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EDUCATION

Ph.D., Huazhong Agricultural Univ. (China), 1988.
M.S., Huazhong Agricultural Univ. (China), 1985.
B.S., Sichuan Agricultural Univ. (China), 1982.

PROFESSIONAL WORK EXPERIENCE

2015 – Present: Professor, Univ. of Florida (UF), Gulf Coast Res. and Ed. Center (GCREC), Wimauma, FL
2009 – 2015: Associate Professor, UF, GCREC
2002 – 2009: Assistant Professor, UF, GCREC
1999 – 2002: Assistant-In Citrus Molecular Genetics and Biology, UF, Citrus Research and Education Center (CREC), Lake Alfred, FL
1998 – 1999: Postdoctoral Research Associate, UF, CREC
1996 – 1998: Postdoctoral Research Associate, Univ. of Alberta, Department of Agricultural, Food, and Nutritional Sciences, Molecular Biology and Biotechnology Center, Edmonton, AB, Canada
1993 – 1996: Visiting Scholar, UF, CREC
1992 – 1993: Associate Professor, Huazhong Agricultural University (HAU), Department of Horticulture, Wuhan, China
1988 – 1992: Assistant Professor (Lecturer), HAU, Department of Horticulture
1982 – 1988: Graduate Assistant, HAU, Department of Horticulture

SUMMARY OF RESEARCH ACCOMPLISHMENTS

1. 90 refereed articles published in more than 20 journals, with some having been cited more than 100 times.
2. Nine book chapters published by major international publishers, 34 articles published in conference proceedings and other journals, and 137 published abstracts.
3. Developed and released 22 new caladium cultivars, with novel ornamental characteristics, improved tuber yield, disease resistance, and/or stress tolerance; granted 20 plant patents for new caladium cultivars; signed nearly 50 licenses for commercial production; marketed and used across the U.S. and as many as forty foreign countries in the world. These new introductions have increased grower incomes, reduced pesticide use, and improved overall plant performance for consumers.
4. Developed and released four triploid sterile, non-invasive Lantana camara cultivars, granted four plant patents for these cultivars, applied for IP protection in Australia and Japan. The cultivars are in commercial production in U.S., Canada, Australia, and Japan.

Growers and consumers have sought non-invasive lantana varieties. These cultivars are ideal replacement of the invasive types: They protect native plant species and the environment while allowing growers and consumers to continue enjoying the benefits of lantana being easy to grow and produce, tolerant of tough landscape conditions and stresses, attracting pollinators, butterflies and bees, and saving water.

5. Developed and released 12 new gerbera daisy cultivars with improved resistance to powdery mildew and plant performance, granted seven plant patents for these cultivars, and established collaborative genetic improvement projects with top-notch horticultural firms in the world.
6. Discovered very valuable sources of resistance for major diseases in multiple horticultural crops and developed disease screening techniques. Including sources of resistance to *Fusarium* tuber rot, *Pythium* root rot, and *Xanthomonas* leaf blight in caladium, and sources of strong resistance to powdery mildew, the most destructive disease in gerbera daisy and *Coreopsis*. These sources of resistance have been induced to new caladium and gerbera cultivars, and also served as very valuable germplasm for commercial and private breeding programs.
7. Discovered, located, cloned and/or characterized important resistance/defense genes for major diseases in citrus, gerbera, impatiens and caladium, including the gene locus for citrus tristeza virus (CTV) resistance, strong candidate genes for citrus greening resistance, major quantitative trait loci for powdery mildew resistance in gerbera daisy, resistance genes for downy mildew resistance in impatiens, and defense genes for *Pythium* root rot resistance in caladium. These findings and molecular tools are fueling the development of a new generation of cultivars that can reduce the use of pesticides and better protect workers and the environment.
8. Revealed that production of unreduced female gametes via apomeiosis and apomictic seed production are the primary reproductive biological causes of lantana's strong invasive potential, discovered valuable diploids and tetraploids that lack these biological properties, and developed effective ploidy manipulation and screening strategy to sterilize lantana and other invasive ornamental plants.
9. Revealed the modes of inheritance and genetic linkage relationship for six important ornamental foliar traits in caladium, identified major QTL and chromosomal intervals for seven major plant and flower traits in petunia,
10. Awarded \$5.9 million research grants, including \$2.3 million from federal competitive grant programs, as PI or Co-PI (fund allocated to Deng).

I. CULTIVAR RELEASES, PLANT AND UTILITY PATENTS

1. Utility patent (1): Plant genes conferring resistance to citrus tristeza virus (7,126,044).

2. Plant cultivars released (37):

Caladium cultivars (22): 'Firecracker Red', 'Garden White', 'Summer Rose', 'Cranberry Star', 'Passionista', 'Sizzle', '75-14', 'UF-331', 'UF-340', 'UF-404', 'UF-18-49', 'UF-48-5', 'UF-85-8', 'UF-172', 'UF 44-4', 'UF 4412', 'UF 4424', 'UF-R304', 'UF-R813', 'UF-R1012', 'UF-R1022' ('Icicle'), and 'UFR1409'.

Gerbera cultivars (12): ‘UF Multi-flora Peach’, ‘UF Multi-flora Pink Frost’, ‘UF Enduring White’, ‘UF Enduring Burgundy’, ‘UFGE 4141’, ‘UFGE 7014’, ‘UFGE 7015’, ‘UFGE 7023’, ‘UFGE 7032’, ‘UFGE 7034’, ‘UFGE 7031’, and ‘UFGE 7080’.

Lantana cultivars (4): ‘UF-T3’, ‘UF-T4’, ‘UF-1011-2’ (Bloomify™ Rose), and ‘UF-1013A-2A’ (Bloomify™ Red).

3. Plant patents (PP) (31):

Caladium plant patents (20): PP20,461 - ‘Firecracker Red’ caladium; PP20,448 - ‘Garden White’ caladium; PP20,446 - ‘Summer Rose’ caladium; PP20,792 - ‘Cranberry Star’ caladium; PP21,089 - ‘75-14’ caladium; PP21,347 - ‘UF-340’ caladium; PP22,055 - ‘UF331’ caladium; PP24,327 - ‘UF-48-5’ caladium; PP24,431 - ‘UF-18-49’ caladium; PP24,432 - ‘UF-172’ caladium; PP24,680 - ‘UF 44-4’ caladium; PP24,681 - ‘UF-85-5’ caladium; PP25,598 - ‘UF 4424’ caladium; PP25,612 - ‘UF 4412’ caladium; PP26,591 - ‘Passionista’ caladium; PP26,592 - ‘Sizzle’ caladium; U.S. PP26,833 - ‘Fiesta’ caladium; U.S. PP27,154 - ‘Cosmic Delight’ caladium; U.S. PP27,155 - ‘Hearts Desire’ caladium; and U.S. PP29,249 - ‘Icicle’ caladium.

Gerbera plant patents (7): PP23,373 - ‘UFGE 7014’ gerbera; PP23,488 - ‘UFGE 7015’ gerbera; PP23,448 - ‘UFGE 7032’ gerbera; PP23,433 - ‘UFGE 7034’ gerbera; PP23,373 - ‘UFGE 7014’ gerbera; PP23,346 - ‘UFGE 4141’ gerbera; PP24,792 - ‘UFGE 7080’; and PP24,793 - ‘UFGE 7031’.

Lantana plant patents (4): PP24,057 - ‘UF-T3’ lantana; PP24,043 - ‘UF-T4’ lantana; U.S. PP29,267 - ‘UF-1011-2’ lantana; and U.S. PP29,292 - ‘UF-1013A-2A’ lantana.

II. PUBLICATIONS

1. Book chapters (9):

Deng, Z. 2018. Caladium breeding. In: J.V. Huylenbroeck (ed). Handbook of plant breeding: Ornamental crops. Springer International Publishing AG, Switzerland.

https://doi.org/10.1007/978-3-319-90698-0_12.

Deng, Z. and K. Bhattarai. 2018. Gerbera breeding. In: J.V. Huylenbroeck (ed). Handbook of plant breeding: Ornamental crops. Springer International Publishing AG, Switzerland.

https://doi.org/10.1007/978-3-319-90698-0_17.

Deng, Z. 2016. Breeding for disease resistance in florists’ crops, pp 1-31. In: R.J. McGovern and W.H. Elmer (eds.). Handbook of Plant Disease Management. Handbook of Florists’ Crops Diseases. Springer International Publishing, Switzerland (invited, in press). DOI: 10.1007/978-3-319-32374-9_4-1.

Deng, Z. 2013. Molecular markers in caladium: Development, characterization and applications. pp. 214-227. In: K.G. Ramawat and J.M. Merillon (eds.). Bulbous Plants Biotechnology. CRC Press, Boca Raton, FL, US (invited).

Deng, Z. 2012. Caladium breeding and genetics: Recent advances. pp. 53-61. In: J.A. Teixeira da Silva (ed.). Floriculture and Ornamental Biotechnology 6 (Special Issues 1). Global Science Books, London, UK (invited).

Gmitter Jr., F.G., **Z. Deng**, and C. Chen. 2007. Cloning and characterization of disease resistance genes. pp. 287-305. In: Iqar A. Kahn (ed.). Citrus Genetics, Breeding and Biotechnology. CAB International, Nosworthy Way, Wallingford, Oxfordshire, OX10 8DE, UK.

- Deng, Z.** 2006. Disease resistance gene analogs: Isolation, identification and applications. pp. 358-366. In: J.A. Teixeira da Silva (ed.). *Floriculture, Ornamental and Plant Biotechnology: Advances and Topical Issues (1st Edition)*. Global Science Books, London, UK.
- Deng, Z.** 1996. Applications of plant growth regulators in citriculture (in Chinese), pp. 196-208. In: D. Li (ed.). *Citriculture*. Agriculture Publishing House, Beijing, China.
- Deng, Z.** 1996. Freezes and freezing prevention in citriculture, p. 209-214. In: D. Li (ed.). *Citriculture*. Agriculture Publishing House, Beijing, China.

2. Refereed publications (93; [§] and ^P indicate graduate students and postdocs under supervision, respectively):

- Bechtloff, A., C. Reinhardt-Adams, S. Wilson, **Z. Deng**, and C. Wiese. 2019. Insights from Southeastern US nursery growers guide research for sterile ornamental cultivars. *J. Environ. Hort.* 37(1):9-18.
- [§] Cao, Z., ^P Y. Guo, Q. Yang, Y. He, M. Fetouh, R.M. Warner, and **Z. Deng**. 2019. Genome-wide identification of quantitative trait loci for important plant and flower traits in petunia using a high-density linkage map and an interspecific recombinant inbred population derived from *Petunia integrifolia* and *P. axillaris*. *Horticulture Research* (in press).
- ^P Peng, Z., [§] K. Bhattarai, ^P S. Parajuli, and **Z. Deng**. 2019. Transcriptome analysis of young ovaries reveals candidate genes involved in gamete formation in *Lantana camara*. *Plants* 8(8):263. <https://doi.org/10.3390/plants8080263>
- Sun, J., C.L Sigler, G.A. Beaudoin, J. Joshi, J.A. Patterson, K.H. Cho, M.A. Ralat, J.F. Gregory, D.G. Clark, **Z. Deng**, T.A. Colquhoun, and A.D. Hanson. 2019. Parts-prospecting for a high-efficiency thiamin thiazole biosynthesis pathway. *Plant Physiology*. DOI: <https://doi.org/10.1104/pp.18.01085>.
- Xavier, K., A. KC, N.A. Peres, **Z. Deng**, W.S. Castle, W. Lovett, and G.E. Vallad. 2019. Characterization of *Colletotrichum* species causing anthracnose of pomegranate in the southeastern U.S. *Plant Disease*. <https://doi.org/10.1094/PDIS-03-19-0598-RE>
- [§] Bhattarai, K., [§] W. Wang, [§] Z. Cao, and **Z. Deng**. 2018. Comparative analysis of impatiens leaf transcriptomes reveal candidate genes for resistance to downy mildew caused by *Plasmopara obducens*. *International Journal of Molecular Science* 19(7). pii: E2057. doi: 10.3390/ijms19072057.
- [§] Cao, Z., Y. Guo, Q. Yang, Y. He, M. Fetouh, R.M Warner, and **Z. Deng**. 2018. Genome-wide search for quantitative trait loci controlling important plant and flower traits in petunia using an interspecific recombinant inbred population of *Petunia axillaris* and *Petunia exserta*. *G3: Genes, Genomes, Genetics*. <https://doi.org/10.1534/g3.118.200128>.
- Chen, L., L. Wei, L. Katin-Grazzini, J. Ding, X. Gu, Y. Li, T. Gu, R. Wang, X. Lin, **Z. Deng**, R.J. McAvoy, F.G. Gmitter Jr., Z. Deng, Y. Zhao, and Y. Li. 2018. A method for the production and expedient screening of CRISPR/Cas9-mediated non-transgenic mutant plants. *Horticulture Research* 5:13. Doi:10.1038/s41438-018-0023-4.
- Deng, Z.** and N.A. Peres. 2018. 'Icicle' – A white lance-leaved caladium cultivar for containers and shady landscapes. *HortScience* 53:1076-1079; doi:10.21273/HORTSCI13073-18.
- Freyre, R., **Z. Deng**, and V.A. Zayas. 2018. Fruitless and semi-dwarf *Ruellia simplex* R13-5-3, R15-24-17, and R16-1-1. *HortScience* 53(10):1528-1533.

- Huang, M., M.L. Roose, Q. Yu, D. Du, Y. Yu, Y. Zhang, **Z. Deng**, E. Stover, and F.G. Gmitter Jr. 2018. Construction of high-density genetic maps and detection of QTLs associated with Huanglongbing tolerance in Citrus. *Frontiers in Plant Science*. <https://doi.org/10.3389/fpls.2018.01694>.
- [§] Wang, W., Y. He, [§] Z. Cao, and **Z. Deng**. 2018. Induction of tetraploids in impatiens (*impatiens walleriana*) and characterization of their changes in morphology and resistance to downy mildew. *HortScience* 53:925-931; doi:10.21273/HORTSCI13093-18.
- [§] Cao, Z. and **Z. Deng**. 2017. De novo assembly, annotation, and characterization of root transcriptomes of three caladium cultivars with a focus on necrotrophic pathogen resistance/defense-related genes. *International Journal of Molecular Sciences* 18, 712. DOI:10.3390/ijms18040712.
- [§] Cao, Z., S. Sui, Q. Yang, and **Z. Deng**. 2017. A single gene controls leaf background color in caladium (*Araceae*) and is tightly linked to genes for leaf main vein color, spotting and rugosity. *Horticulture Research* 4, Article number 16067. DOI:10.1038/hortres.2016.67.
- Deng, Z.**, S.B. Wilson, ^P X. Ying, and [§] D.M. Czarnecki II. 2017. Infertile *Lantana camara* cultivars UF-1011-2 and UF-1013A-2A. *HortScience* 52(4):652-657.
- ^P **Rawat, N.**, B. Kumar, U. Albrecht, D. Du, M. Huang, Q. Yu, Y. Zhang, Y-P Duan, K.D. Bowman, F.G. Gmitter Jr., and **Z. Deng**. 2017. Genome resequencing and transcriptome profiling reveal structural diversity and expression patterns of constitutive disease resistance (CDR) genes in Huanglongbing-tolerant *Poncirus trifoliata* and its hybrids. *Horticulture Research* 4, 17064; doi:10.1038/hortres.2017.64.
- Cai, X. and **Z. Deng**. 2016. Thidiazuron promotes callus induction and proliferation in *Caladium ×hortulanum* Birdsey UF-4609. *Propagation of Ornamental Plants* 16(3):90-97.
- [§] Cao, Z., S. Sui, Q. Yang, and **Z. Deng**. 2016. Inheritance of rugose leaf in caladium and genetic relationships with leaf shape, main vein color and leaf spotting. *Journal of the American Society for Horticultural Science* 141(5):527-534.
- [§] Cao, Z., S. Sui, X. Cai, Q. Yang, and **Z. Deng**. 2016. Somaclonal variation in ‘Red Flash’ caladium: Morphological, cytogenetic and molecular characterization. *Plant Cell, Tissue and Organ Culture: Journal of Plant Biotechnology* 126(2):269-279. DOI: 10.1007/s11240-016-0996-3.
- Deng, Z.**, B.K. Harbaugh, and N.A. Peres. 2016. ‘Cosmic Delight’, ‘Fiesta’, and ‘Hearts Desire’ – Three caladium cultivars. *HortScience* 51(6):766-771.
- Fetouh, M.I., A. Kareem, G.W. Knox, S.B. Wilson, and **Z. Deng**. 2016. Induction, identification and characterization of tetraploids in Japanese privet (*Ligustrum japonicum*). *HortScience* 51(11):1371-1377.
- Rosanna, F., **Z. Deng**, G. Knox, and V. Zayas. 2016. Fruitless *Ruellia simplex* R12-2-1 (Mayan Compact Purple). *HortScience* 51(8):1057-1061.
- Deng, Z.**, B.K. Harbaugh, and N.A. Peres. 2015. ‘UF 432’ and ‘UF 4015’ – Two lance-leaved caladium cultivars. *HortScience* 50(7):1099-1103.
- Du, D., N. Rawat, **Z. Deng**, and F.G. Gmitter Jr. 2015. Construction of citrus gene coexpression networks from microarray data using random matrix theory. *Horticulture Research* 2:15026. doi:10.1038/hortres.2015.26.
- ^P Rawat, N., S.P. Kiran, D. Du, F.G. Gmitter Jr., and **Z. Deng**. 2015. Comprehensive meta-analysis, co-expression, and miRNA nested network analysis identifies gene candidates in citrus against Huanglongbing disease. *BMC Plant Biology* 15(1):184. DOI: 10.1186/s12870-015-0568-4.

- Cai, X., [§] Z. Cao, [¶] S. Xu, and **Z. Deng**. 2015. Induction, regeneration and characterization of tetraploids and variants in ‘Tapestry’ caladium. *Plant Cell, Tissue and Organ Culture* 120:689-700.
- [§] Smith, S.M. and **Z. Deng**. 2015. Interspecific hybridization between *Coreopsis leavenworthii* and *Coreopsis tinctoria* affected progeny growth, development and reproduction differently. *Journal of the American Society for Horticultural Science* 140(1):27-37.
- [§] Czarnecki II, D.M., A. Hershberger, C.D. Robacker, and **Z. Deng**. 2014. Ploidy level and pollen stainability of *Lantana camara* cultivars and breeding lines. *HortScience* 49:1271-1276.
- [§] Cao, Z., **Z. Deng**, and M. McLaughlin. 2014. Interspecific genome size and chromosome number variation sheds new light on species classification and evolution of *Caladium* (Araceae). *Journal of the American Society for Horticultural Science* 49(4):449-459.
- Deng, Z.** and B.K. Harbaugh. 2014. Royal Flush™ ‘UF-18-49’ – A red fancy-leaved caladium for large containers and sunny landscapes. *HortScience* 49 (8):1113-1115.
- Wilson, S.B., G.W. Knox, **Z. Deng**, K.L. Nolan, and J. Aldrich. 2014. Landscape performance and fruiting of nine heavenly boom selections grown in northern and southern Florida. *HortScience* 49:706-713.
- Deng, Z.** and B.K. Harbaugh. 2013. UFGE 7031 and UFGE 7080 gerbera cultivars. *HortScience* 48(5):659-663.
- Deng, Z.**, B.K. Harbaugh, and N.A. Peres. 2013. UF 4412 and UF 4424 – Red lance-leaved caladium cultivars. *HortScience* 48(2):239-244 (cover page).
- Song, X. and **Z. Deng**. 2013. Powdery mildew resistance in gerbera: Mode of inheritance, quantitative trait locus identification, and resistance responses. *Journal of the American Society for Horticultural Science* 138(6):470-478.
- [§] 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. *HortScience* 47(1):132-137.
- Deng, Z.** and B.K. Harbaugh. 2012. ‘Summer Pink’ – A new pink fancy-leaved caladium. *HortScience* 47(5):672-674.
- [¶] Gong, L. and **Z. Deng**. 2012. Selection and application of SSR markers for variety discrimination, genetic similarity and relation analysis in gerbera. *Scientia Horticulturae* 138:120-127 (<http://dx.doi.org/10.1016/j.scienta.2012.02.020>).
- [§] Smith, S.M. and **Z. Deng**. 2012. Pollen-mediated gene flow from *Coreopsis tinctoria* to *Coreopsis leavenworthii* (Asteraceae): Identification and inheritance of morphological markers and determination of gene flow rates as affected by separation distances. *Journal of the American Society for Horticultural Science* 137(3):173-179.
- Song, X., **Z. Deng**, [¶] L. Gong, J. Hu, and Q. Ma. 2012. Cloning and characterization of resistance gene candidate sequences and molecular marker development in gerbera (*Gerbera hybrida*). *Scientia Horticulturae* 145:68-75 (<http://dx.doi.org/10.1016/j.scienta.2012.07.027>).
- Deng, Z.** and B.K. Harbaugh. 2011. UF 85-5 – A spotted caladium cultivar for use in containers and sunny landscapes. *HortScience* 46(9):1326-1329.
- Deng, Z.** and B.K. Harbaugh. 2011. UF 44-4 – A dwarf red lance-leaved caladium cultivar. *HortScience* 46(7):1049-1051.
- Deng, Z.**, B.K. Harbaugh, and N.A. Peres. 2011. ‘UF-172’, a pink fancy-leaved caladium cultivar for large containers and landscapes. *HortScience* 46(1):132-134.

- ^P Gong, L. and **Z. Deng**. 2011. Development and characterization of microsatellite markers for caladiums (*Caladium* Vent.). *Plant Breeding* 130(5):591-595. (doi:10.1111/j.1439-0523.2011.01863.x).
- Deng, Z.** and B.K. Harbaugh. 2010. UFGE 4141, UFGE 7014, UFGE 7015, UFGE 7023, UFGE 7032, and UFGE 7034: Six new gerbera cultivars for marketing flowering plants in large containers. *HortScience* 45(6):971-974.
- ^P Gong, L. and **Z. Deng**. 2010. EST-SSR markers for gerbera. *Molecular Breeding* 26:125-132 (DOI 10.1007/s11032-009-9380-x).
- Seijo, T.E., N.A. Peres, and **Z. Deng**. 2010. Characterization of strains of *Xanthomonas axonopodis* pv. *dieffenbachiae* from bacterial blight of caladium and identification of sources of resistance for breeding improved cultivars. *HortScience* 45(2):220-224.
- Xiang, X., **Z. Deng**, Q. Zheng, C. Chen, and F.G. Gmitter Jr. 2010. Developing specific markers and improving genetic mapping for a major locus *Tyr1* of citrus nematode resistance. *Molecular Plant Breeding* 7(3): 497-504.
- Xiang, X., **Z. Deng**, C. Chen, F.G. Gmitter Jr., and K. Bowman. 2010. Marker assisted selection in citrus rootstock breeding based on a major gene locus 'Tyr1' controlling citrus nematode resistance. *Agricultural Sciences in China* 9(4):557-567. DOI: 10.1016/S1671-2927(09)60129-2.
- [§] Czarnecki II, D.M. and **Z. Deng**. 2009. Occurrence of unreduced female gametes leads to sexual polyploidization in lantana. *Journal of the American Society for Horticultural Science* 134(5):560-566.
- Deng, Z.** and B.K. Harbaugh. 2009. Caladium 75-14, a spotted, fancy-leaved cultivar for containers and sunny landscapes. *HortScience* 44(3):854-856.
- Deng, Z.** and B.K. Harbaugh. 2009. Inheritance of leaf blotching in caladium. *HortScience* 44(1):40-43.
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- Deng, Z.**, B.K. Harbaugh, and N.A. Peres. 2008. 'UF-331' and 'UF-340' - new dwarf caladium cultivars for landscapes and pot plants. *HortScience* 43(7):2231-2235.
- Deng, Z.**, B.K. Harbaugh, and N.A. Peres. 2008. 'UF-404' - dwarf, red caladium for container-forcing and sunny landscapes. *HortScience* 43(6):1907-1910.
- [§] Czarnecki II, D.M., ^P M.N. Rao, J.G. Norcini, F.G. Gmitter Jr., and **Z. Deng**. 2008. Genetic diversity and differentiation among natural, production, and introduced populations of the narrowly endemic species *Coreopsis leavenworthii* (Asteraceae). *Journal of the American Society for Horticultural Science* 133(2):234-241.
- Deng, Z.**, ^P F. Goktepe, and B.K. Harbaugh. 2008. Inheritance of leaf spots and their relationships with leaf shape and main vein color in caladium. *Journal of the American Society for Horticultural Science* 133(1):78-83.
- Deng, Z.**, B.K. Harbaugh, and N.A. Peres. 2008. 'Cranberry Star' - A fancy-leaved caladium for containers and shady landscapes. *HortScience* 43(1):252-254.
- [§] Moyer, C., N. A. Peres, L.E. Datnoff, E.H. Simonne, and **Z. Deng**. 2008. Evaluation of silicon for managing powdery mildew (*Podosphaera fusca*) on gerbera daisy (*Gerbera jamesonii*). *Journal of Plant Nutrition* 31:2131-2144.
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- ^P Goktepe, F., T.E. Seijo, **Z. Deng**, B.K. Harbaugh, and N.A. Peres. 2007. Toward breeding for resistance to fusarium tuber rot in caladium: inoculation technique and sources of resistance. *HortScience* 42(5):1135-1139.
- Kelly, R. O., **Z. Deng**, and B.K. Harbaugh. 2007. Evaluation of 121 petunia cultivars as bedding plants and establishment of class standards. *HortTechnology* 17(3):386-396.
- Deng, Z.** and B.K. Harbaugh. 2006. 'Garden White' - A large white fancy-leaved caladium for sunny landscapes and large containers. *HortScience* 41(3):840-842.
- Deng, Z.** and B.K. Harbaugh. 2006. 'UF Multi-flora Peach' and 'UF Multi-flora Pink Frost': Multi-flora gerbera cultivars for landscapes and large pots. *HortScience* 41(3):843-845.
- Deng, Z.** and B.K. Harbaugh. 2006. Independent inheritance of leaf shape and main vein color in caladium. *Journal of the American Society for Horticultural Science* 131(1):53-58.
- Deng, Z.** and B.K. Harbaugh. 2006. 'Summer Rose' - A fancy-leaved caladium for containers and landscapes. *HortScience* 41(2):468-470.
- Deng, Z.** and B.K. Harbaugh. 2006. 'Dynamite Red' - A red fancy-leaved caladium for sunny landscapes and containers. *HortScience* 41(2):471-473.
- Deng, Z.** and B.K. Harbaugh. 2006. Evaluation of caladium cultivars for sensitivity to chilling. *HortTechnology* 16(1):172-176.
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- Harbaugh, B.K. and **Z. Deng**. 2006. UF Savanna cultivar group – eight colors of heat-tolerant lisianthus for potted plants. *HortScience* 41(3):850-854.
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3. Publications in Conference Proceeding/Journal Publications (34)

- Deng, Z. W. Castle, G. Vallad, S. Agehara, M. Thetford, and J.C. Diaz-Perez. 2018. Pomegranate: An emerging fruit crop in southeast United States. *Acta Horticulturae* (in press).
- § Xu, J. and Z. Deng. 2019. Progress in genetic sterilization of *Lantana camara* through ploidy manipulation. *Proc. Fla. State Hort. Soc.* 131:220-223.
- § Yu, X., K.V. Xavier, G.E. Vallad, and Z. Deng. 2019. Disease resistance in pomegranates: Importance, sources, breeding approaches, and progress. *Proc. Fla. State Hort. Soc.* 131: 1-5.
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- Wilson, S.B., G.W. Knox, **Z. Deng**, and R. Freyre. 2010. Non-invasive alternative to *Stachytarpheta cayennensis* (Nettleleaf porterweed) grown in North and South FL. SNA (Southern Nursery Association) Research Conference 55:64-68.
- Deng, Z.** and B.K. Harbaugh. 2008. Progress in breeding for disease resistance and stress tolerance in caladium, gerbera and lisianthus. *Acta Horticulturae* 766:399-403.
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Jin, Y.H., Z. Deng, and W.C. Zhang. 1988. Induction, identification and characterization of tetraploids in citrus (in Chinese). *Hubei Agricultural Science* (4):20-22.

Zhang, W.C., S. Xiao, J. Luo, **Z. Deng**, X.X. Deng, and F. Wang. 1988. Investigation and utilization of citrus varietal resources in China. *Proceedings of the Sixth International Citrus Congress*, Tel Aviv, Israel. pp. 291-294.

III. PRESENTATIONS at professional conferences

	Invited	Contributed/selected	Total
International	5	48	53
National	4	24	28
Regional and state	32	34	66
Local	23	8	31
Others	7		7
Total	71	114	185

IV. EXTERNAL GRANTS & CONTRACTS (2003-2018)

	Deng's Share	From USDA programs (Deng's share)
As principal investigator	\$3,237,954	\$369,611
As co-principal investigator	\$2,690,490	\$1,941,412

Total	\$5,928,444	\$2,311,023
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V. MEMBERSHIP AND ACTIVITIES with ASHS

- ASHS member since 2003.
- Served as chair of three ASHS working groups (Invasive Plant Research 2012-2013; Ornamental Plant Breeding – 2010-2011; Asian Horticulture 2007-2008).
- Served as committee member of two ASHS committees (Cross-Commodity Publication Award 2013-2016; Outstanding International Horticulturist Award 2012-2015).
- Organized two workshops at ASHS annual conferences (2008, 2011).
- Moderated three ASHS workshop (2008, 2011, 2014).
- Attended ASHS annual meetings and made more than 43 presentations at ASHS annual meetings.
- Published 50 papers in three ASHS journals.
- Reviewed more than 50 manuscripts for three ASHS journals.

VI. INTERNATIONAL ACTIVITIES

- Awarded the Ding Ying Guest Professorship by the South China Agricultural University.
- Served on the editorial boards for international/foreign journals.
- Organized and chaired one workshop at the 29th International Horticultural Congress.
- Organized and chaired workshops at the International Conference on Plant and Animal Genomes.
- Invited to give 21 talks/lectures to international researchers, professors, graduate students, and growers at six foreign institutes.
- Advise and supervise two international visiting graduate students and seven international visiting scholars.
- Invited to review manuscripts for 15 international journals.
- Collaborated with five international scholars from four countries.
- Invited to give presentations at seven international conferences.
- Participated in and made 44 presentations at some 21 international conferences.