

H. LIU

## CURRICULUM VITAE

**Hong Liu, Ph.D.**

**Associate Professor**

**Department of Earth and Environment, Florida International University  
Research Associate, Fairchild Tropical Botanic Garden**

### Address

**Department of Earth and Environment**

**Florida International University,**

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### Fairchild Tropical Botanic Garden

**10901 Old Cutler Road, Miami, FL 33156-4296**

**Phone: 305-667-1651 ext 3517, Fax: 305-661-8953**

### EDUCATION:

1998-2003 Ph.D. in Biological Sciences, Florida International University, Miami, Florida, USA

1994-1997 M.S. in Botany, Clemson University, South Carolina, USA

1985-1989 B.S. in Ecology, Nanjing University, P.R. China

### PROFESSIONAL POSITIONS:

August 2014 – present Associate Professor, Department of Earth and Environment, Florida International University

August 2008 – August 2014 Assistant Professor, Department of Earth and Environment, Florida International University (with dual appointment at the Fairchild Tropical Botanic Garden)

August 2008 – present Conservation Ecologist, Center for Tropical Plant Conservation, Fairchild Tropical Botanic Garden

October 2009 – present Associate Editor, Biological Invasions

July 2010 Invited Editor, Natural Areas Journal

July 2009 – present Adjunct Professor, Guangxi University

April 2005 – May 2008 Postdoctoral Associate. Co-operative agreement between the University of Florida and USDA ARS Invasive Plant Research Laboratory. Supervisors: Drs. Robert Pemberton and Forest Howard

Nov 2003 – Feb 2005 Postdoctoral Associate, Department of Biological Sciences, University of South Florida. Supervisor: Dr. Peter Stiling

### GRANTS

- **Liu H.** (PI) Study of assisted colonization of endangered species based on modern ecological niche concept: a case using orchids with different elevational distributions.

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National Science Foundation of China (NSFC). Jan 2014 –Dec 2017. Feb 2013, \$80,000 (0.49 M RMB). Applied as Adjunct Professor at Guangxi University. The funding rate of the NSFC in Ecology was 19.7% in 2012

([www.nsf.gov.cn/nsfc/cen/xmtj/pdf/2012\\_table.pdf](http://www.nsf.gov.cn/nsfc/cen/xmtj/pdf/2012_table.pdf))

- Liu (PI), Guangxi Science and Technology Bureau. The Chairman's Foundation. Dec 2012 – Dec 2014. Studying the fates of selected wild orchids subject to assisted colonization using modern ecological niche model. \$32,250 (0.2 M RMB).
- Liu (PI), Fairchild Tropical Botanic Garden. May 1, 2011- August 30, 2013. Preliminary study of the impacts of extreme weather on wild orchids in southwestern China". \$91,600
- Liu, H. Mohamed bin Zayed Species Conservation Funds. January 2012-August 2014. In-situ and ex-situ conservation and restoration of the endemic and endangered Guizhou *Georodum* orchid in Southwestern China. \$15,000.
- Liu, H. Conservation Ecology of selected plants in Halmahera, Indonesia. 01/01/2012-08/31/2014. \$41,113. This grant provides research assistantship to Ph.D. student Melissa Abdo and is expected to be renewed annually at least through summer 2015.
- Liu, H. Graduate Assistantship to Ph.D. student Mr. Jason Downing. 08/15/2011-08/14/14. \$46,920. This grant will also be renewed annually through 2015.
- Liu (PI), Fairchild Tropical Botanic Garden. Seed Ecology of *Melinis repens*, an invasive grass in South Florida. Fairchild Tropical Botanic Garden. August 2010 – January 2012. \$22,527.
- Liu (PI), Fairchild Tropical Botanic Garden. May-August 2010. Comparative Ecology of the rare orchid *Geodorum eulophioides* and its more common congeners in Southwest China. \$30,000.
- Liu (PI), Guangxi Science and Technology Bureau. The Chairman's Foundation. Oct 2010 – Dec 2012. Conservation Ecology of selected endangered orchids in Yachang Orchid Nature Reserve. \$74,000 (0.5 M RMB).
- Liu (PI), Mohamed bin Zayed Species Conservation Funds. July 2009-Dec 2010. Habitat analyses of selected endangered orchids in Southwestern China. \$17,000.
- Liu (co-PI), Mohamed bin Zayed Species Conservation Funds. June 2009-Dec 2011. Conservation of *Carpinus putoensis*, a critically endangered island tree species endemic to the Zhoushan Archipelago of China. \$25,000.
- Liu (PI), Fairchild Tropical Botanic Garden. May-August 2009. Population dynamics, breeding system and pollination of *Geodorum eulophioides*, a narrowly endemic and rare orchid in Southwestern China. \$29,417.
- Liu (PI), Summer Faculty Development Award, College of Arts and Science, Florida International University. May-August 2009. Comparative study of symbiotic mycorrhizal fungi requirements of an endangered native orchid and it introduced invasive congener in South Florida. \$8,704.00
- Liu, Doctoral Dissertation Improvement Grant, National Science Foundation, 2001. \$7,850 (Max \$8,000).
- Liu (PI), Research Grant, The Florida Native Plant Society, 1999. \$500

#### FELLOWSHIPS:

- Catherine Beattie Fellowship, Garden Club of America, Center for Plant Conservation, 2001. \$4,000

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- Research Fellowship, The Key West Garden Club, 2000, 2001. \$1,500
- Student Travel Award, The Association for Tropical Biology INC. 1999. \$500
- Dissertation Year Fellowship, Florida International University, 2002. \$15,000 stipend
- Graduate Studies Research Award, Cuban Research Institute, Florida International University, 2002. \$2,000
- Tropical Biology Research Award, Florida International University, 1998, 1999, 2000, 2001. \$5,400.
- Tropical Biology Travel Award, Florida International University, 1998, 1999. \$1,500
- P.E.O. International Peace Scholarship, International Chapter P.E.O. Sisterhood, 1996, 1997.

## PUBLICATIONS:

### **Refereed papers:** (\* Graduate student under my supervision)

- Liu, H.** H. Ren, Q. Liu, X.-Y. Wen, M. Maunder, and J.-Y. Gao. Accepted. The conservation translocation of threatened plants as a conservation measure in China. *Conservation Biology*.
- Ying, T., G. -F. Geng, D. -B. Wang, **H. Liu**, J. Xu, Z. -B. Zhang, Z. -S. Wang, Y. -B. Luo. 2014. Developing microsatellite markers for *Geodorum eulophioides* (Orchidaceae) and cross-species amplification in two sympatric, congeneric species. *Conservation Genetics Resources* 6:957-959.
- Liu, H.**, Y. -B. Luo, J. Heinen, M. Bhat, and Z. -J. Liu. 2014. Eat your orchid and have it too: a new conservation model for the Chinese medicinal orchids. *Biodiversity and Conservation*. 23: 1215-1228. DOI 10.1007/s10531-014-0661-2
- Lin, W.-Y.\* , **H. Liu**, X.-K. Ma, T. Ying, Z.-B. Zhang, Z.-S. Wang, and Y.-B. Luo. 2014. Natural hybridization potential between a rare endemic orchid and its sympatric congeners in southwestern China. *Orchids*. March: 178-183.
- Ren, H., S. - G. Jian, Y. -J. Chen, **H. Liu**, Q. -M. Zhang, N. Liu, Y. Xu, and J. Luo. 2014. Distribution, status and conservation of *Camellia changii* Ye (Theaceae), a critically endangered plant endemic to southern China. *Oryx* 48: 358-360.
- Platt. S. G., R. M. Eelsey, **H. Liu**, et al. 2013. Frugivory and seed dispersal by crocodilians: An over-looked form of saurochory? *Journal of Zoology* 291: 87-99.
- Downing J. \* and H. Liu. In press. Downing and Liu. 2013. Self-incompatibility in *Byrsonima lucida* (Malpighiaceae), a threatened pine rockland specialist. *Castanea*.
- Liu, H.**, Y.-B. Luo, and Z. -J. Liu. 2013. Using guided commercialized cultivation models to promote species conservation and sustainable utilization: an example from the Chinese medicinal orchids. (以产业化促进可物种保护和可持续利用的新模式：以兰花为例). *Biodiversity Science (生物多样性)* 21: 132-135. (Journal cover article, in Chinese with an English Abstract. This journal in Chinese language ranks #4 among the biological journals in the country).
- Liu, H.**, C. -L. Feng, B. -S. Chen, Z. -S. Wang, X. -Q. Xie, et al. 2012. Overcoming extreme weather events: successful but variable assisted translocations of wild orchids in southwestern China. *Biological Conservation* 150: 68-75.
- Downing J.\* and **H. Liu**. 2012. Friend or foe? Impacts of the invasive oil-collecting bee on native, specialized plant-pollinator interactions in southern Florida. *Biological Invasions*

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14: 2175-2185.

- Pemberton, R.W. and **H. Liu**. 2011. Naturalized yellow cowhorn orchid, *Cyrtopodium flavum* (Orchidaceae), spreading in Florida. *Journal of Botanical Research Institute of Texas* 5(1): 331-335.
- Maschinski, J., M. Ross, **H. Liu**, J. O'Brien, E. J. von Wettberg, and K. E. Haskins. 2011. Sinking Ships: Conservation Alternatives for Endemic Taxa Threatened by Sea Level Rise. *Climatic Change* 107: 147-167.
- Wang, Z. -S., **H. Liu**, W. -X. Xu, N. Wei, S. -Q. An. 2010. Genetic diversity in young and mature cohorts of cultivated and wild populations of *Picea asperata* Mast (Pinaceae), a spruce endemic in western China. *European Journal of Forest Research* 129 (4): 719-728.
- Liu, H.** and R. W. Pemberton. 2010. Pollination of an invasive and rewardless orchid (*Cyrtopodium polyphyllum*) by an invasive oil-collecting bee in natural and residential areas in Florida. *Botany* 88: 290-295.
- Francisco-Ortega, J., F.-G. Wang, Z. -S. Wang, F. -W. Xing, **H. Liu**, H. Xu, W. -X. Xu, Y. -B. Luo, X. -Q. Song, S. Gale, D. E. Boufford, M. Maunder, and S.-Q. An. 2010. Endemic Seed Plant Species from Hainan Island: A Checklist. *Botanical Review* 76: 295-345. IF = 3.056.
- Francisco-Ortega, J., Z. -S. Wang, F.-G. Wang, F. -W. Xing, **H. Liu**, H. Xu, W. -X. Xu, Y. -B. Luo, X. -Q. Song, S. Gale, D. E. Boufford, M. Maunder, and S.-Q. An. 2010. Seed Plant Endemism on Hainan Island: A Framework for Conservation Actions. *Botanical Review* 76:346-376.
- Liu, H.** and Y. -B. Luo. 2010. Protecting orchids in Nature Reserves: Research and Restoration Needs. *Botanical Review* 76: 137-139.
- Liu, H.\***, C. -L. Feng, Y.-B. Luo, B. -S. Chen, Z. -S. Wang, and H. -Y. Gu. 2010. Potential challenges of climate change to orchid conservation in a wild orchid hotspot in southwestern China. *Botanical Review* 76: 174-192 (\*corresponding author).
- Liu, H.-X., Y. -B. Luo, and **H. Liu\***. 2010. Studies of mycorrhizal fungi of Chinese orchids and their role in orchid conservation in China – a review. *Botanical Review* 76: 241-262 (\*corresponding author).
- Liu, F. -D., W. -J. Yang, Z. -S. Wang, Z. Xu, **H. Liu**, M. Zhang, Y. -H. Liu, S. -Q. An, S. -C. Sun. 2010. Plant size effects on the relationships among specific leaf area, leaf nutrient content, and photosynthetic capacity in tropical woody species. *Acta Oecologica* 36 (2): 149-159.
- Platt, S. G., **H. Liu#**, and C. K. Borg. 2010. Fire mortality among Florida Box Turtles (*Terrapene carolina bauri*) on National Key Deer Wildlife Refuge, Florida. *Natural Areas Journal* 30: 254-260. (#corresponding author).
- Wang Z. -S., S. -Q. An, **H. Liu#**, J. Feng, F. Zhang, Y. Liu, Z.-F. Deng, N. Wei, C. Yan, S. Chen, S.-Y. Liu. 2009. Effects of stand regeneration management regimes and age on genetic structure of *Quercus aquifolioides* (sclerophyllous oak) in southwestern China. *Forest Science* 52(2):142-148 (#corresponding author).
- Liu, H.** and R. W. Pemberton. 2009. Invasive orchid bee outperforms co-occurring native bees to promote an invasive *Solanum*. *Oecologia* 159:515-525..
- Pemberton, R. W. and **H. Liu#**. 2009. Marketing time determines naturalization rates of horticultural plants in Florida. *Ecology* 90(1): 69-80. (#corresponding author).
- Platt, S. G., C. Hall, **H. Liu**, and C. K. Borg. 2009. Wet season food habits and intersexual dietary overlap of Florida Box Turtles (*Terrapene carolina bauri*) on National Key Deer

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- Wildlife Refuge, Florida. *Southeastern Naturalist* 8(2): 335-346.
- Liu, H.** and R. W. Pemberton. 2008. Differential soil seed bank longevity of an invasive woody vine (*Paederia foetida* L) across three habitats in Florida. *Journal of Torrey Botanical Society*. 135: 391-496.
- Pemberton, R. W. and **H. Liu**#. 2008. Potential of invasive and native solitary specialist bee pollinators to help restore the rare cowhorn orchid (*Cyrtopodium punctatum*) in Florida. *Biological Conservation* 141: 1758-1764. (# corresponding author).
- Pemberton, R. W. and **H. Liu**. 2008. A naturalized orchid bee pollinates resin reward flowers in southern Florida; novel and known mutualism. *Biotropica* 40 (6): 714-718.
- Pemberton, R. W. and **H. Liu**. 2008. The naturalization of the oil collecting bee *Centris nitida* (Hymenoptera, Apidae, Centridini), a potential pollinator of selected native, ornamental, and invasive plants in Florida. *Florida Entomologist* 91:101-109.
- Pemberton, R. W. and **H. Liu**. 2008. Naturalization of *Dalechampia scandens* in southern Florida. *Caribbean Journal of Science* 44 (3) 417-419. IF = 0.36.
- Pemberton, R. W. and **H. Liu**. 2007. Rare naturalization of an ornamental *Tillandsia ionantha* in southern Florida. *Silbyana* 28: 150-153.16.
- Liu, H.**, P. Stiling, and R. W. Pemberton. 2007. Does enemy release matters? Evidence from a comparison of insect damage level among invasive, non-invasive, and native congeners. *Biological Invasions* 9: 773-781.
- Pemberton, R. W. and **H. Liu**. 2007. Control and persistence of native *Opuntia* on Nevis and St. Kitts fifty years after the introduction of *Cactoblastis cactorum*. *Biological Control* 41: 272-282.
- Howard, F. W., R. W. Pemberton, G. S. Hodges, B. Steinberg, D. McLean, and **H. Liu**. 2006. The host plant range of lobate lac scale, *Paratachardina lobata*, in Florida, with implications concerning host plant ranges of scale insects in general. *Proceedings of the Florida State Horticulture Society* 119: 398-408.
- Liu, H.**, P. Stiling, R. W. Pemberton, and J. Peña. 2006. Comparison of insect faunal diversity among invasive, non-invasive, and native congeners and implication for the enemy release and biotic resistance hypotheses. *Florida Entomologist* 89: 475-484.
- Liu, H.**, R. W. Pemberton, and P. Stiling. 2006. Reproductive biology and pollination of skunk vine (*Paederia foetida*), an exotic invasive species of Florida. *Journal of Torrey Botanical Society* 133: 304-311.
- Wang, Z., S. An, **H. Liu**, J. Feng, X. Leng, and F. Zhang. 2006. Older spruce plantations harbor more genetically diverse moss *Thuidium cymbifolium* than younger stands. *Biological Conservation* 129:551-557.
- Liu, H.** and P. Stiling. 2006. Testing the enemy release hypothesis: a review and meta-analysis. *Biological Invasions* 8: 1535-1545.
- Liu, H.** and E. Menges. 2005. Dry-season fires promote population vital rates of *Chamaecrista keyensis*, a narrowly endemic herb of the Lower Florida Keys. *Ecology* 86: 1483-1495.
- Liu, H.**, E. Menges, J. Snyder, S. Koptur, and M. Ross. 2005. Effect of fire intensity on population vital rates of *Chamaecrista keyensis*. *Natural Areas Journal* 25: 71-76. .
- Liu, H.**, E. Menges, and P. F. Quintana-Ascencio. 2005. Population viability analysis of *Chamaecrista keyensis* – Stochastic model simulations on the effect of different fire regimes. *Ecological Applications* 15: 210-221.
- Wang, Z. S., S. Q. An, **H. Liu**, X. Leng, J. W. Zheng, and Y. H. Liu. 2005. Genetic structure of

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the endangered plant *Neolitsea sericea* (Lauraceae) from the Zhoushan Archipelago using RAPD Markers. *Annals of Botany* 95: 305-313.

**Liu, H.**, S. G. Platt, and C. K. Borg. 2004. Seed dispersal by the common box turtle (*Terrapene carolina*) in subtropical pine rockland in the Lower Florida Keys. *Oecologia* 138: 539-546.

**Liu, H.**, J. Trusty, R. Oviedo, and J. Francisco-Ortega. 2004. Molecular phylogenetics of the Caribbean genera *Rhodogeron* and *Sachsia* (Asteraceae). *International Journal of Plant Sciences* 165: 209-217.

**Liu, H.** and S. Koptur. 2003. Breeding system and pollination of a narrowly endemic herb of the Lower Florida Keys: Impacts of the urban wildland interface. *American Journal of Botany* 90: 1180-1187.

**Liu, H.** and T. P. Spira. 2001. The influence of seed age and inbreeding on seed vigor in *Hibiscus moscheutos*. *Journal of Torrey Botanical Society* 128: 16-24.

Snow, A. A., T. P. Spira, and **H. Liu**. 2000. Effects of sequential pollination on the success of “fast” and “slow” pollen donors in *Hibiscus moscheutos* (Malvaceae). *American Journal of Botany* 87: 1656-1659.

#### **Book chapter (peer reviewed):**

**Liu, H.**, C. -L. Feng, X.-Q. Xie, W.-Y. Lin, Z. -H. Deng, X. -L. Wei, S. Y. Liu, Y. -B. Luo. 2014. Impacts of extreme weather on flowering phenology of wild orchids in southwestern China. In Darwin’s Orchids—Now and then, Bernhardt, P. and R. Meier (Eds.) University of Chicago, Chicago. Pp. 311-327.

Reichard, S., **H. Liu**, and C. Husby. 2012. Is managed Relocation another pathway of biological invasion? In *Managing Eden: Plant Reintroduction’s Promises, Perils, and Uses in a Changing Climate*. J. Maschinski and K. E. Haskins (editors) Island Press, Washington D.C. pp243-262.

#### **In revision or review:**

Lin, W.-Y\*., **H. Liu**, X.-K. Ma, et al. Comparative reproductive biology of A rare endemic orchid and its sympatric congeners in southwestern China. In revision. \* Graduate student under my supervision.

Borrero, H.\*., P. Nunez\* and H. Liu. Living life on the edge gets more sex – an orchid’s story from limestone cliffs in southwestern China. In review. \*Undergraduate students under my supervision.

#### **Special Issue Edited in Journal:**

Special Orchid Conservation Issue, *Botanical Review* 76 (2) 137-294.

#### **Non-peer-reviewed publications:**

**Liu, H.** 2013. Third Guangxi International Orchid Symposium. *Oryx* 47: 18.

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- Borrero, H. \* and P. Nunez\*. 2013. Conservation Research in wild China. The Tropical Garden. Winter issue: 16-17. \* Undergraduate student under my supervision.
- Liu, H.** 2012. Helping stimulate orchid conservation in China. The Tropical Garden. Fall issue: 49.
- Liu, H., C.** –L. Feng, S.-W. Cai, and Y.-B. Luo. 2012. Rescuing endangered wild orchids from a man-made flood. The Tropical Garden. Spring issue: 34-38.
- Downing, J. L.\* 2012. Oil bees, oil plants and orchids. The Tropical Garden. Spring issue: 50-53. \* Graduate student under my supervision.
- Liu, H.** 2010. *Geodorum Eulophioides* – Challenges for conserving one of the rarest Chinese orchids. March 2010 issue: 161-162.
- Liu, H., A.** Tye, P. Jaramillo, W. Simbana, P. Madriz, S.-Q. An, A. –S. Wang, W. –X. Xu, F. –G. Wang, H. Xu, X. – Q. Song, J. Trusty, M. Maunder, C. Lewis, and J. Francisco-Ortega. 2010. Research at Fairchild: Conservation and biodiversity on Pacific Ocean Islands. Winter issue.
- Pemberton, W. R., **H. Liu**, and Y. –B. Luo. 2009. The Yachang Orchid Reserve. Orchids, November 2009 issue: 270-272.
- Liu, H., Y.-B.** Luo, R. Pemberton, D. Luo, and S.-Y.Luo. 2009. New Hope for Chinese Wild Orchids. *Oryx* 43(2): 169.
- Liu, H. 2009.** Research and conservation opportunities in the First Orchid Nature Preserve in China. The Tropical Garden. Spring issue.
- Wang Z.- S., S.-Q. An, **H. Liu**, W.-X. Xu, M. Maunder, and J.Francisco-Ortega. 2009. Plant Conservation and Biodiversity on Hainan Island, China – a new partnership between Nanjing University, Florida International University and Fairchild Tropical Botanic Garden. The Tropical Garden. Spring issue.
- Howard, F. W., R. W. Pemberton, and H. Liu. 2008. Erythrina Gall wasp, *Quadrastichus erythrinae* (Hymenoptera: Eulophidae) in Florida, and susceptibility of *Erythrina herbacea* (Fabaceae). Proceedings of the Florida State Horticultural Society 121: 363-369.
- Pemberton, R. W. and **H. Liu**. 2008. Pollination of the rare cowhorn orchid. The Tropical Garden. Spring issue.
- Muir, A. M. and **H. Liu**. 2003. Conservation Action Plan: *Chamaecrista lineata* var. *keyensis*. An integrated conservation program for the protection of Florida's rare and endangered flora. Final Report to Florida Department of Agriculture and Consumer Services. Contract # 007182.
- Liu H.** 2002. Research unlocks secret of island wildfires. *Plant Conservation* 15 (2): 7.

#### **SYMPOSIA ORGANIZED:**

- 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> Guangxi International Orchid Symposium. Leye, Guangxi, China. May 2009, 2010, 2012. I co-edited a special journal issue on orchid conservation in the Botanical Review following this symposium.
- Newly Emerged Plant Reintroduction Guidelines – Taking Climate Change into Consideration, a workshop during the 13<sup>th</sup> Conference of the International Association of Botanical Gardens (IABG), Guangzhou, Oct 2012

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- Plant Reintroduction in Asia – case studies, a symposium during the 13<sup>th</sup> Conference of the International Association of Botanical Gardens (IABG), Guangzhou, Oct 2012
- Overharvesting species for traditional medicine and food in Asia. Society For Conservation Biology Asia 2014 Conference. Malacca, Malaysia, August 19-22, 2014.

#### **SYMPOSIA INVITED:**

- XVIII International Botanical Congress, Melbourne, Australia, July 25-29, 2011. I am an invited speaker at the Symposium on Orchid pollination: the post-Darwinian revolution. Presentation title: Impacts of extreme weather on flowering phenology of wild orchids in southwestern China.
- 20<sup>th</sup> World Orchid Conference, Singapore, 13-16th November, 2011. I am an invited speaker at the Orchid conservation symposium. Presentation title: "Conserving Wild Orchids in Southwestern China: Buffering the Impacts of Global Changes", invited to present at the.
- The First Symposium of National Investigation on Invasive Plants in Taiwan. Taipei, Taiwan. June 11, 2009. Marketing time predicts plant naturalization of horticultural plants.
- Biological invasions in the tropics symposium, Annual Meeting of the Association for Tropical Biology and Conservation. July 18-21, 2006. Kunming, China Comparison of insect faunal diversity and damage level among introduced invasive, non-invasive, and native congeners and implication for the enemy release hypothesis.
- Beijing International Symposium on Biological Invasions. June 8-15, 2004, Beijing, China. A review and meta-analysis of empirical studies for the enemy release hypothesis.

#### **OTHER INVITED TALKS:**

- Dress to impress -- how orchids attract their diverse pollinators. USDA-ARS-SHRS, National Germplasm Repository at Chapman Field. March 16, 2013.
- Can we eat our orchid and have it too: strategies to conserve Chinese Medicinal Orchids. Pan American Orchid Society (at Pinecrest Garden) April 16<sup>th</sup>, 2013.
- Introduced orchids that wander off gardens in South Florida. United States Department of Agriculture, Animal and Plant Health Inspection Service, Plant Protection and Quarantine, Miami. April 12, 2012
- Guangxi – A little known plant paradise. Fairchild Lecture Series. March 9, 2011.
- The first orchid preserve in China: conservation opportunities and Challenges. Department of Environmental Studies, Florida International University. Oct 2008.
- What makes horticultural plants go out of bound? College of Life Sciences, Nanjing University, China. July 2008.
- Specialized invasive pollination mutualism in Florida. College of Life Sciences, Nanjing University, China. July 2008



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- Does enemy release matter? Evidence from native, introduced non-invasive, and invasive *Eugenia* in Florida. Departmental Seminar, University of Florida, Fort Lauderdale Research and Education Center. February 2007.

## **TEACHING EXPERIENCE:**

### **Graduate courses**

- Plant-Animal Interactions (5935 U04, Special Topic)
- Advanced Ecology and Management of Invasive Species (EVR5376)
- Advanced Restoration Ecology (EVR5375)

### **Undergraduate courses:**

- Plant-Animal Interactions (EVR4934 U05, Special Topic)
- Ecology and Management of Invasive Species (EVR4374)
- Restoration Ecology (EVR 4323)
- Restoration Ecology Lab (EVR 4323L)
- Ecology of South Florida (EVR 3013)

## **MENTORING EXPERIENCE:**

### **A. Undergraduate research projects supervised**

*(include semester, student, title and status of project)*

- Carlos Quintero, Fall 2012 and Spring 2013. Ecology of introduced bees and orchids.
- Paul Nunez, Fall 2012 and Spring 2013. Ecological studies of Chinese wild orchids.
- Haydee Borrero, Spring and Fall 2012. Ecological studies of Chinese wild orchids.
- Erin Marie Praver, Summer 2012. Impacts of invasive bees on native mutualism.
- Shannon McAskill, Summer 2012. Impacts of invasive bees on native mutualism.
- Christine Beck, Summer 2012. Impacts of invasive bees on native mutualism.
- Kristine Matos, Fall 2010-Fall 2012. Evaluation of invasive risk of the Florida horticultural plants. Agroecology program.
- Daniel Alfonso, Fall 2010. Pollination interactions between selected native plants and bees.
- David Herbella, Summer 2010. Pollination interactions between selected native plants and bees.
- Santiago Agango, Spring 2010. Interaction between selected native plants and introduced bees.
- Briana Baham, Fall 2009, nest ecology of an invasive bee in southern Florida.
- Tiara Thanawastien, Spring and Summer 2009, ecology of an invasive orchid in southern Florida.

### **B. Graduate thesis committees**

#### **a. Advisor**

- Jason Downing, Ph.D. student, Fall 2011 – present. Impacts of invasive, specialist bee on native mutualism.
- Melissa Abdo, Ph.D. student, Spring 2012 – present. Endemic bird and palm interactions on Halmahera Island, Indonesia.

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- Mario Cisneros, Master study, Fall 2013 – present. Population status of the rare and threatened mule year orchid in the Everglades National Park.
- Haydee Borrero, Ph.D. student, Fall 2014 – present. Pollination ecology of the rare and threatened cowhorn orchids and other *Oncidium* orchids in South Florida

**b. Member**

- Yogesh Dongol, Master student, Spring 2010-Spring 2012.
- David Gandy, Master student, Spring 2011-present
- Nathan Paul Lemoine, Ph.D. student, Department of Biology, Fall 2011-present
- Evan Rehm, Ph.D. student, Department of Biology, Spring 2012 - present
- Michael Calonje, Ph.D. student, Department of Biology, Spring 2012-present
- Beyte Barrios Roque, Ph.D. student, Department of Biology, Spring 2012 - present
- James Stroud, Ph.D. student, Department of Biology, Spring 2013-present
- Julia S. Gehring, Ph.D. student, Department of Biology, Spring 2013- present
- Kerry Bohl, Ph. D. student, University of South Florida, April 1<sup>st</sup>, 2013 (I was the Chairperson and the external examiner of the defense).

**c. Graduated students**

- Jason Downing, Master degree, Spring 2011. Thesis: Impacts of invasive, specialist bee on native mutualism.
- Wuying Lin, Master degree, Spring 2012. Thesis: Comparative reproductive ecology of an rare and endangered orchid and its congeners.
- Cara Cooper, Master degree, Summer 2012. Thesis: Ecology of an invasive grass in southern Florida.

**B. Graduate research projects supervised**

(include semester, student, title and status of project)

- Brett Jestrew, Ph.D. Candidate, FIU-Fairchild Tropical Botanic Garden graduate program, Summer 2009, A Conservation Genetics Study of *Cymbidium cyperifolium* (Orchidaceae) in southwestern China, funded by the NSF East Asia and Pacific Summer Institutes for Graduate Students.
- Hua Qing, Ph.D. candidate, Nanjing University, dissertation committee, Fall 2009 – present. Ecology of invasive *Spartina* in east coast of China.
- Jin Cheng, Ph.D. candidate, Fall 2008 – Now, Influence of floral display size and density on fruit set of an self-incompatible orchid species.

**PROFESSIONAL AND COMMUNITY SERVICE:**

- Handling Editor: Conservation Biology, July 2013 -- present
- Associate Editor: Biological Invasions, September 2009 – May 2014 (handles on average 10 manuscripts per year)
- Manuscript reviewer for the following journals:
  - Biological Conservation, 2013
  - Oecologia, 2013
  - Plant Biology, 2013
  - Plos One, 2012
  - Plant Biology, 2012

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- Ecology Letters, December 2009; April 2010
- Ecology, December 2009; February 2004 (together with Peter Stiling); Ecology, January 2003
- Castanea, July 2009
- Restoration Ecology, January 2009
- Biological Conservation, July 2008; November 2006; September 2004
- Journal of Torrey Botanical Society, August 2008; April 2002
- Natural Areas Journal, May 2008
- Journal of Integrative Plant Biology, August 2007
- Systematic Botany, January 2007
- Journal of Ecology 2006 (together with Robert Pemberton).
- Canadian Journal of Botany, September 2006 (together with Robert Pemberton)
- Proposal reviewer for NSF, Ecology section. March 2008; Ecology section. September 2007
- Secretarial committee of Beijing International Symposium on Biological Invasions: species exchanges between Eastern Asia and North America: Threats to Environment and Economy. June 8-11, 2004.