2.
- Thomas, W. W. 2011. *Nothotalisia*, a new genus of Picramniaceae from tropical America. *Brittonia* 63: 51-61. DOI: 10.1007/s12228-010-9130-8.
- Thomas, W. W., R. C. Forzza, F. Michelangeli, A. M. Giulietti Harley and P. M. Leitman. 2012, 2011 online. Large-scale Monographs and Floras – the Sum of Local Floristic Research. *Plant Ecology & Diversity* 5(2): 217-224. DOI:10.1080/17550874.2011.622306.
- Araújo, A. C., H. M. Longhi-Wagner and W. W. Thomas. 2012. A Synopsis of *Rhynchospora* sect. *Pluriflorae* (Cyperaceae). *Brittonia* 64: 381-393.
- Thomas, W. W., M. V. Alves & R. Trevisan. 2013. A New Species of *Pleurostachys* (Cyperaceae) from Atlantic coastal Brazil. *Phytotaxa* 126 (1): 31–36.
- Waterway, M., et al. (Global *Carex* Group). 2015. Making *Carex* monophyletic: a new broader circumscription. *Botanical Journal of the Linnean Society*. DOI: 10.1111/boj.12298
- Saiter, F. Z., P. V. Eisenlohr, M. R. V. Barbosa, W. W. Thomas, and A. T. Oliveira-Filho. 2015. From evergreen to deciduous tropical forests: how energy-water balance, temperature, and space influence the tree composition in a high diversity region. *Plant Ecology and Diversity*. DOI:10.1080/17550874.2015.1075623
- Nusbaumer, L., M. R. V. Barbosa, W. W. Thomas, M. V. Alves, B. S. Amorim, E. Pessoa, A. Melo, P.-A. Loizeau & R. Spichiger. 2015. Inventário I da Reserva Biológica de Pedra Talhada: Flora. In: Studer, A., L. Nusbaumer & R. Spichiger (Eds.). *Biodiversidade da Reserva Biológica de Pedra Talhada (Alagoas, Pernambuco - Brasil)*. *Boissiera* 68: 439-547.
- Saiter, F., P. V. Eisenlohr, G. S. França, J. R. Stehmann, W. W. Thomas, and A. T. Oliveira-Filho. 2015. Floristic units and their predictors unveiled in part of the Atlantic Forest hotspot: implications for conservation planning. *Anais da Academia Brasileira de Ciências*. 87(4): 2031-2046. DOI: [10.1590/0001-3765201520140132](https://doi.org/10.1590/0001-3765201520140132)

- Ganzhorn, S.G., W.W. Thomas, F.A. Gaiotto, and J.D. Lewis. 2015. Spatial genetic structure of *Manilkara maxima*: A threatened tree species from the Brazilian Atlantic forest. *Journal of Tropical Ecology* 31 (5): 437-447. DOI: [10.1017/S0266467415000292](https://doi.org/10.1017/S0266467415000292).
- Saiter, F. Z., J. L. Brown, W. W. Thomas, A. T. Oliveira-Filho and A. C. Carnaval,. 2016. Environmental correlates of floristic regions and plant turnover in the Atlantic Forest hotspot. *Journal of Biogeography*. 43: 2322–2331, DOI: [10.1111/jbi.12774](https://doi.org/10.1111/jbi.12774)
- Bonet Mayedo, W. and W. W. Thomas. 2016. Two New Species of *Scleria* section *Hypoporum* (Cyperaceae) from Espírito Santo, Brazil. *Phytotaxa* 268 (4): 263–270. DOI: [10.11646/phytotaxa.268.4.4](https://doi.org/10.11646/phytotaxa.268.4.4).
- Buddenhagen, Christopher E., W. Wayt Thomas and Austin R. Mast. 2017. A First Look at Diversification of Beaksedges (Tribe Rhynchosporae; Cyperaceae) in habitat, pollination, and photosynthetic features. In: *Diversity and Phylogeny of the Monocotyledons, Contributions from Monocots V*. Memoirs of the New York Botanical Garden 118: 113-126. DOI: [10.21135/893275341.002](https://doi.org/10.21135/893275341.002).
- Ribeiro, T., C. Buddenhagen, W. Thomas, G. Souza and A. Pedrosa-Harand. 2017. Are holocentrics doomed to change? Limited chromosome number variation in *Rhynchospora* Vahl (Cyperaceae). *Protoplasma* 2017. DOI: [10.1007/s00709-017-1154-4](https://doi.org/10.1007/s00709-017-1154-4)
- Thomas, W. W. and P. J. S. Silva Filho. 2017. *Rhynchospora rheophytica* (Cyperaceae), a new species of from western Bahia, Brazil. *Brittonia*. DOI: [10.1007/s12228-017-9499-8](https://doi.org/10.1007/s12228-017-9499-8)
- Devecchi, M. F., W. W. Thomas, G. M. Plunkett and J. R. Pirani. 2018. Testing the monophyly of *Simaba* (Simaroubaceae): Evidence from five molecular markers and morphology. *Molecular Phylogenetics and Evolution* 120: 63-82. DOI: [10.1016/j.ympev.2017.11.024](https://doi.org/10.1016/j.ympev.2017.11.024)
- Costa, A.C.G ., I.S. Albuquerque, W.W. Thomas, & I.C. Machado. 2018. Influence of environmental variation on the pollination of the ambophilous sedge *Rhynchospora ciliata* (Cyperaceae) *Plant Ecology*. DOI: [10.1007/s11258-018-0792-8](https://doi.org/10.1007/s11258-018-0792-8)
- Devecchi, M. F., W. W. Thomas and J. R. Pirani. 2018. Two new dwarf species of *Homalolepis* (Simaroubaceae) from the Brazilian Cerrado (Neotropical savanna). *Phytotaxa* 336(3)Ç 252-262. DOI: [10.11646/phytotaxa.336.3.3](https://doi.org/10.11646/phytotaxa.336.3.3)
- Thomas, W.W. 2018. Trust and the power of global collaborative projects. *Taxon* 67(6): 1062-1063. DOI: [10.12705/676.3](https://doi.org/10.12705/676.3).
- Silva Filho, P. J. S., W. W. Thomas and I. I. Boldrini. 2019. Two new endemic species of *Rhynchospora* (Cyperaceae) section *Tenues* from Bahia, Brazil. *Systematic Botany* 44(3): 652-658. DOI: [10.1600/036364419X15620113920671](https://doi.org/10.1600/036364419X15620113920671)
- Piotto, D., D. Craven, F. Montagnini, M. Ashton, C. Oliver and W. W. Thomas. 2019. Successional, spatial, and seasonal changes in seed rain in the Atlantic forest of southern Bahia, Brazil. *PLOS ONE*. DOI: [10.1371/journal.pone.0226474](https://doi.org/10.1371/journal.pone.0226474)
- Schulze-Albuquerque, I., A. C. G. Costa, P. Milet-Pinheiro, D. M. A. F. Navarro, W. W. Thomas, I. C. Machado. 2019. Visual and olfactory floral cues related to ambophilous pollination systems in Poaceae. *Bot. J. Linn. Soc.* 192: 242-257. DOI: [10.1093/botlinnean/boz082](https://doi.org/10.1093/botlinnean/boz082)