

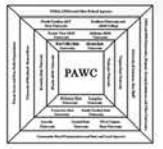
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A N N U A L

PAWGC

**PROFESSIONAL AGRICULTURAL
WORKERS CONFERENCE**

**Building Resilient
Communities & Families Through
Integrative Partnerships,
Sustainable Practices, Policies,
and Agricultural
Transformations**



www.pawc.info

Farm Bill



AUBURN MARRIOTT
OPELIKA HOTEL AND
CONFERENCE
CENTER GRAND
NATIONAL

DECEMBER

**8TH-10TH
2019**

PRESENTED BY:

TUSKEGEE UNIVERSITY

COLLEGE OF AGRICULTURE, ENVIRONMENT AND NUTRITION SCIENCES

AGENDA AT A GLANCE

77TH PROFESSIONAL AGRICULTURAL WORKERS CONFERENCE DECEMBER 8-10, 2019

*Building Resilient Communities & Families Through Integrative Partnerships,
Sustainable Practices, Policies, and Agricultural Transformations*

SATURDAY, DECEMBER 7, 2019		
6:00 pm – 8:00 pm	PAWC Early Registration	Lobby
SUNDAY, DECEMBER 8, 2019		
8:00 am – 10:00 am	Student Competition Registration	Ballroom Foyer
9:00 am – 2:00 pm	Student Paper and Poster Competition	See Below
	Graduate Oral Competition	Theatre/Video Conference Room Meeting Room 3
	Undergraduate Oral Competition	Meeting Room 1 Ballroom A & B
	Undergraduate & Graduate Poster Competition	Ballroom D & E Ballroom C
10:00 am – 3:00 pm	Tomorrow's Agricultural Professional Symposium Collegiate Workshop	Camellia Room
10:00 am – 3:00 pm	PAWC General Conference Registration	Lobby
11:00 am – 12:15 pm	Student Competition Networking Break *Registered Competing Students Only* *Tickets Required*	Marriott Breakroom
12:00 pm – 5:00 pm	Exhibit and Vendor Setup	Ballroom & Camellia Foyer
3:00 pm – 5:00 pm	PAWC & Gamma Sigma Delta Opening Reception Sponsored by: USDA – APHIS & Association of Research Directors (ARD)	Ballrooms
6:00 pm – 9:00 pm	Tuskegee University Christmas Concert	Tuskegee University Chapel
9:30 pm – 10:30 pm	PAWC Meet & Greet Hosted by Virginia State University	PAWC Hospitality Suite

*“When you do the common things in an un-
common way, you’ll command the attention
of the world.”*

– George Washington Carver

MONDAY, DECEMBER 9, 2019

6:30 am – 8:00 am	Exhibit and Vendor Setup	Ballroom and Camellia Foyer
6:30 am – 8:00 am	Breakfast	Ballroom
7:30 am – 5:00 pm	Registration	Lobby
8:00 am – 9:00 am	77 th PAWC Opening Plenary Session	Ballroom
9:00 am – 10:00 am	PAWC Plenary Session PAWC Gets Amp'd Up	Ballroom
10:00 am – 10:30 am	Refreshment Break & Visit With Exhibitors	Marriott Breakroom
10:30 am – 12:00 pm	Concurrent Sessions I	See Below
	Issues Impacting Student Success in Higher Education	Meeting Room 1
	Research in Food and Nutrition	Meeting Room 3
	Farm Bill – What's In It For You?	Theater/Video Conference Room
	Research in Sustainable and Production Agriculture	Camellia Room
12:00 pm – 2:00 pm	L.A. Potts Success Story & Luncheon	Ballroom
2:00 pm – 2:15 pm	Stretch Break	
2:15 pm – 3:30 pm	Concurrent Sessions II	See Below
	Social, Economic, and Community Development	Meeting Room 1
	Innovations in Plant and Soil Science	Meeting Room 3
	Small Farmer, Rancher & Community Based Organization Think Tank	Camellia Room
	Agricultural Leadership in the Classroom	Theater/Video Conference Room
3:30 pm – 3:45 pm	Stretch Break	
3:45 pm – 5:00 pm	Concurrent Session III	See Below
	Resources for Farmers	Meeting Room 1
	Getting In and Staying In- Navigating the Breakthroughs and Challenges of the Emerging Hemp Industry	Theater/Video Conference Room
	Innovations in Animal and Soil Science	Camellia Room
5:00 pm – 5:30 pm	Refreshment Break & Visit with Exhibitors	
5:30 pm	Shuttle Departs to Tuskegee University	
6:30 pm – 9:00 pm	MANRRS Student Banquet	Tuskegee University Kellogg Hotel and Conference Center

“The greatness of a community is most accurately measured by the compassionate actions of its members.”

– Coretta Scott King

TUESDAY, DECEMBER 10, 2019

6:30 am – 7:45 am	PAWC Advisory Board Meeting	Meeting Room 3
6:30 am – 8:00 am	Breakfast	Ballroom
8:00 am – 2:00 pm	Conference Registration	Lobby
8:00 am – 10:00 am	Demetris Johnson Memorial Panel Discussion	Ballroom
8:00 am – 10:00 am	Current Trends in Beef Cattle Production Part I	Meeting Room 1
10:00 am – 10:30 am	Refreshment Break	Marriott Breakroom
10:30 am – 11:30 am	PAWC Special Presentation	Ballroom
10:30 am – 11:30 am	Current Trends in Beef Cattle Production Part II	Meeting Room 1
11:30 am – 12:00 pm	Stretch Break	
12:00 pm – 2:00 pm	P.W. Brown, V. Blackwell, & B.D. Mayberry Memorial Luncheon	Ballroom
2:00 pm – 3:00 pm	Concurrent Session IV	See Below
	Agricultural Research	Meeting Room 1
	Natural Resource Conservation Services (NRCS)- Moving Outreach Forward	Theater/Video Conference Room
	Professional Poster Setup	Ballroom Foyer
3:00 pm – 3:15 pm	Stretch Break	
3:15 pm – 4:30 pm	Concurrent Session V	See Below
	Heir Property and Economic Issues in Agriculture	Theater/Video Conference Room
	Professional Poster Session	Ballroom Foyer
	Marketing Strategies for Small Agricultural Business and Community Organizations	Meeting Room 1
4:30 pm – 5:30 pm	Refreshment Break & Agribusiness Expo	Camilla Room
6:00 pm – 6:30 pm	Networking Break	
6:30 pm – 10:00 pm	George Washington Carver Public Service Hall of Fame Awards Banquet	Marriott Ballroom

WEDNESDAY, DECEMBER 11, 2019

8:00 am – 11:00 am	PAWC Post Conference (Closed Session)	Marriott Ballroom
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“Community organizing is all about building grassroots support. It’s about identifying the people around you with whom you can create a common, passionate cause. And it’s about ignoring the conventional wisdom of company politics and instead playing the game by very different rules.”

- Tom Peters

PAWC REGISTRATION HOURS

DATE	HOURS	TYPE	LOCATION
Saturday, December 7	6:00 pm – 8:00 pm	General	Lobby
Sunday, December 8	8:00 am – 11:00 am	Student Competition	Ballroom Foyer
Sunday, December 8	10:00 am – 3:00 pm	General	Lobby
Monday, December 9	7:30 am – 5:00 pm	General	Lobby
Tuesday, December 10	8:30 am – 2:00 pm	General	Lobby

TRANSPORTATION SCHEDULE SUNDAY, DECEMBER 8, 2019

TIME	PICKUP LOCATION	DROP OFF LOCATION
7:30 am	Tuskegee University Kellogg Conference Center	Marriott Hotel
10:00 am	Tuskegee University Kellogg Conference Center	Marriott Hotel
11:30 am	Tuskegee University Kellogg Conference Center	Marriott Hotel
3:30 pm	Marriott Hotel	Tuskegee University
4:30 pm	Marriott Hotel	Kellogg Conference Center
5:30 pm	Marriott Hotel	Kellogg Conference Center
9:00 pm	Tuskegee University Kellogg Conference Center	Marriott Hotel

MONDAY, DECEMBER 9, 2019

TIME	PICKUP LOCATION	DROP OFF LOCATION
5:00 pm	Marriott Hotel Side Entrance	Tuskegee University Kellogg Conference Center
9:00 pm	Tuskegee University Kellogg Conference Center	Marriott Hotel Side Entrance

*“Life most persistent and urgent question is,
What are you doing for others?”*

– Martin Luther King, Jr.



SATURDAY, DECEMBER 7, 2019

6:00 pm – 8:00 pm

PAWC Early Registration – *Lobby*

SUNDAY, DECEMBER 8, 2019

8:00 am – 10:00 am

Student Competition Registration – *Marriott Ballroom Foyer*

9:00 am – 2:00 pm

Student Paper and Poster Competition

- Graduate Oral Competition
 - *Theatre/Video Conference Room*
 - *Meeting Room 3*
- Undergraduate Oral Competition
 - *Meeting Room 1*
 - *Ballroom A & B*
- Undergraduate & Graduate Poster Competition
 - *Ballrooms D & E*
 - *Ballroom C*

10:00 am – 3:00 pm

PAWC General Conference Registration – *Lobby*

10:00 am – 3:00 pm

Tomorrow's Agricultural Professional Symposium Collegiate Workshop – *Camellia Room*

11:00 am – 12:15 pm

Student Competition Networking Break – *Ballrooms D & E*

****Registered Competing Students Only- Tickets Required****

12:00 pm – 5:00 pm

Exhibit & Vendor Setup – *Ballroom & Camellia Foyers*

2:00 pm – 2:30 pm

YBAM TU Student Chapter of the Beaux Art Guild Exhibit Setup – *TBD*

3:00 pm – 5:00 pm

PAWC & Gamma Sigma Delta Opening Reception – *Ballrooms*

***Sponsored by
USDA- APHIS & Association of Research Directors***

Greetings & Welcome: *Walter Hill, Tuskegee University*

Remarks:

- *La Shon Cole & Sophia Kirby, USDA- APHIS*
- *Lila Karki, Franklin Quarcoo, & Gregory Bernard, Tuskegee University*

Closing Comments: *Robert Zabawa & Tasha Hargrove, Tuskegee University*

6:00 pm – 9:00 pm

Tuskegee University Christmas Concert – *TU Chapel*

9:30 pm – 10:30 pm

PAWC Meet & Greet – *PAWC Hospitality Suite*

***Hosted by
Virginia State University***

MONDAY, DECEMBER 9, 2019

6:30 am – 8:00 am Exhibit & Vendor Setup – *Ballroom & Camellia Foyer*

6:30 am – 8:00 am Breakfast - *Ballroom*

7:30 am – 5:00 pm Registration – *Lobby*

8:00 am – 9:00 am 77th PAWC Opening Plenary Session – *Ballroom*

Presiding: John Williams, USDA – APHIS (Retired)

Invocation: Ronald Smith, Tuskegee university

Greetings & Welcome: Walter Hill, Tuskegee University

Musical Performance: Rayvon Savary, Tuskegee University

Recognition of Sponsors & Special Guest: Tasha Hargrove, Tuskegee University

Introduction of Panelists: Carlton Morris, Tuskegee University



- Henry Morris, US Forest Service



- Valencia Morris, US Forest Service

9:00 am – 10:00 am

PAWC Gets Amp'd Up

Introduction of Speaker: Ray McKinnie, Virginia State University

Speaker: James Amps III



James Amps III rose to national prominence by conveying his “message of action” to more than 550 worldwide corporate and professional audiences, inspiring them to accept responsibility in unleashing their personal greatness. Amps combined his professional experiences in team building, diversity and executive coaching, and founded AMPS International, LLC (1993), a company with a goal of providing management consulting and organizational development training to corporate, college, federal and the non-profit sectors. Amps is impelled by a desire to assist others in facing obstacles head on, to achieve their goals; put ideas into action and help them redefine and improve their lives. He served in the US Navy (1980-1986) where he toured Grenada, Lebanon and Bahrain.

10:00 am – 10:30 am

Refreshment Break & Visit with Exhibits – *Marriott Break Room*

*“The best way to find yourself
is to lose yourself
in the service of others.”*

– Mahatma Gandhi



MONDAY | DECEMBER 9 | 10:30 am – 12:00 pm

CONCURRENT SESSION I

MEETING ROOM 1

Title: Issues Impacting Student Success in Higher Education

Moderator: Zelia Wiley, Kansas State University

Presenters:

- **Addressing Diversity, Equity and Inclusion in the Forest Industry**
Zakiya Leggett and Sam Cook, NCSU
Ronald Smith and Rashidah Farid, Tuskegee University
- **Elementary Educators' Perceptions of Agritourism as a Curriculum Enhancer**
Michelle Page and Ricketts, Tennessee State University
- **Agricultural Science Student Success and Retention: Developing Students for Successful Agricultural Careers**
Thomas Broyles, Andrew Reid, Marie Hammond, Elaine Martin, Tennessee State University

MEETING ROOM 3

Title: Research in Food and Nutrition

Moderator: Brittannie Chester, Tuskegee University

Presenters:

- **The Growth and Survival of Listeria Monocytogenes in Low Sodium South Africa Sausage Produced with Salt Replacers**
Haarisah Fakier and Zaa-id Rinqwest, South Africa
- **Nutrition Hazard Mapping: Exploring Sodium Consumption within the Parish of Saint Catherine in Jamaica**
Rasheed Perry and Vanessa White- Barrow, Jamaica
- **Domestic of Stevia – an Alternative Sweetener for Production in the Southeastern U.S.A.**
Steven Samuels, D. Jones, A. Chancey, C. Hicks, G. Lester, and B. Biswas, Fort Valley State University
- **Monitoring Levels of Ascorbic Acid Metabolites in Sauvignon Blanc (Vitifera L.) During Berry Development and in the Wine**
Mvuselelo Dalicuba, South Africa



THEATRE/VIDEO CONFERENCE ROOM

Title: Farm Bill – What's in It For You?

Moderator: Lorette Picciano, Rural Coalition

Description:

The most recent Farm Bill passed in December 2018, has numerous provisions that affect small farmers and historically underserved farmers, their families and communities. Key organizations with long experience in this debate will lead a discussion about the current status of the implementation of the 2018 Farm Bill. We will provide an overview of key changes and what is in the Farm Bill related to Heirs Property, Farm Credit, Conservation, Industrial Hemp, the 2501 Program, 1890 Colleges and Universities, and Urban Agriculture, among others. Questions covered will include how each of these provisions affect farmers, when the new Industrial Hemp rules may go into effect, and how small farmers and ranchers can access heir's property and equitable relief provisions .

Presenter:

Lorette Picciano, Rural Coalition

John Zippert, Alabama Association of Cooperatives and Rural Coalition

Savi Horne, Land Loss Prevention Project

Quinton Robinson, , Rural Coalition

Barbara Shipman, Cottage House, Inc.

Eloris Speight, Socially Disadvantaged Farmers and Ranchers Policy Research Center

*“You should never be fearful
about what you are doing
when it is right.”*

– Rosa Parks

CAMELLIA ROOM

Title: Research in Sustainable and Production Agriculture

Moderator: George Hunter, Tuskegee University

Presenters:

- **Alabama Sustainable Irrigation Expansion Project Overview**
Eve Brantley and Cameron Handyside, Auburn University and University of Alabama in Huntsville
- **Is Conservation Agriculture a Sustainable Practice in Terms of Topsoil Stratification in the Western Cape of South Africa**
Annemarie Vand der Merwe, South Africa
- **Cover Crops, Cowpea and Farmer's Perception of Sustainability in Alabama, Georgia, and Tennessee**
Elenora Troyanovskaya, Thomas W. Broyles, and Matthew Blair, Tennessee State University
- **Air and Soil Temperature Readings from Two Wiregrass Tunnel Houses Located in East Central Alabama**
Victor Khan, Tuskegee University, James Currington, Currington Consultants, Raymon Shange, Ramble Ankumah, Tuskegee University, Michele Foo, Alabama State University, Edward Sparks, Nathaniel Ellison, George Hunter, and Jeffery Moore, Tuskegee University

12:00 pm – 2:00 pm

L.A. Potts Luncheon & Success Stories - Ballroom

Presiding: William Hodge, Tuskegee University

Invocation: Christopher Mathis, South Carolina State University

Comments: Tasha Hargrove, Tuskegee University

Lunch

Recognition of Success Stories: William Hodge, Tuskegee University

- SMART Program by Dr. Ndunge Kiiti, Cornell University
- Marketing with Myles, Dr. Elizabeth Myles, Alcorn State University
- The Tuskegee Public Dialogue Team, Marquess James, Lindsey Lunsford, Danielle Smith, and Sheila De Heer, Tuskegee University

2:00 pm – 2:15 pm

Stretch Break



MONDAY | DECEMBER 9 | 2:15 pm – 3:30 pm

CONCURRENT SESSION II

MEETING ROOM 1

Title: Social, Economic, and Community Development

Moderator: Miles Robinson, Tuskegee University

Presenters:

- **Amplifying Rural Voices and the 2020 Census**
Steve Turner and John Green
- **GROW 2 SHIP- A Strategy for Farming Organizations to Support Farmers of Color as Agriculture Evolves into Precision Agriculture, Emerging Diverse Crops, and Urban Farming**
Scheril Murray Powell and William “Billy Rennalls” , Green Sustainable and Strong LLC
- **Agritourism Needs and Preferences: Determining How Extension Can Help**
Sarah Murphy, John C. Ricketts, Tennessee State University
- **Upper Breede Collaborative Extension Group**
Wilanie De Villers, South Africa
- **Mississippi Pilots Program for Harmonized GAP Certification Using Web-Based Technology**
Wes Miller, Horizons Management Consulting, Calvin Head, Milestone Cooperative, David Watkins, Jr. and William Evans, Up In Farms

MEETING ROOM 3

Title: Innovations in Plant and Soil Science

Moderator: Sy Mamadou Traore, Tuskegee University

Presenters:

- **Daylilies Introductions and Research Progress at Langston University**
Kanyand Matand, Kameron Lindsay, Zoe McGowan, Langston University
- **Use of Rootstocks to Increase Yield and Enhance Quality of ‘Chardone’ and ‘Norton’ Grapes in Alabama**
Elina Coneva, Enfeng Xu, Raymond Kessler, and Matthew Price, Auburn University
- **Evaluation of Two Varieties of Collards (Brassica Oleracea L. Var. Acephala D.C.) Planted in Single and Staggered Rows in a Wiregrass Tunnel House in East Central Alabama**
Victor A Khan, James E. Currington, Raymon Shange, Ramble Ankumah, Michele Foo, Edward Sparks, Nathaniel Ellison, George Hunter, and Jeffery Moore, Tuskegee University, Currington Consultants, and Alabama State University



THEATER/VIDEO CONFERENCE ROOM

Title: Agricultural Leadership in the Classroom

Moderator: Carl Butler, USDA

Presenters:

- Leadership Voices – Past, Present and Future
Christopher Mathis, Jr. and Lee June, South Carolina State University
- School Students' Willingness to Contribute to Global Food Security Through an Agricultural Track Career:
The Case of George Washington Carver Society's Oratorical Contest
Lila Karki, Janet Sullen, Raymon Shange, and Tuskegee University
- Agricultural Literacy Among the Generations: A National Study
Madison Lewis, John Ricketts, Tom Broyles, Tennessee State University

CAMELLIA ROOM

Title: Small Farmer, Rancher, & Community Based Organization Think Tank

Facilitator: Rhonda Benton, Rhema Ranch

3:30 pm – 3:45 pm Stretch Break

MONDAY | DECEMBER 9 | 3:45 pm – 5:00 pm

CONCURRENT SESSION III

MEETING ROOM 1

Title: Resources for Farmers

Moderator: John Brown, Tuskegee University

Presenters:

- **Taxation and Entity Structure**
Darrell Tennie, Tennie Group
- **Land Retention Through Income Diversification of Your Forest Resources**
Alex Harvey, Southern Forestry Consultants and Austin Carroll Southern Forestry Consultants
- **Crop Insurance**
Darrell Tennie, Tennie Group

THEATER/VIDEO CONFERENCE ROOM

Title: Getting In and Staying In – Navigating the Breakthroughs and Challenges of the Emerging Hemp Industry

Moderator: Scheril Murray Powell

Description:

This topic is intended for an audience of new farmers, veteran farmers interested in the hemp industry and intermediate knowledge hemp farmers. The panel will share their experience with hemp from a legal, academic, and accounting perspective. The objective is to eliminate the stigma associated with the hemp plant and brief the audience on the legal posture of hemp since the Farm Bill of 2018.

Panelists:

- Eric McGee, Wonder Works, LLC
- Clemon Dabney III, University of Minnesota
- Melanie Rose Rodgers, Influential X
- Cait Curley,
- Chad Adams, Earlie Bird Farms
- Kim Claxton, Dope Accountants

CAMELLIA ROOM

Title: Innovations in Animal and Soil Science

Moderator: Barrett Vaughan, Tuskegee University

Presenters:

- **Assessing Consumer Post Response to Food Safety Scare in South Africa Using Behavioral Game Theory**
Hadebe Ziyanda, South Africa
- **Nutrition Content of Common Forage and Browse Species Available in Different Grazing Systems**
Uma Karki, Shailes Bhattarai, Lila Karki, Rishi Khatri, Sanjok Poudel, and Asha Tillman, Tuskegee University
- **Evaluation of a Microbial Model Forecasting the Effect of Arsenic Contamination on Biomass of Bacteria and the Activity of Beta- Glucosidase in Soil**
Naira Ibrahim, Gamal El Afandi, Ramble Ankumah and Raymond Shange, Tuskegee University
- **Investigating the Relationship Between Novel Farming Practices and the Transmission of Zoonotic Diseases at the Wildlife/ Livestock Interface**
Yameen Badrodien, Adriaan Engelbrecht, Morne Du Plessis, and Oriel Moeti, South Africa

5:00 pm – 5:30 pm Refreshment Break and Visit with Exhibitors

5:30 pm Depart for Tuskegee University for MANRRS Banquet

6:30 pm MANRRS Student Banquet - *Tuskegee University Kellogg Conference Center*

TUESDAY, DECEMBER 10, 2019

- 6:30 am – 7:45 am PAWC Advisory Board Meeting – *Meeting Room 3*
- 6:30 am – 8:00 am Breakfast –*Ballroom*
- 8:00 am – 2:00 pm Conference Registration –*Lobby*
- 8:00 am – 10:00 am Demetris Johnson Memorial Panel Discussion –*Ballroom*
- Presiding: Catherine Barnett, Freedom to Thrive.Org

Remembrance of Demetris Johnson: William Hodge, Tuskegee University

“Urban Meets Rural: Examples of Grassroots Community Development Projects”

Description:

Creating a positive future depends on building and maintaining the strength and resilience of every community. Populations at risk have particular challenges to their well-being and community. To face these challenges, communities and small grassroots groups are organizing and empowering themselves to educate and influence policies, practices while developing sustainable partnerships. These groups strengthen their communities by focusing on initiatives such as community gardens, agritourism, food waste, and others. This panel brings together community leaders who have the common goal of building healthy resilient communities.

Panelists:

- Harold May, Fathers And Mothers, Infants, Elders, and Youth, Inc. (FAMILY)
- Jifunza Wright-Carter, Black Oaks Center
- Sandra Hamilton, Healthy Buckets
- Raquel Thomas-Caesar, Iwokrama
- The Moses Project and Kansas State University's Jr. MANRRS Chapter, Curtis Pitts, The Moses Project and Zeila Wiley and Lonnie Hobbs, Jr., Kansas State University
- Gibron Jones-Burchett, Holistic Organic Sustainable Cooperative (HOSCO)

Part II:

Presentation Title: Fostering Community Prosperity with the Office of Partnerships and Public Engagement

Presenter: Jacqueline Davis Slay, Office of Partnerships and Public Engagement

“Always interact as though we are all members of one family.”

– Harold May

MEETING ROOM 1

Title: Current Trends in Beef Cattle Production Part I

Moderator: Olga Bolden-Tiller, Tuskegee University

Description:

Beef cattle production has and continues to be a mainstay for a large segment of our clientele. There are changes in the industry that could potentially have adverse effects on profitability and threaten the ability of producers, especially small and limited resource producer's ability to sustain. This workshop will introduce and highlight new and emerging trends occurring in the beef cattle industry. Topics cover herd improvement, traceability, market trends, environmental consideration, and disaster relief; these can result in the collective formulation of strategies and lead to the sustainability of small and limited resources producers. With this in mind, the Tuskegee University Beef Cattle Program would like to add a symposium track entitled, "*Current Trends in Beef Cattle Production.*"

10:00 am – 10:30 am

Refreshment Break - *Marriott Breakroom*

BALLROOM

10:30 am – 11:30 am

PAWC Special Presentation - *Ballroom*

Introduction of Speaker:

Walter Hill, Tuskegee University

Speaker:

Dr. Michael Eric Dyson



Michael Eric Dyson is a motivational author and minister. Educated at Carson-Newman College and Princeton University, Dr. Dyson is a Detroit, Michigan native, born to an Alabama mother who migrated north and who received his surname upon adoption by his stepfather. Dyson currently serves as a professor of sociology at Georgetown University in Washington, D.C. and he has authored numerous books on diverse subjects.



MEETING ROOM 1

Title: Current Trends in Beef Cattle Production Part II

Moderator: Olga Bolden-Tiller, Tuskegee University

Description:

Beef cattle production has and continues to be a mainstay for a large segment of our clientele. There are changes in the industry that could potentially have adverse effects on profitability and threaten the ability of producers, especially small and limited resource producer's ability to sustain. This workshop will introduce and highlight new and emerging trends occurring in the beef cattle industry. Topics cover herd improvement, traceability, market trends, environmental consideration, and disaster relief; these can result in the collective formulation of strategies and lead to the sustainability of small and limited resources producers. With this in mind, the Tuskegee University Beef Cattle Program would like to add a symposium track entitled, "*Current Trends in Beef Cattle Production.*"

11:30 am – 12:00 pm **Stretch Break and Visit with the Exhibitors**

12:00 pm – 2:00 pm **P.W. Brown, V. Blackwell, & B.D. Mayberry Memorial Luncheon & Lecture -Tuskegee University**

Presiding: Raymon Shange, Tuskegee University

Invocation: Ramble Ankumah, Tuskegee University

Lecture: Robert Zabawa, Tuskegee University

TUESDAY | DECEMBER 10 | 2:00 pm – 3:00 pm

CONCURRENT SESSION IV

MEETING ROOM 1

Title: Agricultural Research

Moderator: Youssouf Diabate, Tuskegee University

Presenter:

- **An Observational Study of Water Quality and Bacterial Communities in Sediments:
A Case Study of Choctawhatchee, Uppawee and Cubahatchee Creeks In the Lower Tallapoosa River Basin, Alabama**
Ovigeroye Ojarikre, T. Hossain, Raymon Shange, Wendell McElhenney, Joseph Essumuah-Quansah,
and Souleymane Fall, Tuskegee University
- **Economic Potential of an Integrated Approach vs. a Traditional Approach for Controlling Animal Diseases and Parasites:
The Case of Small Producers in Rural Alabama**
Lila Karki, Uma Karki, and B. Paneru, Tuskegee University
- **The Financial Implications of Diversifying Wine Grape Production to Include Citrus in the Robertson Area,
Western Cape, South Area**
Blanche Chenay Bezuidenhout, South Africa



THEATER/VIDEO CONFERENCE ROOM

Title: Natural Resource Conservation Services (NRCS)- Moving Outreach Forward

Moderators: Ronald Harris & Vivian Dickson, USDA- NRCS

Description:

The mission of the NRCS Outreach and Advocacy Division is to provide leadership to ensure that all programs and services are made accessible to all NRCS customers, fairly and equitably, with emphasis on reaching the underserved and socially disadvantaged farmers or ranchers and landowners. This interactive session will provide an opportunity for participants to engage with NRCS leaders and learn more about current programs.

BALLROOM FOYER

Professional Poster Setup

3:00 pm – 3:15 pm

Stretch Break

TUESDAY | DECEMBER 10 | 3:15 pm –4:30 pm

CONCURRENT SESSION V

MEETING ROOM 1

Title: Marketing Strategies for Small Agricultural Business & Community Organizations

Moderator: Jerome Myles

Presenter: Elizabeth Myles

THEATER/VIDEO CONFERENCE ROOM

Title: Heir Property and Economic Issues in Agriculture

Moderator: Robert Zabawa, Tuskegee University

Presenters:


- **Heirs' Property and Persistent Poverty- What Do the Numbers Say?**
Stephen Turner, Cassandra Johnson Gaither, and Ardian Harris, Mississippi State University
- **The Impact of Heir Property in Macon County, AL**
Rosie Long, John Deere and Robert Zabawa, Tuskegee University
- **Contextual Meaning Given to the Family Heirs' Property Title Clearing Process**
Sandra Thompson, Florida A&M University
- **Challenges and Opportunities at Farmers Markets: A Case of Small Producers in Alabama's Black Belt**
Jasmine Ratliff, Tuskegee University

BALLROOM FOYER

Title: Professional Poster Session

Presenters:

- **Cost Analysis and Nutrient Profile Assessment of Specialty Crops Grown in Vermicompost Vis-A-Vis Hydroponics**
Clarence Hicks II, S. Samuels, A. Chaney, D. Jones, G. Lester, and B. Biswas, Fort Valley State University
- **The JAK-STAT Pathway Is Affected By Heat Stress In Corpus Lutea Of Post-Pubertal Crossbred Gilts**
Crystal Roach, Katie L. Bidne & Matthew Romoser, Jason Ross & Lance Baumgard and Aileen F. Keat, Iowa State University
- **Assessment of Armillaria Root Rot Resistant Size Controlling Rootstocks for Sustainable Peach Production Alabama**
Elina Coneva and Matthew Price, Auburn University
- **Unwanted Violence Towards Our Youth**
Dennis Murray, Sr., YDACB
- **Influence Of Forest Vegetation Shift On Ground Water Recharge In Ocala National Forest**
Israel Ojo & Lucy Ngatia, Florida A & M University & Johnny Grace and Alfredo Lorenzo, USDA Forest Service
- **Cultivating the Next Generation of Black Farmers and the Restoration of Farming Communities**
Jifunza Wright-Carter, Black Oaks Center
- **Review of Aquaponics system: Searching for a Technically Feasible and Economically Profitable Aquaponics System**
Kamal Gosh, Langston University and Santa Chowdhury, University of Chittagong, Bangladesh
- **Anaerobic Soil Disinfection: A Potential Alternative to Chemical Soil Fumigation**
Kaylene, Sattanno, Alia DeLong, Marilyn E. Swisher, Bodh Paudel, Qiang Zhu, Xin Zhao, Zhifeng Gao, Jason Hong, University of Florida, Francesco Di Gioia, USDA -ERS, and Erin Roskopf, Pennsylvania State University
- **Greening of Strawberry Plasticulture in Florida**
Kaylene Sattanno, Marilyn Swisher & Lillian Pride & Carlene A. Chase, University of Florida
- **Vitamin D Intakes of Students Completing the Nutrition Lifestyle Activities & Behaviors Project (NLAB) at a Rural Mississippi Historically Black College/University (HBCU)**
Kiara Azor & Cinda Catching, Alcorn State University
- **A Diversity Summit: Growing Our Mindset for One World, One Family**
Lonnie. Hobbs, Jr. & Zelia Wiley, Kansas State University
- **Predicting Bruising Thresholds of Organic Sweet potatoes Using Instrumented Sphere Technology**
Makeda Nurradin, Tuskegee University
- **Application Of Neutron Activation Analysis (NAA) For Accurate Measurements Of Water Flow In Pipes**
Mohammadreza Hadizadeh, Central State University
- **The Mental Health & Resilience Of The Minority Farmer: A Casualty Of Sustained Racism**
Tia Mutiah Lennora Pierrot, BABI- Bibs and Blankets International & Tony Gobert, Gwinnet Technical College & Josie Gbadamosi, The Shady Grove Blueberry Patch

- 
- **Sam and Anna in Berlin- Alabama That is**
Wiggins, Lydia, Independent Researcher
 - **A Greenhouse Study Evaluating the Feasibility of Intercropping Industrial Hemp in a Loblolly Pine Plantation**
Zakiya Leggett, Alison Plumley, and Tyrik Cooper, North Carolina State University

4:30 pm – 5:30 pm Agribusiness Expo & Refreshment Break – *Camilla Room*

6:00 pm – 6:30 pm Networking Break

6:30 pm – 10:00 pm George Washington Carver Public Service Hall of Fame Awards Banquet

Presiding: Alton Thompson, Association of Research Directors

Invocation: William Crutchfield, Virginia State University

Dinner

Musical Performance

Induction into the Hall of Fame

Carver I: Lawrence Carter, Florida Agricultural & Mechanical University

Carver II: Rosalind Harris – University of Kentucky- Lexington

Recognition of Student Awards: Lila Karki & Franklin Quarcoo, Gamma Sigma Delta, Tuskegee University

Musical Performance

“No individual has any right to come into the world and go out of it without leaving behind him distinct and legitimate reasons for having passed through it.”

– George Washington Carver

GRADUATE ORAL

THEATRE/VIDEO CONFERENCE ROOM

GROUP 1

9:00 am – 9:15 am

01. IDENTIFYING EFFECTIVE AGRICULTURAL BEST MANAGEMENT PRACTICES FOR SMALL-SCALE FARMERS WITHIN THE BLACK BELT REGION OF ALABAMA

AISHA FAVORS, Joseph Essamuah-Quansah (Faculty Advisor), Souleymane Fall, Desmond Mortley, Raymon Shange, Franklin Quarcoo and Ramble O. Ankumah
Tuskegee University, AL

9:15 am – 9:30 am

02. GENETIC ASSOCIATIONS FOR FLOWER TRAITS OF *MISCANTHUS* GROWN IN THE SOUTHEAST UNITED STATES (TUSKEGEE, ALABAMA)

YONGLI ZHAO and Jessie Jaynes (Faculty Advisor)
Tuskegee University, Tuskegee, AL

9:30 am – 9:45 am

03. EVALUATION OF ROW COVERS IN YIELD PERFORMANCE OF THE LEAFY GREEN VEGETABLES IN ORGANIC MANAGEMENT SYSTEM

KRIPA DHAKAL, and Dilip Nandwani (Faculty advisor)
Tennessee State University, TN

9:45 am – 10:00 am

04. MODELING OF EXPANSION OF A HOLE CAUSED BY SOIL LOSS AT THE PROXIMITY OF PINCHBACK HALL ON SOUTHERN UNIVERSITY (SUBR) AND NUMBER OF YEARS THE HOLE WILL EXPAND TO TOUCH THE BUILDING

JOHN BOSCO NAMWAMBA¹, Yaw A. Twumasi¹, Kamran Abdollahi (Faculty Advisor), Ronald Okwemba¹, Yemane Ghebreiyyesus¹ and Thomas L. Nyatta²
¹Southern University (SUBR), LA, ²University of Mississippi, MS

10:00 am – 10:15 am

05. THE RELATIONSHIP BETWEEN THE CHURCH, LAND OWNERSHIP AND HEIR PROPERTY FOR THE AFRICAN AMERICAN COMMUNITY IN MACON COUNTY, ALABAMA

KARA WOODS, Robert Zabawa, and Souleymane Fall, Tuskegee University, AL

10:15 am – 10:30 am

06. EFFECT OF LATE GESTATION HEAT STRESS ON HEIFER'S HEMATOLOGY AND IMMUNE COMPETENCE

BRITTANY NICOLE JOHNSON¹, B. Davidson², B. Dado-Senn², N. Rosa², T. F. Fabris², L. Casarotto², V. Ouellet², G. E. Dahl², J. Laporta (Intern Advisor)²
¹Tuskegee University, AL, ²University of Florida, FL

10:30 am – 10:45 am

07. SYSTEM SUSTAINABILITY: USING COWPEA (*VIGNA UNGUICULATA*) IN AN INTERCROPPING SYSTEM TO ALLEVIATE EFFECTS OF POLLINATOR DECLINE ON CROP PRODUCTIVITY

PAUL C. OMALIKO, Beatrice N. Dingha (Faculty Advisor), and Louis E. N. Jackai
North Carolina A&T State University, NC

10:45 am – 11:00 am

08. FIELD EVALUATION OF THE EFFECT OF FOLIAGE REMOVAL ON ROOT YIELD, PEST AND DISEASE INCIDENCE AND DIVERSITY, AND THE ANTICANCER EFFECTS OF VARIOUS SWEET POTATO (*IPOMEA BATATAS*) CULTIVARS
ENOCH AYAMGA, Beatrice Dingha (Faculty Advisor) and Louis Jackai
North Carolina A&T State University, NC

11:00 am – 12:15 pm **Student Competition Networking Break**

12:15 pm – 12:30 pm

09. INCREASING YIELD OF *STEVIA REBAUDIAN* EXTRACT THROUGH SOLVENT-FREE SONICATION IN COMPARISON TO TRADITIONAL EXTRACTION METHODS
GEOFFREY LESTER, Steven Samuels, Alana Chaney, Clarence Hicks, D'amber Jones, and Bipul Biswas
Fort Valley State University, GA,

12:30 pm – 12:45 pm

10. ASSESSING THE IMPACT OF VARIOUS ORGANIC AMENDMENTS ON RHIZOSPHERE ECOLOGY OF BELL PEPPER
MALACHI MUHAMMAD, Raymon Shange, and Desmond Mortley (Faculty Co-advisors)
Tuskegee University, AL

12:45 pm – 1:45 pm

11. NATURAL INFECTION OF FUNGAL, BACTERIAL AND VIRAL PATHOGENS TO DRY BEAN GENOTYPES
BINAGWA, PAPIAS H., G. He and C. K. Bonsi (Faculty Advisors), M. Egnin, G. C. Bernard, and D. Mortley, T. Sy
Tuskegee University, AL

12:45 pm – 1:00 pm

12. GENOME EDITING IN PEANUT
BINITA SUBEDI¹, Guohao He¹ (Faculty Advisor), Sy Traore¹, Suman Veeramasu¹, Papias Binagwa¹, Anjanasree Neelakandan², David Wright², Martin Spalding², Xiangyu Chen³, and Fengzhen Liu⁴
¹Tuskegee University, AL, ²Iowa State University, IA, ³Fujian Academy of Agricultural Sciences, China, ⁴Shandong Agricultural University, China

MEETING ROOM 3

GROUP 2

9:00 am – 9:15 am

01. CHARACTERIZATION OF PHOSPHORUS(P) IN POULTRY LITTER AND DETERMINATION OF P EXTRACTION EFFICIENCY OF EXTRACTANTS
POULOMI DEV, Rishi Prasad, and Debolina Chakraborty
Auburn University, AL

9:15 am – 9:30 am

02. USING NITROGEN BUDGET TO QUANTIFY ENVIRONMENTAL NITROGEN LOSS UNDER POULTRY LITTER AND UREA APPLICATION SYSTEMS
RAJVEER SINGH and Rishi Prasad (Faculty Advisor)
Auburn University, AL

9:30 am – 9:45 am

03. CONSUMERS' ACCEPTANCE, PREFERENCE AND WILLINGNESS TO PAY FOR CONVENIENT CATFISH PRODUCTS: RESULTS FROM EXPERIMENTAL AUCTIONS IN ARKANSAS
SAROJ ADHIKARI, Uttam Deb (Faculty Advisor), Madan Dey, Lin Xie, Nabin B. Khanal, Peter Bechtel, John Bland and Casey Grimm
University of Arkansas at Pine Bluff, AR

9:45 am – 10:00 am

04. IMPLICATIONS FOR MARKETING PRODUCT ATTRIBUTES IN THE PET FOOD INDUSTRY

LONNIE HOBBS, JR. and A. Shanoyan (Faculty Advisor)

Kansas State University, KS

10:00 am – 10:15 am

05. THE EFFECTS ON THE UTILIZATION OF NOSE FLAPS OF WEANING BEHAVIOR CHARACTERISTICS OF BEEF CALVES

KAYLA - MARIE JONES, Wendall McElhenney (Faculty Advisor) and Chukewueme Okere

Tuskegee University, AL

10:15 am – 10:30 am

06. THE PERCEPTION OF THE EFFECTS OF COMMUNITY GARDENS ON FOOD DESERT COMMUNITIES IN SELECTED COUNTIES OF THE ALABAMA BLACK BELT

CARTER ANDRE D. and Tackie, David (Faculty Advisor)

Tuskegee University, AL

10:30 am – 10:45 am

07. AGRICULTURAL VALUE CHAIN FINANCE IN DEVELOPING COUNTRIES: A SOCIOLOGICAL APPROACH TO MINIMIZE AGRICULTURAL LOAN VIABILITY RISK AMONG SMALLHOLDER RURAL FARMERS

FOMBA WAI and Joseph Molner (Faculty Advisor)

Auburn University, AL

10:45 am – 11:00 am

08. THE EFFECTS BLACK SHADE BALLS HAVE ON THE REDUCTION OF ALGAE GROWTH IN LIVESTOCK WATERING SYSTEMS

CHRISTOPHER ALLEN and Wendall McElhenney (Faculty Advisor)

Tuskegee University, AL

11:00 am – 12:15 pm **Student Competition Networking Break**

12:15 pm – 12:30 pm

09. UTILIZATION PATTERN OF WOODLAND VEGETATION BY HAIR SHEEP

NEVERSHI ELLIS, Uma Karki (Faculty Advisor), and Bidur Paneru

Tuskegee University, AL

12:30 pm – 12:45 pm

10. EVALUATION OF SMALL BUSINESSES UTILIZING VALUE COCREATION THROUGH SOCIAL MEDIA

FINNEY MARILYN E., Hugue, Tatiana B., and Singh R.

South Carolina State University, SC

12:45 pm – 1:00 pm

11. SOIL HEALTH AND CROP PRODUCTION UNDER ALLEY CROPPING SYSTEM

JONES LEE D., Leonard Kibet (Faculty Advisor), Girish Panicker, and Jacqueline McComb

Alcorn State University, MS

UNDERGRADUATE ORAL

BALLROOM A

GROUP 3

9:00 am – 9:15 am

01. EVALUATION OF FITNESS COST ASSOCIATED WITH CARRIAGE OF INC I1 PLASMIDS IN ENTERIC BACTERIA

WESTON KENNEDI^{1,2}, A. Carlton^{1,2}, N. Aljahdali², B. Khajanchi², J. Han², S. Foley² and Y. M. Sanad^{1,2} (Faculty Advisor)

¹University of Arkansas at Pine Bluff, AR, ²National Center for Toxicological Research, U.S. Food and Drug Administration, AR

9:15 am – 9:30 am

02. USE OF BLOOD METABOLITES PERIPARTUM TO PREDICT POSTPARTUM LIVER TRIGLYCERIDE CONTENT IN DAIRY CATTLE

WALDON NAOMI L.¹, C. Seely², S. Erb², R. Pralle², M. Martin², and H. White²

¹Tuskegee University, AL, ²University of Wisconsin – Madison, WI

9:30 am – 9:45 am

03. DOMESTIC VIOLENCE AND ITS IMPACT ON CHILDREN'S DEVELOPMENT

JASMINE WILLIAMS and Martha Ravola (Faculty Advisor)

Alcorn State University, MS

9:45 am – 10:00 am

04. A STUDY OF STUDENT WELLNESS AT ALCORN STATE UNIVERSITY

DESTINEE SCOTT and Martha Ravola (Faculty Advisor)

Alcorn State University, MS

10:00 am – 10:15 am

05. ENHANCING SUSTAINABLE SPECIALTY CROP PRODUCTION IN SOUTHWEST MISSISSIPPI

OUNAME MHOTSHA¹, F. Iseguede¹, C. Ayers², F. Mrema¹, A. Baffoe-Bonnie¹, F. Chukwuma¹, L. Kibet¹

¹Alcorn State University, MS, ²Foot Footprint Farms, MS

10:15 am – 10:30 am

06. CHLAMYDIA: THE SILENT STRIKER

MANSON TYARA A. and Ray, Kajia R. and Hoffman, Catrina (Advisor)

Tuskegee University, AL

10:30 am – 10:45 am

07. MAINTAINING A HEALTHY LIFESTYLE AS A COLLEGE STUDENT

EDWARDS ZION D., St. George, Sabreya, Robinson, Tori, and Saunders, Autumn

Tuskegee University, AL

10:45 am – 11:00 am

08. EFFECT OF ULTRASOUND TARGETED MICROBUBBLE CAVITATION ON ENDOTHELIAL BARRIER PERMEABILITY

ANA RYAN^{1,2}, Thiruganesh Ramasamy¹, Xucai Chen¹, and Flordeliza S. Villanueva¹ (Faculty Advisor)

¹University of Pittsburgh, PA, ² Tuskegee University, AL

11:00 am – 12:15 pm: Student competition Networking Break

12:15 pm – 12:30 pm

09. INFLUENCE OF WELL VACCINATED DAMS EXPOSURE TO BVDV DURING PREGNANCY ON RESULTING CALVES INFECTION STATUS
KIERNEY BURKS
Tuskegee University, AL

12:30 pm – 12:45 pm

10. RECRUITMENT OF 1890 STUDENTS INTO AGRICULTURE
MARBURY BETHANY E.¹, Wiley, Zelia², and Hobbs, Lonnie Jr.³
¹Tuskegee University, AL, ²Kansas State University, KS

12:45 pm – 1:00 pm

11. EVALUATION OF MICROBIAL POPULATIONS IN UTERUS OF EARLY LACTATION COWS
JOHNSON JESSICA M.¹, C. Takiya², L. Mamedova², and B. Bradford²
¹Tuskegee University, AL, ²Kansas State University, KS

1:00 pm – 1:15 pm

12. THE ROLE OF CHANGING PRECIPITATION PATTERNS IN MOSQUITO POPULATION DYNAMICS
ANNA M. COBB¹ and Shannon LaDeau²
¹Tuskegee University¹, AL, ²Cary Institute of Ecosystem Studies, NY

1:15 pm – 1:30 pm

13. STUDENTS PERCEIVED and ACTUAL INTAKE of FRUITS and VEGETABLES at a RURAL MISSISSIPPI HISTORICALLY BLACK COLLEGE/UNIVERSITY (HBCU)
PATRICE WILSON, Cinda Catchings (Faculty Advisor), and Edith Ezekwe
Alcorn State University, MS

*“You’ve got to have faith
in what you’re doing
and not take no for an answer.”*

– Nipsey Hussle

UNDERGRADUATE ORAL

BALLROOM A & B

GROUP 4

9:00 am – 9:15 am

14. ASSESSMENT OF BODY MASS INDEX, TOTAL AND EMPTY CALORIE INTAKE, AND FOOD INSECURITY RATE OF STUDENTS AT A RURAL SOUTHWEST MISSISSIPPI UNIVERSITY
KAITLYN JAMES and Cinda Catchings (Faculty Advisor)
Alcorn State University, MS

9:15 am – 9:30 am

15. USING COMMUNITY GARDENS TO DEMONSTRATE INTERGRATED PEST MANAGEMENT (IPM) PRACTICES AND INCREASE FOOD SECURITY IN SOUTHWEST MISSISSIPPI
OWENS DERRICK¹, D. Collins¹ (Faculty Advisor), L. Ross¹, and T. Rashid¹, M. McIntyre², and R. Butler³
¹Alcorn State University, MS, ²Natchez Triumphant SDA Church Community Garden, MS, ³Morgan-Collins Home School, LA

9:30 am – 9:45 am

16. ISOLATION AND CHARACTERIZATION OF TRICHODERMA ISOLATES FROM ENERGY GRASS GIANT MISCANTHUS (MISCANTHUS GIGANTEUS)
ROSS LANE, D. Collins (Faculty Advisor), and K. Mandyam
Alcorn State University, MS

9:45 am – 10:00 am

17. RECLAIMING OF POLY (ETYLENE TEREPHTHALATE) FROM POST-CONSUMER PLASTICS VIA SOLVENT EXTRACTION
NURANNAHAAR ABDUSSALAM and Nasrollah Hamidi (Faculty Advisor)
South Carolina State University, SC

10:00 am – 10:15 am

18. SPANISH MOSS AS A BIO-INDICATOR OF AIR POLLUTION IN THE LOW COUNTRY OF SAVANNAH RIVER BASIN
HARGLERODE J., G. Nelson, and Z. J. Sun (Faculty Advisor)
South Carolina State University, SC

10:15 am – 10:30 am

19. USING RELAXATION AND CONCENTRATION IN BRAIN - COMPUTER INTERFACE STUDY
HOOK DESIRAE, Liljana Bozinovska (Faculty Advisor), Jessica. Mitchell, and Nyeshiah Randolph
South Carolina State University, SC

10:30 am – 10:45 am

20. MUSIC AND AGRICULTURAL LITERACY AWARENESS: GRADES PREK-5
PARSON KATAYA S., Jamieon Jamison-Gilmore, and Rosetta Dingle (Faculty Advisor)
South Carolina State University, SC

10:45 am – 11:00 am

21. A SOCIAL WORKER'S ROLE IN IMPROVING FOOD INSECURITY TO PROMOTE HEALTHY STUDENT DEVELOPMENT THROUGH SCHOOL-BASED SERVICES
FARMER KELLY S., L.M. Tucker (Faculty Advisor), and J. L. Rogers
South Carolina State University, SC

11:00 am – 12:15 pm: Student competition Networking Break

12:15 pm – 12:30 pm

22. DETERMINING CONCENTRATIONS OF TOXIC ELEMENTS IN COTTON SEEDS BY INSTRUMENTAL NEUTRON ACTIVATION ANALYSIS (INAA)

MANHARDT AMELIA¹, N. Isa², and Z. J. Sun (Faculty Advisor)¹, Q. S. Cai³ and S. Lassell^{4, 1}

^{1, 3, 4} South Carolina State University, SC, ²North Carolina State University, NC

12:30 pm – 12:45 pm

23. INVESTIGATING THE EXPRESSION OF ACUTE AND CHRONIC INFLAMMATORY MARKERS IN SOUTH CAROLINIAN CHILDREN: ORANGEBURG COUNTY ANALYSIS

MEDINA-BANDY ELIJAH, T. Biotidara K. Hasty, V. Burgess, S. Brown, and A. Knowell (Faculty Advisor)

South Carolina State University, SC

12:45 pm – 1:00 pm

24. ANALYSIS OF SMALL FARM AND NON-FARM BUSINESSES IN A TRI-COUNTY REGION OF BAMBERG, CALHOUN AND ORANGEBURG IN THE STATE OF SOUTH CAROLINA

DUKES SHANA, H. Selassie and M. Mustafa (Faculty Advisor)

South Carolina State University, SC

1:00 pm – 1:15 pm

25. MITE BITING BEHAVIOR OF APIS MELLIFERA (HONEY BEES) AND MANDIBLE SCANNINGS

KAILA N. YOUNG and Hongmei Li-Byarlay (Faculty Advisor)

Central State University, OH

*“There is no power
for greater change than a community
discovering what it cares about.”*

- Margaret J. Wheatley

GRADUATE POSTER

BALLROOM D & E

GROUP 5

01. THE IMPLEMENTATION AND EVALUATION OF AN ARTIFICIAL INSEMINATION TRAINING WORKSHOP IN GOATS
ATIYA SHAHID, Olga Bolden-Tiller (Faculty Advisor), and Wendell McElhenney
Tuskegee University, AL
02. IMPROVING DRINKING WATER SYSTEMS IN HAITI: A FOCUS ON TRAINING AND TECHNOLOGY
LONEGE OGISMA, Frances O'Donnell, and Joseph J. Molnar (Faculty Advisor)
Auburn University, AL
03. KNOWLEDGE, ATTITUDES AND PERCEPTIONS OF OBESITY AND OVERWEIGHT AMONG SENIOR CITIZENS IN RURAL ALABAMA
JOHNPAUL KAGULIRE and Norma Dawkins (Faculty Advisor)
Tuskegee University, AL
04. THE EFFECTS OF FEEDING DIFFERENT WINTER FORAGES ON GROWTH PERFORMANCE, BODY CONDITION SCORE, FAMACHA, AND CARCASS TRAITS OF MEAT GOATS IN THE SOUTHEASTERN USA
NIKISHA RYAN, Nar Gurung (Faculty Advisor), Jeremy Byrant, Frank Abrahamsen, Wendell McElhenney, and Sunday Asogwa
Tuskegee University, AL
05. DOES POULTRY LITTER AFFECT DRYLAND CORN GRAIN YIELD AND NUTRIENT COMPOSITION?
RAJVEER SINGH and Rishi Prasad (Faculty Advisor)
Auburn University, AL
06. ESTIMATING SOIL PHOSPHORUS STORAGE CAPACITY OF MAJOR SOIL TYPES OF ALABAMA: IMPLICATIONS FOR ENVIRONMENTAL LOSS RISK ASSESSMENT
ANJAN BHATTA, Rishi Prasad (Faculty Advisor) and Debolina Chakraborty
Auburn University, AL
07. SENSORY APTNESS AND ITS INFLUENCE ON CONSUMER'S WILLINGNESS TO PAY OF CONVENIENT CATFISH PRODUCTS
KHANAL NABIN¹, U. Deb, M. Dey, L. Xie, S. Adhikari, P. Bechtel, J. Bland and C. Grimm
¹University of Arkansas at Pine Bluff, AR
08. NORTH CENTRAL REGION PRODUCE GROWER TRAINING KNOWLEDGE ASSESSMENT
BRIDGET PERRY, Arlene Enderton, Shannon Coleman, and Angela Shaw (Faculty Advisor)
Iowa State University, IA
09. ASSESSMENT OF *DUDDINGTONIA FLAGARANS* IN REDUCING AVAILABILITY OF INFECTIVE LARVAE OF GASTROINTESTINAL NEMATODES IN FECES OF GOAT
VERNITA SMITH, Tom Terrill and Brou Kouakou (Faculty Advisors)
Fort Valley State University, GA
10. COMPARISON OF STEVIA GROWTH AND CROP QUALITY IN TRADITIONAL VS HYDROPONICS FARMING
D'AMBER JONES, S. Samuels, A. Chaney, C. Hicks, G. Lester, and B. Biswas
Fort Valley State University, GA

11. RADIOLOGICAL ASSESSMENT OF ORGANIC FERTILIZERS
KENNETH GIBSON, Jeremiah Billa & Steve Adzanu (Faculty Advisors)
Alcorn State University, MS
12. UTILIZING ANTI-ADDICTIVE PROPERTIES OF GINGER [*ZINGIBER OFFICINALE*] TO EASE OPIOID WITHDRAWAL SYMPTOMS IN MORPHINE INDUCED MAMMALIAN CELLS
CHANEY ALANA, S. Samuels, D. Jones, G. Lester, C. Hicks, B. Biswas
Fort Valley State University, GA
13. IDENTIFICATION OF NEW DROUGHT RESISTANCE GENES, ARG29B AND 29B, THAT CONCURRENTLY IMPROVE CROP YIELDS
WENSHAN LIU, Ed Sikora and Sang-Wook Park (Faculty Advisor)
Auburn University, AL
14. PROFITABILITY IN MARKETING BRED HEIFERS IN ALABAMA
PINTO ALLAN F., B. Goodrich, W. Kelley, and M. Runge
Auburn University, AL
15. CATHELICIDIN FROM ALLIGATOR ENHANCES PROTECTION OF CHANNEL AND CHANNEL-BLUE HYBRID CATFISH FROM AEROMONAS HYDROPHILA AND EDWARDSIELLA ICTALURI INFECTIONS
RHODA MAE SIMORA, Shangjia Li, Michael Coogan, Nour El Hussein, Wenwen Wang, Jeffery Terhune, Mark Liles and Rex Dunham (Faculty Advisor)
Auburn University, AL
16. EXPERIENTIAL LEARNING MODULES FOR TEACHING INTERNATIONAL AGRICULTURAL DEVELOPMENT
NYESA GORDON, Abhimanyu Gopaul, Joseph J. Molnar, and James Linder
Auburn University, AL
17. ANTIOXIDANT POTENTIALS AND INHIBITORY ACTIVITY OF ORANGE AND PURPLE COLOR SWEETPOTATOES (*IPOMOEA BATATAL L.*) TOWARDS RAT INTESTINAL α -GLUCOSIDE USING PNG AS A SUBSTRATE
RABBANI BRITI, B. Z. Adam, and S. Islam (Faculty Advisor)
University of Arkansas at Pine Bluff, AR
18. VARIATIONS IN SUMMER HEMATOLOGICAL, SERUM BIOCHEMICAL PARAMETERS, BODY WEIGHTS, BODY CONDITION AND FAMACHA SCORES IN KIKO MEAT GOATS
RANDALL JERROD KING and Chukwuemeka Okere (Faculty Advisor), Tuskegee University, AL
19. BANKER TRAP CROP (BTraP): A NEW TRAPPING APPROACH IN THE MANAGEMENT OF THE HARLEQUIN BUG (*MURGANTIA HISTRIONICA*) ON COLLARD
LAWRENCE OWUSU, Louis E. N. Jackai (Faculty Advisor), and Beatrice N. Dingha
North Carolina A&T State University, NC
20. COMPARISON OF DIFFERENT RUMEN INOCULUM SOURCES FOR DETERMINING *IN VITRO* TRUE DIGESTIBILITY OF DIFFERENT WINTER FORAGES ACROSS THE GROWING SEASON
FRANK ABRAHAMSEN¹, Nikisha Ryan¹, Kim Mullenix², and Nar Gurung (Faculty Co-advisor)¹
Tuskegee University¹, AL, Auburn University², AL

21. THE DEVELOPMENTAL INFORMATION AND EVALUATION OF COSTA RICA
KAYLA – MARIE JONES¹, E. Bonsi¹, M. Alvarez², and S. Tubene³
¹Tuskegee University, AL, ²Delaware State University, DE, ³University of Maryland Eastern Shore, MD
22. SOIL THERMAL CONDUCTIVITY MODELS EVALUATION UNDER SEMIARID PASTURE SOILS
GEETA KHAREL, and Sanjit K. Deb (Faculty Advisor)
Texas Tech University, TX
23. COMPARATIVE ANALYSIS OF FOUR CORN INBRED LINES BY AMPLIFIED FRAGMENT POLYMORPHISM REVEALS MARKERS ASSOCIATED WITH RESISTANCE AGAINST CORN LETHAL NECROSIS DISEASE
INOCENT RITTE¹, M. Egnin¹, P. Kulsolwa², G. C. Bernard¹, G. He, C. Bonsi¹
¹Tuskegee University, AL, ²Sokoine University of Agriculture, Morogoro –Tanzania
24. NO-TILL ORGANIC PRODUCTION OF MUSKMELON (*CUCUMIS MELO* L.) ON A HEAVY SOIL AND ITS EFFECT ON BIOMASS, YIELD, AND SOIL PHYSICO-CHEMICAL CHANGES
ANDREW A. FRYE, Girish K. S. Panicker, Kibet Leonard, and Ananda Nanjunda Swamy
Alcorn State University, MS
25. MANAGEMENT STRATEGIES FOR EFFICIENT UTILIZATION OF WOODLAND RESOURCES INTEGRATING SMALL RUMINANTS
BIDUR PANERU¹, Uma Karki¹ (Faculty Advisor), Nevershi Ellis¹, Lila B. Karki¹ and Shailes Bhattarai²
¹Tuskegee University, AL, ²University of Georgia, GA

*“A winner is a dreamer
who never gives up.”*


- Nelson Mandela


UNDERGRADUATE POSTER

BALLROOM C

GROUP 6

01. MUTANT ACETYLATION IN PLANT PATHOGEN INTERACTIONS
DESIREE T. WARREN, Brianna Griffin, Justin Walley and Olga Bolden-Tiller
Tuskegee University, AL
02. SUCCESS STORIES ON THE NCR FSMA TEAM
DAYSIA WILLIAMS¹, Angela Shaw² (Advisor), Bridget Perry², and Olga Bolden-Tiller¹
¹Tuskegee University, AL, ²Iowa State University, IA
03. ASSESSMENT AND CHARACTERIZATION OF LEGACY AND CURRENT-USE PESTICIDES (CUPS) IN THE MAUMEE AND OTTAWA RIVERINE SYSTEMS
ELYSE BONNER and M. Edwards
Tuskegee University, AL
04. MONARCH LARVAL MOVEMENT ON COMMON MILKWEED
CODY J. ACEVEDO, K. E. Fisher, and S. P. Bradbury
Iowa State University, IA
05. POTENTIAL OF HYDROPONIC HERB PRODUCTION FOR YIELDING QUALITY PLANT MATERIALS
SHANTINIQUE MILLER and M. Nagle (Faculty Advisor)
Central State University, OH
06. ANTI-BACTERIAL POTENTIAL OF BIOLOGICAL EXTRACTS BASED ON OBSERVED EFFECTS WITH *CHROMOBACTERUM VIOLACEUM*
PRINCESS SIMEON, Marcus Nagle, and Anthony Arment (Faculty Advisors)
Central State University, OH
07. RADIOACTIVITY STUDIES ON TOBACCO LEAVES
LARONDA WILSON, Jermiah Billa and Steve Adzanu (Faculty Advisors)
Alcorn State University, MS
08. RADIUM LEVELS IN SOILS COLLECTED IN THE VICINITY OF A COAL-FIRED PLANTS
BERNICE AKUANA, Jermiah Billa and Steve Adzanu (Faculty Advisors)
Alcorn State University, MS
09. IDENTIFICATION OF STARCH UTILIZING BACTERIA IN THE RUMEN OF BEEF COWS
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South Dakota State University, SD
10. RESEARCH TITLE: ANALYSIS OF QUEEN QUALITY BETWEEN FERAL AND COMMERCIAL BEES
XARYN CLEARE and Hongmei Li-Byarlay (Faculty Advisor)
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11. COMPARISON OF ON-FARM WINTER FEEDING STRATEGIES FOR SUSTAINABLE MEAT GOAT PRODUCTION
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 12. THE IMPACT OF HOST FACTORS ON ANTIBODY RESPONSE TO INFLUENZA VACCINE
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 14. METHANE EMISSIONS IN CATTLE FARMING – METHODS TO REDUCE CALIFORNIA'S IMPACT ON GLOBAL WARMING
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ANF ITS TOPS IN RELATION TO POLYPHENOLIC CONTENTS
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N. ISA, F. Martin, and Z. J. Sun (Faculty Advisor)
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“Education is the great engine of personal development. It is through education that the daughter of a peasant can become a doctor, that the son of a mineworker can become the head of the mine, that a child of farm workers can become the president of a great nation. It is what we make out of what we have, not what we are given, that separates one person from another.”

– Nelson Mandela

31. **LINKING MUSIC, AGRICULTURAL LITERACY AND AWARENESS: AT GRADE LEVELS PREK-5**
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32. **A WEB APPLICATION FOR PEAK ANALYSIS AND CONCENTRATION CALCULATIONS IN NEUTRON ACTIVATION ANALYSIS**
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STOKES KAYA, K. Hasty, T. Biotidara, M. Barbour, O. Cross, T. Green, S. Brown, and A. Knowell (Faculty Advisor)
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MACK SHAQUANDA T., and Nasrollah Hamidi (Faculty Advisor)
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35. **IMPLICATION OF CHILDHOOD OBESITY, NUTRITION, AND INFLAMMATION IN ORANGEBURG COUNTY CHILDREN: SURVEY ANALYSIS**
NORMAN CHRISTYAN, L. Sims, T. Green, O. Cross, T. Biotidara, D. Thomas, S. Brown and A. Knowell (Faculty Advisor)
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36. **ACHIEVEMENT MOTIVATION FOR CHILD OBESITY PREVENTION**
NYESHIAH RANDOLPH Liljana Bozinovska (Faculty Advisor), Jessica Mitchell, and Desirae Hook
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— Albert Einstein

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- Develop policy and programs that will allow full participation by underserved individuals and groups and socially disadvantaged farmers or ranchers and landowners.
- Identify and address potential institutional and systemic barriers that prevent underserved customers from full participation.
- Provide implementation strategies to increase the participation in programs and benefits to underserved clientele and socially disadvantaged farmers or ranchers and landowners.
- Develop and implement specific outreach activity performance measures with expected outcomes and program results to ensure better program accountability.
- Develop strategies to most effectively utilize 1890 Land-Grant Colleges and Universities, 1994 Tribal Colleges, Hispanic Serving Institutions and other Historically Black Colleges and Universities. Expand and strengthen relationships in order to increase research capacity and contribute to technical and community assistance to the underserved and socially disadvantaged farmers or ranchers and landowners.
- Develop and maintain effective communication and working relationships with tribal, federal, community-based organizations and non-governmental organizations to engage them in fostering and promoting outreach strategies.
- Expand and enhance partnerships and networks that provide assistance and information to underserved groups and individuals, and socially disadvantaged farmers or ranchers and landowners.

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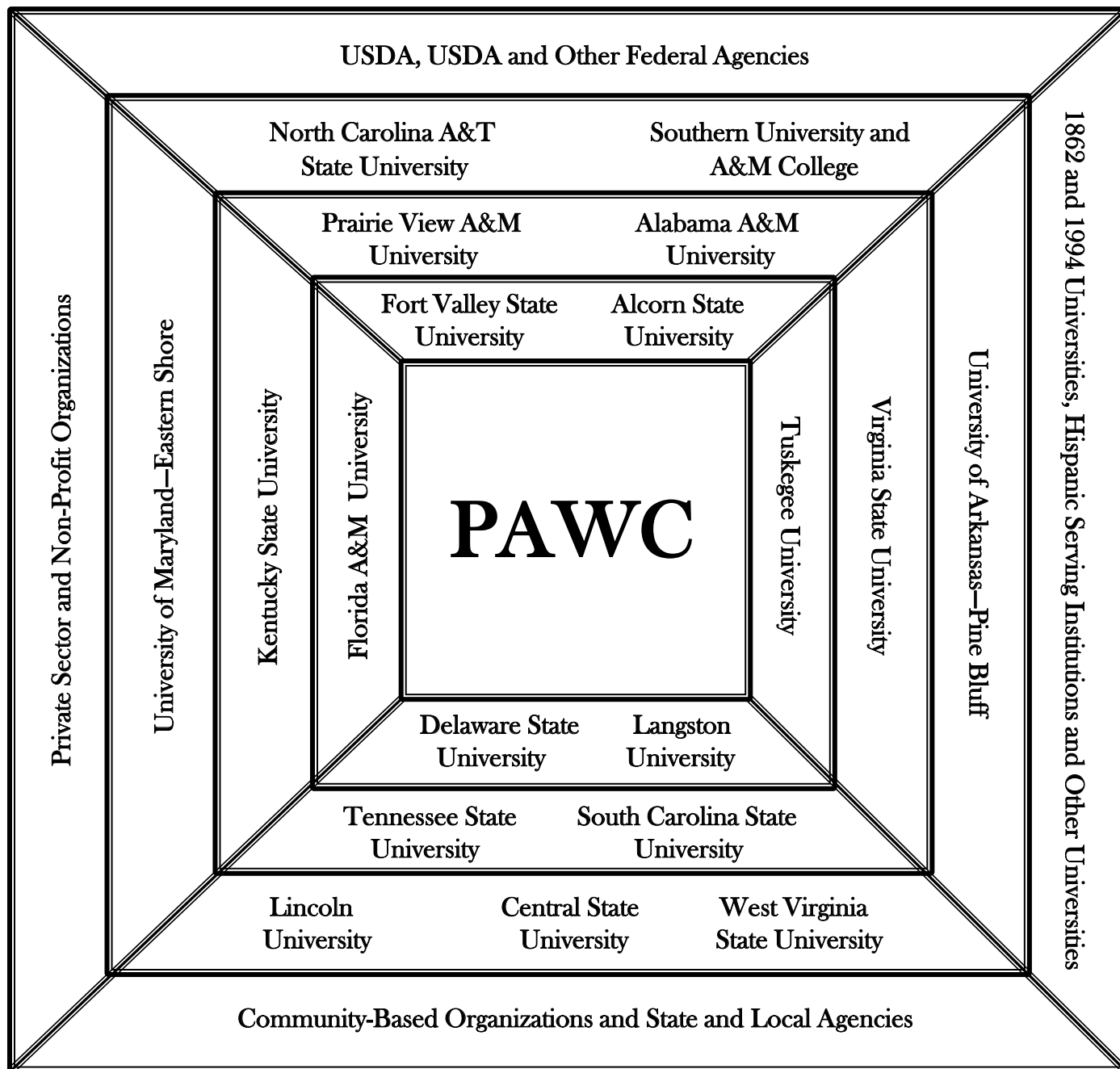
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Headquarters: 110 Henderson hall is the official conference headquarters. The telephone number is (334) 727-8157. Select papers, posters and workshops presented at the conference will be considered for inclusion in the proceedings. Presenters should leave an e-copy of the paper and two hard copies with the Program Coordinators. Papers in final form will still be considered for publication if sent postmarked by January 31, 2020 to 110 Henderson Hall, Tuskegee University, AL 36088.

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