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# 49<sup>th</sup> Annual Joint Meeting



## Florida and Louisiana Divisions



"Organized for the Advancement of Mainland Cane Sugar"



*American Society of Sugar Cane Technologists  
Florida and Louisiana Divisions  
49<sup>th</sup> Annual Joint Meeting*

Freddie Martin, General Secretary-Treasurer  
Albert Orgeron, Program Chair

**Wednesday, June 26<sup>th</sup>**

- 8:30**      **Golf Tournament**      *(Lakewood Golf Course)*
- 2:00-5:00**      **Registration**      *(Conference Center Foyer)*  
**\*\*\*pick up pre-registration packets\*\*\***
- 1:30**      **FL Executive Committee meeting**      *(Magnolia 1)*  
**LA Executive Committee meeting**      *(Magnolia 2)*
- 3:00**      **Joint Executive Committee meeting**      *(Magnolia 2)*
- 5:30-6:30**      **Welcome Reception in Exhibit Hall**      *(Grand Ballroom)*

**Thursday, June 27<sup>th</sup>**

- 8:00-8:30**      **Lite Continental Breakfast**      *(Magnolia Ballroom)*
- 12:00**      **Luncheon (tickets required)**      *(Magnolia Ballroom)*

**Friday, June 28<sup>th</sup>**

- 7:30-8:00**      **Lite Continental Breakfast**      *(Magnolia Ballroom)*
- 12:00**      **Luncheon (tickets required)**      *(Magnolia Ballroom)*
- 5:00-6:30**      **Awards and Closing Reception**      *(Grand Ballroom)*

**Theater tickets to be used for Exhibitors' Prize Drawings**  
*See program for times. Tickets will be good for entire meeting.*  
**Must be present to win.**

## **Thursday Morning, June 27<sup>th</sup>**

- 7:45 Registration** (Conference Center Foyer)
- 7:45 Exhibits Open** (Grand Ballroom)
- 8:15 Early Bird Prize Drawings** (Grand Ballroom)
- 8:45 Plenary Session** (Azalea Ballroom)

### **Welcome and President's Message**

Alan Chatman, Louisiana Division President

### **Greetings and President's Message**

Rosa Muchovej, Florida Division President

### **General Business**

General Secretary-Treasurer's Report – Freddie Martin

ISSCT Councilor Report - Les Baucum

ASSCT Joint Meeting 2020 -

Rosa Muchovej, Florida Division President

ASSCT Joint Meeting 2021 -

Alan Chatman, Louisiana Division President

Journal Report – Collins Kimbeng, Editor

Recognition of 2018 Program Chair and Best Presentations -

Calvin Otero

Announcements -

### **Coffee Break/Prize Drawings (Grand Ballroom)**

### **Keynote Presentations**

“USDA-ARS Research in Support of US Sugarcane Production”

Dr. Archie Tucker, Area Director, USDA-ARS-Southeast Area

“Data Driven Agriculture: Paradigm Shift or Evolutionary Blip”

Steven M. Ward, Ph.D., GISP, Director of R&D, The Climate Corp.

### **2019 Program – Albert Orgeron, Program Chair**

Introduction of Session Chairs -

Announcements -

Thursday Afternoon, June 27<sup>th</sup>

**Agriculture I**  
**Azalea AB**

- 1:05**     *Niranjan Baisakh, Presiding*
- 1:10**     *Identification of Genetic Diversity Among Isolates of Sorghum mosaic virus from Louisiana Sugarcane* - M. P. Grisham, K. Z. Warnke, J. R. Maggio, and D. Mollov
- 1:30**     *Sugarcane Mosaic: Recovery and Impact on Yield* - J. L. Rice, C. F. Savario, and J. W. Hoy
- 1:50**     *Sugarcane Mosaic and Sorghum Mosaic are Caused by Two Different Strains of Sugarcane mosaic virus in the Everglades Agricultural Area* - M. Hincapie, S. Sood, D. Mollov, and P. Rott
- 2:10**     *Detection of Sugarcane yellow leaf virus and Sugarcane mosaic virus in Arthropods Collected from Corn, Sorghum and Sugarcane in Florida* - L. Tang, W. Boukari, S. Sood, M. Hincapie, and P. Rott
- 2:30**     *Phenotypic Evaluations of Disease Resistance in Populations Derived from Different Crosses* - S. Sood, X. Yang, J. Comstock, M. Islam and J. Wang
- 2:50**     **Coffee Break/Prize Drawings (Grand Ballroom)**
- 3:20**     *Effects of Soil Applied Fungicides on Sugarcane Growth and Yield in Florida Histosols* - H. Sandhu, M. Vuyyuru, R. Raid and M. McCray
- 3:40**     *Economics of Applying Fungicides for Sugarcane Rust Management* – R. N. Raid, B. Chaulagain, and P. C. Rott
- 4:00**     *Influence of Burning Post-harvest Sugarcane Residue Density and Moisture Content on Surface Deposited Divine Nightshade and Itchgrass Emergence* - D. J. Spauhorst, A. J. Orgeron, and P. M. White Jr.
- 4:20**     *Effect of Asulam on Fall Panicum Seed Production* - D. C. Odero and R. Negrisoli



**Thursday Afternoon, June 27<sup>th</sup>**

***Manufacturing I***

***Azalea C-F***

- 1:05** *Albert Katryan, Presiding*
- 1:10** *The Use of Mannitol Kits at Sugarcane Factories* - G. Eggleston and A. Triplett
- 1:30** *Impact of Using Oxidizing Agents to Reduce Microbial Contamination and Sugar Loss During Sugarcane Processing* - S. Boone, S. Ihli, J. Sanders, T. Klasson, G. Brown, D. LeBlanc, K. Pontiff, C. Clayton, and I. Lima
- 1:50** *Simultaneous Production of Cellulosic Ethanol and Other Advanced Biofuels/Bio-chemicals from Bagasse* - J. Godbole
- 2:10** *How to Monitor Mud Consistency at Sugarcane Factories to Improve Mud Filtration* - J.M. Henriquez, P. Gaston, G. Eggleston, and H. Birkett
- 2:30** *Proper Sizing and Selection of Valves as a Means to Increase Plant Reliability – A Follow Up* - S. Iqbal and B. McManus
- 2:50** **Coffee Break/Prize Drawings (Grand Ballroom)**
- 3:20** *Modernization Options when Sugar Mill Gearboxes Reach End-of-Life* – C. Burg
- 3:40** *Optional Improvements with SucrOx™ Liquid Permanganate in Sugar Mills* – W. Bentley, J. Sanders, D. Hartsough, S. Boone, I. Lima, T. Klasson, I. Chopik, and D. Hatcher
- 4:00** *Improvement Efforts are Causing Failures* - P.J. Maheu
- 4:20** *Gear Failures* - C. Lau and M. O'Malley



**Thursday Afternoon, June 27<sup>th</sup>**

**Posters**

**Conference Center Foyer (Authors Present 4:40-6:00 pm)**

- 1 ***Genome Sequencing of the Sugarcane Orange Rust Pathogen *Puccinia kuehnii* -***  
D. Cardenas, L. M. Cano, T. S. Oppelaar, M. Hincapie, S. Sood, J. Huguet-Tapia,  
J. C. Comstock, and P. Rott
- 2 ***Carbon Pools and Fluxes Under Continuous Sugarcane Production in Louisiana***  
- P. M. White, Jr. and C. L. Webber, III
- 3 ***Postemergence Control Failure of Italian Ryegrass [*Lolium perenne* L. ssp.  
multiflorum (Lam.) Husnot] with Paraquat*** - A. J. Orgeron, A. B. Coco,  
M. R. Foster, and D. J. Spaunhousht
- 4 ***Distribution of the Mexican Rice Borer (Lepidoptera: Crambidae) in Florida*** - M.  
VanWeelden, J. Beuzelin, S. Swanson, and G. Nuessly
- 5 ***A Molecular Identity Database of Sugarcane Clones (Saccharum Hybrids spp.)  
Constructed with Microsatellite (SSR) DNA Markers*** - Y. B. Pan, J. Todd,  
B. E. Scheffler, L. Lomax, S. Simpson, E. Dufrene, A. Hale, M. Grisham,  
H. Waguespack Jr., and A. Finger
- 6 ***Evaluation of Mosaic Incidence in Sugarcane Clones used for Crossing*** –  
M. Daigle, M. Pontif, G. Hawkins, J. Hoy and C. Kimbeng
- 7 ***Genetic Diversity of Divine Nightshade (Solanum nigrescens Mart. & Gal.) in  
Louisiana*** - M. R. Foster, A. J. Orgeron, N. Baisakh, and D. J. Spaunhousht
- 8 ***Bias in Estimating Cane Yield in Small plots Using Stalk Number*** –  
D. Sexton, C. Baucum, G. Hawkins, M. Pontiff, and C. Kimbeng
- 9 ***Main Varieties of Sugar Cane in Cuba During the Last Seven Years (2012-2018)***  
- R. M. González, G. Hernández, H. García, J. M. Mesa, S Rill, and  
G. Gálvez
- 10 ***Biochar and Fly ash Amended Soils to Increase Sugarcane Yields*** –  
I. Lima, P. White Jr., and C. Webber
- 11 ***Microbial Populations in Blends of Sugarcane Filter Mud Compost or Worm  
Castings with Biochar*** - M. S. Wright and I. M. Lima
- 12 ***Crystal Size Analysis for Louisiana Sugar Factories: 2018/2019 Grinding Season***  
- Y. H. Moon and G. M. Aita
- 13 ***Antioxidant Content of Various Sugar Products Commercially Available in the  
USA*** - G. M. Aita, E. St. Cyr, A. Triplett, and G. Eggleston
- 14 ***A Small pH Control System for Ethanol Fermentation Reactors*** – K. T. Klasson



Friday Morning, June 28<sup>th</sup>

***Agriculture II***  
***Azalea A***

- 8:15**     *Douglas Spaunhorst, Presiding*
- 8:20**     *Ho 12-615 – A New Variety for the Louisiana Sugarcane Industry –*  
J. T. Todd, E. O. Dufrene, A. L. Hale, Y. B. Pan, M. P. Grisham, and  
M. J. Duet
- 8:40**     *L 12-201 – A New Sugarcane Variety for the Louisiana Sugar Industry-*  
M.J. Pontif, C. Kimbeng, K. Gravois, G. Hawkins, D. Sexton, M. Daigle,  
B. Wilson, and J. Hoy
- 9:00**     *Fiber Variation of the CP Sugarcane Varieties and Fiber Assessment in*  
*the Canal Point Cultivar Development Program -* D. Zhao, P. McCord,  
A. Fufidio, Z. Young, W. Davidson, and M. Baltazar
- 9:20**     *QTL Identification of Sugar and Yield Related Traits in Saccharum spp.*  
*hybrid -* M. S. Islam, X. Yang, S. Sood, J. C. Comstock, F. Zan, and  
J. Wang
- 9:40**     *Developing and Applying Sugarcane100K SNP Array for Sugarcane*  
*Genetic Map Construction and QTL Identification -* Q. You, X. Yang,  
Z. Peng, M. S. Islam, S. Sood, Z. Luo, J. Comstock, L. Xu, and J. Wang
- 10:00**     **Coffee Break/Prize Drawings (Grand Ballroom)**
- 10:30**     *Optimum Replication Number and Assessing Genotype by Environment*  
*Interactions in Advanced Stage Sugarcane Selection Trails for Sand*  
*Lands in the Canal Point Breeding Program –*  
O.C. Arbelo, H. Sandhu, M. Baltazar, W. Davidson, Z. Young,  
A. Migneault, G. Sandoya, and A. Fufidio
- 10:50**     *Putative Novel Sources of Resistance to Brown Rust Disease*  
*in a Louisiana Sugarcane Cultivar L 99-233 -* A. Gutierrez, J. Hoy,  
C. Kimbeng, M. Pontif, A. Hale, and N. Baisakh
- 11:10**     *Status of the Sugarcane Borer and Selected Beneficial Insects in Florida*  
*Sugarcane and Rice -* J. Beuzelin, E. Roldán, M. VanWeelden, and  
R. Cherry
- 11:30**     *Susceptibility and Tolerance to Sugarcane Borer, Diatraea saccharalis,*  
*Injury Among Louisiana’s Commercial and Experimental Sugarcane*  
*Cultivars -* B. E. Wilson, R. Richard, R. Johnson

**Friday Morning, June 28<sup>th</sup>**

***Agriculture III***  
***Azalea B***

- 8:15**     *Paul White, Presiding*
- 8:20**     *Biomass and Nutrient Contribution of Summer (Sweet Sorghum) and Winter Cover Crops in Energy Cane Production in Louisiana – M. S. Dalen, B. S. Tubana, H. Viator, W. Paye, and D. Forestieri*
- 8:40**     *Soil Factors Influence Relationships of Soil Silicon with Sugarcane Leaf Silicon and Yield - M. McCray, S. Ji, and A. Santos*
- 9:00**     *Soil Fertility Indicators for Louisiana Sugarcane Production Systems - B. Tubana, D. Forestieri, M. Martins, W. Paye, J. Mite, and M. Dalen*
- 9:20**     *Effect of Cobalt and Starter Fertilizer Applied at Planting on Cane and Sugar Yields in Louisiana - R. M. Johnson and D. P. da Silva*
- 9:40**     *Effects of Combination of Enerplant and Phytomas-E with Mineral Fertilization on Four Sugar Cane Cultivars in Carbonated Brown Soils (Inceptisols) in Camagüey Province - I. Santana, E. Garcia, and L. Ávila*
- 10:00**     **Coffee Break/Prize Drawings (Grand Ballroom)**
- 10:30**     *Nitrogen-Rich Strip: A Fertilizer Decision Tool for Louisiana Sugarcane Production Systems - B. Tubana, D. Forestieri, M. Dalen, R. Frazier, and D. Burns*
- 10:50**     *Using 60 Years of Weather Records to Predict Sugar Yield for a Louisiana Sugarcane Crop - K. A. Gravois*
- 11:10**     *Prediction of Sugarcane Yield by Machine Learning – J. Todd, E. Dufrene, and M. Pontif*
- 11:30**     *The Biostimulants in the Sugarcane Production in Cuba – I. Santana, L. M. Ávila, and F. Sulroca*

**Friday Morning, June 28<sup>th</sup>**

***Manufacturing II***  
***Azalea C-F***

- 8:15**    *Jason Burke, Presiding*
- 8:20**    *Proper Material Selection for Chain* - R. Hensley and R. Jeffrey
- 8:40**    *Continuously Seeking for Better Brix Measurement Solutions for Evaporators* - M. Korhonen, D. Aragon, B. McManus, and A. Katryan
- 9:00**    *Split & Dual Continuous Pans- Design Aspects for Maximizing the Benefits to Sugar Mills* - M.P.R. Rao
- 9:20**    *Online Diagnostics of Sugar Crystallization with a Novel Portable Non-Intrusive Instrument* - H. Eloranta, M. Honkanen, and C. Myers
- 9:40**    *Use of Coriolis Meters to Measure Mud Consistency from Juice Clarifiers* – V.C. Miller
- 10:00**    **Coffee Break/Prize Drawings (Grand Ballroom)**
- 10:30**    *Control of B-Sugar Purity by Means of Real-Time Color Measurement* - D. Aragon, B. McManus, and A. Katryan
- 10:50**    *Variations in Molasses Exhaustion at Louisiana Sugar Factories in 2018* - C. Verret, T. Foster, G. Eggleston, A. Triplett, and E. St. Cyr
- 11:10**    *Selecting VFD for Your Application* - S. Snead
- 11:30**    *Double O-Ring Seal Solutions for Abrasive Fluids in the Sugar Industry* - J. Fenton



**Friday Afternoon, June 28<sup>th</sup>**

## ***Manufacturing III***

***Azalea C-F***

- 1:05** *Stephen Bergeron, Presiding*
- 1:10** *Gear Case Study - A. Stokley*
- 1:30** *The Role of NPSH in the Selection of Pumps - Y. Tarafa*
- 1:50** *Proper Valve Selection for Various Operations in Sugar Manufacturing - S. Iqbal and A. Katryan*
- 2:10** *Efficiency of a Sugar Factory (A supplier's point of view) - T. Diringer and B.C. Nielsen*
- 2:30** *Mechanical Integrity as it applies to Sugar Mills – A Follow Up – B. M. Schmidt*
- 2:50** **Coffee Break/Prize Drawings (Grand Ballroom)**
- 3:20** *Seasonal Chemical Sucrose Losses in Upstream and Downstream Products in a Sugarcane Factory - G. Eggleston, D. Legendre, A. Monge, J. Gober, E. St. Cyr, and T. Charlet*
- 3:40** *A Review of the 2018-19 Crop – Florida Mills - M. Michuda and A. Katryan*
- 4:00** *A Review of the 2018-19 Crop – Louisiana Mills - A. Chatman and J. Burke*
- 4:20** *Round Table Discussion*
- 5:00** **Awards and Closing Reception**

*Friday Afternoon, June 28<sup>th</sup>*

## *Student Presentations*

*Azalea A*

- 1:05**     *Blake Wilson, Presiding*
- 1:10**     *Growth and Yield Response of Two Sugarcane Cultivars to Water Stress Conditions* - J. Bamrungrai, A. Polthanee, B. Tubana, and A. Promkhambut
- 1:30**     *Evaluating the Impacts of Cover Crops on Nutrient Cycling and Sugarcane Productivity* - D. Forestieri, M. Dalen, M. Martins, J. Mite, W. Paye, J. Cruz, and B. Tubana
- 1:50**     *Application of Bagasse for Sugarcane Production on Sandy Soils in South Florida* - N. Xu, J. Bhadha, S. Swanson, and R. Mylavarapu
- 2:10**     *Can Florida Sugarcane Varieties Benefit the Louisiana Sugar Industry?* – B. Blanchard and K. Gravois
- 2:30**     *Genome-wide Association Studies on Saccharum spp. hybrid for Different Complex Traits* - L. Qin, P. H. McCord, M. Zhang, S. Sood, X. Yang, D. Zhao, and M.I. Islam
- 2:50**     **Coffee Break/Prize Drawings (Grand Ballroom)**
- 3:20**     *Resistance of Sugarcane Cultivars to the Sugarcane Borer: Diatraea saccharalis* - L. D. Salgado and B. E. Wilson
- 5:00**     **Awards and Closing Reception**



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### FUTURE MEETINGS

<b>Florida Division</b>	<b>August 22 - 23, 2019</b>	<b>UF/IFAS Everglades Research and Education Center, Belle Glade, FL</b>
<b>Louisiana Division</b>	<b>February 3 - 5, 2020</b>	<b>L'Auberge Baton Rouge, LA</b>
<b>Joint Meeting</b>	<b>June 17 - 19, 2020</b>	<b>The Westin Savannah Harbor, Savannah, GA</b>