

# 51<sup>st</sup> Tobacco Workers' Conference

## Preliminary Program

V. 01.08.2024

### Monday, January 15, 2024

#### Committee Meetings

8:00 am – 9:00 am	GAP Certification.....	Room 301 D
9:00 am – 10:00 am	Production Guide Committee.....	Room 301 D
3:00 pm – 3:30 pm	Pesticide Committee.....	Room 301 C
3:30 pm – 4:00 pm	Burley Variety Evaluation Committee and Flue Cured Minimum Standard Committee Joint Meeting.....	Room 301 D

### Tuesday, January 16, 2024

8:00 am	Welcome and Opening Remarks: M. Richmond, Program Chair, 51st TWC
8:10 am	Remarks from the Tennessee Commissioner of Agriculture: Dr. Charles Hatcher
8:20 am	1. The history and importance of tobacco production in Tennessee. J. Aiken, Deputy Commissioner of Agriculture, and tobacco producer
8:40 am	2. A grower's perspective on producing tobacco in the 2020's. A. Pedigo, President, Burley, and Dark Tobacco Producer Association.
9:00 am	3. Tobacco Science Journal – 65 Years of History. B. Pearce, University of Kentucky
9:20 am	4. CORESTA Strategy, Cooperation, and Achievements and Perspectives. Stéphane Colard, CORESTA
9:40 am	Break
10:10 am	5. GAP Connections Update. J. Chadwell, GAP Connections
10:30 am	6. Updates from the insurance program for tobacco. R. Bell, Director, United States Department of Agriculture
10:50 am	7. Boots on the ground – US H2-A Labor Program Updates. M. Bryant, Director of Field Services, Tennessee Farm Bureau, and R. Jones, Jones and Church Farms
11:10 am	8. An Update from the Pesticide Residue Testing Program at NCSU. M. VANN, North Carolina State University, Raleigh, NC, USA
Noon	Lunch

	<b>Session A – Grand Ballroom F Tobacco Production</b> <i>Presiding: Andy Bailey</i>	<b>Session B – Grand Ballroom G Engineering and Technology</b> <i>Presiding: Matthew Vann</i>
<b>1:10</b>	<b>9. Greenhouse Tobacco Seed Performance Research.</b> <u>T. Reed</u> <sup>1</sup> , S. Irby <sup>2</sup> ; <sup>1</sup> Virginia Tech, Blackston, VA, USA, <sup>2</sup> Virginia Cooperative Extension - Lunenburg County, Kenbridge, VA, VA	<b>10. Analysis of Multiple Energy Saving Technologies Utilized on a Curing Barn.</b> <u>K. Bostian</u> , G.H. Ellington, J.A. Macialek; North Carolina State University, Raleigh, NC, USA
<b>1:30</b>	<b>11. Evaluation of Yield and Leaf Quality in Tobacco Varieties Screened and Unscreened for Low Conversion of Nicotine to Nornicotine.</b> <u>S. Graham</u> , M. Richmond; University of Tennessee, Knoxville, TN, USA	<b>12. Reducing electrical energy usage during curing with a variable frequency drive.</b> <u>G. Ellington</u> , K.E. Bostain, J.A. Macialek; North Carolina State University, Raleigh, NC, USA
<b>1:50</b>	<b>13. Evaluation of maleic hydrazide applied at different times of day in burley tobacco.</b> <u>M. Richmond</u> , A. Counce, T. Clark, R. Hensley; University of Tennessee, Knoxville, TN, USA	<b>14. Systemic Insecticide Application at Transplanting – An Assessment of Imidacloprid Placement.</b> <u>C. Stainback</u> , M. Vann, M. Short, J. Cheek, J. Machacek, D. Ahumada, A. Huseh; North Carolina State University, Raleigh, NC, USA
<b>2:10</b>	<b>15. Comparison of ridging, hilling, and flat planting for water damage incidence, standability, and sucker Control in dark fire-cured tobacco.</b> <u>C. Rodgers</u> <sup>1</sup> , C. Perkins <sup>1</sup> , A. Bailey <sup>1</sup> , M. Richmond <sup>2</sup> , R. Ellis <sup>2</sup> ; <sup>1</sup> University of Kentucky, Princeton, KY, USA, <sup>2</sup> University of Tennessee, Knoxville, TN, USA	<b>16. Early pest detection and among-cultivar variations in susceptibility to insect pests.</b> <u>A. Nikoukar</u> , H. Farrokhzadeh, S. Parizad, U. Panta, M. Vahidi, S. Shafian, A. Rashed; Virginia Tech, Blackston, VA, USA
<b>2:30</b>	<b>17. Burley tobacco yield and leaf chemistry response to topping height under two nitrogen rates in varieties released over time.</b> <u>M. Richmond</u> , W. Bracey, R. Ellis; University of Tennessee, Knoxville, TN, USA	<b>18. High Throughput Data Collection.</b> <u>J. Machacek</u> , M. Vann, J. Cheek; North Carolina State University, Raleigh, NC, USA
<b>2:50</b>	<b>Break</b>	

	<b>Session A – Grand Ballroom F Tobacco Production</b> <i>Presiding: Mitchell Richmond</i>	<b>Session B – Grand Ballroom G Cigar Wrapper</b> <i>Presiding: William Hardee</i>
<b>3:20</b>	<b>19. Impact of Plant Population on Yield and Leaf Quality of Burley Tobacco Varieties.</b> <u>S. Graham</u> , M. Richmond; University of Tennessee, Knoxville, TN, USA	<b>20. Developing nitrogen and potassium fertilizer rate recommendations for cigar wrapper tobacco in North Carolina.</b> <u>M. James</u> , M. Vann, J. Cheek, J. Machacek, D. S. Whitley; North Carolina State University, Raleigh, NC, USA
<b>3:40</b>	<b>21. Adoption of Agricultural Labour Practices driving sustainable tobacco production in Zimbabwe.</b> <u>S. Bauren</u> <sup>1</sup> , E. Matsvaire <sup>1</sup> , N. Prongue <sup>2</sup> ; <sup>1</sup> TIMB, Harare, Zimbabwe, <sup>2</sup> ECLT Foundation, Geneva, Switzerland	<b>22. Comparison of fungicide programs for cigar wrapper leaf production in Connecticut broadleaf tobacco.</b> <u>C. Perkins</u> , C. Rodgers, A. Bailey; University of Kentucky, Princeton, KY, USA
<b>4:00</b>	<b>23. The impact of harvest timing on burley tobacco.</b> <u>M. Richmond</u> , A. Counce, T. Clark, R. Hensley; University of Tennessee, Knoxville, TN, USA	<b>24. Impact of lower leaf removal and fungicide application on cigar wrapper leaf production in Connecticut broadleaf.</b> <u>C. Perkins</u> , C. Rodgers, A. Bailey; University of Kentucky, Princeton, KY, USA
<b>4:20</b>	<b>25. The Effect of Tillage Practice and Cover Cropping Systems on Yield, Quality, and Angular Leaf Spot Occurrence in Dark Tobacco in Tennessee.</b> <u>A. Thelin</u> <sup>1</sup> , V. Sykes <sup>1</sup> , Z. Hansen <sup>2</sup> , D. Saha <sup>1</sup> , M. Richmond <sup>1</sup> ; <sup>1</sup> University of Tennessee, Knoxville, TN, USA; <sup>2</sup> Cornell University, Ithaca, NY, USA	
<b>4:40</b>	<b>26. Tobacco Seedling Production with Alternative Soilless Media Materials.</b> <u>M. Willard</u> , M. Vann, M. James, J. Machacek, J. Cheek, S. Iley; North Carolina State University, Raleigh, NC, USA	
<b>5:00</b>	<b>Adjourn</b>	

Wednesday, January 17, 2024

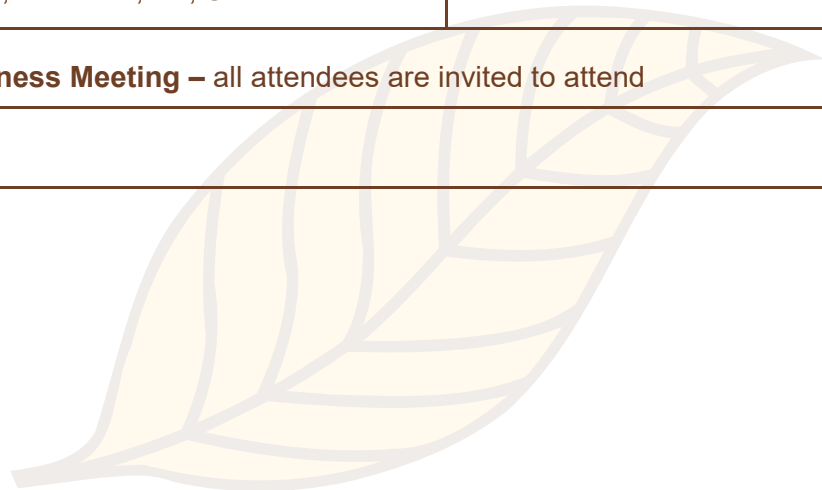
Technical Sessions

	<b>Session A – Grand Ballroom F Fertility and CPA Evaluations</b> <i>Presiding: Eric Walker</i>	<b>Session B – Grand Ballroom G Foliar Disease Management</b> <i>Presiding: J. Michael Moore</i>
8:00	<b>27. Evaluations of Modern Nozzle Technology for Maleic Hydrazide Application in Flue-Cured Tobacco.</b> <u>J. Cheek</u> , M. Vann, C. Cahoon, G. Ellington; North Carolina State University, Raleigh, NC, USA	<b>28. Evaluation of Fungicides for Control of Pole Rot (<i>Rhizopus arrhizus</i>) on flue-cured tobacco.</b> <u>M. AL-Amery</u> ; Canadian Tobacco Research Foundation, Tillsonburg, ON, Canada
8:20	<b>29. Stalk-applied Maleic Hydrazide, Can it Work?</b> <u>J. Cheek</u> , M. Vann, C. Cahoon, G. Ellington; North Carolina State University, Raleigh, NC, USA	<b>30. Quantifying the Effects of Excalia® for Target Spot Control in Flue-Cured Tobacco.</b> <u>C. Stainback</u> , M. Vann, M. Short, D. Ahumada; North Carolina State University, Raleigh, NC, USA
8:40	<b>31. Burley tobacco growth response to sulfur fertilization in Central Kentucky.</b> <u>B. Pearce</u> , T. Valentine, N. Martinez; University of Kentucky, Lexington, KY, USA	<b>32. Management of Angular Leaf Spot Through Chemical Control Options in Dark Tobacco.</b> <u>A.B. Webb</u> <sup>1</sup> , R. Pearce <sup>1</sup> , P. Vinceli <sup>1</sup> , W. A. Bailey <sup>2</sup> , K. Wise <sup>2</sup> ; <sup>1</sup> University of Kentucky, Lexington, KY, USA, <sup>2</sup> University of Kentucky, Princeton, KY, USA
9:00	<b>33. Tobacco growth and yield response to close band placement of liquid fertilizers at-planting.</b> <u>B. Spivey</u> <sup>1</sup> , N. Harrell <sup>1</sup> , M. Vann <sup>2</sup> ; <sup>1</sup> NC State Extension Wilson, NC, USA, <sup>2</sup> North Carolina State University, Raleigh, NC, USA	<b>34. Evaluation of effects of chemical treatments on tobacco leaf spot diseases.</b> <u>Y. Zeng</u> ; Virginia Tech, Blackstone, VA, USA
9:20	<b>35. Exposure of Flue-Cured Tobacco to Sub-Lethal Dose Rates of HPPD-Inhibiting Herbicides.</b> <u>M. Vann</u> ; North Carolina State University, Raleigh, NC, USA	<b>36. The rhizosphere microbial community varies among tobacco cultivars with different resistant mechanisms to <i>Phytophthora nicotianae</i>.</b> <u>Y. Zeng</u> ; Virginia Tech, Blackston, VA, USA

9:40	<b>37. Cured Leaf Residues Following Various Application Timings and Techniques of Chlorantraniliprole.</b> <u>M. Vann</u> , M. James; North Carolina State University, Raleigh, NC, USA	<b>38. Unraveling Microbiome Dynamics in Phytophthora nicotianae-infested Tobacco Fields with Different Crop Management Methods.</b> <u>A. Bello</u> , D. Reed, Y. Zeng; Virginia Tech, Blackstone, VA, USA
10:00	<b>Break</b>	
	<b>Session A – Grand Ballroom F Economics</b> <i>Presiding: Will Snell</i>	<b>Session B – Grand Ballroom G</b>
10:30	<b>39. Tobacco Economic Round Table</b> - W. SNELL, University of Kentucky - G. BOYD, Tobacco Growers Association of North Carolina - D. GREEN, BSC - D. JAYSON, TMA	
11:30	<b>Recognition Luncheon</b>	
1:00	<b>Poster Session</b>	
	<b>Session A – Grand Ballroom F TSNA &amp; Low Alkaloid Tobacco</b> <i>Presiding: David Reed</i>	<b>Session B – Grand Ballroom G Soilborne Disease Management</b> <i>Presiding: Yuan Zeng</i>
2:40	<b>59. Combining Different Genetics-Based TSNA Reduction Strategies in Burley Tobaccos.</b> <u>R. Dewey</u> <sup>1</sup> , H. Ma <sup>1</sup> , R.S. Lewis <sup>1</sup> , S. Goepfert <sup>2</sup> , L. Bovet <sup>2</sup> ; <sup>1</sup> North Carolina State University, Raleigh, NC, USA, <sup>2</sup> Philip Morris Products, S.A., Neuchatel, Switzerland	<b>60. The impact of black shank (Phytophthora nicotianae) presence and nitrogen fertilization on yield and leaf quality of burley tobacco varieties.</b> <u>A.K. Turner</u> and M. Richmond; University of Tennessee, Knoxville, Tennessee, USA

3:00	<p><b>61. Potential ultra-low nicotine limit in tobacco – can we meet it?</b> <u>A. Fisher</u><sup>1</sup>, C. Fisher<sup>1</sup>, B. Patra<sup>1</sup>, H. Ji<sup>1</sup>, J. Kinney<sup>1</sup>, S. Yang<sup>2</sup>, S. Stone<sup>1</sup>; <sup>1</sup>University of Kentucky, Lexington, KY, USA, <sup>2</sup>United States Department of Agriculture, Fargo, ND, USA</p>	<p><b>62. Impacts of Fungicide and Starter Fertilizer Placement at Transplanting.</b> <u>C. Stainback</u>, M. Vann, D. Ahumada and A. Huset; North Carolina State University, Raleigh, NC, USA</p>
3:20	<p><b>63. Potassium Source Influences Yield and TSNA of Burley Tobacco in Tennessee.</b> <u>M. Richmond</u><sup>1</sup>, W. Bracey<sup>2</sup>, R. Ellis<sup>2</sup>; <sup>1</sup>University of Tennessee, Knoxville, TN, USA; <sup>2</sup>Highland Rim AgResearch and Education Center, Springfield, TN, USA</p>	<p><b>64. Survival of the Resistant: An Evaluation of Tobacco Varieties in a Black Shank Nursery.</b> <u>A. Counce</u><sup>1</sup>, M. Richmond<sup>1</sup>, R. Hensley<sup>2</sup>, T. Clark<sup>2</sup>, J. McKinney<sup>2</sup>; <sup>1</sup>University of Tennessee, Knoxville, Tennessee, USA, <sup>2</sup>Northeast Tennessee AgResearch and Education Center, Greenville, TN, USA</p>
3:40	<i>Break</i>	
	<p><b>Session A – Grand Ballroom F</b>  <b>Foliar Disease Management</b>  <i>Presiding: Bob Pearce</i></p>	<p><b>Session B – Grand Ballroom G</b>  <b>Soilborne Disease Management</b>  <i>Presiding: Yuan Zeng</i></p>
4:10	<p><b>65. Disease management practices for dark tobacco in Kentucky and Tennessee.</b> <u>A. Bailey</u>, C. Rodgers, C. Perkins, A. Webb; University of Kentucky, Princeton, KY, USA</p>	<p><b>66. Fusarium Wilt of Tobacco: Unraveling its Complexity and the Susceptibility of Tobacco Varieties.</b> <u>P. Gangwar</u>; Southern Piedmont Agricultural Research and Extension Center, Blackstone, VA, USA</p>
4:30	<p><b>67. Screening Foliar Fungicides for Target Spot Management in North Carolina.</b> <u>C. Stainback</u>, M. Vann, J. Machacek, J. Cheek, D. Ahumada; North Carolina State University, Raleigh, NC, USA</p>	<p><b>68. Simple Survey of Soil Microbe Activity Compared to Soil Borne Disease Incidence.</b> <u>K. Foley</u><sup>1</sup>, F. Scott<sup>2</sup>; <sup>1</sup>Foley Seed and Service LLC, <sup>2</sup>Scott Brothers Farm, Wilson, NC, USA</p>

4:50	<p><b>69. Evaluation of Target Spot (Rhizoctonia solani) Fungicide Products and Application Methods on disease occurrence, yield, and leaf quality of Burley Tobacco.</b> <u>K. Turner</u><sup>1</sup>, M. Richmond<sup>1</sup>, Z. Hansen<sup>2</sup>; <sup>1</sup> University of Tennessee, Knoxville, TN, USA, <sup>2</sup>Cornell University, Ithaca, NY, USA</p>	<p><b>70. Field evaluation of fungicides for management of Black shank of tobacco caused by Phytophthora nicotianae on Burley.</b> <u>N. Martinez</u>; University of Kentucky, Lexington, KY, USA</p>
5:10	<p><b>71. Environmental Factors and Management Practices Associated with Angular Leaf Spot Incidence In Dark Tobacco.</b> <u>A.B. Webb</u><sup>1</sup>, R. Pearce<sup>1</sup>, P. Vinceli<sup>1</sup>, W. A. Bailey<sup>2</sup>, K. Wise<sup>2</sup>; <sup>1</sup>University of Kentucky, Lexington, KY, USA, <sup>2</sup>University of Kentucky, Princeton, KY, USA</p>	
5:30	<p><b>TWC Business Meeting</b> – all attendees are invited to attend</p>	
6:00	<p><b>Adjourn</b></p>	



## Poster Session

- 40. Investigating off-type flue-cured tobacco plants.** M. AL-Amery; Canadian Tobacco Research Foundation, Tillsonburg, ON, Canada
- 41. Occurrences and distribution of Plant-Parasite Nematodes in Lowndes County Georgia Tobacco.** J. Dawson, I.A. Chowdhury, J. M. Moore; University of Georgia, Tifton, GA, USA
- 42. A Multi-County Survey of Plant-Parasitic Nematodes in North Carolina Tobacco Fields.** A. Gorny, H. Bonyak, E. Davis, M. Vann, R. Lewis; North Carolina State University, Raleigh, NC, USA
- 43. Annual evaluation of greenhouse media used by Georgia tobacco transplant producers.** J.M. Moore; University of Georgia, Tifton, GA, USA
- 44. Evaluation of In-Field Sequential Applications of Actigard® for Tomato Spotted Wilt Management in Late Planted Tobacco.** B. Reeves and J.M. Moore; University of Georgia, Tifton, GA, USA
- 45. On-farm evaluation of new and released tobacco varieties for relative resistance to black shank for potential use in Georgia and Florida in 2021, 2022 and 2023.** J. Shealey<sup>1</sup>, B. Reeves<sup>1</sup>, T. Barnes<sup>1</sup>, K. Post<sup>1</sup>, D. Bowen<sup>1</sup>, A. Shirley<sup>1</sup>, R. Greene<sup>1</sup>, J. M. Moore<sup>1</sup>, J. Dawson<sup>2</sup>; <sup>1</sup>University of Georgia, Tifton, GA, USA, <sup>2</sup>Fort Valley State University, Valdosta, GA, USA
- 46. Tomato spotted wilt development in non-treated and imidacloprid treated tobacco plants in multiple Georgia plot locations during the 2023 production season.** A. Shirley<sup>1</sup>, B. Reeves<sup>1</sup>, T. Barnes<sup>1</sup>, R. Greene<sup>1</sup>, J. Shealey<sup>1</sup>, J. Miller<sup>1</sup>, K. Post<sup>1</sup>, J. Jacobs, J. M. Moore<sup>1</sup>, J. Dawson<sup>2</sup>; <sup>1</sup>University of Georgia, Tifton, GA, USA, <sup>2</sup>Fort Valley State University, Valdosta, GA, USA
- 47. Analytical Methodology for EU Target List Residual Pesticides in Cannabis.** L. Sirkisoon, H.Li, R. Cornelius; Labstat International Inc.
- 48. Flutriafol Residues in Non-Traditional Burley Tobacco.** M. Vann, S. Whitley; North Carolina State University, Raleigh, NC, USA
- 49. Tobacco Nematode Survey in Tattnall and Candler Counties in Georgia.** A. Shirley<sup>1</sup>, I. A. Chowdhury<sup>1</sup>, J. M. Moore<sup>1</sup>, G. Jagdale<sup>1</sup>, J. Shealey<sup>1</sup>, K. Post<sup>1</sup>, B. Reeves<sup>1</sup>, T. Barnes<sup>1</sup>, A. Smith<sup>1</sup>, J. Miller<sup>1</sup>, D. Bowen<sup>1</sup>, R. Greene<sup>1</sup>, W. Brown<sup>1</sup>, J. Jacobs<sup>1</sup>, J. Kichler<sup>1</sup>, M. Frye<sup>1</sup>, J. Dawson<sup>2</sup>; <sup>1</sup>University of Georgia, Tifton, GA, USA, <sup>2</sup>Fort Valley State University, Fort Valley, GA, USA



**50. Occurrences and Distribution of Plant-Parasitic Nematodes in Tobacco Fields in Lowndes County, Georgia.** J. Dawson, I. A. Chowdhury, J. M. Moore, G. Jagdale, J. Shealey, K. Post, B. Reeves, T. Barnes, A. Smith, J. Miller, A. Shirley, D. Bowen, R. Greene, W. Brown, J. Jacobs, J. Kichler, M. Frye; University of Georgia, Tifton, GA, USA

## Graduate Student Poster Competition

The 51<sup>st</sup> Tobacco Workers' Conference would like to thank the following graduate students for their participation in the 2<sup>nd</sup> TWC Graduate Student Poster Competition.

**51. Evaluation of Yield and Leaf Quality in Burley and Dark Tobacco: Plant population and screened and unscreened for low conversion of nicotine to nornicotine.** S. Graham, M. Richmond; University of Tennessee, Knoxville, TN, USA

**52. Precision Agriculture in Pest Detection.** A. Nikoulkar, H. Farrokhzadeh, S. Parizad, U. Panta, M. Vahidi, S. Shafian, A. Rashed; Virginia Tech, Blackstone, VA, USA

**53. Agronomic performance and pest susceptibility of low alkaloid burley cultivars in the Regional Quality Trial.** M. Ricciardi, N. Martinez, R. Pearce; University of Kentucky, Lexington, KY, USA

**54. Mancozeb Application in Tobacco: A Revival of an Older Chemistry?** C. Stainback, M. Vann; North Carolina State University, Raleigh, NC, USA

**55. Assessment of selected burley varieties infected with black shank in the greenhouse.** A.K. Turner, M. Richmond, Z. Hansen; University of Tennessee, Knoxville, TN, USA

**56. Impacts of Fungicide and Starter Fertilizer Placement at Transplanting.** C. Stainback, M. Vann; North Carolina State University, Raleigh, NC, USA

**57. Addressing Sucker Control Using Alternative Nozzles and Carrier Volumes to Apply Maleic Hydrazide.** M. Willard, M. Vann; North Carolina State University, Raleigh, NC, USA

**58. The Effect of Tillage Practice and Cover Cropping Systems on Yield, Quality, and Angular Leaf Spot Occurrence in Dark Tobacco in Tennessee.** A. Thelin, V. Sykes, M. Richmond; University of Tennessee, Knoxville, TN, USA