

## Lawrence A. Alice - Curriculum Vitae

Associate Professor  
Department of Biology  
Western Kentucky University  
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### ACADEMIC DEGREES

Ph.D. Plant Science 1997, University of Maine. *Thesis*: Molecular Phylogenetic Systematics of *Rubus* (Rosaceae). Advisor: Dr. Christopher S. Campbell.

M.A. Botany 1989, Southern Illinois University at Carbondale. *Thesis*: The Vascular Flora and Selected Fleshy Fungi of the Ripple Hollow Area, Illinois. Advisor: Dr. Robert H. Mohlenbrock.

B.A. Botany 1986, Southern Illinois University at Carbondale.

### PROFESSIONAL EXPERIENCE

Associate Professor of Biology, Western Kentucky University. August 2005-present. Includes WKU Herbarium curator and former Biology Department greenhouse director.

Assistant Professor of Biology, Western Kentucky University. August 1999-August 2005. Includes WKU herbarium curator and Biology Department greenhouse director.

Postdoctoral Research Associate, Virginia Tech. Advisor: Dr. Khidir W. Hilu. Project: Molecular systematics of grasses (Poaceae), in particular, subfamily Chloridoideae. February 1998-July 1999.

Graduate Teaching Assistant, University of Maine. Courses: General Biology laboratories. Spring/Fall semesters 1997; Spring semester 1996; Fall semester 1995; Spring semester 1993; Fall semester 1992.

Graduate Research Assistant, University of Maine. Advisor: Dr. Christopher S. Campbell. Project: Genetic variation, hybridization, and nucleotide polymorphism in the *Amelanchier* (Rosaceae) agamic complex. Summer 1997; Fall semester 1996; September 1993-May 1995.

External Consultant, Taza, Morocco, North Africa. Training of U.S. Peace Corps Volunteers and Moroccan National Park personnel in vegetation sampling methods. March 1994.

Consultant, International Union for the Conservation of Nature (IUCN), Republic of Niger, West Africa. Responsibilities: Preparation of two technical reports based on previously executed ecological studies and computerization of herbarium specimens from the Aïr and Ténéré National Nature Reserve. January-March 1992.

U.S. Peace Corps Volunteer, Republic of Niger, West Africa. Position: botanist, Aïr and Ténéré National Nature Reserve. Responsibilities: Collection and identification of plant specimens; curation of ~1,500 specimen herbarium; development, execution, and analysis of

vegetation studies; design and implementation of research expeditions. November 1989-January 1992.

Graduate Teaching Assistant, Southern Illinois University at Carbondale. Courses: Introductory Botany laboratory or Upland Flora. Spring/Summer semesters 1989; Spring/Fall semesters 1988; Fall semester 1987.

Smithsonian Institution Intern, National Museum of Natural History, Department of Botany. Responsibilities: Curation and nomenclature of 75 small vascular plant families. October-December 1986.

### **GRANTS, CONTRACTS, AND AWARDS**

Spring 2020. RCAP. \$9,075. Ploidy level variation and phylogeography in two blackberry species. [declined]

Spring 2019. RCAP. \$9,075. Ploidy variation in Pacific blackberry. [pending]

November 2018. QTAG. Revised. \$3,000. [funded]

October 2018. QTAG. \$3,000. [declined]

Spring 2019. FUSE: Kaylynn Crow. Conservation Status and Ploidy Analysis of *Rubus ursinus* and *R. flagellaris*. \$5,000. [Funded, but declined by student]

Fall 2018. FUSE: Kaylynn Crow. Conservation Status and Ploidy Analysis of *Rubus whartoniae*. \$5,000. [Declined]

Fall 2018. FUSE: Thomas Pelkey. Morphological and Ploidy Analysis of *R. ursinus* \$5,000. [Declined]

Jan. 2015 - National Science Foundation-DEB. Title. Preliminary Proposal: SG: Evaluating species boundaries in *Rubus* (Rosaceae). [declined]

Feb. 2014 - KYEPSCoR-National Laboratory Initiative Type II. Target-Capture Sequencing in *Rubus* and Other Studies. Amount: \$4822. [funded]

Fall 2013 - Furthering Our Understanding of Blackberries and Raspberries (*Rubus*). Research & Creative Activities Program (RCAP I). Amount: \$16,000. [declined]

Fall 2012 - Taxonomy of the *Rubus fruticosus* L. aggregate in eastern North America. Research & Creative Activities Program (RCAP II). Amount: \$7,983. [declined]

Dec. 2010 - National Science Foundation-ADBC. Title: Digitization TCN: Collaborative Research: SouthEast Regional Network of Expertise and Collections-All Taxa (SERNEC-AT)." PI Zack Murrell, Appalachian State Univ., L. Alice, senior personnel. WKU subaward: \$7,427. [declined]

April 2010 - Western Kentucky University Regular Faculty Fellowship Award. Title: Untangling Relationships Among Blackberries. Amount: \$3000.

- September 2010 - Peace Corps Master's International proposal (WKU). L. Alice and K. Doerner coauthors. No funding involved. [MOC signed; first ever in Kentucky and one of ~80 in programs in U.S.]
- July 2008 - National Science Foundation, Biological Research Collections. Title: The WKU Herbarium: Computerization and Integration of the Orphaned Davies Herbarium. Amount: \$126,264. [declined]
- April 2008 - Western Kentucky University Regular Faculty Fellowship Award. Title: Genetic Variation in Invasive *Rubus* II: Data Collection. Amount: \$2000.
- April 2008 - Western Kentucky University Regular Faculty Fellowship Award. Title: Assessment of Noncoding Chloroplast DNA for Studies in *Rubus*. Amount: \$2000.
- January 2008 - National Science Foundation, Biological Research Collections. Title: Collection enhancement at the Western Kentucky University Herbarium. Amount: \$159,284. [declined]
- July 2007 - Western Kentucky University Regular Faculty Fellowship Award. Title: Genetic variation in invasive *Rubus*. Amount: \$2000.
- July 2006 - Western Kentucky University Proposal Incentive Fund. Title: Field Collection of Western North American Blackberries. Amount: \$1548.
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- July 2005 - Western Kentucky University Regular Faculty Fellowship Award. Title: Classification of *Rubus* in California. Amount: \$1000.
- July 2005 – Lawrence Heckard Fund from the Jepson Herbarium, University of California, Berkeley. Travel funds to support herbarium study of California *Rubus*. Amount: \$1150.
- May 2005 - Western Kentucky University Summer Faculty Fellowship Award. Title: Collection of *Rubus* specimens in Latin America. Amount: \$5000.
- February 2005 – Plant Protection Research Institute, Stellenbosch, South Africa. Title: Taxonomic status and phylogenetic affinity of invasive *Rubus cuneifolius* in South Africa. Amount: \$8136.
- May 2004 - Western Kentucky University Regular Faculty Fellowship Award. Title: Collection of *Rubus* specimens in the Himalayas. Amount: \$1000.
- February 2003 - National Science Foundation, Research Undergraduate Institution. Title: RUI: Molecular Phylogenetics and Allopolyploidization in *Rubus* (Rosaceae). Amount: \$211,592.
- December 2002 - Western Kentucky University Faculty Fellowship Award. Title: Evolutionary biology of mints (*Mentha*). Amount: \$5000.
- October 2002 - National Institutes of Health-Kentucky Biomedical Research Infrastructure Network Supplement. Title: Molecular systematics of mints (*Mentha*; Lamiaceae). Amount: \$99,508.

- October 2001 - Water Management Services, Nashville, TN. Title: Green River Valley Water District, Water Main Extension Projects: Plant Surveys. Co-PI with Dr. Albert Meier, Dr. John Andersland, and Dr. Michael Stokes. Amount: \$2849.
- September 2001 - U.S. Department of Agriculture-Agricultural Research Service, National Plant Germplasm System. Title: Characterization of genetic diversity in wild and cultivated black raspberry (*Rubus occidentalis* L.). Amount: \$13,654 [declined].
- May 2001 - Kentucky Department of Fish and Wildlife Resources. Title: Vegetation characterization of allegheny woodrat permanent monitoring sites at Mammoth Cave National Park, Kentucky. Amount: \$2000.
- December 2000 - Western Kentucky University Faculty Summer Scholarship Award. Title: Evolutionary relationships in *Rubus* based on nuclear DNA. Amount: \$5000.
- Fall 1999 - Western Kentucky University Junior Faculty Research Grant. Title: Evolutionary relationships in *Rubus* based on DNA sequence data. Amount: \$4000.
- Spring 1993 to Fall 1997 - University of Maine Association of Graduate Students (7 separate awards). Title: Systematics of *Rubus*. Amount: \$285-\$475.
- Spring 1994 - American Society of Plant Taxonomists Graduate Student Research Grant. Title: Systematics of *Rubus* subgenus *Rubus* section *Moriferi* subsections *Procumbentes* and *Suberecti*. Amount: \$335.
- Fall 1988 - James E. Ozment Award for Outstanding Achievement in Natural History, Southern Illinois University at Carbondale Department of Plant Biology. Amount: \$275.

## **PUBLICATIONS**

### **PAPERS PUBLISHED IN REFEREED JOURNALS:**

1. Carter, K.A., A. Liston, N.V. Bassil, **L.A. Alice**, J.M. Bushakra, B.L. Sutherland, T.C. Mockler, D.W. Bryant, and K.E. Hummer. 2019. Target Capture Sequencing Unravels *Rubus* Evolution. *Frontiers in Plant Science: Plant Systematics*. <https://doi.org/10.3389/fpls.2019.01615>.
2. Bushakra, J.M., **L.A. Alice**, K.A. Carter, M. Dossett, J.C. Lee, A. Liston, R. Meiers, C. Mulch, A.M. Nyberg, M. Peterson, K.J. Vining, M.L. Worthington, M.H. Yin, J.D. Zurn, J.R. Clark, C.E. Finn, N.V. Bassil, and K.E. Hummer. Accepted. Status of *Rubus* germplasm at the US National Clonal Germplasm Repository in Corvallis, Oregon. *Acta Horticulturae*. Proceedings of 12<sup>th</sup> International *Rubus* and *Ribes* Symposium, Zürich, Switzerland.
3. Hummer, K.E., N.V. Bassil, and **L.A. Alice**. 2017. Small genomes in tetraploid *Rubus* L. (Rosaceae) from New Zealand and southern South America. *Journal of the American Pomological Society* 1: 2-7.
4. Hummer, K.E., N.V. Bassil, and **L.A. Alice**. 2016. *Rubus* ploidy assessment. Proceedings of the 11<sup>th</sup> International *Rubus* and *Ribes* Symposium, Asheville, North Carolina. *Acta Horticulturae* 1133: 81-88. <http://dx.doi.org/10.17660/ActaHortic.2016.1133.13>

5. **Alice, L. A.**, D. Goldman, J. Macklin and G. Moore. 2015. *Rubus*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 19+ vols. New York and Oxford. Vol. 9, pp. 28-56.

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6. **Alice, L. A.** 2012. *Rubus*. Pp. 1202-1207, in B. G. Baldwin et al. (eds.). The Jepson Manual: Vascular Plants of California. University of California Press, Berkeley.
7. **Alice, L.A.**, T.M. Dodson, and B.L. Sutherland. 2008. Diversity and relationships of Bhutanese *Rubus* (Rosaceae). Pp. 63-69, in P. Bañados and A. Dale (eds.). Acta Horticulturae 777, Proceedings of the 9<sup>th</sup> International *Rubus* and *Ribes* Symposium, Pucon, Chile, 2005.
8. Bunsawat, J., N. Elliott, K. Hertweck, E. Sproles, and **L. A. Alice**. 2004. Phylogenetics of *Mentha* (Lamiaceae): Evidence from Chloroplast DNA Sequences. Systematic Botany 29: 959-964.
9. Hilu, K.W., T. Borsch, K. Müller, D.E. Soltis, P.S. Soltis, V. Savolainen, M.W. Chase, M.P. Powell, **L.A. Alice**, R. Evans, H. Sauquet, C. Neinhuis, T.A.B. Slotta, J.G. Rohwer, C.S. Campbell, and L.W. Chatrou. 2003. Angiosperm phylogeny based on *matk* sequence information. American Journal of Botany 90: 1758-1776.
10. **Alice, L. A.** 2002. Evolutionary relationships in *Rubus* (Rosaceae) based on molecular data. Pp. 79-83, in R. M. Brennan, S. L. Gordon, and B. Williamson (eds.). Acta Horticulturae 585, Proceedings of the 8<sup>th</sup> International *Rubus* and *Ribes* Symposium, Dundee, Scotland, UK, 2001.
11. **Alice, L. A.**, T. Eriksson, B. Eriksen, and C. S. Campbell. 2001. Hybridization and gene flow between distantly related species of *Rubus* (Rosaceae): Evidence from nuclear ribosomal DNA internal transcribed spacer sequences. Systematic Botany 26: 769-778.
12. Hilu, K. W. and **L. A. Alice**. 2001. A Phylogeny of Chloridoideae (Poaceae) based on *matK* sequences. Systematic Botany 26: 386-405.
13. Evans, R. C., **L. A. Alice**, C. S. Campbell, T. A. Dickinson, and E. A. Kellogg. 2000. The granule-bound starch synthase (GBSSI) gene in the Rosaceae: Multiple loci and phylogenetic utility. Molecular Phylogenetics and Evolution 17: 388-400.
14. Hilu, K. W. and **L. A. Alice**. 2000. Phylogenetic relationships in subfamily Chloridoideae (Poaceae) based on *matK* sequences: A preliminary assessment. Pp. 173-179, in S. W. L. Jacobs and J. Everett (eds.), Grasses: systematics and evolution, v.2 of Proceedings, 2nd International Conference on the Comparative Biology of Monocotyledons, Sydney, Australia, 1998.
15. **Alice, L. A.** and C. S. Campbell. 1999. Phylogeny of *Rubus* (Rosaceae) based on nuclear ribosomal DNA internal transcribed spacer region sequences. American Journal of Botany 86: 81-97.
16. Campbell, C. S., **L. A. Alice**, and W. A. Wright. 1999. Comparisons of within-population genetic variation in sexual and agamospermous *Amelanchier* (Rosaceae) using RAPD markers. Plant Systematics and Evolution 215: 157-167.

17. Hilu, K. W. and **L. A. Alice**. 1999. Evolutionary implications of *matK* indels in Poaceae. *American Journal of Botany* 86: 1735-1741.
18. Hilu, K. W., **L. A. Alice**, and H. Liang. 1999. Phylogeny of Poaceae inferred from *matK* sequences. *Annals of the Missouri Botanical Garden* 86: 835-851.
19. Serrão, E. A., **L. A. Alice**, and S. H. Brawley. 1999. Evolution of the Fucaceae (Phaeophyceae) inferred from nrDNA-ITS. *Journal of Phycology* 35: 382-394.
20. Campbell, C. S., M. F. Wojciechowski, B. G. Baldwin, **L. A. Alice**, and M. J. Donoghue. 1997. Persistent nuclear ribosomal DNA sequence polymorphism in the *Amelanchier* (Rosaceae) agamic complex. *Molecular Biology and Evolution* 14: 81-90.

PAPERS IN PREPARATION:

**Alice, L. A.** and T. M. Dodson. In prep. Inferring the phylogeny of *Rubus* (Rosaceae) using chloroplast DNA sequences.

Hertweck, K. L. and **L. A. Alice**. In mss. A phylogeographic approach to taxonomy of *Mentha longifolia* (Lamiaceae).

Sutherland, B. L. and **L. A. Alice**. In mss. DNA sequence data reveal an allopolyploid origin of the *Rubus ursinus* complex (Rosaceae).

MISCELLANEOUS PUBLICATIONS:

**Alice, L. A.** 2005. Why do the names of species change? *The Lady-Slipper* (newsletter of the Kentucky Native Plant Society) 20(2): 7-9.

**Alice, L. A.**, and S. Simon. 1992. Conservation et gestion des ressources naturelles dans l'Aïr et du Ténéré (République du Niger): Preliminary report on the ecological study at Etaghas. IUCN/WWF, Niamey, Niger.

**Alice, L. A.**, and S. Simon. 1992. Conservation et gestion des ressources naturelles dans l'Aïr et du Ténéré (République du Niger): Review and changes of methods used for the measurement of woody vegetation in the valley of Aza-n-Ghraidane, Niger. IUCN/WWF, Niamey, Niger.

PRESENTATIONS:

Carter, K., A. Liston, **L.A. Alice\***, N.V. Bassil, J. Bushakra, B.L. Sutherland and K.E. Hummer. 2019. Target Capture Sequencing: Application to Phylogeny, Biogeography, and Divergence Time for *Rubus* (Rosaceae). Botany annual meeting. Tucson, AZ. [poster]

Bushakra, J.M.\*, **L.A. Alice**, K.A. Carter, M. Dossett, J.C. Lee, A. Liston, R. Meiers, C. Mulch, A.M. Nyberg, M. Peterson, K.J. Vining, M.L. Worthington, M.H. Yin, J.D. Zurn, J.R. Clark, C.E. Finn, N.V. Bassil, and K.E. Hummer. 2019. Status of *Rubus* germplasm at the US National Clonal Germplasm Repository in Corvallis, Oregon. 12<sup>th</sup> International *Rubus* and *Ribes* Symposium, Zürich, Switzerland. [poster]

Carter, K., **L.A. Alice\***, N.V. Bassil, J. Weber, A. Liston, and K.E. Hummer. 2018. Increased phylogenetic resolution using target enrichment of nuclear loci in *Rubus*. Botany annual meeting. Rochester, MN. [poster]

Bushakra, J.M., **L.A. Alice**, K.A. Carter, M. Dossett, J.C. Lee, A. Liston, R. Meiers, C. Mulch, A.M. Nyberg, M. Peterson, K.J. Vining, M.L. Worthington, M.H. Yin, J.D. Zurn, J.R. Clark,

- C.E. Finn, N.V. Bassil, and K.E. Hummer\*. 2017. Status of *Rubus* germplasm at the US National Clonal Germplasm Repository in Corvallis, Oregon. North American Rubus Breeding Association.
- Carter, K.\*, K.E. Hummer, N.V. Bassil, J. Weber, A. Liston, and **L.A. Alice**. 2017. Increased phylogenetic resolution using target enrichment of nuclear loci in *Rubus*. American Society for Horticulture Science annual meeting. Waikoloa, Hawai'i.
- Hummer, K.E.\* , N.V. Bassil, and **L.A. Alice**. 2015. *Rubus* ploidy assessment. 11<sup>th</sup> International *Rubus* and *Ribes* Symposium, Asheville, North Carolina.
- Alice, L. A.\***, J Ferriel, and R. Ferriel. 2012. Taxonomy and ecology of Bartonberry, *Rubus bartonianus* (Rosaceae): a narrow endemic of Hell's Canyon. Kentucky Academy of Science annual meeting, Richmond, KY.
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- Alice, L.A.\***, R. Chang, and B. Sutherland. 2010. Phylogenetics of blackberries (*Rubus*; Rosaceae) and new evidence of hybridization involving *R. ursinus*. BOTANY 2010 Conference, Providence, RI. [paper]  
<http://2010.botanyconference.org/engine/search/index.php?func=detail&aid=669>
- Wang, Y.\* and **L. A. Alice**. 2010. Relationships among *Rubus* (Rosaceae) species used in traditional Chinese medicine. BOTANY 2010 Conference, Providence, RI. [poster]  
<http://2010.botanyconference.org/engine/search/index.php?func=detail&aid=674>
- Wang, Y.\* and **L. A. Alice**. 2010. Relationships among *Rubus* (Rosaceae) species used in traditional Chinese medicine. Botany 2010 Conference, Providence, RI. [poster]
- Alice, L. A.\*** and R. Neidlinger. 2008. Acquisition of the Orphaned Davies Herbarium (DHL). Kentucky Academy of Science annual meeting, Lexington, KY.
- Davis, J.\* and **L. A. Alice**. 2007. Monophyly and putative hybrid origin of *Rubus* subgenus *Orobatus* (Rosaceae). Kentucky Academy of Science annual meeting, Louisville, KY.
- Mahmood, H.\*, H. Johnson, **L. Alice**, and S. Sahi. 2007. Conversion of Traditional Taxonomy-Centered Botany Labs to Case-Based Inquiry Learning.  
(<http://www.2007.botanyconference.org/engine/search/index.php?func=detail&aid=2001>). BOTANY 2007 Conference, Chicago, IL. [poster]
- Wint, A.\* and **L. A. Alice**. 2007. Genetic diversity in native and invasive *Rubus* (Rosaceae). Kentucky Academy of Science annual meeting, Louisville, KY.
- Alice, L.A.\*** and T.M. Dodson. 2006. Inferring the phylogeny of *Rubus* (Rosaceae) using chloroplast DNA sequences. Pp. 203 in Botany 2006 Abstracts. BOTANY 2006 Conference, Chico, CA. [paper]  
<http://www.2006.botanyconference.org/engine/search/index.php?func=detail&aid=614>
- Ambrose, K.\* and **L.A. Alice**. 2006. Nuclear GBSSI sequences demonstrate a hybrid origin of 8x *Rubus chamaemorus* (Rosaceae). Pp. 270 in Botany 2006 Abstracts. BOTANY 2006 Conference, Chico, CA. [poster]  
<http://www.2006.botanyconference.org/engine/search/index.php?func=detail&aid=649>

Ambrose, K.\* and **L. A. Alice**. 2006. Clarification of basal relationships in *Rubus* (Rosaceae). WKU Student Research Conference co-sponsored by Sigma Xi.

**Alice, L. A.\***, T. M. Dodson, and B. L. Sutherland. 2005. Diversity and relationships of Bhutanese *Rubus* (Rosaceae). 9<sup>th</sup> International *Rubus* and *Ribes* Symposium, Pucon, Chile.

Ambrose, K.\* and **L. A. Alice**. 2005. Clarification of basal relationships in *Rubus* (Rosaceae). Kentucky Academy of Science annual meeting, Richmond, KY.

Dodson, T. M.\* and **L. A. Alice**. 2005. Relationships and classification of *Rubus* (Rosaceae) based on chloroplast DNA sequences. WKU Student Research Conference sponsored by Sigma Xi, Bowling Green, KY.

Dodson, T. M.\* and **L. A. Alice**. 2005. Diversity and relationships of Bhutanese *Rubus* (Rosaceae). Kentucky Academy of Science annual meeting, Richmond, KY. **[tied for 1<sup>st</sup> place award in Botany & Microbiology section]**

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Elliott, N. E.\* , J. Bunsawat, and **L. A. Alice**. 2005. Testing hypotheses of hybridization in *Mentha spicata* and *M. canadensis* using molecular data. Posters-at-the-Capitol, Frankfort, KY. [poster]

Hertweck, K.\* and **L. A. Alice**. 2005. A phylogeographic approach to taxonomy of *Mentha longifolia* (Lamiaceae). Evolution 2005 Conference, Fairbanks, AK.

Sutherland, B. L.\* , C. Lennox, and **L. A. Alice**. 2005. Taxonomic status and phylogenetic affinity of an invasive blackberry in South Africa. Evolution 2005 Conference, Fairbanks, AK. [poster]

Sutherland, B. L.\* , C. Lennox, and **L. A. Alice**. 2005. Taxonomic status and phylogenetic affinity of an invasive blackberry in South Africa. Kentucky Academy of Science annual meeting, Richmond, KY.

**Alice, L. A.\***, B. L. Sutherland, and Y. Dorji. 2004. From blue poppies to green chilis: floristics of Bhutan. Kentucky Academy of Science annual meeting, Richmond, KY.

Dodson, T. M.\* , N. Woolen, and **L. A. Alice**. 2004. Phylogeny of *Rubus* (Rosaceae) based on chloroplast DNA *trnL-trnF* region sequences. WKU Student Research Conference sponsored by Sigma Xi, Bowling Green, KY. **[2<sup>nd</sup> place award in undergraduate competition]**

Dodson, T. M.\* , N. Woolen, and **L. A. Alice**. 2004. Phylogeny of *Rubus* (Rosaceae) based on multiple chloroplast DNA region sequences. Evolution 2004 Conference, Ft. Collins, CO. [poster]

Dodson, T. M.\* , N. G. Woolen, and **L. A. Alice**. 2004. Relationships and classification of *Rubus* (Rosaceae) based on chloroplast DNA sequences. Kentucky Academy of Science annual meeting, Murray, KY. **[tied for 1<sup>st</sup> place award in Botany & Microbiology section]**



- Elliott, N. E. \*, J. Bunsawat, and **L. A. Alice**. 2004. Testing hypotheses of hybridization in *Mentha spicata* and *M. canadensis* using molecular data. WKU Student Research Conference sponsored by Sigma Xi, Bowling Green, KY.
- Elliott, N. E. \*, J. Bunsawat, and **L. A. Alice**. 2004. Testing hypotheses of hybridization in *Mentha spicata* and *M. canadensis* using molecular data. Evolution 2004 Conference, Ft. Collins, CO. [poster]
- Elliott, N. E. \*, J. Bunsawat, and **L. A. Alice**. 2004. Do nuclear GBSSI sequences support a hybrid origin for *Mentha canadensis* and *M. spicata*? Kentucky Academy of Science annual meeting, Murray, KY.
- Hertweck, K. \*, A. Hogart, and **L. A. Alice**. 2004. A comparison of molecular data with morphological and geographic patterns in *Mentha longifolia* (Lamiaceae). Evolution 2004 Conference, Ft. Collins, CO.
- Sutherland, B. L. \* and **L. A. Alice**. 2004. New insights on the origin of *Rubus ursinus* (Rosaceae) based on low-copy number nuclear genes. WKU Student Research Conference sponsored by Sigma Xi.
- Sutherland, B. L. \* and **L. A. Alice**. 2004. New insights on the origin of *Rubus ursinus* (Rosaceae) based on low-copy number nuclear genes. Evolution 2004 Conference, Ft. Collins, CO.
- Sutherland, B. L. \* and **L. A. Alice**. 2004. Evidence for a hybrid origin of *Rubus ursinus* (Rosaceae) based on low-copy nuclear genes. Kentucky Academy of Science annual meeting, Murray, KY. **[tied for 1<sup>st</sup> place in Botany and Microbiology section]**
- Elliott, N. E. \*, K. Hertweck, A. R. Hogart, J. Bunsawat, and **L. A. Alice**. 2003. Comparative phylogenetic utility of four noncoding chloroplast DNA regions in mints (*Mentha*). WKU Student Research Conference sponsored by Sigma Xi.
- Elliott, N. E. \*, K. Hertweck, A. R. Hogart, E. Sproles, J. Bunsawat, and **L. A. Alice**. 2003. Phylogenetic utility of four noncoding chloroplast DNA regions in mints (*Mentha*). Evolution 2003 Conference, Chico, CA. [poster]
- Elliott, N. E. \*, J. Bunsawat, and **L. A. Alice**. 2003. Testing hypotheses of hybridization in *Mentha spicata* and *M. canadensis* using molecular data. Kentucky Academy of Science annual meeting, Bowling Green, KY.
- Hertweck, K. \*, A. Hogart, and **L. A. Alice**. 2003. Does genetic variation support geographical and morphological patterns? A phylogenetic interpretation of *Mentha longifolia* (Lamiaceae) using molecular data. Kentucky Academy of Science annual meeting, Bowling Green, KY. **[1<sup>st</sup> place award in Botany & Microbiology section]**
- Sproles, E. \*, N. Elliott, K. Hertweck, J. Bunsawat, A. Hogart, and **L. A. Alice**. 2003. Phylogenetic relationships in *Mentha* (Lamiaceae) using DNA sequence data; An overview. Kentucky Academy of Science annual meeting, Bowling Green, KY.
- Sutherland, B. L. \*, N. G. Woolen, and **L. A. Alice**. 2003. Origin of the *Rubus ursinus* polyploid complex (Rosaceae). WKU Student Research Conference sponsored by Sigma Xi.

- Sutherland, B. L.\* , N. G. Woolen, and **L. A. Alice**. 2003. Origin of the *Rubus ursinus* polyploid complex (Rosaceae). Evolution 2003 Conference, Chico, CA. [poster]
- Sutherland, B.\* , N. Woolen, and **L. A. Alice**. 2003. Origin of the *Rubus ursinus* (Rosaceae) polyploid complex. Kentucky Academy of Science annual meeting, Bowling Green, KY. **[2<sup>nd</sup> place award in Botany & Microbiology section]**
- Woolen, N. G.\* and **L. A. Alice**. 2003. Phylogenetic utility of multiple non-coding chloroplast DNA regions in *Rubus* (Rosaceae). Evolution 2003 Conference, Chico, CA. [poster]
- Woolen, N.\* and **L. A. Alice**. 2003. Phylogenetic utility of the chloroplast DNA *psbA-trnH* spacer in *Rubus* (Rosaceae). Kentucky Academy of Science annual meeting, Bowling Green, KY. **[2<sup>nd</sup> place award in Botany & Microbiology section]**
- Bunsawat, J.\* and **L. A. Alice**. 2002. *Mentha* (Lamiaceae) phylogenetic analysis using *trnL-trnF* and ITS sequences. Pp. xxx in Botany 2002 Abstracts published by American Journal of Botany. BOTANY 2002 meeting.
- Bunsawat, J.\* and **L. A. Alice**. 2002. *Mentha* (Lamiaceae) phylogenetic analysis using the chloroplast DNA *trnL-trnF* region. WKU Student Research Conference sponsored by Sigma Xi.
- Greenwell, R.\* , J. Bunsawat, and **L. A. Alice**. 2002. An Improved Method for Sequencing through GC-Rich Regions. Kentucky Academy of Science annual meeting, NKU.
- Neves, S. S., **L. A. Alice\***, and K. W. Hilu. 2002. The root of the Chloridoideae (Poaceae) revisited: a preliminary assessment based on *trnT-trnF* and *matK* DNA sequences. Pp. xxx in Botany 2002 Abstracts published by American Journal of Botany. BOTANY 2002 meeting.
- Alice, L. A.\*** and A. Hogart. 2001. Phylogeny of *Rubus* (Rosaceae) based on Granule-Bound Starch Synthase I (GBSSI) gene sequences. Pp. 97 in Botany 2001 Abstracts published by American Journal of Botany. BOTANY 2001 meeting.
- Alice, L. A.\*** 2001. Evolutionary relationships in *Rubus* based on molecular data. 8<sup>th</sup> International *Rubus-Ribes* Symposium, Dundee, Scotland, UK.
- Bunsawat, J.\* and **L. A. Alice**. 2001. Molecular characterization and phylogenetic utility of nrDNA ETS sequences in *Rubus* (Rosaceae). Pp. 155 in Botany 2001 Abstracts published by American Journal of Botany. BOTANY 2001 meeting. [poster]
- Bunsawat, J.\* and **L. A. Alice**. 2001. Molecular characterization and phylogenetic utility of nrDNA ETS sequences in *Rubus* (Rosaceae). WKU Student Research Conference sponsored by Sigma Xi.
- Hilu, K. W.\* , T. Borsch, V. Savolainen, P. S. Soltis, D. E. Soltis, M. W. Chase, K. Müller, T. Slotta, M. Powell, L. Chatrou, J. G. Rohwer, H. Sauquet, P. Cuenoud, C. Neinhuis, and **L. A. Alice**. 2001. Angiosperm phylogeny based on *matK* sequence data. Pp. 118 in Botany 2001 Abstracts published by American Journal of Botany. BOTANY 2001 meeting.

- Hogart, A. R.\* , and **L. A. Alice**. 2001. Molecular characterization of the Granule-Bound Starch Synthase I (GBSSI) gene in *Rubus*. WKU Student Research Conference sponsored by Sigma Xi.
- Hogart, A. R.\* , and **L. A. Alice**. 2001. Phylogenetic utility of the Granule-Bound Starch Synthase I (GBSSI) gene in *Rubus* (Rosaceae). Kentucky Academy of Science and Tennessee Academy of Science joint meeting, Murfreesboro, TN.
- Alice, L. A.\*** G. G. Borneo, and K. W. Hilu. 2000. Systematics of *Chloris* (Chloridoideae; Poaceae) and related genera: Evidence from nuclear ITS and chloroplast *matK* sequences. American Journal of Botany supplement 87: 108-109. BOTANY 2000 meeting.
- Alice, L. A.\*** and D. K. Conover. 2000. Systematics of *Rubus* (Rosoideae; Rosaceae) based on nuclear ribosomal ITS and chloroplast *trnK* intron DNA sequences. American Journal of Botany supplement 87: 108. BOTANY 2000 meeting.
- Alexander, K.\* , T. Eatherly, and **L. A. Alice**. 2000. A hybrid origin of blackberries (*Rubus*; Rosaceae): evidence from molecular data. Kentucky Academy of Science annual meeting, Lexington, KY. [Poster]
- Conover, D. K.\* and **L. A. Alice**. 2000. Phylogeny of *Rubus* (Rosaceae) based on nuclear ribosomal internal transcribed spacer region (ITS) and chloroplast *trnK* intron sequences. WKU Student Research Conference sponsored by Sigma Xi.
- Conover, D. K.\* and **L. A. Alice**. 2000. Phylogeny of *Rubus* (Rosaceae) based on sequences of three chloroplast DNA regions. Kentucky Academy of Science annual meeting, Lexington, KY.
- Hilu, K. W.\* and **L. A. Alice**. 2000. Addressing and raising new systematic questions in the Chloridoideae (Poaceae) with *matK* sequence data. American Journal of Botany supplement 87: 133. BOTANY 2000 meeting.
- Hilu, K. H.\* , **L. A. Alice**, and W. Zhang. 2000. Phylogenetic relationships in subfamily Chloridoideae (Poaceae) based on *matK* sequences: A preliminary assessment. *In* S. W. L. Jacobs and J. Everett (editors), Grass systematics and evolution, vol. 2 of Proceedings, 2nd International Conference on the Comparative Biology of Monocotyledons, Sydney, Australia, 1998.
- Hilu, K. W.\* , T. Borsch, J. Rhower, C. Neinhuis, T. Slotta, B. Gemeinholzer, M. Wink, and **L. A. Alice**. 2000. Insight into the evolution of angiosperms: evidence from *matK* sequences. American Journal of Botany supplement 87: 133. BOTANY 2000 meeting.
- Alice, L. A.** and K. W. Hilu\*. 1999. Evolutionary significance of insertions/deletions in the *matK* gene. Virginia Journal of Science 50: 95. Virginia Academy of Science annual meeting.
- Alice, L. A.\***, J. E. Bond, and C. S. Campbell. 1999. Molecular evidence of hybridization between North American and European blackberries (*Rubus*; Rosaceae). Kentucky Academy of Science annual meeting, Richmond, KY.

- Borneo, G. G.\* **L. A. Alice**, and K. W. Hilu. 1999. Effect of combining molecular data sets on phylogeny in Chloridoideae (Poaceae, grasses). *Virginia Journal of Science* 50: 96. Virginia Academy of Science annual meeting.
- Hilu, K. W.\* and **L. A. Alice**. 1999. Evolutionary implications of insertion/deletion events in the *matK* gene. 14<sup>th</sup> International Symposium: Morphology, Anatomy, and Systematics, German Botanical Society, Jena, Germany.
- Evans, R. C., **L. A. Alice**\*, C. S. Campbell, T. A. Dickinson, and E. A. Kellogg. 1998. Evidence for an allopolyploid origin of subfamily Maloideae s. l. (Rosaceae) from the nuclear gene *GBSSI* (*waxy*). *American Journal of Botany* supplement 85: 127. AIBS annual meeting.
- Evans, R. C.\* **L. A. Alice**, C. S. Campbell, T. A. Dickinson, and E. A. Kellogg. 1998. Characterization and phylogenetic utility of the nuclear gene “*waxy*” in Rosaceae. Annual meeting of the Society of Systematic Biologists and the Society for the Study of Evolution, Vancouver, British Columbia, Canada.
- Hilu, K. H.\* **L. A. Alice**, and W. Zhang. 1998. A phylogeny of Poaceae and subfamily Chloridoideae based on chloroplast DNA *matK* sequences. *American Journal of Botany* supplement 85: 135. AIBS annual meeting.
- Serrão, E. A.\* **L. A. Alice**, and S. H. Brawley. 1998. Phylogeny of the Fucaceae based on nrDNA-ITS (Internal Transcribed Spacers). British Phycological Society annual meeting, London, UK.
- Alice, L. A.\*** T. Eriksson, B. Eriksen, and C. S. Campbell. 1997. Intersubgeneric hybridization between a diploid raspberry, *Rubus idaeus*, and a tetraploid blackberry, *R. caesius* (Rosaceae). *American Journal of Botany* supplement 84: 171. AIBS annual meeting.
- Morden, C. W.\* **L. A. Alice**, and D. E. Gardner. 1997. *Rubus* colonization in Hawai'i: morphological vs. molecular stories. AIBS annual meeting, Montreal, Quebec, Canada.
- Alice, L. A.\*** and C. S. Campbell. 1996. A molecular phylogeny of *Rubus* (Rosaceae: Rosoideae) based on internal transcribed spacer (ITS) sequence data of nuclear ribosomal DNA. *American Journal of Botany* supplement 83: 136. American Institute of Biological Sciences (AIBS) annual meeting.
- Campbell, C. S.\* **L. A. Alice**, M. F. Wojciechowski, W. A. Wright, and **L. A. Alice**. 1996. Agamospermy, hybridization, and microspecies in *Amelanchier* (Rosaceae). *American Journal of Botany* supplement 83: 144. AIBS annual meeting.
- Campbell, C. S., **L. A. Alice**\*, and W. A. Wright. 1994. Estimating the frequency of apomixis in an individual of *Amelanchier laevis* (Rosaceae, Maloideae) using Random Amplified Polymorphic DNA (RAPD) markers. *American Journal of Botany* supplement 81: 145. AIBS annual meeting.
- Campbell, C. S., **L. A. Alice**\*, and T. Helenjarits. 1993. Genetic diversity in and hybridization between apomictic and sexual *Amelanchier* (Rosaceae, Maloideae): Evidence from Random Amplification of Polymorphic DNA (RAPD) markers. *American Journal of Botany* supplement 80: 135. AIBS annual meeting.

\* indicates presenter.

INVITED TALKS IN SYMPOSIA/COLLOQUIA:

**Alice, L. A.** 2002. Insights into a taxonomically challenging group: *Rubus* (Rosoideae; Rosaceae). ASPT Colloquium: Rosaceae phylogeny: current knowledge, problems, and prospects. Pp. xxx *in* Botany 2002 Abstracts published by American Journal of Botany. BOTANY 2002 meeting.

**Alice, L. A.**, J. E. Bond, and C. S. Campbell. 1999. Molecular phylogenetics of *Rubus*. XVI International Botanical Congress-Rosaceae Symposium, St. Louis, Missouri.

Eriksson, T.\* J. E. E. Smedmark, M. S. Kerr, **L. A. Alice**, and C. S. Campbell. 2005. Major clades in the evolution of Rosoideae. International Botanical Congress, Vienna, Austria.

Evans, R., C. Campbell, D. Potter\*, D. Morgan, T. Eriksson, **L. Alice**, S.-H. Oh, E. Bortiri, F. Gao, J. Smedmark, and M. Arsenault. 2002. A Rosaceae phylogeny. ASPT Colloquium: Rosaceae phylogeny: current knowledge, problems, and prospects. Pp. xxx *in* Botany 2002 Abstracts published by American Journal of Botany. BOTANY 2002 meeting.

**INVITED SEMINARS**

October 2009 – Fall meeting of Kentucky Native Plant Society. Title: *Rubus* (Rosaceae) diversity around the globe.

March 2005 – Royal Botanic Gardens Edinburgh, UK. Title: Phylogeny, classification, and hybridization in *Rubus* (Rosaceae).

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February 2003 - Far Away Places series, WKU Libraries. Title: Life in the Sahara and the blue men of the desert.

December 2001 - Department of Biology, Idaho State University. Title: Evolution and hybridization in blackberries and raspberries (*Rubus*; Rosaceae): evidence from molecular data.

October 2000 - Department of Botany, University of Tennessee-Knoxville. Title: Evolutionary relationships in *Rubus* (Rosaceae) and the hybrid origin of blackberries.

August 2000 - USDA-ARS National Clonal Germplasm Repository. Title: Molecular systematics of *Rubus* and Rosaceae.

Fall 1998 - Department of Biology, Virginia Polytechnic Institute and State University. Title: Evolution and hybridization in blackberries and raspberries (*Rubus*, Rosaceae).

Spring 1998 - Department of Biology, Western Kentucky University. Title: Evolution and hybridization in blackberries and raspberries (*Rubus*, Rosaceae).

Spring 1998 - Department of Biology, University of Akron, Ohio. Title: Evolution and hybridization in blackberries and raspberries (*Rubus*, Rosaceae).

Spring 1995 - Introduction to Conservation Biology course, University of Maine. Title: Political, cultural, economic, and biotic considerations in developing countries: A case study from Niger.

Spring 1994 - International Conservation course, University of Maine. Title: Protected areas management: A case example from Niger.

Summer 1993 - Josselyn Botanical Society of Maine annual meeting. Title: Botanical exploration in Niger.

Spring 1993 - Introduction to Conservation Biology course, University of Maine. Title: Conservation in developing countries: A case example from Niger.

### **PROFESSIONAL SERVICE**

Kentucky Academy of Science--Botany Section--Secretary (2008-2009), Chair, (2009-2010), Co-Chair (2016-2017); Associate editor for Systematic Botany (2002-2005); ad hoc reviewer for U.S. National Science Foundation; Kentucky Academy of Science--Botany and Microbiology Section--Secretary (1999-2000), Chair, (2000-2001); Sigma Xi-Western Kentucky University Chapter Secretary/Treasurer (2001-2002), Vice President (2002-2003), President (2003-2004); manuscript reviews for the refereed journals American Journal of Botany, Australian Journal of Botany, Australian Systematic Botany, Biochemical Systematics and Evolution, Brittonia, Canadian Journal of Botany, International Journal of Plant Sciences, Molecular Phylogenetics and Evolution, Novon, Plant Systematics and Evolution, Rhodora, Systematic Botany.

### **MEMBERSHIP IN PROFESSIONAL SOCIETIES**

American Society of Plant Taxonomists (1993-present); Botanical Society of America (1997-present); Kentucky Academy of Science (1999-present); Society of Systematic Biologists (1998-2006); Sigma Xi (2000-2005).

### **UNIVERSITY/PUBLIC SERVICE**

University Senate, OCSE at-large member, (2018-)  
Chair, Botany Section, Kentucky Academy of Science (2016-2018)  
Committee Member, Biology Dept. Microbiology Search (2017-2018)  
University Coordinator, Peace Corps Master's International program (2010-2016)  
Graduate Council Vice-Chair (2010-2012)  
Graduate Council Ogden College representative (2008-2012)  
Chair, Dept. of Biology graduate committee (2009-2012)

### **STUDENT RESEARCH**

#### **GRADUATE STUDENT COMMITTEES SERVED ON**

Meghan Parsley: 2015-2017  
Pranav Chandra: 2012-2015  
Yinu Wang (Chair): 2007-2010  
Ashley Wint (Chair): 2006-2008  
Karen Ambrose (Chair): 2004-2006  
- Currently Postdoc, University of California-Davis  
Jiranan Bunsawat (Chair): 2000-2002  
Daniel Givens: DNF  
Leslie Meng: 2007-2013  
Rick Remington: DNF  
Paulette Reneau: 1999-2001  
John Starnes: 2002-2004  
Mathew Wood: 2009-2016

UNDERGRADUATE STUDENT RESEARCH (\*Gatton Academy)

\*Laurel Philpott: August 2019-2020  
Kaylyn Crowe: August 2018-2019  
\*Wyatt Powers: August 2017-2018  
Shouta Brown: Jan. 2011-May 2011  
\*Victoria Gilkison: Jan. 2011-May 2011  
Kaylissa Horton: Aug. 2010-Dec. 2010  
\*Ruby Chang (Academy): Aug. 2007-May 2007  
Jeffrey Davis: Aug. 2007-Dec. 2007  
T. Michael Dodson: Aug. 2003-Aug. 2006  
    - M.S. Ecology and Evolutionary Biology, Ohio University  
    - Teacher, Mississippi State Teachers College  
Ashley Wint: Jan. 2006-Aug. 2006  
F. Nikki Glidewell: Aug. 2005-Dec. 2005  
F. Coti Riddle: Aug. 2005-Dec. 2005  
Natalina Elliott: Jan. 2003-Aug. 2005  
    - Ph.D., Vanderbilt Univ.  
    - Postdoc, Oxford Univ., England  
Kate Hertweck: Aug. 2002-Aug. 2005  
    - Ph.D., Univ. of Missouri  
    - Assistant professor, University of Texas-Tyler  
Brittany Sutherland: Jan. 2003-Aug. 2005  
    - Ph.D., Univ. of Virginia  
    - Postdoc, University of Arizona  
Christa Gaskill: Aug. 2004-Dec. 2004  
Nathan Woolen: Jan. 2003-Aug. 2004  
Elizabeth Sproles: Jan. 2003-Dec. 2003  
Ashley Stoker: Aug. 2003-Dec. 2003  
Amber Hogart: Aug. 2000-Aug. 2003  
    Ph.D. Genetics, University of California-Davis  
Nae'shara Neal: May 2003-Aug. 2003  
Margaret Hayden: Jan. 2003-May 2003  
Rohan Parekh: Aug. 2000-Dec. 2000  
Kasey Jo Pelham: Aug. 2000-Dec. 2000  
Kerri Alexander: Jan. 2000-Dec. 2000  
Dustin K. Conover: Jan. 2000-Dec. 2000  
Tabatha Eatherly: Jan. 2000-May 2000  
Cammie Rinehart: Jan. 2000-May 2000

**COURSEWORK (WKU)**

Spring 2017: French 323  
Spring 2013: French 328  
Spring 2011: French 331  
Fall 2010: French 314  
Fall 2009: French 321  
Fall 2008: French 201, 202  
Summer 2008: French 102  
**24 hrs completed; GPA 3.87**