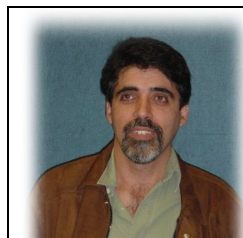


CURRICULUM VITAE

JORGE ALBERTO GONCALVES DA SILVA, PhD.



Plant Breeder, with 33 years of experience in sugarcane genetic breeding research, a Ph.D. degree in Plant Genetic Breeding from Cornell University, in Ithaca (NY), USA, and an M.S. degree in Genetics and Plant Breeding from USP – Universidade de Sao Paulo, Brazil, Piracicaba (ESALQ) and a B.S. in Agronomy from UFRuRJ -Universidade Federal Rural do Rio de Janeiro, Brazil. In 1987 Jorge joined CTC (Centro de Tecnologia Copersucar) in Piracicaba, Sao Paulo, Brazil, as sugarcane genetic breeder where he remained until 2001, when he was offered the position of Associate Professor and leader of the sugarcane program at the Texas A&M University System, Weslaco Center. Jorge stayed at Texas A&M University until 2009, when he accepted the executive position of Sugarcane Breeding Director at Syngenta Crop Protection, in Brazil, to seek most advanced technologies and increase accuracy and speed breeding, including integrated product portfolio in breeding targets, seeking novel approaches to improve breeding. There, Jorge identified and promoted partnership with universities and private sector, involving sugarcane germplasm, genetic breeding, biotechnology and genomics. He also stimulated inter regional interactions with state universities and research agencies to develop Syngenta's Global Sugarcane Research Program. In 2010 the Texas A&M System brought Jorge back to Texas as a Professor, Governor's Office Superiority Hiring, Bioenergy Program, and latter appointed Associate Center Director. In addition to being Associate Center Director, Jorge dedicates his time to the leadership of the Bioenergy Research Program and the interaction with the private sector, involving lead companies such as Chevron Technology Ventures, BP Biofuels, Ceres and the Rio Grande Valley Sugar Growers.

Personal Information

Professor

Texas A&M AgriLife Research – Weslaco Center

Soil and Crop Science Department

Texas A&M University System

2415 East Highway 83 Weslaco, TX – 78.596-8399, USA.

Telephone: (956)969-5623; Fax: (956)969-5620

E-mail: jorge.dasilva@agnet.tamu.edu

Homepage - <http://weslaco.tamu.edu/directory/faculty/jorge-a-dasilva/>

ORCID: <https://orcid.org/0000-0001-7628-5549>

Education

Ph.D. 1993, Plant Breeding, Molecular Biology - Cornell University. Ithaca, NY, USA.

M.Sc. 1987, Genetics and Plant Breeding - ESALQ, Universidade de São Paulo, Piracicaba, São Paulo, Brazil.

B.S. 1983. Agronomy - Universidade Federal Rural do Rio de Janeiro, Brazil.

Professional Experience

2017 – current: Acting Associate Center Director; Texas Governor’s Office Superiority Professor – Plant Breeding; Acting Program Leader - Insect Vector Biology and Vegetables Initiative - Texas A&M AgriLife Research, Weslaco Center;

2011 – 2017: Texas Governor’s Office Superiority Professor, Texas A&M AgriLife Research, Weslaco Center; Soil & Crop Science Department, Texas A&M University System.

2010 – 2011. Texas Governor’s Office Superiority Professor and Associate Center Director - Texas A&M AgriLife Research and Extension Center, Weslaco, TX; Soil & Crop Science Department, Texas A&M University System.

2009- 2010. Director, Sugarcane Breeding – Syngenta Crop Protection. Sao Paulo, Brazil.

2003 – 2009: Associate Professor - Sugarcane Project Leader. Texas AgriLife Research; Soil & Crop Science Dep., Texas A&M University System, Weslaco, TX.

2001 – 2003: Research Scientist - Sugarcane Project Leader. Texas Agricultural Experiment Station; Soil & Crop Science Dep., Texas A&M University System, Weslaco, TX.

1987-2001: Research Scientist, sugarcane genetic breeding. CTC - Centro de Tecnologia Copersucar - Piracicaba, Sao Paulo, Brazil.

1986 – 1987. Agronomist, Copener. Alagoinhas, Bahia, Brazil.

1986. Agronomist. Meridional Planejamentos Agricolas.

Areas of Expertise

- Research & development in sugarcane genetic breeding for sugar and energy production;
- Integration of sugarcane genetic breeding and biotech/crop production
- Gene mapping/tagging of agronomic important traits in sugarcane;
- Development of markers for molecular plant breeding, investigating the relationship between molecular markers and tolerance to biotic and abiotic stresses.

Publications: 48 publications, 18,345 reads, 1,684 citations as of 01/26/22
(<https://www.researchgate.net/profile/Jorge-Da-Silva>)

Book Chapters

1. Mustafa Aljadi, Flavio Breseghello, Linda Brewer, Micaela Colley, **Jorge da Silva**, Julie Dawson, Christine H. Diepenbrock, Francisco F. Fuentes, Luz Rayda Gómez-Pando, Alvina Gul, Karen R. Harris-Shultz, Michael J. Havey, Elliot L. Heffner, David E. Jarvis, Eric N. Jellen, David Jespersen, Lisa Kissing Kucek, Mauricio La Rota, Ying Li, Janet B. Matanguihan, Peter J. Maughan, J. Mitchell McGrath, Euclides Minella, Jesse D. Munkvold, Kevin M. Murphy, James R. Myers, Lee Panella, Andrew H. Paterson, Ryan M. Patrick, Jessica Rutkoski, Julio Isidro Sanchez, Edward Souza, Allen Van Deynze, Ju-Kyung Yu, Long-Xi Yu, Zhengqiang Ma, Jared Zystro. (2019). Mark E. Sorrells: Plant Breeder, Geneticist, Innovator, Mentor. *Plant Breeding Reviews*, 1st Edition. [VitalSource].
<https://online.vitalsource.com/#/books/undefined/>
2. Park, J-W and **da Silva, J.** (2016). Hybridization of Sugarcane and other Grasses for Novel Traits. In: *Compendium of Bioenergy Plants: Sugarcane*. Lam, E., Carrer, E., **Da Silva, J.A.** and Cole, C. (Eds.) CRC Press 129 pp.
3. Brumbley, Steve M., Snyman, Sandy J., Gnanasambandam, Annathurai, Priya, Joyce, Hermann, Scott R., **da Silva, Jorge A. G.**, McQualter, Richard B., Wang, Ming-Li, Egan, Brian T., Patterson, Andrew H., Albert, Henrich H. and Moore, Paul H. (2008). Sugarcane, In: C Kole and T C Hall (Eds.) *A Compendium of Transgenic Crop Plants: Sugar, Tuber and Fiber Crops*, Volume VIII: Sugar, Tuber & fiber Crops. Blackwell Publishing, Oxford, UK.
4. Ming, R., P. H. Moore, K. K. Wu, A. D'Hont, J. C. Glaszmann, T. L. Tew, T. E. Mirkov, **J. da Silva**, J. Jifon, M., Rai, R. J. Schnell, S. M. Brumbley, P. Lakshmanan, J. C. Comstock, A. H. Paterson. (2006). Sugarcane improvement through breeding and biotechnology. *Plant Breeding Reviews* 27:15-118.
5. **Da Silva, J. A. G.** and M. E. Sorrells. (1996). Linkage Analysis in Polyploids using Molecular Markers In: *Methods of Genome Analysis in Plants* ed. P. Jauhar, CRC Press, Boca Raton, Florida. pp 211 - 228.
6. **Da Silva, J. A. G.** and B. W. S. Sobral. (1996). Genetics of Polyploids In: *The Impact of Plant Molecular Genetics* ed. B. Sobral, Birkhauser, Cambridge, Massachusetts, pp. 3-37.

Peer-reviewed Papers

1. Pokhrel, Pramod; Rajan, Nithya; Jifon, John; **Da Silva, Jorge**; Rooney, William L; Jessup, Russell; Enciso, Juan; Attia, Ahmed. (2021). Evaluation of the DSSAT-CANEGRO Model for Simulating the Growth of Energy

- Cane (*Saccharum* spp.), a Biofuel Feedstock. *Crop Sciences*. DOI: 10.1002/csc2.20648. Published Online.
2. Gautam S, Solis-Gracia N, Teale MK, Mandadi K, **da Silva JA** and Vales MI (2021) Development of an in vitro Microtuberization and Temporary Immersion Bioreactor System to Evaluate Heat Stress Tolerance in Potatoes (*Solanum tuberosum* L.). *Front. Plant Sci.* 12:700328. DOI: 10.3389/fpls.2021.700328.
 3. Pramod Pokhrel, Nithya Rajan, John Jifon, William Rooney, Russell Jessup, **Jorge da Silva**, Juan Enciso, Ahmed Attia. (2020). Agronomic Performance of the Lignocellulosic Feedstock Crop Energy Cane in the Texas Rolling Plains. *Agronomy*, 10, 718; DOI:10.3390/agronomy10050718.
 4. Padilla, C.S., Damaj, M.D., Yang, Z-N, Molina, J., Berquist, B.R., White, E.L., Gracia, N.S., **Da Silva, J.**, Mandadi, K.K. (2020). High-Level Production of Recombinant Snowdrop Lectin in Sugarcane and Energy cane. *Front. Bioeng. Biotechnol.*, 8, 977.
 5. Uriel Cholula, **Jorge A. da Silva**, Thiago Marconi, J. Alex Thomasson, Jorge Solorzano and Juan Enciso. (2020). Forecasting Yield and Lignocellulosic Composition of Energy Cane Using Unmanned Aerial Systems. *Agronomy* 2020, 10, 718; DOI:10.3390/agronomy10050718.
 6. **da Silva, J.A.**, Solis-Gracia, N., Jifon, J. et al. (2020). Use of bioreactors for large-scale multiplication of sugarcane (*Saccharum* spp.), energy cane (*Saccharum* spp.), and related species. *In Vitro Cell.Dev.Biol.-Plant*. <https://doi.org/10.1007/s11627-019-10046-y>.
 7. Renesh Bedre, Sonia Irigoyen, Patricia Schaker, Claudia Monteiro-Vitorello, **Jorge DaSilva**, and Kranthi Mandadi. (2019). Genome-wide Alternative Splicing Landscapes Modulated by Biotrophic Sugarcane Smut Pathogen". *Nature Scientific Reports*. <https://doi.org/10.1038/s41598-019-45184-1>.
 8. Andrade, L.M., Peixoto, R.F. Jr., Nóbile, P.M., Brito, M.S., Ribeiro, R.V., Marchiori, P.E.R., Cavallari, S.D.C., Martins A.P.B., Goldman, M.H.S., Llerena, J.P.P., Perecin, C.F.D., Nebó, J.F., De Oliveira, C., Figueira, A.V.O, Bennatti, T., **J.A. Da Silva**, Mazzafera, J.A.P., Creste. (2019). S. Biomass accumulation and cell wall structure of rice plants overexpressing a dirigent-jacalin of sugarcane (ShDJ) under varying water availability. *Front. Plant Sci.* 10:65. DOI: 10.3389/fpls.2019.00065.
 9. Ramasamy, M., Mora V., Damaj, M.B., Padilla, C.S. Ramos, N., Rossi D., Solís-Gracia, N., Vargas-Bautista, C., Irigoyen, S. **Da Silva, J.A.**, Mirkov, T.E., Mandadid, K.K. (2018). A biolistic-based genetic transformation system applicable to a broad-range of sugarcane and energycane varieties. *GM Crops and Food*. <https://doi.org/10.1080/21645698.2018.1553836>.
 10. Fernandez, C.J., **Da Silva, J.A.**, Correa, J.C., Grichar, W.J. (2018). Biomass Production and Water Economy of Sugarcane and Energy Cane Genotypes Grown in Water-Deficient and Well-watered Regimes. *Journal of*

Experimental Agriculture International 20(1): 1-15.

DOI:[10.9734/JEAI/2018/38309](https://doi.org/10.9734/JEAI/2018/38309)

11. Elsayed-Farag, S., Silva, M. Solis-Gracia, N. Enciso, J., **Da Silva, J.** (2018). An agronomic approach to screen sugar and energy cane genotypes for drought tolerance. *Afr. J. Agric. Res.* V.13(23):1220-26. DOI:[10.5897/AJAR2018.13144](https://doi.org/10.5897/AJAR2018.13144).
12. Yang, Y, Wilson, L.T., Jifon, J., Landivar, J, **Da Silva, J. A.**, Maeda, M., Wang, J., Christensen, E. (2018). Energycane Growth Characteristics and Yield Potential along the Texas Gulf Coast. *Biomass and Bioenergy*, 113 :1-14. <https://doi.org/10.1016/j.biombioe.2018.03.003>.
13. **Da Silva, J. A.**; Costa, P.M.A.; Marconi, T.G.; Barreto, E.J. S.; Gracia, N.S.; Park, J.W.; Glynn, N.C. (2018). Agronomic and Molecular Characterization of Wild Germplasm (*Saccharum spontaneum*) for Sugarcane and Energycane Breeding Purposes. *Scientia Agricola. Sci.* v.75, n.4: 329-338.
14. **Da Silva, J. A.** The Importance of the Wild Cane *Saccharum spontaneum* for Bioenergy Genetic Breeding. A Review. (2017). *Sugar Tech* 19: 229. DOI: [10.1007/s12355-017-0510-1](https://doi.org/10.1007/s12355-017-0510-1).
15. Dos Santos, F.R.C., Zucchi, M.I., Park, J-W, Benatti, T.R., **da Silva, J.A.**, Souza, G.M., Pinto, L.R. (2017). New Sugarcane Microsatellites and Target Region Amplification Polymorphism Primers Designed from Candidate Genes Related to Disease Resistance. *Sugar Tech.* Volume 19, 2: 219–224. DOI [10.1007/s12355-016-0457-7](https://doi.org/10.1007/s12355-016-0457-7).
16. Arro, J., Park, J-W., Wai, C.M., VanBuren, R., Pan, Y-B, Nagai, C., **da Silva, J.**, Ming, R. (2016). Domestication of autopolyploid sugarcane (*Saccharum officinarum* L.) was attributed to balancing selection. *Euphytica*. DOI: [10.1007/s10681-016-1672-8](https://doi.org/10.1007/s10681-016-1672-8).
17. Park, J., Benatti, T., Marconi, T., Yu, Q., Gracia, N. S., Mora, V., **da Silva, J.** (2015). Cold Responsive Gene Expression Profiling of Sugarcane and *Saccharum spontaneum* with Functional Analysis of a Cold Inducible *Saccharum* Homolog of NOD26-Like Intrinsic Protein to Salt and Water Stress. *PLoS ONE* 10(5): e0125810. doi:[10.1371/journal.pone.0125810](https://doi.org/10.1371/journal.pone.0125810).
18. Pedrozo, C.A. Jifon, J., Barbosa, M.H., **da Silva, J.A.**, Park, J.-W. and Gracia, N.S. (2015). Differential, Morphological, Physiological and Molecular Responses to Water Deficit Stress in Sugarcane. *Journal of Plant Breeding and Crop Science.* Vol. 7 (7): 226-233. DOI: [10.5897/JPBCS2015.0500](https://doi.org/10.5897/JPBCS2015.0500).
19. Monge, J.J., Ribera, L.A., Jifon, J.L., **da Silva, J.A.** and Richardson, J.W. (2014). Economics and Uncertainty of Lignocellulosic Biofuel Production from Energy Cane and Sweet Sorghum in South Texas. *Journal of Agricultural and Applied Economics*, 46, 4 (November 2014): 457–485.

20. Silva, M. de A.; Jifon, J. L.; **Da Silva, J. A. G.**; Dos Santos, C. M.; Sharma, V. (2014). Relationships between physiological traits and productivity of sugarcane in response to water deficit. *Journal of Agricultural Science*, v. 152, p. 104-118.
21. Silva, M. A., Jifon, J.L., Santos, C.M, Jadoski, C.J. and **da Silva, J.A.** (2013). Photosynthetic Capacity and Water Use Efficiency in Sugarcane Genotypes Subject to Water Deficit During Early Growth Phase. *Braz. Arch. Biol. Technol.* v.56 n.5: pp. 735-748.
22. Park, J-W., Gracia, N.S. Trevino, C., and **da Silva, J.A.** (2011). Exploitation of Conserved Intron Scanning as a Tool for Molecular Marker Development in the Saccharum Complex. *Molecular Breeding*, DOI: 10.1007/s11032-011-9683-6.
23. Silva, M. A.; Jifon, J.; Sharma V.; **da Silva**, Jorge Alberto; Caputo, M. M.; Damaj, M.; Guimarães, E. R.; Ferro, M.I.T. (2011). Use of Physiological Parameters in Screening Drought Tolerance in Sugarcane Genotypes. *Sugar Tech*, v. 13, p. 191-197.
24. Hodnett, G.L., Hale, A.L., Packer, D.J., Stelly, D.M., **da Silva, J.** and Rooney, W. L. (2010). Elimination of a Reproductive Barrier Facilitates Intergeneric Hybridization of Sorghum bicolor and Saccharum. *Crop Science*, vol. 50: 1-8.
25. Zhou, M.M. Kimbeng, C. A., **da Silva, J.A.** and White, W. H. (2010). Cross-resistance between the Mexican Rice Borer and the Sugarcane Borer (Lepidoptera: Crambidae): A Case Study Using Sugarcane Breeding Populations. *Crop Science*, vol. 50: 861-869.
26. Lam, E., J. Shine Jr, **J. da Silva**, M. Lawton, S. Bonos, M. Calvino, H. Carrer, M. C. Silva-Filho, N. Glynn, Z. Helsel, J. Ma, E. Richard Jr., G. Souza, R. Ming. (2009). Improving Sugarcane for Biofuel: Engineering for an even better feedstock. *Global Change Biology Bioenergy* 1:251-255.
27. Kimbeng, C., Zhou M., and **da Silva J.** (2009). Genotype x Environment Interactions and Resource Allocation in sugarcane Yield Trials in the Rio Grande Valley of Texas. *Journal of American Soc. Sugar Cane Tech.* 29:11-24.
28. **Da Silva J.A.**, Solís-Gracia N., Silva P.R. and Mehkri F.M. (2008). Sugarcane Variety Identification through DNA Fingerprinting with Microsatellites Markers. *Subtropical Plant Science* 60: 1-7.
29. Guimarães E.R.; Mutton M.A.; Mutton M.J.R.; Ferro M.I.T.; Ravanelli G.C. and **da Silva J.A.** (2008). Can compatible solutes be used to measure spittlebug infestation stress in sugarcane? *Sci. Agric.:* 27-36.
30. Silva M. A., J. L. Jifon, **J A.G. da Silva**, Juan Enciso; V. Sharma and John Jifon. (2008). Yield components as indicators drought tolerance of sugarcane. *Sci. Agric.* 65, 6: 620-627.

31. Guimarães E.R., Mutton M.A., Mutton M.J.R., Ferro M.I.T., Raveloni G.C., Da Silva J.A. (2008). Free proline accumulation in sugarcane under water restriction and spittlebug infestation. *Sci. Agric.* 65 (6), 628-633.
32. Silva, M. A., J. L. Jifon, **J A.G. da Silva** and V. Sharma. (2007). Use of physiological parameters as fast tools to screen for drought tolerance in sugarcane. *Braz. J. Plant Physiol.*, 19(3):193-201.
33. Outlaw, J. L., Ribera L. A., Richardson J. W., **da Silva J.** Bryant H., and Klose S. (2007). Economics of Sugar-Based Ethanol Production and Related Policy Issues. *Journal of Agricultural and Applied Economics* 39, 2: 357-363.
34. **Da Silva, J.A.**, Veremis, J. and Solís-Gracia, N. (2007). *Saccharum spontaneum* Gene Tagging by Markers developed from Sugarcane Expressed Sequence Tags. *Journal of the Subtropical Plant Science* 58:6-14.
35. **Da Silva J.A.** W. H. White, N. Solis-Gracia and M. Setamou. (2007). A Molecular Approach to Breeding Sugarcane for Borer Resistance. *Sugar Cane International*, 25 (2): 22-25.
36. Bressiani J.A., Sanguino Á., Burnquist W.L, Vencovsky R., and. **da Silva J.A.** (2007). Breeding sugarcane for leaf scald resistance: a genetic study. *Journal of the American Society of Sugar Cane Technologists*, 27:15-22.
37. **Da Silva J.A.** and N. Solís-Gracia. (2006). Development of Simple Sequence Repeat Markers from Genes Related to Stress Resistance in Sugarcane. *Journal of Subtropical Plant Science* 58:5-11.
38. Bressiani J.A., **J.A da Silva.**, R. Vencovsky; R.A. Sordi and W.L. Burnquist. (2006). Combining High Yields of Cane and Sucrose in Sugarcane through Recurrent Selection. *Journal ASSCT* Vol. 26: 26-37.
39. Garcia A. A. F., E. A. Kido, A. N. Meza, H. M. B. Souza, L. R. Pinto, M. M. Pastina, C. S. Leite, **J. A. G. da Silva**, E. C. Ulian, A. Figueira, A. P. Souza. (2006). Development of an integrated genetic map of a sugarcane (*Saccharum spp.*) commercial cross, based on a maximum-likelihood approach for estimation of linkage and linkage phases. *Theor. Appl. Genet.* 112: 298–314.
40. **Da Silva, J. A.** and J. A. Bressiani. (2005). Sucrose Synthase EST-derived RFLP marker associated to sugar content in elite sugarcane progeny. *Genetics and Molecular Biology* 28, 2: 294-298.
41. Scott, A., **J. A. da Silva**, N. Rozeff, E. Hernandez, B. L. Legendre and J. D. Miller. (2005). Registration of ‘TCP89-3505’ Sugarcane. *Crop Science* 45:2120.
42. Bressiani, J. A; R. Vencocsky; **Da Silva, J. A. G.** (2003). Repeatability within and Between Selection Stages in a Sugarcane Breeding Program. *Journal ASSCT*, Vol. 23: 40-47.

43. **Da Silva, J. A. G.** (2001). Preliminary Analysis of Microsatellite Markers derived from Sugarcane ESTs. *Genetics and Molecular Biology* 24 (1-4): 155-159.
44. Ripol, M. I.; Churchill, G. A.; **Silva, J. A. G. da**; Sorrells, M. (1999) Statistical aspects of genetic mapping in autopolyploids. *Gene* 235 (1/2): 31 – 41.
45. Ming, R.; S.C. Liu, Y.R. Lin, **J. da Silva**, W. Wilson, D. Braga, A. van Deynze, T. F. Wenslaff; KK Wu; P. H. Moore, W. Burnquist, M. E. Sorrells, J. E. Irvine, A. H. Paterson. (1998). Detail alignment of *Saccharum* and *Sorghum* chromosomes: Comparative organization of closely related diploid and polyploid genomes. *Genetics* 150: (4) 1663-1682.
46. **Da Silva, J. A. G.**; R. J. Honeycutt; W. L. Burnquist; S. M. Al-Janabi; M. E. Sorrells; S. D. Tanksley, and B.W. S. Sobral. (1995). *Saccharum spontaneum* L. ‘SES 208’ genetic linkage map combining RFLP- and PCR-based markers. *Molecular Breeding* vol. 1 (2) 165 - 179.
47. **Da Silva, J. A. G.**; M. E. Sorrells, W. L. Burnquist and S. D. Tanksley. (1993). RFLP linkage map and genome analysis of *Saccharum spontaneum*. *Genome* 36: 782 - 791.
48. **Da Silva, J. A. G.** (1993). A Methodology for Genome Mapping of Autopolyploids and its Application to Sugarcane (*Saccharum* spp.). *Ph.D. Dissertation, Cornell University*. 108 pp.

Peer-reviewed Posters

1. Bedre, R., Irigoyen, S., Schaker, P.D.C., Monteiro-Vitorello, C.B., **Da Silva, J.A.**, and Mandadi, K.K. (2019). Characterization of Alternative Splicing Patterns Modulated by Biotrophic Smut Pathogen in Sugarcane. *Plant and Animal Genome XXVII Conference*, January 12-16, San Diego, CA.
2. Andrade, L.M., Benatti, T.R., Mobile, P.M., Goldman, M.H., Figueira, A., Marin, A., Brito, M.S., **Da Silva, J.**, Creste, S. (2014). Characterization, Isolation and Cloning of Sugarcane Genes Related to Drought Stress. *BMC Proceeds*. <http://www.biomedcentral.com/1753-6561/8/S4/P110>.
3. **Da Silva, J.A.**, Solis-Garcia, N. (2003). Tagging Resistance Genes with Sugarcane EST-Derived Microsatellites. *Plant & Animal Genomes XI Conference*. http://www.intl-pag.org/pag/11/abstracts/W26_W185_X185_XI.html.
4. **Da Silva J.**, Ulian, E. (2001). Applying Molecular Markers to Sugarcane Breeding. http://www.intl-pag.org/pag/9/abstracts/W30_09.html.
5. **Da Silva, J.A.G.**, Sorrells, M.E., Burnquist, W.L., Tanksley, S.D.(1992). Sugarcane Genome Analysis by Means of Restriction Fragment Length Polymorphisms. Plant Genome I Conference. <http://www.intl-pag.org/pag/1/abstracts/134pg1.html>.

Technology Transfer

- In charge of Organizing educational events among sugarcane growers through Sugarcane Field Days for the Rio Grande Valley Sugar Growers Cooperative.

Invention Disclosures

1. TAMUS-4166 - “Modifying Lipid Transport by Activating or Modulating Mitochondrial Uncoupling”. Inventors: Martha K. N. Rogers, Richard Tobin and **Jorge A. da Silva**. Provisional Application No.62/084, 212 November 25, 2014.
2. TAMUS-4121 - “Controlled Gene Expression in Plants Against Various Unfavorable Growth Conditions”. Inventors: Jong-Won Park, **Jorge A. da Silva** and Quingyi Yu.
3. TAMUS – 4040 – “Saccharum sp. Homolog of Nodulin 26-like Protein Confers Salt Stress Tolerance in Plants. Inventors: Jong-Won Park, **Jorge A. da Silva** and Thiago Benatti.
4. TAMUS-3483 - “TUS11-1 (Sorghum x Miscanthus Hybrid)”
Breeder/ Inventors (s): George Hodnett, **Jorge A. da Silva**, and Bill Rooney
5. TAMU 3475 - “Plant Variety/Germplasm Disclosure TCP99-4474”. Breeder/
Inventors: **Jorge A. da Silva**
6. TAMU 3162 - “Selection of Eleven Superior ‘Energy Cane’ Genotypes”. Inventors: Nael El-Hut, **Jorge A. da Silva** Vivek Sharma
7. TAMU-3160 - “Target Region Amplified Polymorphism (TRAP) Markers for Lignin Composition in *Miscanthus* species”. Inventors: **Jorge A. da Silva** and Jong-Won Park
8. TAMU-3159 - “Conserved Intron Scanning Primers (CISP) Markers for Lignin Composition”. Inventors: **Jorge A. da Silva** and Jong-Won Park

Plant Variety Releases

1. Registration of ‘TCP98-4454’ Sugarcane. Accepted after revisions by the TAMU Plant Release Committee. Submitted to Journal of Plant Registration.
2. Registration of ‘TCP89-3505’ Sugarcane. 2005. Crop Science 45:2120.

Plant Variety Patents

1. Plant Variety Disclosure of TUS05-5, Cold Tolerant Miscane - Sugarcane x Miscanthus Germplasm. (Office of Technology Commercialization - 12/11/07).
2. Plant Variety Disclosure of TUS05-8, Cold Tolerant Miscane - Sugarcane x Miscanthus Germplasm. (Office of Technology Commercialization - 04/11/08).

Awards

Jorge has been recognized for his excellence in research, being granted the immigrant status as an Outstanding Researcher/Professor by the US government. He has also received the following awards:

The Denver T. Loupe Best Presentation at the 2003 32nd. Joint Meeting of the American Society of Sugar Cane Technologists – ASSCT.

The Denver T. Loupe Best Presentation at the 2005 34th. Joint Meeting of the American Society of Sugar Cane Technologists – ASSCT.

Grants Funded

1. Novel Perennial Native Grasses for Sustainable Multiple Uses: Bioenergy, CRP, Wildlife and Forages. Sponsored by Sun Grant Initiative - South Central Region. Total Amount: \$342,033, da Silva's part: \$19,719,
2. Temporary Immersion Bioreactors in potato sponsored by Texas A&M AgriLife Research. Sponsored by Texas A&M AgriLife Research & Extension Center. Amount Funded: US\$10,000.
3. Pilot Study Application of Temporary Immersion Bioreactors in Hemp. Sponsored by Texas A&M AgriLife Research & Extension Center. Amount Funded: US\$10,000.
4. Genetic Breeding of Sugarcane/Energy Cane. Texas A&M AgriLife Research. Bioenergy/Bioproducts Seed Grant. Program FY'16-FY'17. PI: **Jorge Da Silva** Amount Funded: US\$200,000.
5. Sugarcane as Feedstock for High Value Bioproducts and Hydrocarbon Biofuels. Bioenergy/Bioproducts Seed Grant. Program FY'16-FY'17. PI: Susie Dai; Co-PI: **Jorge Da Silva** et al. Amount Funded: US\$160,000.
6. Genomics-enabled Targeted Trait Improvement of Sugarcane and Energy cane. Bioenergy/Bioproducts Seed Grant. Program FY'16-FY'17. PI: Kranthi Mandadi. Co-PIs: **Jorge Da Silva** et al. Amount Funded: US\$140,000.
7. A Water and Risk Management Tool for Sustainable Production of Bioenergy Feedstocks. USDA-AFRI-NIFA-004029: Sustainable Bioenergy Program: Impacts of Regional Bioenergy Systems on Water Availability and Quality. PIs: Jifon, J., L. Ribera, R. Taylor, **Jorge Da Silva** et al. (2013 -2016). Amount Funded: US\$973,000.
8. Perennial Energy Grass Breeding Program (2012 - 2014). BP Biofues. PIs: **Jorge da Silva**, Russell W. Jessup and John Jifon. Total funded: \$1,576,385; da Silva's portion funded: US\$689,000.
9. Evaluation of New Gen II Feedstocks for Biofuels (2012 – 2015). Chevron Technology Venture. PIs: Bob Avant, Adam Helms, Juan Landivar, **Jorge Da Silva**, John Jifon, Jaime Foster, Yubin Yang, Ted Wilson, Luis Ribera Total funded: \$3,930,000; **da Silva's** portion: US\$720,000.
10. Intergeneric Hybridization of Sorghum, Sugarcane, and Miscanthus to Create and Enhance Energy Feedstock Productivity. Ceres Inc. (2011- 2015). PIs: William L Rooney, David Stelly and George L. Hodnett. Co-PIs: **Jorge da Silva** and Patricia Klein. Total funded: \$1,718,960; da Silva's portion: US\$374,000.
11. Regional Adaptability and Quality of Lignocellulosic Bioenergy Feedstocks for South Central States. PI John Jifon; Co-PI: **Jorge da Silva** - South Central Sun Grant. Total requested: US\$388,000.
12. Sugarcane Variety Improvement. PI: **Jorge da Silva** (2013). RGVSG - Rio Grande Valley Sugar Growers, Inc. Total funded: US\$130,000.

13. Sugarcane Variety Improvement. PI: **Jorge da Silva** (2012). RGVSG - Rio Grande Valley Sugar Growers, Inc. Total funded: US\$100,000.
14. Sugarcane Variety Improvement. PI: **Jorge da Silva**. 2010. RGVSG - Rio Grande Valley Sugar Growers, Inc. Total funded: US\$67,000.
15. Bioenergy Research Superiority (2010 – 2014). PIs: Mike Gould and **Jorge da Silva**. Office of The Governor's Office, Emerging Technology Fund (ETF), Superiority Hiring. Total funded \$1,250,000; da Silva's portion: US\$1,250,000.
16. Lignocellulosic Feedstock Development for Gen II Biofuels. 2007. PIs: Mike Gould, John Mullet. Co-PIs: Bill Rooney, Martin Dickman, Patricia Klein, **Jorge da Silva**, T. Erik Mirkov, Ted Wilson. Chevron Technology Ventures. Total funded: US\$5,411,905; da Silva's portion: US\$1,807,000.
17. Novel Bioenergy Crops through Hybridization of Sorghum, Sugarcane and Energycane. PI: W.L. Rooney. Co-PIs: **Jorge da Silva**, David Stelly and George Rodnett. 2007. TAES Bioenergy Program. Amount funded: Total - \$230,000; da Silva's portion - US\$70,000.
18. Sugarcane Hybridization for Sugar & Ethanol. PI: **Jorge da Silva**, United States Sugar Corporation. U S Sugar Inc. Amount funded: Total US\$231,000.
19. Sugarcane Variety Improvement. 2008. PI: **Jorge da Silva**. Rio Grande Valley Sugar Growers, Inc. Amount funded: Total -US\$90,000.
20. Sugarcane Variety Improvement. 2007. PI: **Jorge da Silva**. Rio Grande Valley Sugar Growers, Inc. Amount funded: Total US\$105,000.
21. Sugarcane Variety Identification with Molecular Markers. 2006. PI: **Jorge da Silva**. Rio Grande Valley Sugar Growers, Inc. Amount funded: Total US\$20,000.
22. Sugarcane Variety Improvement. 2006. PI: **Jorge da Silva**. Rio Grande Valley Sugar Growers, Inc. Amount funded: Total US\$80,000.
23. Evaluation of Novel Molecular Markers for *S. spontaneum* Germplasm Characterization on Sugar Composition. 2006. PIs: Jorge da Silva and John Veremis. USDA – Crop Germplasm Committee, Sugarcane. Amount funded: US\$10,000
24. Sugarcane Variety Improvement. 2005. PI: **Jorge da Silva**. Rio Grande Valley Sugar Growers, Inc.
25. Integrated Past Management in Sugarcane. 2005. PIs: John da Graca and **Jorge da Silva**. Rio Grand Valley Sugar Growers, Inc.
26. Sugarcane Variety Improvement. 2004/2005. PI: **Jorge da Silva**. Rio Grande Valley Sugar Growers, Inc.
27. Breeding Sugarcane for Mexican Rice Borer Resistance, Continued 2004. PIs: **Jorge da Silva** and William White. American Sugar Cane League.

28. Sugarcane Variety Improvement. 2003. PI: **Jorge da Silva** Rio Grande Valley Sugar Growers, Inc.
29. Early Selection for Water Stress Tolerance in Sugarcane Breeding. 2003. PI: **Jorge da Silva**. Texas Water Resources Institute.
30. Breeding Sugarcane for Mexican Rice Borer Resistance. 2003. PIs: **Jorge da Silva** and William White. American Sugar Cane League
31. Sugarcane Variety Improvement. 2002. PI: **Jorge da Silva**. Rio Grande Valley Sugar Growers, Inc.
32. Mapeamento Genético de Caracteres Quantitativos em Cana-de-açúcar. 2000 - 2003. PI: **Jorge da Silva**. Ministério da Ciência e Tecnologia PADCTIII.
33. Microsatellite Data mining 2000 – 2001. PI: Jorge da Silva. FAPESP – Fundação de Amparo a Pesquisa do Estado de São Paulo. Awards Received.

Consulting

CTC – Centro de Tecnologia Canavieira. Invited to review CTC's genetic breeding program. Piracicaba, Sao Paulo, **Brazil**. June 2012.

Syngenta Biotechnology Inc. – Global Evaluation of Sugarcane Technology and Breeding Programs. May – December, 2008.

E. I. Du Pont de Nemours and Company - Sugarcane Genetic Breeding and Biotechnology. August 2006 – August 2007 – Evaluation of Canavialis Sugarcane Program. Campinas, Sao Paulo, **Brazil**.

CAP – IAC – Centro de Coordenação de Pesquisa do Instituto Agrônomo de Campinas. Research Projects Review for Funding. March 8, 1999.

ESCA Engenharia de Sistemas de Controle e Automação S.A.

Settlement of families in Alcantara, MA, Brazil. March – April/1986.

Fazenda Abaira, Wagner, BA, Brazil. Farm planning. 1983 – 1984

Languages:

English: fluent. English Courses: First Certificate in English. Cultura Inglesa, 1981

Spanish: reads, understands;

Portuguese: mother language.

International Involvement

- Advisor Sugarcane industry in Sudan
- Member of the Editorial Board of the international, open access, peer reviewed journal The Scientific Pages of Crop Science.

- Member of the Editorial Board of the international, peer reviewed journal Crop Breeding, Genetics and Genomics.
- Chairperson Workshop Sugarcane Production, 6th. International Congress of Crop Science. Bento Goncalves, Rio Grande do Sul, Brazil, August 6-10, 2012.
- Reviewer for Tropical Plant Biology.
- Reviewer of CTC – Centro de Tecnologia Canavieira- sugarcane breeding program

National Involvement

- Associate Editor for Crop Sciences, Crop Sciences Society of America;
- Associate Editor for Journal of Plant Registrations, Crop Sciences Society of America;
- Texas A&M University - AgriLife Tenure and Promotion Committee Member;
- USDA Crop Germplasm Committee - Sugarcane - Member representing Texas: C 852.16 2008 – current;
- Editorial Board Member Crop Breeding, Genetics and Genomics
- Co-Editor Compendium of Bioenergy Plants: Sugarcane. Contract signed with Science Publishers, New Hampshire, USA;
- Editor for The Scientific Pages of Crop Science;
- Member Editorial Board of Crop Breeding, Genetics and Genomics;
- Review of Book Proposal for Springer “Sugarcane Biotechnology: Challenges and Prospects” by Dr. Chakravarthi Mohan.

Training

Leadership: Texas A&M AgriLife Emerging Leaders Conference

IR4 Project: Good Laboratory Practice - Provided by IR-4 Southern Region Field Coordinator
Janine Spies

Recent Conference Presentations:

Cholula, U., da Silva, J.A, Marconi, T.G., Diaz, J S, Enciso, J. New High Yield Energy Cane Germplasm and its Yield Prediction Using Unmanned Aerial System at the 2019 American Society of Agronomy, Crop Science Society of America, Soil Science Society of America Annual Meeting, San Antonio, Texas, USA.

“Can we break the sugar content Plateau and create cold resistant sugarcane by Crossing with *S. spontaneum*?” at the 2015 American Society of Agronomy, Crop Science Society of America, Soil Science Society of America Annual Meeting, Minneapolis, Minnesota.

“Using Next Generation Sequencing for tagging stress resistance genes from *S. spontaneum*” at the *International Consortium of Sugarcane Biotechnology Workshop*. XXIII Plant & Animal Genome Conference, San Diego, USA. 01/11/2015.

“Using NGS to Explore the Wild Side of Sugarcane. *III Workshop on Sugarcane Physiology for Agronomic Applications*. Campinas, Brazil. 12/2/2014.

“Genomic Tools for Cane Wide Hybrids as Energy Feedstock”. *Bioenergy Grass Genomics*. Plant & Animal Genome XX, San Diego, CA, USA. 01/14/2012.

“New Energy Cane – Miscane Hybrids”. *Pacific Rim Summit on Industrial Biotechnology and Bioenergy*. Vancouver, Canada – 09/11/2008.

“Melhoramento molecular da cana-de-açúcar visando tolerância a estresse com vistas à bio-energia”. “*WORKSHOP TECNOLÓGICO SOBRE MELHORAMENTO GENÉTICO E BIOTECNOLOGIA*” Projeto PPPP Etanol - FAPESP. 06/ 28/2007 - Centro Citricultura – Cordeirópolis, Brazil.

Invited Presentations:

Plant & Animal Genome XXIII, January, 2015. Intl. Cons. of Sugar Cane Biotechnology – ICSB Workshop. Using Next Generation Sequencing for tagging stress resistance genes from *S. spontaneum*.

Plant & Animal Genome XIX, January 15-19, 2011. “Development of New Intergenic Cane Hybrids - Miscanes - as a Source of Feedstock for Biofuel Production. Jorge da Silva.

“Energy Cane and Miscane” at TAMU, Centeq Bldg. for Case New Holland Visitors February 18, 2008.

“BioFuels: Feedstock Production”.at the MVC Biology Club Horticultural Seminar Series – South Texas College – April 9, 2008.

“BioFuels: Feedstock Production” at the 62nd. Annual Meeting of the Rio Grande Valley Horticultural Society – January 30, 2008. Texas A&M University – Kingsville Citrus Center. Weslaco, TX.

“Sweet Fuel for the U.S.” at the Symposium-Agronomic Aspects of Biofuels Crop Production: I; ASA ASA-CSSA-SSSA 2007 International Annual Meetings - November 4-8, 2007. New Orleans, LA.

“New Markers from Sugar Metabolism ESTs” at the USDA – Crop Germplasm Committee meeting – Sugarcane, 2007 held at the USDA, ARS, SRRC - Sugarcane Research Unit, Houma, LA.

Participation in Search Committees:

Chairman of Search Committee for Associate Professor/Professor Agronomist position at the AgriLife Research, Weslaco.

Member of Search Committee for the tenure-track faculty position on Plant Redox Biochemistry at the College of Agriculture and Life Sciences, Texas A&M University.

Member of Search Committee for the tenure-track faculty position on Plant metabolism/Metabolic Engineering at the College of Agriculture and Life Sciences, Texas A&M University.

Member of Search Committee for the tenure-track faculty position on Plant Molecular Genetics at the College of Agriculture and Life Sciences, Texas A&M University.

Member of Search Committee for the tenure-track faculty position on Bioinformatics/Computational Biology at the College of Agriculture and Life Sciences, Texas A&M University

Member of Search Committee for the Assistant Professor position in Plant Molecular Biologist at the AgriLife Research, Weslaco.

Member of Search Committee for Assistant Professor of Quantitative Genetics at the Soil & Crop Science Department, College of Agriculture and Life Sciences, Texas A&M University.

Member of Search Committee for Assistant Professor in Plant Pathology at the AgriLife Research, Weslaco.

Congress Proceedings

Silva, M.A., **J.A. Da Silva**, S. Vivek and J.L. Jifon, 2007. Evaluation of yield components as indicators of drought tolerance in sugarcane. XXVI International Society of Sugar Cane Technologists (ISSCT) Congress, Durban, South Africa, July 29-Aug. 2, 2007; Proc. & Abstracts.

Silva, M.A., J.L. Jifon, S. Vivek and **J.A. Da Silva**. 2007. Standardizing Paraquat as a Selection Tool for Drought Tolerance in Sugarcane. 61st Annual Meeting of the Rio Grande Valley Horticultural Society, Jan 30, 2007, Univ. of Texas-Pan American, Edinburg, TX.

Bressiani J.A., Zucchi M.I.; Colombo C.A., **Da Silva J.A.G.**, Vencovsky R., Landell M.G.A, Burnquist W.L., Ulian E.C. 2007. Proc. Int. Soc. Sugar Cane Technol.-ISSCT XXVI Congress. Accepted as full paper.

Ribera L. A., J L. Outlaw, J. W. Richardson, **J. Da Silva**, and H. Bryant. 2007“Mitigating the Fuel and Feed Effects of Increased Ethanol Production Utilizing Sugarcane: A Risk Based Feasibility Analysis.” Selected Paper, Biofuels, Food & Feed Tradeoffs Conference. St. Louis, Missouri, April 12-13, 2007

*Guimares E.R., Mutton M.A., Ferro, M.I.T.; **Silva, J.A.**; Mutton, M.J.R.; Kalaki, D.B.; Madaleno, L.L. 2007. Evidence of sugarcane Resistance against *Mahanarva fimbriolata* (STÅL, 1854) (Hemiptera A:Cercopidae). Proc. Int. Soc. Sugar Cane Technol.-ISSCT XXVI Congress. Accepted.

White, W. H. and **J. A. da Silva**. 2006. Cross resistance in sugarcane to the Mexican rice borer and the sugarcane borer (Lepidoptera: Crambidae) In: International Society of Sugar Cane Technologists, 6th Entomology Workshop. 15 May - 20 May 2006, Cairns, Australia.

da Silva J. A., W. H. White, N. Solis-Gracia and M. Setamou. 2005. A Molecular Approach to Breeding Sugarcane for Borer Resistance. Proc. Int. Soc. Sugar Cane Technol.-ISSCT Silver Jubilee Congress, 487 - 492. Guatemala.*

José A. Bressiani, Á. Sanguino, W. L. Burnquist R. Vencovsky and **J. A. G. da Silva**. 2005. Breeding Sugarcane for Leaf Scald Resistance: a Genetic Study. Proc. Int. Soc. Sugar Cane Technol.-ISSCT Silver Jubilee Congress, 474 - 480. Guatemala.

da Silva, J. A. G., E. C. Ulian, C. F. Barsalobres. 2001. Development of EST-derived RFLP markers for Sugarcane Breeding. Proc. Int. Soc. Sugar Cane Technol.- ISSCT XXIV Congress, 24: 318-322. Australia.

Congress/Meeting Presentation

da Silva, J.A. Sweet Fuel for Texas. In: 62nd. Rio Grand valley Horticultural Science Annual Conference – January 30, 2008.

Luis Ribera, Joe Outlaw, James Richardson and **Jorge Da Silva**. Mitigating Fuel and Feed Effects of Increased Ethanol Production Utilizing Sugarcane. In: Biofuels, Food and Feed Tradeoffs – April 12-13, 2007. St. Louis, Missouri.

Jorge A. da Silva, John Veremis and Nora Solís-Gracia. 2006. New Markers from Sugar Metabolism ESTs. Paper presented at the 5th. International Society of Sugar Cane Technologists, ISSCT - Molecular Biology Workshop held in Mauritius from 3-7 April, 2006.

da Silva, J.A. J. Veremis and N. Solís-Gracia¹ 2006. New Markers from Sugar Metabolism ESTs. Vth ISSCT Molecular Biology Workshop. Réduit, Mauritius

Bressiani, J.A., R. Vencovsky, W.L. Burnquist 2005. Modified Sequential Selection in Sugarcane. Proc. Int. Soc. Sugar Cane Technol.-ISSCT Silver Jubilee Congress, 459-467. Guatemala.

da Silva J. A. and Gracia 2003. Tagging Resistance Genes with Sugarcane EST-Derived Microsatellites. Plant & Animal Genome XI. 2003. Town & Country Hotel. San Diego, CA, USA.

Pinto, Luciana Rossini; Oliveira, Karine M de ; Souza, A. P.; Ulian, Eugênio Cesar ; **da Silva, Jorge Alberto Gonçalves**. 2003. Caracterização de Microsatélites no Banco de Dados do SUCEST. In: 2 Congresso Brasileiro de Melhoramento de Plantas, 2003, Porto Seguro. CD Rom T063. Porto Seguro: Sociedade Brasileira de Melhoramento de Plantas.

da Silva, J. and E. Ulian. 2001. Applying Molecular Markers to Sugarcane Breeding. Plant & Animal Genome IX Conference. Town & Country Hotel, San Diego, CA, January 13-17, 2001.

Meza, Andréia Navarro; Leite, Cynthia Saraiva; **da Silva, Jorge Alberto Gonçalves**; Souza, A. P. 2001. Mapeamento genético de uma variedade comercial (híbrido específico) de cana-de-açúcar através de RFLP. In: 47 Congresso Nacional de Genética, , Águas de Lindóia. CD-rom. Ribeirão preto: Associação Brasileira de genética p. 1030.

Meza, Andréia Navarro; **da Silva, Jorge Alberto Gonçalves**; Souza, A. P. 2000. Mapeamento genético de uma variedade comercial de cana-de-açúcar através de RFLP. In: Congresso Nacional de Genética, 2000, Águas de Lindóia. Genetics and Molecular Biology. Ribeirão Preto : Sociedade Brasileira de Genética. v. 23.

da Silva, J. A. G.; J. A. Bressiani e W. L. Burnquist. 1997. Uso de Marcadores Moleculares para Escolha de Cruzamentos. VII Seminário de Tecnologia Agronômica, Centro de Tecnologia Copersucar 18 - 24.

da Silva, J. A. G.; M. E. Sorrells, W. L. Burnquist and S. D. Tanksley. 1992. Sugarcane (*Saccharum spontaneum*) Genome Analysis by means of Restriction Fragment Length Polymorphisms. Plant Genome I. 1992. p 47. Town & Country Hotel San Diego, CA, USA.

Abstracts

Andrade, L.M., Benatti, T.M. Nobile, P.M., Goldman, M.H., Figueira, A., Alzate, A.L. Brito, M.M. **da Silva, J.** and Creste, S. 2014. Characterization, isolation and cloning of sugarcane genes related to drought stress. BMC proceedings 8(Suppl 4):P110-P110.

White, W.H. and **da Silva, J.A.** 2006. Cross Resistance in Sugar Cane to the Mexican Rice Borer and the Sugarcane Borer. VI ISSCT Entomology Workshop. Cairn, Australia and Ramu, Papua New Guinea

da Silva, J. A. and J. A. Bressiani. 2002. Characterization of *S. spontaneum* collection for juice quality. Sugar Cane International Sep/Oct.:33. Abstract.

da Silva, J. A. 2002. Development of Microsatellite Markers from Sugarcane Resistance Related Genes. Sugar Cane International Sep/Oct.:33. Abstract.

Dissertations

da Silva, J. A. G. 1993. A Methodology for Genome Mapping of Autopolyploids and its Application to Sugarcane (*Saccharum spp.*). Ph.D. dissertation, Cornell University, Ithaca, NY, 108 pp.

da Silva, J. A. G. 1987. Avaliação da Variabilidade Interpopulacional em *Leucaena (Leucaena leucocephala)* (Lam.) de Wit em Condições de Acidez de Alumínio e Fixação de Nitrogenio. Dissertation MS dissertation, Escola Superior de Agricultura Luiz Queiroz, Universidade de Sao Paulo, Brazil.

Student Supervision

PhD Scholar: Heber Aquino, Distance Education, Committee member. Texas A&M University. Soil & Crop Science Department 2016 – present;

PhD Scholar: Paulo Mafra Costa. Universidade Federal de Viçosa. Viçosa, Minas Gerais, Brazil. 2014.

PhD Scholar: Karine Kettener. “Estudo genético da característica fibra em Cana-de-Açúcar”. 02/2013 -02/2014.

PhD Scholar: Fernanda Raquel. Instituto Agronomico de Campinas. Campinas, Sao Paulo, Brazil. 2012.

PhD Scholar: Cassia Pedrozo. “Expressão Gênica Diferencial sob Condições de Déficit Hídrico em Cana-de-Açúcar”. Departamento de Fitotecnia – DFT. Universidade Federal de Viçosa. Viçosa, Minas Gerais, Brazil. 2009.

PhD Scholar: Vivek Sharma. “Development of New Sugarcane Germplasm for Reduced Water Use”. Major Professor; Texas A&M University. Soil & Crop Science Department. 2006 – 2009.

Post Doc Associate: Marcelo Almeida Silva. “Early Selection for Water Stress Tolerance in Sugarcane Breeding Using Molecular and Physiological Approaches”. 2008.

PhD Scholar: Eduardo Rossini. “Cigarrinha das Raízes em Cana-de-Acucar: “Resistência Genotípica e Interação Planta-Praga. Universidade Estadual Paulista” – UNESP. Faculdade de Ciências Agrárias e Veterinárias. Campus Jaboticabal. 2008.

Graduate Students – Major Advisor

- ✓ Degree: M.Sc.
 - Ajay Kommula - to begin on Fall, 2022. Self-funded student on vegetables breeding
 - B. Himabindhu Parshuram - to begin on Fall, 2022. Self-funded student on vegetables breeding
- ✓ Degree: Ph.D.
 - Ittipon Khuimphukhieo - current
 - Indra Adhikari - to begin on Fall, 2022. Self-funded student on vegetables breeding
 - Indra Adhikari - to begin on Fall, 2022. Self-funded student on vegetables breeding

Thesis Dissertation Committee

External Member of the Graduate Faculty at Texas A&M University Kingsville Center

Member of the Thesis Dissertation Committee for Ph.D. student distance education: Heber Aquino, having William Rooney as major professor;

Member of the Thesis Dissertation Committee for Ph.D. degree of John R. Gill, obtained at the Texas A&M University – Soil & Crop Sciences Department - College Station, TX in April, 2014.

Member of the Thesis Dissertation Committee for Ph.D. degree of Matthew Bartek, obtained at the Texas A&M University – Soil & Crop Sciences Department - College Station, TX. May/2012.

Member of the Thesis Dissertation Committee for Ph.D. degree of Shibu M. Poulouse, obtained at the Texas A&M University – Vegetable & Fruit Improvement Center - College Station, TX in August 3, 2005.

Member of the Thesis Dissertation Committee for Ph.D. degree of Russell William Jessup, obtained at the Texas A&M University – Soil & Crop Science Department - College Station, TX in June 13, 2005.

Member of the Thesis Dissertation Committee for Master of Science degree of Pedro Trejo, obtained at the Texas A&M University – Kingsville Citrus Center, in April 15, 2004.

Member of the Thesis Dissertation Committee for Master of Science Degree in Plant Genetics and Breeding of the Agronomist Irlane Toledo Bastos, obtained at the Universidade Federal de Viçosa, in March 9, 2001.

Member of the Thesis Dissertation Committee for the Master of Science Degree in Agricultural Economy of the Agronomist Miguel Santaella, obtained at the Escola Superior de Agricultura Luiz de Queiroz, in August 25, 1995.

Professional Organization and Activities:

Principal Investigator representing Texas A&M University in NIMSS NC_OLD007: Conservation, Management, Enhancement and Utilization of Plant Genetic Resources.

Member of Promotion and Tenure External Reviewer - Louisiana State University for Dr. Collins Kimbeng on September, 2006.

Member of:

- Crop Science Society of America Sugarcane Subcommittee for Cultivar and Germplasm and Registrations.
- NC-7 Conservation, Management, Enhancement and Utilization of Plant Genetic Resources Committee, covering research at Texas, representing Texas A&M University.
- The International Society of Sugarcane Technologists – ISSCT
- American Society of Plant Biology
- American Society of Sugar Cane Technologists - ASSCT
- Rio Grande Valley Horticultural Society
- Texas A&M University - Molecular and Environmental Plant Science – MEPS;
- Center for Coffee Research and Education, Texas A&M University (<http://coffee.tamu.edu/>).
- Editorial board of Breeding, Genetics and Genomics.

Reviewer of Professional Journals

Crop Science
Journal of Plant Registration
Theoretical and Applied Genetics
Genetics and Molecular Biology
Euphytica
Journal of the American Society of Sugar Cane Technologists
Journal of the Subtropical Plant Science

Reviewer of Book Chapters

Sugarcane by Angélique D'Hont, Gláucia Souza, Marcelo Teixeira, Michel Vincentz, Marie-Anne Van-Sluis, Jean Christophe Glaszmann, and Eugenio Ulian. *In*: Genomics of Tropical Crop Plants Springer 2007 Paul Moore Ed.

Oral Presentations

Title: “Applications of Bioreactors to Plant Breeding”

Event: Sil & Crop Science Department, TAMU, Seminar – 10/14/2020. Online presentation da Silva, Gracia, Vales, Gautam & Mandadi.

<https://soilcrop.tamu.edu/people/da-silva-jorge/>.

Title: “Sugarcane Genetic Breeding for Variety Improvement”

Event: Annual Sugarcane Field Day. September 20, 2006.

Place: Texas Agricultural Experiment Station, Weslaco, Texas

Title: “Genome Analysis Through Molecular Markers ”

Event: Simpósio de Melhoramento Genético da Cana-de-Açúcar: Desafios e Tecnologia. October 6, 1999.

Place: Brazilian Genetics Congress, Gramado, RS.

Title: “Aplicação de Marcadores Moleculares no Melhoramento de Cana-de-açúcar”

Event : “Ciclo de Palestras IAC”. November 28, 1997.

Place: Instituto Agrônômico de Campinas - Campinas - SP

Title: “Marcadores Moleculares e Melhoramento Genético em Cana-de-Açúcar”

Event: 1° Workshop sobre Silvicultura Clonal e Viveiros Florestais. 1997.

Place: IPEF - Instituto de Pesquisas e Estudos Florestais - ESALQ/USP Piracicaba - SP.

Title: “Aplicação de Marcadores Moleculares na Genética e Melhoramento da Cana-de-açúcar”

Event: 11° Encontro sobre Temas de Genética e Melhoramento. 1994.

Place: Departamento de Genética - ESALQ/USP Piracicaba - SP.

Title: “An RFLP Linkage Map for *Saccharum*”

Event: Second ISSCT Molecular Biology Section Workshop. 1993.

Place: Centro de Tecnologia Copersucar

Teaching

Invited teacher at Universidade Federal Rural do Rio de Janeiro

Institute of Biology

Genetics Department

Discipline: Plant Breeding

Period: First semester of 1986

Teacher Assistant at Universidade Federal Rural do Rio de Janeiro

Institute of Biology

Genetics Department

Discipline: Genetics

Period: First semester of 1981

Teacher Assistant at Universidade Federal Rural do Rio de Janeiro

Institute of Biology

Genetics Department

Discipline: Quantitative Genetics

Period: Second semester/1982 – first semester/1983.

Extension

Organization of Annual Sugarcane Field Day
September 20, 2006
Texas Agricultural Experiment Station, Weslaco, Texas.

Congress and Workshops

U.S. Department of Energy's Bioenergy Technologies Office 9th. Annual conference
Bioenergy 2016: Mobilizing the Bioeconomy through Innovation July 12-14th, 2016 -
Washington D.C.

Convention Center 46° Brazilian Genetics Congress
Águas de Lindóia/SP
September 19 – 23, 2000

45° Brazilian Genetics Congress
Gramado/ RS
Period: October 4 -7, 1999.

44° Brazilian Genetics Congress
Águas de Lindóia, SP, Brazil
September 9 - 12 1998.

ISSCT Pathology and Molecular Biology Workshop
Durban, South Africa
May 11 – 15, 1997.

ISSCT Breeding Workshop
Montpellier, France
March 7 – 11, 1994.

ISSCT Molecular Biology Workshop
Piracicaba SP Brazil
April 19-23, 1993.

Ad-hoc meeting of ICSB
US Sugarcane Field Station, Canal Point, Florida
December 10-11, 1992.

Plant Genome I
San Diego, CA - EUA
November 9 – 11, 1992.

Special Skills

Training Trip as a CTC – Centro de Tecnologia Copersucar employee, 1987:
Activity: Sugarcane genetic breeding. Places: BSES – Bureau of Sugar Experiment Station,
Bundaberg and Cairns, Queensland, Australia;
HSPA, Hawaii, USA.

Statistics Course as a CTC employee, 1988:

Place: University of Edinburgh, Edinburgh, Scotland, under supervision of Dr. Norman Simmonds and Dr. Rob Kempton.

National Recognition

Jorge has been recognized for his excellence in research, being granted the immigrant status as an Outstanding Researcher/Professor by the US government. He has also received the following awards:

The Denver T. Loupe Best Presentation at the 2003 32nd. Joint Meeting of the American Society of Sugar Cane Technologists – ASSCT.

The Denver T. Loupe Best Presentation at the 2005 34th. Joint Meeting of the American Society of Sugar Cane Technologists – ASSCT.