

CURRICULUM VITAE

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EDUCATION

- 1993 PhD in Plant Breeding and Genetics, Michigan State University. 'Quantitative trait loci analyses of tuber traits in diploid potato (*Solanum spp*)'
1989 MS in Plant Breeding, Universidad Nacional Agraria, Lima, Perú. 'Development of synthetic hexaploids of *Ipomoea trifida* (H.B.K.) G. Don'.
1987 BS in Biology (*summa cum laude*), Universidad Nacional Agraria, Lima, Perú.

PROFESSIONAL EXPERIENCE

- Sep 2010 – present Research Scientist, Dept. Environmental Horticulture, University of Florida. 100% research, 0.5 FTE. Breeding of *Ruellia* spp. for sterility and landscape performance. Development and production of training videos for greenhouse production.
Aug 2006 – Feb 2010 Research Scientist, Dept. Environmental Horticulture, University of Florida. 100% research, 0.8 FTE.
2003 – 2006 Graduate Faculty, Dept. Plant Biology, University of New Hampshire
1999 – 2000 Trial Manager, Pleasant View Gardens, Loudon, NH (part-time)
1999 – 2001 Manager and editor, UNH Sustainable Horticulture website (part-time)
1998 – 2006 Research Assistant Professor, Dept. Plant Biology, University of New Hampshire
1996 – 1997 Affiliate Researcher, Dept. Plant Biology, University of New Hampshire
1993 – 1996 Post-doctoral Scholar, University of California, Davis, CA
1990 - 1993 Graduate Research Assistant, Michigan State University, Lansing MI
1987 – 1989 Research Assistant, International Potato Center (CIP), Lima, Perú

PROFESSIONAL ORGANIZATIONS

International Society for Horticultural Science, American Society of Horticultural Science, Florida Nursery Growers and Landscape Assn.

AWARDS

Outstanding Paper Award, The Potato Association of America. Douches, D.S and R. Freyre. 1994. Identification of genetic factors influencing chip color in diploid potato (*Solanum spp.*) *Am. Pot. J.* 71:581-590.
Graduate Student Presentation Award, 1st Place: Freyre, R. and D.S. Douches. 1993. Assessment of molecular marker technology for quantitative trait loci analysis in diploid potato. The Potato Association of America Meeting. Madison, Wisconsin. August 1993.

PUBLICATIONS

Refereed articles

- Freyre R., A. Moseley, C. Reinhardt-Adams, A.G.W. Knox, S.B. Wilson and Z. Deng. 2013. Breeding *Ruellia* spp. at the University of Florida. Proc. VIIth IS on New Floricultural Crops. Eds.: G. Facciuto and M.I. Sanchez. *Acta Hort.* 1000, pp. 423-428.
Freyre, R., A. Moseley, S.B. Wilson and G.W. Knox. 2012. Breeding and evaluating for landscape performance and fruitlessness in Mexican petunia. *HortScience* 47:1245-1251.
Freyre, R., A. Moseley, S.B. Wilson and G.W. Knox. 2012. Fruitless *Ruellia simplex* R10-102 ('Mayan Purple')

- and R10-108 ('Mayan White'). *HortScience* 47:1808-1814.
- Czarnecki II, D.M., S.B. Wilson, G.W. Knox, R. Freyre, and Z. Deng. 2012. UF-T3 and UF-T4 – Two sterile *Lantana camara* cultivars. *HortSci.* 47:132-137.
- Jewell, C., A. Douglas-Papineau, R. Freyre and L.C. Moyle. 2012. Patterns of reproductive isolation in *Nolana*. *Evolution.* 66:2628-2636.
- Wilson, S.B., G.W. Knox, R. Freyre, and Z. Deng. 2012. Characterizing the invasive potential of ornamental plants. Proc. XXVIII International Horticulture Congress on Science and Horticulture for People. Acta Hort. 937:1183-1192.
- Douglas, A.C. and R. Freyre. 2010. Floral development, stigma receptivity and pollen viability in eight *Nolana* species. *Euphytica* 174:105-117.
- Wilson, S., G.W. Knox, K.L. Muller, R. Freyre and Z. Deng. 2009. Seed production and viability of eight porterweed selections grown in northern and southern Florida. *HortSci.* 44:1842-1849.
- Quintana, A, T. Davis, R.J. Griesbach, and R. Freyre. 2008. Genetic studies of flower color in *Anagallis monelli* L. *Hortsci.* 43:1680-1685.
- Quintana, A., J. Albrechtova, R.J. Griesbach, and R. Freyre. 2007. Anatomical and biochemical studies of anthocyanins in flowers of *Anagallis monelli* L. *Scientia Hort.* 112:413-421.
- Freyre, R., A.C. Douglas and M.O. Dillon. 2005. Artificial hybridizations in five species of Chilean *Nolana* (Solanaceae). *Hortsci.* 40:532-536.
- Freyre R and R.J. Griesbach. 2004. Inheritance of flower color in *Anagallis monelli* L. *Hortsci.* 39:1220-1223.
- Freyre R. and J.B. Loy. 2000. Evaluation and yield trials of Tomatillo (*Physalis ixocarpa* Brot.) in New Hampshire. *HortTech.* 10:374-377.
- Freyre R., P. Skroch, V. Geffroy, A-F. Adam-Blondon, A. Shirmohamadali, W.C. Johnson, V. Llaca, R.O. Nodari, P.A. Pereira, S-M. Tsai, J. Tohme, M. Dron, J. Nienhuis, C.E. Vallejos and P. Gepts. 1998. Towards an integrated map of common bean. 4. Development of a core linkage map and alignment of RFLP maps. *Theor. Appl. Genet.* 97:847-856.
- Freyre R., R. Ríos, L. Guzmán, D.G. Debouck and P. Gepts. 1996. Ecogeographic distribution of *Phaseolus spp.* (Fabaceae) in Bolivia. *Econ. Bot.* 50:195-215.
- Freyre R. and D.S. Douches. 1994. Development of a model for marker-assisted selection of specific gravity in diploid potato across environments. *Crop Sci.* 34:1361-1368.
- Freyre R., B. Sosinski, S. Warnke and D.S. Douches. 1994. Quantitative trait loci analysis of tuber dormancy in diploid potato (*Solanum spp.*). *Theor. Appl. Genet.* 89:474-480.
- Freyre R. and D.S. Douches. 1994. Isoenzymatic identification of quantitative traits in crosses between heterozygous parents: mapping tuber traits in diploid potato (*Solanum spp.*). *Theor. Appl. Genet.* 87:764-772.
- Watanabe K., Orrillo M., Iwanaga M., Ortiz R., Freyre R., Perez S. 1994. Diploid potato germplasm derived from wild and land race genetic resources. *Am. Pot. J.* 71: 599-604.
- Douches, D.S and R. Freyre. 1994. Identification of genetic factors influencing chip color in diploid potato (*Solanum spp.*) *Am. Pot. J.* 71:581-590.
- Werner, J.E, D.S. Douches and R. Freyre. 1992. Use of half-tetrad analysis to discriminate between two types of 2n egg formation in a potato haploid. *Genome.* 35:741-745.
- Ortiz, R., R. Freyre, S.J. Peloquin and M. Iwanaga. 1991. Adaptation to day length and yield stability of families from 4x-2x crosses in potato. *Euphytica.* 56:187-195.
- Douches, D.S., K. Ludlam and R. Freyre. 1991. Isozyme and plastid DNA assessment on pedigrees of nineteenth century potato cultivars. *Theor. Appl. Genet.* 82:195-200.
- Freyre, R., M. Iwanaga and G. Orjeda. 1991. Use of *Ipomoea trifida* (H.B.K.) G. Don germ plasm for sweet potato improvement. 2. Fertility of synthetic hexaploids and triploids with 2n gametes of *I. trifida*, and their interspecific crossability with sweet potato. *Genome* 34:209-214.
- Iwanaga, M., R. Freyre and G. Orjeda. 1991. Use of *Ipomoea trifida* (H.B.K.) G. Don germ plasm for sweet potato improvement. 1. Development of synthetic hexaploids of *I. trifida* by ploidy-level manipulations. *Genome* 34:201-208.
- Iwanaga, M., R. Freyre and K. Watanabe. 1991. Breaking the crossability barriers between disomic tetraploid *Solanum acaule* and tetrasomic tetraploid *S. tuberosum*. *Euphytica* 52:183-191.

- Orjeda, G., R. Freyre and M. Iwanaga. 1991. Use of *Ipomoea trifida* germ plasm for sweet potato improvement. 3. Development of 4x interspecific hybrids between *Ipomoea batatas* (L.) Lam. (2n=6x=90) and *I. trifida* (H.B.K) G. Don. (2n=2x=30) as storage-root initiators for wild species. *Theor. Appl. Genet.* 83:159-163.
- Ortiz, R., S.J. Peloquin, R. Freyre, and M. Iwanaga. 1991. Efficiency of potato breeding using FDR 2n gametes for multitrait selection and progeny testing. *Theor. Appl. Genet.* 82:602-608.
- Orjeda, G., R. Freyre, and M. Iwanaga. 1990. Production of 2n pollen in diploid *Ipomoea trifida*, a putative wild ancestor of sweet potato. *J. Hered.* 81:462-467.

BOOK CHAPTERS

- Freyre R. 2006. *Anagallis (Anagallis monelli)*. In Anderson N. (Ed.). *Flower breeding & Genetics: Issues, challenges and opportunities for the 21st century*. Vol. 2. Springer, The Netherlands. pp. 225-239.

POPULAR JOURNALS

- Freyre, R.. 2013. *Ruellia*: New colors and non-invasive cultivars for an outstanding landscape plant. To be published in *Greenhouse Grower* on 2013.
- Fisher, P.R., R. Freyre, and J. Erwin. 2013. Conducting onsite greenhouse trials. *GrowerTalks*, May 2013 70-74.
- Freyre, R., J. Henny, Z. Deng, B. Harbaugh and D. Clark. June 2009. Breeding brilliance. *Greenhouse Product News* 9(6):28-32.
- Boldt, J.K., J.L. Boldt, J. Barrett, and R. Freyre. October 2008. Summer survivors. *Greenhouse Product News* 8(10):20-24.
- Boldt, J.K., J.L. Boldt, J. Barrett, and R. Freyre. July 2008. Selecting this Spring's sensations. *Greenhouse Product News* 8(7):36-39.
- Boldt, J.K., J.L. Boldt, J. Barrett, and R. Freyre. May 2008. Winter winners. *Greenhouse Product News* 18(5):32-37.
- Boldt, J.K., J.L. Boldt, J. Barrett, and R. Freyre. January 2008. Climbing out of a rut. *Greenhouse Product News* 18(1):47-50.
- Boldt, J.K., J.L. Boldt, J. Barrett, and R. Freyre. November 2007. Summer's hottest selections: bring on the heat - these plants are ready! *Greenhouse Product News* 17(11):36-40.
- Boldt, J.K., J.L. Boldt, J. Barrett, and R. Freyre. August 2007. Spring trials evaluate new variety performance. *Greenhouse Product News* 17(8):36-41.
- Perkins D., C. Esmel, L. Boyer, R. Freyre and P. Fisher. 2005. *UNH Growing a green generation. Curriculum of gardening activities for preschool and kindergarten children. Second Edition. University of New Hampshire, Durham, NH.*
- Esmel, C., R. Freyre and P. Fisher. 2002. *UNH Growing a green generation. Curriculum of gardening activities for preschool and kindergarten children. First Edition. University of New Hampshire, Durham, NH.*
- Freyre R. 1999. Growing tomatillos. *American Vegetable Grower*, April 1999. pgs. 38-39.
- Freyre R. 1999. Growing tomatillos. *Country Folk's Grower*. March 1999. pg. 16.

PLANT PATENTS

- Ruellia* 'Mayan Purple', Plant Patent Pending, submitted 6/12.
- Ruellia* 'Mayan White', Plant Patent Pending, submitted 6/12.
- Anagallis* 'Wildcat Blue', US Plant Patent 15,137 P2. 2004.
- Anagallis* 'Wildcat Orange', US Plant Patent 15,136 P2. 2004.
- Anagallis* 'Wildcat Mandarin', US Plant Patent PP18,845,P3. 2008.
- Anagallis* 'Wildcat Pink', US Plant Patent PP18,893 P3, 2008.
- Nolana* 'Loma Blanca', US Plant Patent PP19450, 2008.
- Browallia* UNHBR4 'Endless Sensation', US Plant Patent PP18,923, P2. 2008.
- Browallia* UNHBR12 'Endless Illumination', US Plant Patent PP18,925, P2. 2008.
- Browallia* UNHBR15 'Endless Celebration', US Plant Patent PP19,821. 2009
- Browallia* UNHBR18 'Endless Flirtation', US Plant Patent PP19,822. 2009.

TRAINING VIDEOS

- Freyre, R., Lopez, J., Dickson, R. and P.R. Fisher. 2013. Tissue culture 1: Receiving and handling materials
Freyre, R., Lopez, J., Dickson, R. and P.R. Fisher. 2013. Tissue Culture: 2. Sticking cuttings into the tray
Freyre, R., Lopez, J., Dickson, R. and P.R. Fisher. 2013. Tissue Culture: 3. Greenhouse growing
Freyre, R., Lopez, J., Dickson, R. and P.R. Fisher. 2013. Plantas de Cultivo de Tejidos 1: Recepción
Freyre, R., Lopez, J., Dickson, R. and P.R. Fisher. 2013. Plantas de Cultivo de Tejidos 2: Plantado
Freyre, R., Lopez, J., Dickson, R. and P.R. Fisher. 2013. Plantas de Cultivo de Tejidos 3: Crecimiento en el invernadero