Wendy L. Applequist

Missouri Botanical Garden P. O. Box 299, Dept. 43 St. Louis, MO 63166-0299 (314) 577-0267 Fax: (314) 577-0800 E-mail: wendy.applequist@mobot.org 5907 Columbia Ave. St. Louis, MO 63110

(314) 644-1848

wlapplequist@yahoo.com

Education

Ph.D. in Botany, Department of Botany, Iowa State University, Ames, IA. Dec. 1999.

B.S. in Biology, University of Illinois, Urbana, IL. May 1994.

Employment

Missouri Botanical Garden, St. Louis, MO Associate Curator, William L. Brown Center. Apr. 2011–present.

Assistant Curator, William L. Brown Center. 2004–2011.

Postdoctoral Researcher. 2000–2004.

Washington University in St. Louis, St. Louis, MO Adjunct Instructor, University College. Spring 2011, Spring 2014.

Iowa State University, Ames, IA Postdoctoral Associate. Spring 2000.

Teaching and Research Assistant. 1994–1999.

Books

Applequist, W. L., and L. M. Campbell, editors. In press. *DNA banking for the 21st century: Proceedings of the U.S. Workshop on DNA Banking.* William L. Brown Center, St. Louis, MO.

Applequist, W. 2006. *The identification of medicinal plants: a handbook of the morphology of botanicals in commerce*. American Botanical Council, Austin, TX.

Publications

Applequist, W. L. In press. A taxonomic revision of *Dombeya* section *Decastemon* (Malvaceae). Annals of the Missouri Botanical Garden.

Applequist, W. L. In press. Conioselinum. Flora of North America.

Applequist, W. L. In press. Ligusticum. Flora of North America.

Applequist, W. L. In press. A brief review of recent controversies in the taxonomy and nomenclature of Sambucus nigra sensu lato. Acta Horticulturae. Applequist, W. L., and C. D. Bell. In press. Symphoricarpos. Flora of North America.

- Applequist, W. L., P. B. Phillipson, and G. E. Schatz. In press. A synoptic revision of the Malagasy endemic genus *Calantica* (Salicaceae). *Adansonia*.
- Blasiak, L. C., A. W. Schmidt, H. Andriamiarinoro, T. Mulaw, R. Rasolomampianina, W. L. Applequist, C. Birkinshaw, F. Rejo-Fienena, P. P. Lowry II, T. M. Schmidt, and R. T. Hill. 2014. Bacterial communities in Malagasy soils with differing levels of disturbance affecting botanical diversity. *PLoS One* 9(1): e85097. doi:10.1371/journal.pone.0085097
- Applequist, W. L. 2013. A nomenclator for *Homalium* (Salicaceae). *Skvortsovia* 1:12–74.
- Applequist, W. L. 2013. Report of the Nomenclature Committee for Vascular Plants: 65. *Taxon* 62: 1315–1326.
- Applequist, W. L., and J. S. Miller. 2013. Selection and authentication of botanical materials for the development of analytical methods. *Analytical and Bioanalytical Chemistry* 405: 4419–4428.
- Dai, Y., L. Harinantenaina, P. J. Brodie, C. Birkinshaw, R. Randrianaivo, W. Applequist, M. Ratsimbason, V. E. Rasamison, Y. Shen, K. TenDyke, and D. G. I. Kingston. 2013. Two antiproliferative triterpene saponins from *Nematostylis anthophylla* from the Madagascar dry forest. *Chemistry & Biodiversity* 10: 233–240.
- Liu, Y., L. Harinantenaina, P. J. Brodie, J. D. Bowman, M. B. Cassera, C. Slebodnick, M. W.
 Callmander, R. Randrianaivo, E. Rakotobe, V. E. Rasamison, W. Applequist, C. Birkinshaw, G.
 P. Lewis, and D. G. I. Kingston. 2013. Bioactive compounds from *Stuhlmannia moavi* from the Madagascar dry forest. *Bioorganic & Medicinal Chemistry* 21: 7591–7594.
- Applequist, W. L. 2012. Report of the Nomenclature Committee for Vascular Plants: 64. *Taxon* 61: 1108–1117.
- Walker, K. M., and W. L. Applequist. 2012. Adulteration of selected unprocessed botanicals in the U.S. retail herbal trade. *Economic Botany* 66: 321–327.
- Applequist, W. L. 2011. A revision of the *Dombeya rigida* complex (Malvaceae). *Adansonia*, sér. 3, 33: 249–262.
- Applequist, W. L. 2011. Proposal to conserve the name *Ligusticum californicum (Apiaceae)* with a conserved type. *Taxon* 59: 1288–1289.
- Applequist, W. L., and D. E. Moerman. 2011. Yarrow (*Achillea millefolium* L.): a neglected panacea? A review of ethnobotany, bioactivity, and biomedical research. *Economic Botany* 65: 209–225.
- Thomas, A. L., W. L. Applequist, G. E. Rottinghaus, and J. S. Miller. 2011 [publ. 2012]. Black cohosh rhizome and phytochemical production in response to shading, spacing, and age. *Acta Horticulturae (ISHS)* 925: 175–183.
- Applequist, W. L., M. Callmander, G. Davidse, A. Sennikov, M. Thulin, P. Vorster, and G. Yatskievych. 2010. Apportionment of institutional votes for the Nomenclature Section: a rebuttal to Smith & al. *Taxon* 59: 1567–1570.
- Applequist, W. L. 2009. A revision of the Malagasy endemic *Helmiopsis* (Malvaceae s.l.). *Annals of the Missouri Botanical Garden* 96: 521–540.
- Applequist, W. L. 2009. Two new species of *Dombeya* (Malvaceae) from Madagascar. *Novon* 19: 289–294.
- Applequist, W. L., H. Johnson, and G. Rottinghaus. 2008. (+)-Catechin, (-)-epicatechin, and gallic acid content of seeds of hybrid grapes hardy in Missouri. *American Journal of Enology and Viticulture* 59: 98–102.
- Thomas, A. L., P. L. Byers, C. E. Finn, Y.-C. Chen, G. E. Rottinghaus, A. M. Malone, and W. L. Applequist. 2008. Occurrence of rutin and chlorogenic acid in elderberry leaf, flower, and stem in response to genotype, environment, and season. *Acta Horticulturae (ISHS)* 765: 197–206.
- Applequist, W. L., D. J. McGlinn, M. Miller, Q. G. Long, and J. S. Miller. 2007. How well do herbarium data predict the location of present populations? A test using *Echinacea* species in Missouri. *Biodiversity and Conservation* 16: 1397–1407.

- Hildreth, J., E. Hrabeta-Robinson, W. Applequist, and J. Betz. 2007. Standard operating procedure for the collection and preparation of voucher plant specimens for use in the nutraceutical industry. *Analytical and Bioanalytical Chemistry* 389: 13–17.
- Thomas, A. L., G. E. Rottinghaus, J. K. Tracy, W. L. Applequist, B. E. Schweitzer, L. J. Havermann, S. F. Woodbury, J. S. Miller, M. R. Ellersieck, R. J. Crawford, Jr., and D. Gray. 2007. Occurrence of 23-epi-26-deoxyactein and cimiracemoside A in various black cohosh tissues throughout the growing season. *HortScience* 42: 535–539.
- Applequist, W. L. 2006. Proposal to reject the names *Plantago psyllium* and *Plantago cynops* (*Plantaginaceae*). *Taxon* 55: 235–236.
- Applequist, W. L., B. Avula, B. T. Schaneberg, Y.-H. Wang, and I. A. Khan. 2006. Comparative fatty acid content of seeds of four *Cucurbita* species grown in a common (shared) garden. *Journal of Food Composition and Analysis* 19: 606–611.
- Applequist, W. L., and V. Lebot. 2006. Validation of *Piper methysticum* var. *wichmannii* (Piperaceae). *Novon* 16: 3–4.
- Applequist, W. L., W. L. Wagner, E. A. Zimmer, and M. Nepokroeff. 2006. Molecular evidence resolving the systematic position of *Hectorella* (Portulacaceae). *Systematic Botany* 31: 310–319.
- Miller, J. S., and W. L. Applequist. 2006. Research grade botanicals: issues in dietary supplement research. *Acta Horticulturae* 720: 49–58.
- Thomas, A. L., R. J. Crawford, Jr., L. J. Havermann, W. L. Applequist, B. E. Schweitzer, S. F. Woodbury, and J. S. Miller. 2006. Effect of planting depth, planting season, and fungicide treatment on establishment of black cohosh in a poorly drained soil. *HortScience* 41: 374–376.
- Applequist, W. L. 2005. A revision of the Malagasy endemic *Talinella* (Portulacaceae). *Adansonia*, sér. 3, 27: 47–80.
- Applequist, W. L. 2005. The identity and typification of *Smilax grandifolia* Regel and *S. regelii* Killip & Morton. *Taxon* 54: 144–146.
- Applequist, W. L. 2005. Root anatomy of *Ligusticum* species (*Apiaceae*) sold as osha compared to that of potential contaminants. *Journal of Herbs, Spices and Medicinal Plants* 11(3): 1–11.
- Applequist, W. L., and D. B. Pratt. 2005. The Malagasy endemic *Dendroportulaca* (Portulacaceae) is referable to *Deeringia* (Amaranthaceae): molecular and morphological evidence. *Taxon* 54: 681– 687.
- Applequist, W. L. 2003. Rhizome and root anatomy of potential contaminants of *Actaea racemosa* L. (black cohosh). *Flora* 198: 358–365.
- Applequist, W. L., and L. M. Shultz. 2003. Noteworthy collections: Wyoming. Madroño 50: 53-54.
- Applequist, W. L., and R. S. Wallace. 2003. Expanded circumscription of Didiereaceae and its division into three subfamilies. *Adansonia*, sér. 3, 25: 13–16.
- Applequist, W. L. 2002. A reassessment of the nomenclature of *Matricaria* L. and *Tripleurospermum* Sch. Bip. (*Asteraceae*). *Taxon* 51: 757–761.
- Applequist, W. L., and R. S. Wallace. 2002. Deletions in the plastid *trn*T-*trn*L intergenic spacer define clades within Cactaceae subfamily Cactoideae. *Plant Systematics and Evolution* 231: 153–162.
- Schaneberg, B. T., W. L. Applequist, and I. A. Khan. 2002. Determination of aristolochic acid I and II in North American species of *Asarum* and *Aristolochia*. *Pharmazie* 57: 686–689.
- Applequist, W. L. 2001. Proposal to reject the name *Lavandula spica* L. (*Lamiaceae*). *Taxon* 50: 1213–1214.
- Applequist, W. L., R. Cronn, and J. F. Wendel. 2001. Comparative development of fiber in wild and cultivated cotton. *Evolution and Development* 3(1): 1–15.
- Applequist, W. L., and R. S. Wallace. 2001. Phylogeny of the portulacaceous cohort based on *ndhF* sequence data. *Systematic Botany* 26(2): 406–419.
- Applequist, W. L., and R. S. Wallace. 2000. Phylogeny of the Madagascan endemic family Didiereaceae. *Plant Systematics and Evolution* 221: 157–166.

Other Publications

- Applequist, W. L. In press. Legal and ethical issues related to DNA banking. In W. L. Applequist and L.
 M. Campbell, eds., DNA banking for the 21st century: Proceedings of the U.S. Workshop on DNA Banking. William L. Brown Center, St. Louis, MO.
- Applequist, W. L. In press. Using traditional taxonomy and vouchers in authentication and quality control. In K. Reynertson and K. Mahmood, eds., *Botanicals: Methods and technologies for quality control.* CRC Press, Taylor & Francis Group, LLC, Boca Raton, FL.
- Upton, R., A. Graff, G. Jollife, R. Länger, and E. Williamson, eds. [contributing editors W. L. Applequist, D. Harder, and A. Raman-Soumayanath]. 2011. *American Herbal Pharmacopoeia: Botanical pharmacognosy Microscopic characterization of botanical medicines*. CRC Press, Boca Raton, FL.
- Applequist, W. L. 2011. Botanical identification. P. 4 in R. Upton, P. Axentiev and D. Swisher, eds., *Slippery elm inner bark.* Ulmus rubra *Muhl. Standards of analysis, quality control and therapeutics.* American Herbal Pharmacopoeia, Scotts Valley, CA.
- Applequist, W. L. 2010. Ornamental, beneficial and vanishing? The challenge of protecting America's wildflowers. *Phi Kappa Phi Forum* 90(1): 12–14.
- Brown, P., and W. L. Applequist. 2010. Quality focus: The perils of Paula, episode 3: Interview with a botanist. *Nutraceuticals World* 13(7):34(2).
- Applequist, W. L. 2008. Traditional Chinese medicine authentication. Pp. 342–343 in *McGraw-Hill yearbook of science and technology*. McGraw-Hill, New York, NY.
- Applequist, W. L. 2005–2007. [Text for Compendium Botanicum website, including written descriptions of NIST standard botanical reference materials.] Available online at http://www.wlbcenter.org/herbarium/compendium_page_1.aspx and associated pages.

Applequist, W. L. 2004. [Sidebar on botanical illustration.] *HerbalGram* 63: 37.

- Applequist, W. L. 2003. Letter to the editor (Inappropriate advertising of dietary supplements). *NEJM* 348: 2255–2256.
- Applequist, W. L. 2003. Letter to the editor (*Echinacea* for the common cold). *Annals of Internal Medicine* 139: 599–600.
- Applequist, W. L. 2000. "Family" and "Taxonomic Keys" entries for R. Robinson, ed., *Plant sciences for students*. Macmillan Reference USA, New York, NY.
- **Book reviews:** 2 for *Journal of Natural Products* (2001), 5 for *Systematic Botany* (2002–2008), 1 for *HerbalGram* (2012), 24 for *Economic Botany* (2001–2011). [List available on request.]

Invited Presentations

- "Medicinal Plants and Herbs." Rowena Clarke Garden Club, Kirkwood, MO, Mar. 2014.
- "Herbal Medicines and Drug Discovery: The Uses of Plants for Human Health." Talk for Walters-Kluwer staff, Missouri Botanical Garden, St. Louis, MO, Oct. 2013.
- "Botanical Dietary Supplements: Facts and Fiction." Guest lecture for "Pharmacology for Clinical Research" course, Washington University in St. Louis, St. Louis, MO, Oct. 2013.
- "Botanical Dietary Supplements: Research, Regulation and Commerce." Goldfarb School of Nursing, St. Louis, MO, Sep. 2013.
- "Natural Products Discovery at the Missouri Botanical Garden: Supporting Discovery Programs with Botany, Ethnobotany and Conservation." American Society of Pharmacognosy meeting, St. Louis, MO, July 2013.
- "Toxic Plants at the Missouri Botanical Garden." Lecture/tour for wilderness medicine students from Saint Louis University, St. Louis, MO, Apr. 2013.
- "Conservation Activities at the William L. Brown Center." Missouri Botanical Garden Members' Board meeting, St. Louis, MO, Jan. 2013.

- "Legal and Ethical Issues Related to DNA Banking." U.S. Workshop on DNA Banking, St. Louis, MO, Jan. 2013.
- "Botanical Dietary Supplements: Facts and Fiction." Guest lecture for "Pharmacology for Clinical Research" course, Washington University in St. Louis, St. Louis, MO, Oct. 2012.
- "Botany and Quality Control of Medicinal Plants." St. Louis Ecology, Evolution, and Conservation Retreat, Principia College, Elsah, IL, Sep. 2012.
- "The Rosy Periwinkle and Cancer Treatment." Leukemia and Lymphoma Society, St. Louis, MO, Aug. 2012.
- "Missouri Grapes and Wines." Webster Groves Chamber of Commerce, Webster Groves, MO, Jun. 2012.
- "Introduction to Ethnobotany." Guest lecture and lab for "Plant Biology" course, Southern Illinois University Edwardsville, Edwardsville, IL, Apr. 2012.
- "Missouri Wines and Science: From Phylloxera to Resveratrol." Science Café, St. Louis, MO, Feb. 2012.
- "Nomenclatural Confusion and Botanical Adulteration." U. S. Pharmacopeia Workshop on Intentional and Unintentional Adulteration of Food Ingredients and Dietary Supplements, Rockville, MD, Nov. 2011.
- "Botanical Dietary Supplements: Facts and Fiction." Guest lecture for "Pharmacology for Clinical Research" course, Washington University in St. Louis, St. Louis, MO, Oct. 2011.
- With representatives of Barefoot Wine: "Fabulous Fermentation." SciFest, St. Louis Science Center, St. Louis, MO, Oct. 2011.
- "Plants as Medicines: From Obsolete to Leading Edge." Science Seminar Series, Academy of Science of St. Louis and St. Louis Zoo, St. Louis, MO, Oct. 2011.
- "Applicability of the POI Model to Morphological Methods of Botanical Identification." Dietary Supplements Task Force and Community Meeting, AOAC International annual meeting, New Orleans, LA, Sept. 2011.
- "The Role of Botanical Gardens in Ethno-Veterinary Medical Research." African Association for Medicinal Plants Standards annual meeting and AAMPS-NAPRECA Ethnoveterinary Medicine Symposium, Nairobi, Kenya, Aug. 2011.
- "Health-Related Research at the William L. Brown Center." Talk for first-year pre-medical students from Washington University, St. Louis, MO, Aug. 2011
- "Vines and Wines of Missouri: History and Science." Lecture for travel writers sponsored by the Missouri Division of Tourism, St. Louis, MO, June 2011.
- "Clinical Studies of Medicinal Plants: Challenges for Conduct and Interpretation." Missouri Botanical Garden Students in the Garden seminar, St. Louis, MO, Apr. 2011.
- "Confirmation and Documentation of the Identity of Botanical Test Materials." NIH Botanical Research Centers Annual Meeting, Rockville, MD, Nov. 2010.
- "Botanical Dietary Supplements: Facts and Fiction." Guest lecture for "Pharmacology for Clinical Research" course, Washington University in St. Louis, St. Louis, MO, Nov. 2010.
- "Botanicals and Cancer." Healthy You, Healthy Planet festival, Missouri Botanical Garden, Aug. 2010.
- "Toxic Plants at the Missouri Botanical Garden." Lecture/tour for emergency medicine residents from Saint Louis University, St. Louis, MO, June 2010.
- "Botanicals and Cancer." Guest lecture for economic botany seminar, Washington University in St. Louis, St. Louis, MO, Apr. 2010.
- "From Magic to Molecules: A Short History of the Science of Medicinal Plants." Perspectives on Science & History Lecture Series, Missouri History Museum, St. Louis, MO, Apr. 2010.
- "Dietary Supplements and Drug Discovery: Law, Ethics, and Science." Guest lecture for "Plants and American People: Past and Present" course, Washington University in St. Louis, St. Louis, MO, Apr. 2010.
- "Botanicals and Cancer." St. Louis Herb Society, St. Louis, MO, Mar. 2010.
- "Botanical Careers at the Missouri Botanical Garden and the William L. Brown Center." Guest lecture for freshman biology seminar, Missouri University of Science and Technology, Rolla, MO, Dec. 2009.

- "Botanical Dietary Supplements: Facts and Fiction." Guest lecture for "Pharmacology for Clinical Research" course, Washington University in St. Louis, St. Louis, MO, Oct. 2009.
- "Botanical Dietary Supplements: Facts and Fiction." SciFest, St. Louis Science Center, St. Louis, MO, Oct. 2009.
- "Herbal Medicine and Botanical Dietary Supplements." Metro East Herb Club, Belleville, IL, Aug. 2009.
- "Botanical Dietary Supplements: Facts and Fiction." Science Café, St. Louis, MO, May 2009.
- "Ethnobotany and Drug Discovery in Vietnam: Lessons from Bach Ma." 3rd Annual Alan G. Johnson Memorial Conference, Finca Luna Nueva, Costa Rica, May 2009.
- "Dietary Supplements and Drug Discovery: Law, Ethics, and Science." Guest lecture for "People and Plants: Paleoethnobotany and Ethnobotany" course, Washington University in St. Louis, St. Louis, MO, Apr. 2009.
- "That Our Young People Catch the Vision: Carver's Principles and 21st Century Science." Missouri History Museum, Tuskegee Speaker Series, Feb. 2009.
- "The William L. Brown Center for Plant Genetic Resources: Medicinal Plants Research and Drug Discovery Programs." Greater Missouri Leadership Challenge group, St. Louis, MO, Nov. 2008.
- "Molluginaceae, Halophytaceae, Basellaceae, and Didiereaceae." Guest lecture for Floristic Taxonomy seminar, Missouri Botanical Garden, St. Louis, MO, Sept. 2008.
- "Treating Cancer with Plants." Director's Associates Evening, Missouri Botanical Garden, St. Louis, MO, Sept. 2008.
- "Treating Cancer with Plants." Public lecture, Missouri Botanical Garden, St. Louis, MO, June 2008.
- "The William L. Brown Center for Plant Genetic Resources: Medicinal Plants Research and Drug Discovery Programs." 2nd Annual Alan G. Johnson Memorial Conference, Finca Luna Nueva, Costa Rica, Feb. 2008.
- With Memory P. Elvin-Lewis and David R. Deal: "Bioprospecting or Biopiracy? The Effects of Scientific Research on Biodiversity and Culture." Westminster College 2nd Annual Symposium on Democracy, Fulton, MO, Sept. 2007.
- With James S. Miller: "Botanical Identification in the Quality Assessment of Botanical Products." 121st AOAC Annual Meeting & Exposition, Anaheim, CA, Sept. 2007.
- "Potential and Limitations of Macro-Morphological Identification of Plants" and "Vouchering and Digital Imaging." Botanicals Authentication Conference: State-of-the-Science, Bastyr University, Kenmore, WA, Aug. 2007
- With Ming You and Tom Smith: "Conversations: Let's Talk About the Role of Plants in Enhancing Human Health." Donald Danforth Plant Science Center, St. Louis, MO, Apr. 2007.
- "Sourcing and Characterization of Botanical Test Materials: Making Research Meaningful." The University of the Western Cape, South African Herbal Science and Medicine Institute, Sept. 2006.
- "Scientific Studies of Herbal Medicines: Issues and Opportunities." Young Scientist Program, Washington University Medical School, St. Louis, MO, Aug. 2005.
- "Sphaerosepalaceae: Phylogeny, Biogeography, and Relationships to Other Clades of Malvales Sensu Lato." Rancho Santa Ana Botanic Garden, Apr. 2005.
- "Botanical Service to Center Goals: the Contributions of Herbarium and Cultivation Facilities to Phytomedicinal Research." NIH Botanical Center Directors' Meeting, St. Louis, MO, Aug. 2004.
- "BioBanking: the Perspective from the Missouri Botanical Garden. DNA Banks and Living Collections." BIO2004, San Francisco, CA, June 2004.
- "Production of a Manual for the Macromorphological Identification of Botanicals in Commerce." NIH Botanical Center Directors' Meeting, University of California at Los Angeles, June 2003.
- With P. Leszek D. Vincent: "Ethnobotany and Ethnopharmacology in South Africa." Department of Agronomy seminar, University of Missouri Columbia, Dec. 2002.
- "A Comparison of the Methods of Confirmation of Botanical Identity." [Poster.] NIH Botanical Center Directors' Meeting, University of Illinois at Chicago, July 2002.

- "Botanical Aspects of Research into Plant-Based Dietary Supplements." NIH Botanical Center Directors' Meeting, Washington, DC, May 2001.
- "Horticultural Aspects of Herbs." Weekend Herbal Workshop, Saint Louis University, Department of Nutrition and Dietetics, July 2000.

Conference Presentations and Posters

- Applequist, W. L. 2014. Revision of the alpha taxonomy of *Dombeya* subg. *Xeropetalum* (Malvaceae) in Madagascar. AETFAT 2014, Stellenbosch, South Africa.
- Applequist, W. L. 2013. An elderberry by any other name: Taxonomy and nomenclature of *Sambucus nigra* sensu lato. First International Symposium on Elderberry, Columbia, MO.
- Smillie, T., B. Avula, Z. Ali, A. Weerasooriya, K. Meyer, A. Townesmith, W. Applequist, and I. Khan. 2012. Characteristic analysis of *Dioscorea* species. [Poster.] NIH Botanical Research Centers Annual Meeting, Bethesda, MD.
- Applequist, W. L., A. R. Kuhlman, J. C. Solomon, P. P. Lowry II, R. W. Bussmann, and R. E. Magill.
 2011. The Missouri Botanical Garden's DNA Bank: Challenges and opportunities for service to the scientific community. [Poster.] XVIII International Botanical Congress, Melbourne, Australia.
- Applequist, W. L., A. R. Kuhlman, J. C. Solomon, P. P. Lowry II, R. Bussmann, and R. E. Magill. 2011. The Missouri Botanical Garden's DNA Bank: Expanding opportunities to serve the American systematics community. [Poster.] Botany 2011, St. Louis, MO.
- Applequist, W. L., and K. M. Walker. 2011. Morphological assessment of the identity of selected unprocessed botanicals in commerce. 10th International Conference on the Science of Botanicals, Oxford, MS.
- Applequist, W. L. 2010. Preliminary taxonomic studies of *Dombeya* section *Decastemon*. AETFAT 2010, Antananarivo, Madagascar.
- Phillipson, P. B., R. Ramananjanahary, and W. L. Applequist. 2010. Didiereaceae: a near-endemic plant family in Madagascar. [Poster.] AETFAT 2010, Antananarivo, Madagascar.
- Thomas, A. L., W. L. Applequist, G. E. Rottinghaus, and J. S. Miller. 2010. Black cohosh rhizome and phytochemical production in response to shading, spacing, and age. [Poster.] 28th International Horticultural Congress, Lisbon, Portugal.
- Applequist, W. L. 2008. The status quo of alpha taxonomy in Malagasy Malvaceae: the example of *Dombeya* subsect. *Longifoliae*. Botany 2008, Vancouver, Canada.
- Applequist, W. L., and P. P. Lowry II. 2005. Relationships among major clades of the expanded Malvales: the contribution of *ndhF* data. [Poster.] XVII International Botanical Congress, Vienna, Austria.
- Applequist, W. L. 2004. Molecular phylogeny of Sphaerosepalaceae and relationships of *Diegodendron*. Botany 2004, Snowbird, UT.
- Applequist, W. L., B. Avula, B. T. Schaneberg, and I. A. Khan. 2004. Comparative fatty acid content of seeds of four *Cucurbita* species grown in a common garden. [Poster.] 2004 International Congress on Natural Products Research, Phoenix, AZ.
- Applequist, W. L. 2003. Field observations and systematics of *Talinella* and *Dendroportulaca*. Botany 2003, Mobile, AL.
- Vincent, L., W. Applequist, W. Folk, D. Lubahn, Q. Johnson, and J. Miller. 2003. Medicinal plant research in South Africa and the USA new frontiers. [Poster.] Missouri Life Sciences Week, Columbia, MO.
- Schaneberg, B. T., W. L. Applequist*, and I. A. Khan. 2002. Is wild ginger toxic? Aristolochic acid content of North American species of Aristolochiaceae. Botany 2002, Madison, WI.
- Schaneberg, B. T., W. L. Applequist, and I. A. Khan. 2001. The quantitative analysis of *Asarum* and *Aristolochia* species for aristolochic acid I and II by HPLC. [Poster.] American Society of Pharmacognosy & Council for Responsible Nutrition interim meeting, Asilomar, CA.

Applequist, W. L., and R. S. Wallace. 1999. An *ndhF* phylogeny of the portulacaceous cohort: Reexamination of evolution in a group of related families. [Poster.] XVI International Botanical Congress, St. Louis, MO.

Applequist, W. L., and R. S. Wallace. 1998. Molecular systematic appraisal of Tribe Anacampseroteae (Portulacaceae). American Institute of Biological Sciences, Baltimore, MD.

Applequist, W. L., and R. S. Wallace. 1997. Phylogeny of the Madagascan endemic family Didiereaceae. American Institute of Biological Sciences, Montreal, Canada.

Current Professional Service

Treasurer, Society for Economic Botany, 2014-present.

Member of Board of Directors, American Herbal Products Association Foundation for Education and Research on Botanicals, 2014–present.

Editorial Board of Skvortsovia, 2013-present.

Member of Advisory Board, American Botanical Council, 2012-present.

Member of NSF International's Joint Committee on Dietary Supplements, 2010–present; member of Dietary Supplement Identity Task Group, 2012–present.

Associate Editor of Economic Botany, 2008-present.

Member of international Nomenclature Committee for Vascular Plants, 2006–present; Secretary of the NCVP and ex officio member of the General Committee, 2011–present.

Member of review committee for the Anne S. Chatham Fellowship in Medicinal Botany (Garden Clubs of America), 2002 and 2006–present; committee chair and organizer, 2009–present.

Grants Received

National Science Foundation Division of Biological Infrastructure, 2012. "Conference: U.S. Workshop on DNA Banking – January 2013, St. Louis, Missouri."

National Geographic Society Committee for Research and Exploration Grant, 2011. "Traditional knowledge and useful plants of the Crow Creek Indian Reservation."

National Center for Complementary and Alternative Medicine and Office of Dietary Supplements, 2010. Subaward from five-year Botanical Center grant, "MU Center for Botanical Interaction Studies" (Dennis Lubahn, University of Missouri – Columbia, PI).

National Institutes of Health and U. S. Department of Agriculture, 2008. Subaward from five-year renewal of International Cooperative Biodiversity Group program, "Biodiversity conservation and drug discovery in Madagascar" (David Kingston, Virginia Tech, program PI).

Muséum National d'Histoire Naturelle (Paris) visiting researcher (professeur en visite, 2nd class), Oct. 2003. Revisionary study and curation of Malagasy Portulacaceae.

National Geographic Society Committee for Research and Exploration Grant, 2002. "Biogeography of endemic Malagasy Portulacaceae."

National Science Foundation Dissertation Improvement Grant, 1997. "Molecular phylogenetics and interfamilial relationships in the portulacaceous alliance of the order Caryophyllales."

Honors and Awards

Phi Kappa Phi. Iowa State University, 1999.

Phi Beta Kappa; B.S. cum laude and with departmental distinction. University of Illinois, 1994.

Professional Memberships

American Botanical Council

American Society of Plant Taxonomists

Botanical Society of America

International Association of Plant Taxonomists

Society for Economic Botany

References

[Available upon request.]