

Alina Freire-Fierro

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Academy of Natural Sciences, Drexel University, Philadelphia PA 19103, U.S.A.
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Born in Ecuador; US Citizen

EDUCATION

- 2011- Ph.D. Candidate, Environmental Science, Biology Department, Drexel University. Advisor: Dr. Walter F. Bien. Dissertation: "Origin and Diversification of *Monnina* (Polygalaceae)"
- 1998 M. Sc., Department of Biology, University of Missouri-St. Louis, St. Louis, USA. Thesis title: "Revision of *Aciotis* (Melastomataceae)," 160 pp. (English). Advisor: Susanne Renner.
- 1992 M. em C., Biociências Institute, São Paulo University. Brazil. Thesis title: "Estudos taxonômicos dos subgêneros de *Monnina* Ruiz & Pav. (Polygalaceae), baseados em espécies equatorianas e brasileiras," 190 pp. (Portuguese). Advisor: Ana Maria Giuliatti.
- 1989 Bachelor's Degree in Biological Sciences, Biology Department, Catholic University. Ecuador. Bachelor's Dissertation Title: "Estudios taxonómicos de las especies arbustivas de *Monnina* en el Bosque Montano Ecuatoriano," 194 pp. (Spanish). Advisor: Peter M. Jørgensen.

WORKSHOPS/COURSES

- 2012 Kew Herbarium Techniques, August, Brooklin Botanic Garden, New York, USA.
- 2012 Georeferencing. Appalachian State University, South Carolina, USA
- 2008 Integrated Pest Management for Museums, Libraries and Archives, March 31--May 9. Online Workshop.
- 1996 Plant Systematics, Organization for Tropical Studies. June to August. Costa Rica.
- 1993 Botanical Diversity in Tropical Forests, European Summer School, Aarhus University. July. Denmark.
- 1991 Theory and Methods in Vegetal Taxonomy, Latin American Botanical Network. November. Argentina.
- 1989 Latin American and Caribbean Botanical Workshop, Smithsonian Institution. July to August. USA.

PROFESSIONAL EXPERIENCE

- 2006- Collection Manager, Botany Department, Academy of Natural Sciences, Philadelphia
- 2006-2008 Co-PI, NSF Project on Virtual Types at the Academy of Natural Sciences Herbarium, NSF Grant # #0545170.
- 2002-2006 Research Specialist and Latin American Research Visitors' Liaison, Missouri Botanical Garden.
- 2001 Assistant Coordinator of the project "Floristic Inventory and Rescue of native plants from Oleoductos de Crudos Pesados." Ecuadorian National Herbarium-Entrix-OCP. Quito, Ecuador.
- 2000 Oc-Organizer of the Third Ecuadorian Botanical Congress, Quito, October 25 to 27.
- 1999-2000 Teacher of General Botany, and Flora of Ecuador. Ecotourism Majors, Catholic University and San Francisco University, Quito, Ecuador.
- 1995 Teacher of General Botany, Biology Department, Catholic University, Quito, Ecuador.
- 1992 Assistant Professor of the courses: Taxonomy of Vascular Plants, and Systematics and Taxonomy of Angiosperms, Biology Department, Catholic University, Quito, Ecuador.
- 1989 Adjunct Researcher of the project "Botanical Studies of the Ecuadorian Mountain Forest," QCA Herbarium, Catholic University, Quito, Ecuador.
- 1988 Assistant Researcher of the project "Botanical Studies of the Ecuadorian Mountain Forest," QCA Herbarium, Catholic University, Quito, Ecuador.
- 1984-88 Herbarium Assistant at the QCA Herbarium, Catholic University, Quito, Ecuador.

PUBLICATIONS

- Freire-Fierro, A. In Press. Polygalaceae, In: Catálogo de las Plantas Vasculares de Bolivia. Monographs of Systematic Botany. Missouri Botanical Garden. St. Louis, USA.

- Freire-Fierro, A. and J.F. Pastore. 2013. *Monnina goiana* (Polygalaceae), a Well-known but Misidentified Brazilian species. *Systematic Botany* 38(1): 1-5.
- Freire-Fierro, A. and A. Landale. 2011. Lectotypification of Thomas Nuttall's names applied to North American *Polygala*. *Journal of the Botanical Research Institute of Texas* 5 (1): 106-109.
- Mathias, E.C., and A. Freire-Fierro. 2011. Howard Page Wood, 1924-2010 [Obituary]. *TAXON* 60: 297.
- Freire-Fierro, A. 2011. *Monnina* (Polygalaceae), In Idárraga Piedrahita, A., R. del C. Ortiz, R. Callejas Posada & M. Merello, 2011, (eds. Vol. II). *Flora de Antioquia: Catálogo de las Plantas Vasculares del Departamento de Antioquia (Colombia)*.
- Freire-Fierro, 2011. Polygalaceae. Pp. 740-745 in: León-Yáñez, S., R. Valencia, N. Pitman, L. Endara, C. Ulloa Ulloa and H. Navarrete. *Libro rojo de las plantas endémicas del Ecuador*. 2nd. Ed. Publicaciones del Herbario QCA, Pontificia Universidad Católica del Ecuador.
- Freire-Fierro, A. y F. Pastore. 2008. Polygalaceae. En: Zuloaga, F., O. Morrone, y M. J. Belgrano (eds.). *Catálogo de las Plantas Vasculares del Cono Sur*. *Monographs of Systematic Botany* 107. Missouri Botanical Garden. St. Louis, USA.
- Freire-Fierro, A. 2008. Filadelfia y la Botánica en Norteamérica. *Bol. Soc. Argent. Bot.* 43 (1-2): 179-187.
- Freire-Fierro, A. 2008. Crassulaceae. En: Zuloaga, F., O. Morrone, y M. J. Belgrano (eds.). *Catálogo de las Plantas Vasculares del Cono Sur*. *Monographs of Systematic Botany* 107. Missouri Botanical Garden. St. Louis, USA.
- Freire-Fierro, A. 2004. *Botánica Sistemática Ecuatoriana*. Missouri Botanical Garden, FUNDACYT, QCNE, RLB and FUNBOTANICA. Murray Print, St. Louis. 209 pp.
- Freire-Fierro, A. 2004. 117 E. Phyllonomaceae. In: G. Harling and L. Andersson (eds.), *Flora of Ecuador* 73:85-86.
- Freire-Fierro, A. 2004. 117 D. Hydrangeaceae. In: G. Harling and L. Andersson (eds.), *Flora of Ecuador* 73:25-40.
- Freire-Fierro, A. 2004. 117 B. Grossulariaceae. In: G. Harling and L. Andersson (eds.), *Flora of Ecuador* 73: 41-66.
- Freire-Fierro, A. 2004. 117 A. Saxifragaceae. In: G. Harling and L. Andersson (eds.), *Flora of Ecuador* 73: 17-24.
- Freire-Fierro, A. 2004. 115. Crassulaceae. In: G. Harling and L. Andersson (eds.), *Flora of Ecuador* 73: 3-16.
- Romoleroux, K. & A. Freire-Fierro. 2004. 117 C. Escalloniaceae. In: G. Harling and L. Andersson (eds.), *Flora of Ecuador* 73: 67-84.
- Freire-Fierro, A. 2002. Revision of *Aciotis* (Melastomataceae). *Systematic Botany Monographs* 62: 1--99 pp.
- Freire-Fierro, A. 2002. Proposal to conserve *Ribes leptostachyum* Benth. against *Ribes leptostachyum* Decne. *Taxon* 51(1): 195.
- Freire-Fierro, A. 2002. A new species of *Ribes*, notes and a key of the Ecuadorian Species. *Systematic Botany* 27(1): 14--19.
- Freire-Fierro, A. y D. Neill (eds). 2002. *La Botánica en el Nuevo Milenio*, Memorias del III Congreso Ecuatoriano de Botánica. Herbario Nacional del Ecuador and FUNBOTANICA.
- Freire-Fierro, A., D. Fernández y C. Quintana. 2002. Usos de Melastomataceae en el Ecuador. *Sida* 20(1) 233—260.
- Freire-Fierro, A. 2001. Two new species of *Aciotis* (Melastomataceae). *Novon* 11(2): 166-170.
- Freire-Fierro, A. 2001. *Aciotis*, Melastomataceae. In: *Flora of the Venezuelan Guayana*, Vol. 6: 270-276. *Monographs in Systematic Botany of the Missouri Botanical Garden*.
- Vargas, H., D. Neill, M. Asanza, A. Freire-Fierro y E. Narváez. 2001. *Flora y Vegetación del Parque Nacional Llanganates*. EcoCiencia-Herbario Nacional del Ecuador/GEF.
- Freire-Fierro, A. 2000. Polygalaceae. Pages 392-393 In: Valencia, R., N. Pitman, S. León-Yáñez & P. M. Jørgensen (eds.) *Libro rojo de las plantas endémicas del Ecuador 2000*. Herbario QCA, Pontificia Universidad Católica del Ecuador, Quito.
- Asanza, M., A. Freire-Fierro, D. Neill, S. Sandoval y J. C. Welling (eds.) 2000. *Resúmenes del III Congreso Ecuatoriano de Botánica*. FUNBOTANICA y Herbario Nacional del Ecuador QCNE. Imprenta Hojas y Signos. Quito.
- Freire-Fierro, A. 1999. Crassulaceae, Grossulariaceae, Hydrangeaceae, and Saxifragaceae. In: Jørgensen, P. M. & S. León (eds.). *Catalogue of the Vascular Plants of Ecuador*. *Monographs on Systematic Botany from the Missouri Botanical Garden* 75: 413-414.
- Freire-Fierro, A. 1998. Two new species of *Ribes* (Grossulariaceae) from South America. *Novon* 4: 354-358.
- Freire-Fierro, A. 1998. Revision of *Aciotis* (Melastomataceae). *Am. J. Bot. (Suppl.)* 85 (6): 129.
- Freire-Fierro, A. 1995. Especies medicinales sudamericanas de Polygalaceae. In: Naranjo, P. & R. Escaleras (eds.): *La medicina tradicional en el Ecuador*, Memorias de las Primeras Jornadas Ecuatorianas de

Etnomedicina Andina. Biblioteca Ecuatoriana de Ciencias. Vol. 2. Corporación Editora Nacional, Quito.

Freire-Fierro, A., P. Naranjo, et al. 1995. *270 Plantas medicinales Iberoamericanas*, In Gupta, M. (ed.). Convenio Andrés Bello, Bogotá.

FUNDING RECEIVED

- 2011. Freire-Fierro, A. Origin and Diversification of *Monnina* (Polygalaceae). Bentham-Moxon Award, Kew Gardens. \$ 3,790. Awarded.
- 2011. Freire-Fierro, A. Origin and Diversification of *Monnina* (Polygalaceae). IAPT Fellowships. \$ 1,000. Awarded.
- 2011. Freire-Fierro, A. Origin and Diversification of *Monnina* (Polygalaceae). ASPT Fellowships. \$ 850. Awarded.

REVIEWER FOR

Boletín Latinoamericano de Etnobotánica, Brittonia, Flora Fanerogâmica do Estado de São Paulo, Lundellia, Novon, Phytotaxa, Sida, Taxon, and Spanish Edition of the International Code of Botanical Nomenclature.

DISTINCTIONS AND FELLOWSHIPS

- 2011- Research Student Associate, Smithsonian Institution, USA.
- 2006- Research Associate, Missouri Botanical Garden, St. Louis, USA.
- 2000-02 Research Associate, Missouri Botanical Garden, St. Louis, USA.
- 1995-98 Graduate Fellowship from the Science and Technology Ecuadorian Foundation (FUNDACYT). Ecuador.
- 1989 Master's Graduation "Cum Laude", São Paulo University, Brazil.
- 1989-92 Graduate Fellowship from the Latin American Botanical Network. Brazil.
- 1984-1988 Undergraduate Studentship from Catholic University, Ecuador.

FIELD EXPERIENCE

- 2012 Ecuador, cloud forest, Central Ecuador
- 2012 Peru, cloud forest and lomas vegetation, Northern and Central Peru.
- 2011 Mexico, cloud forest of Central and Western Mexico
- 2011 Taiwan, lowlands and highlands
- 2011 Panama, cloud forests
- 2010 Chile, Dry vegetation and cloud forest
- 2009 Colombia, montane forests
- 2008- USA, New Jersey (Pine Barrens), Pennsylvania (Poconos), Utah.
- 2008 Uruguay, dry forest and wetlands.
- 2007 Argentina, Subropical habitats, cerrado vegetation.
- 2005 Austria, Vienna, Serpentine vegetation.
- 1999-2001 Ecuador, several ecosystems, as the teacher of several college courses, and as a researcher at the Ecuadorian National Herbarium.
- 1998-99 Ecuador, páramo and Andean forests at the Antisana Ecological Reserve and Llanganates National Park.
- 1996 Costa Rica, all ecosystem types, as part of the OTS Course on Plant Systematics. Two months.
- 1994 Bolivia, volunteer work at Noel Kempf National Park. One week.
- 1990-92 Brazil, Caatinga, Cerrados and Campos Rupestres.
- 1989-90 Brazil, Campos Rupestres, Serra do Cipó, Grão Mogol. Monthly visits as part of my studies on *Monnina* (Polygalaceae).
- 1986-89 Ecuador, páramo, montane forest, dry interandean forests, as part of the project Botanical Studies of the Shrubby species of Ecuadorian Mountain Forests.
- 1982-86 Ecuador, all ecosystems, as part of field trips during undergraduate studies.

SYNERGISTIC ACTIVITIES

2010-2014 Council Member, Latin American Botanical Association (ALB).

- 2008- Steering Committee Member, Membership Chapter, Consortium of Northeastern Herbaria, USA-Canada.
2008-2013 Corresponding Secretary, Philadelphia Botanical Club
2004- Creation/Administration of the Discussion list, Anuncios Botánicos,
<http://espanol.groups.yahoo.com/group/Anunciosbotanicos/>
2002- Administration/Content Compilation of a webpage about Polygalaceae.
www.neotropicos.net/Polygalaceae
1998-2002 Representative for Ecuador for the Latin American Botanical Association (ALB).
1999-2000 Executive Director of the Ecuadorian Foundation for Research and Development of Botany, FUNBOTANICA, Ecuador.
1995 President of the Ecuadorian Foundation for Research and Development of Botany, FUNBOTANICA, Ecuador.

SOCIETY MEMBERSHIPS

- 2011-2012 Sigma Xi, The Scientific Research Society
2006- Philadelphia Botanical Club
1998- International Association for Plant Taxonomy
1997- American Society of Plant Taxonomy
1987- Association for Latin American Botanists, ALB
1988- Ecuadorian Foundation for Research and Development of Botany, FUNBOTANICA
1997-98 Botanical Society of America
1997-98 Association for Tropical Biology
1989-92 Brazilian Botanical Society

MEETINGS ATTENDED

- 2012 XIV Congreso Nacional de Botánica, Trujillo, Peru. Guest Speaker.
2012 Global Plants Initiative, 5th Annual Meeting, Madrid, Spain.
2011 Global Plants Initiative, 4th Annual Meeting, Panama City, Panama.
2010 XIII Congreso Latinoamericano de Botánica, La Serena, Chile.
2009 BSA Meetings, Snow Bird, Utah, U.S.A.
2008 LAPI Meetings, Buenos Aires, Argentina
2007 XXXI Jornadas Argentinas de Botánica, September, Corrientes, Argentina. Guest Speaker.
2006 AAAS Meetings, February, St. Louis, U.S.A.
2005 XVII International Botanical Congress, July, Vienna, Austria.
2002 VIII Congreso Latinoamericano de Botánica, Cartagena de Indias, October, Colombia.
2000 III Congreso Ecuatoriano de Botánica, October, Quito, Ecuador (Co-organizer).
1999 XVI International Botanical Congress, August, St. Louis, USA.
1998 VII Congreso Latinoamericano de Botánica, Latin American Botanical Association, Latin American Botanical Network, Mexican Botanical Society, October, México.
1998 American Institute of Biological Sciences (AIBS) Meetings, American Society of Plant Taxonomists, Baltimore, August, USA.
1994 VI Congreso Latinoamericano de Botánica, Latin American Botanical Association, October, Mar del Plata, Argentina.
1992 XLIII Congreso Brasileiro de Botánica, Sociedad Brasileira de Botánica, Universidad Federal de Sergipe, January, Aracajú, Brazil.
1991 XLII Congreso Brasileiro de Botánica, Sociedad Brasileira de Botánica, Universidad Federal de Goiás, January, Goiás, Brazil.
1990 XLI Congreso Brasileiro de Botánica, Sociedad Brasileira de Botánica, Universidad Federal do Ceará, January, Fortaleza, Brazil.

Fluent in Spanish (Native language), Portuguese, and English.

HOBBIES

Martial arts (Aikido, Shindo Muso Ryu, Muay Thai Kickboxing, Krav Maga), outdoor activities, urban gardening, community activism.