

Curriculum vitae

Tatyana Livshultz

Contact information

Academy of Natural Sciences, 1900 Benjamin Franklin Parkway, Philadelphia, PA 19103, USA

Phone 215-299-1051

Email livshultz@ansp.org

Appointments

2008- present Assistant curator of Botany, Academy of Natural Sciences

2006-2008 Assistant professor, Department of Biology, University of Nebraska Omaha; curator of vascular plants OMA herbarium.

2006- 2007 Herbarium associate, Arnold Arboretum and Harvard University Herbaria.

2003-2005 Mercer Post-doctoral Fellow, Arnold Arboretum, Harvard University.

Education

2003 Ph.D. Cornell University, Ithaca, NY. Plant Biology.

Dissertation title: Systematics of *Dischidia* R. Br. (Apocynaceae, Asclepiadoideae)

Dissertation committee: Melissa A. Luckow, Jeff J. Doyle, Dominick J. Paolillo, Terence P. Delaney.

1995 Bachelor of Arts (with honors). University of Chicago, Chicago, IL. Biology.

Peer-reviewed publications

Straub, S.C.K., Fishbein, M., Livshultz, T., Foster, Z., Parks, M., Weitemier, K., Cronn, R.C., & Liston, A. submitted. Building a model: Developing genomic resources for common milkweed (*Asclepias syriaca*) with low coverage genome sequencing. BMC Genomics.

Livshultz, T. 2010. The phylogenetic position of milkweeds (Apocynaceae subfamilies Secamonoideae and Asclepiadoideae): Evidence from the nucleus and chloroplast. Taxon 59: 1016-1030.

Meve, U., Laurente, O., Alejandro, G.J., & Livshultz, T. 2009. Systematics of *Clemensiella* (Apocynaceae-Asclepiadoideae). Edinburgh Journal of Botany 66:447-457.

Livshultz, T. 2007. The identity of *Dischidia micholitzii* (Apocynaceae, Asclepiadoideae). Edinburgh Journal of Botany. 64: 311-315.

Livshultz, T., D. J. Middleton, M. E. Endress, and J. K. Williams. 2007. Phylogeny of Apocynoideae (Apocynaceae) and the APSA clade. Annals of the Missouri Botanical Garden. 94: 324-359.

Simões, A. O., T. Livshultz, E. Conti, and M. E. Endress. 2007. Phylogeny and systematics of Rauvolfioideae (Apocynaceae) based on molecular and morphological evidence. Annals of the Missouri Botanical Garden. 94: 268-297.

Luckow, M., R. H. Fortunato, S. Sede, T. Livshultz. 2005. The phylogenetic affinities of two mysterious monotypic mimosoids from southern South America. Systematic Botany 30(3): 585-602.

Livshultz, T., B. T. Tran, S. Somvangsa, and D. H. Schott. 2005 *Dischidia* (Apocynaceae, Asclepiadoideae) in Laos and Vietnam. Blumea 50(1) 113-134.

Livshultz, T. 2003. *Dischidia cleistantha* (Apocynaceae, Asclepiadoideae): A new Philippine endemic. Novon 13(1): 89-96.

Livshultz, T. 2003. Lectotypification of *Dolichostegia* Schlechter (Asclepiadoideae, Apocynaceae) and a new combination, *Dischidia boholensis*. Taxon 52(3): 595-600.

Luckow, M., J. T. Miller, D. J. Murphy, and T. Livshultz. 2003. A phylogenetic analysis of Mimosoideae (Leguminosae) based on chloroplast DNA sequence. *Advances in Legume Systematics (Part 10)*. 197-220 in B. B. Klitgaard and A. Bruneau, eds. The Royal Botanic Garden, Kew.

Non-peer-reviewed publications

Freire-Fierro, A. & T. Livshultz. 2009. PH - Academy of Natural Sciences of Philadelphia Herbarium. The Vasculum 4(2): 2-6.

Publications in preparation

- Frasier, C., Struwe, L., & Livshultz, T. in prep. Phylogeny and divergence time dating of Gentianales.
- Livshultz, T. in prep. Pollen transfer efficiency in *Apocynum cannabinum* (Apocynaceae): an evolutionary perspective.
- Livshultz, T., Lakata, E., & Mead, J.V. in prep. Comparative climate niche modeling of Baisseeae (the milkweed sister group) and *Secamone* (plesiomorphic milkweeds) in Africa.

Invited Seminars

- Livshultz, T. 2009. Evolution of Pollination Mechanisms in the milkweed family (Apocynaceae). Symposium: "Darwin and Botany in a Changing World". Philadelphia Botanical Club and ANSP. Oral presentation.
- Livshultz, T. 2009. Plants and Ecosystems of Cambodia and Thailand. Philadelphia Botanical Club. Oral presentation.
- Livshultz, T. 2007. Comparative development of stamen ornaments in *Dischidia* (Apocynaceae). Hortus Botanicus Leiden, the Netherlands. Oral presentation.
- Livshultz, T. 2006. Phylogeny of the Apocynaceae: implications for the evolution of complex pollination mechanisms. Department of Plant Biology, Cornell University. Oral presentation.
- Livshultz, T. 2005. Systematic studies in the Apocynaceae: implications for the evolution of complex pollination mechanisms. 1009th meeting of the New England Botanical Club. Oral presentation.

Oral Presentations and Posters at Professional Meetings

- Livshultz, T., S. Frasier, and L. Struwe. 2010. Phylogeny of the "rest" of Gentianales (Excluding Rubiaceae): What Can We Conclude From Currently Available Data? Fifth International Rubiaceae and Gentianales Conference.
- Livshultz, T. and S. Hochleitner. 2010. Pollen transfer efficiency in *Apocynum cannabinum* (Apocynaceae): an evolutionary perspective. Botanical Society of America Annual Meeting.
- Livshultz, T. 2009. Phylogeny of crown clade Apocynaceae: nuclear locus supports surprising milkweed sister-group. Botanical Society of America Annual Meeting.
- Livshultz, T. and E.M. Kramer. 2009. Expression patterns of A- and C-class MADS-box genes identify the corona of *Asclepias syriaca* (Apocynaceae) as staminal appendages. Botanical Society of America Annual Meeting.
- Livshultz, T. and D. Middleton. 2008. Systematics of Apocynaceae in the flora of Cambodia, Laos, and Vietnam. Oral presentation. First International Conference for the Flora of Cambodia, Laos, and Vietnam.
- Widholm, T., R. Egan, and T. Livshultz. 2007. Phylogenetic relationships in the *Parmotrema perforatum* group in North America based on the glyceraldehyde-3-phosphate (GDP) gene. American Bryological and Lichenological Society Meeting. Poster presented by MS student Todd Widholm.
- Livshultz, T. 2007. Systematics of the Apocynaceae. Fourth Annual Great Plains Plant Systematics Symposium. Oral presentation.
- Livshultz, T., D. Middleton, M. Endress, and J. K. Williams. 2005. Progress in the systematics of the Apocynoideae. International Botanical Congress. Oral presentation given by Mary Endress.
- Livshultz, T., D. Middleton, M. Endress, and J. K. Williams. 2004. Systematics of the subfamily Apocynoideae (Apocynaceae) and the APSA clade. Botanical Society of America meeting. Oral presentation.
- Livshultz, T., B. T. Tran, S. Somvangsa, and D. H. Schott. 2003. Systematics and Ecology of *Dischidia* (Apocynaceae, Asclepiadoideae) in Vietnam and Laos. Smithsonian Botanical Symposium. Poster.
- Livshultz, T. 2002. Comparative morphology and development of staminal coronas in *Dischidia*. (Asclepiadoideae, Apocynaceae). Botanical Society of America meeting. Oral presentation.
- Livshultz, T. 2000. Systematics and evolution of ant-leaves in the genus *Dischidia* (Asclepiadaceae). American Journal of Botany 87: 139. Oral presentation.
- Livshultz, T. and M. Luckow. 1997. Phylogenetic relationships among the primarily Madagascan genera *Dichrostachys*, *Gagnebina*, and *Alantsilodendron* (Leguminosae: Mimosoideae). American Journal of Botany 84: 213. Oral presentation.

Prizes

- 2002.** Botanical Society of America Maynard Moseley Award for "Comparative morphology and development of staminal coronas in *Dischidia*. (Asclepiadoideae, Apocynaceae)."

Grants

- 2010.** American Philosophical Society. Franklin Research Grant. *Pollination of primitive milkweeds and their relatives: testing the fitness benefit of a remarkable floral adaptation.* \$2,000.
- 2010.** Andrew W. Mellon Foundation. *Global Plants Initiative.* \$93,000.
- 2009.** Andrew W. Mellon Foundation. *Global Plants Initiative.* \$96,000.
- 2008.** UNO University Committee on Research and Creative Activity. Grant-in-Aid. *The Evolution of a Floral Novelty: Developmental Gene Expression in the Milkweed Corona.* \$4,500.
- 2007.** UNO University Committee on Research and Creative Activity. Grant-in-Aid. *Evolution of complex floral morphologies in the family Apocynaceae investigated with nuclear genes.* \$4,500.
- 1999.** National Science Foundation. DEB- Dissertation Improvement Grant. *Systematics of the genus Dischidia R. Br. (Marsdenieae, Asclepiadaceae) and the tribe Marsdenieae.* (With M. Luckow) \$10,000.
- 1999.** Einaudi Foundation International Research Travel Grant. *Systematics of the genus Dischidia R. Br.* \$1000.
- 1999.** Explorer's Club Exploration Fund. *Systematics and evolution of ant associations in the Southeast Asian epiphyte Dischidia (Asclepiadaceae, milkweed family)* \$1200.
- 1999.** American Society for Plant Taxonomy Graduate Research Grant. *Systematics and evolution of ant associations in the Southeast Asian epiphyte Dischidia (Asclepiadaceae, milkweed family)* \$1000.
- 1999.** Botanical Society of America Karling Graduate Research Grant. *Systematics and evolution of ant associations in the Southeast Asian epiphyte Dischidia (Asclepiadaceae, milkweed family)* \$500.
- 1999.** Cornell Sigma Xi Grant for Student Research. *Systematics and evolution of ant associations in the Southeast Asian epiphyte Dischidia (Asclepiadaceae, milkweed family)* \$500.
- 1998.** Bailey Hortorium Moore/ Mellon Fund Travel Grant. \$800.

Field experience

USA, Thailand, Laos, Malaysia, Philippines, Dominican Republic, Uruguay

Teaching

- 2010.** Introduction to Pollination Biology, Wagner Free Institute of Science and Pennsylvania Horticultural Society
- 2007-2008.** Flora of the Great Plains, University of Nebraska at Omaha
- 2007-2008.** Introductory Biology, University of Nebraska at Omaha
- 2007.** Phylogenetic Systematics, University of Nebraska at Omaha

Graduate Thesis Committee

- 2006-2008.** Todd Widholm. M. S. Testing species delimitations in the *Parmotrema perforatum* group (Parmeliaceae, Ascomycota) in eastern North America. University of Nebraska at Omaha.

Interns mentored

- 2010.** Teresa Trego. Flora of Pennsylvania intern.
- 2010.** Elizabeth Lakata. University of Pennsylvania. Summer intern. Pollination biology and GIS.
- 2010.** Julian Golec. University of Rhode Island. Summer intern. Pollination biology.
- 2009.** Gloria Juliana Rosales. Camden Community College. Summer intern. Molecular Systematics.
- 2009.** Jennifer Prevatt. Arcadia College. Illustration intern.
- 2009.** Lauren Spitz. Flora of Pennsylvania intern.

Professional & Amateur Societies

- American Society of Plant Taxonomists
Botanical Society of America
International Association for Plant Taxonomy
Philadelphia Botanical Club- Vice President

Reviewer

American Journal of Botany, Edinburgh Journal of Botany, International Journal of Plant Science, Madrono, Systematic Botany, Plant Systematics and Evolution, Taxon, Journal of Systematics and Evolution, Proceedings of ANS

Grant Proposal Reviewer

National Science Foundation, International Foundation for Science