

13th Annual ACMAP Conference

Scientific Program

October 3 - 6, 2024

Times are in Central Standard Time
(CST)

Day 1: October 3, 2024 (Thursday)

Prairie View A&M University

Registration and plenary talk: Willie A. Tempton Memorial Student Center (MSC), Opal Johnson Smith Auditorium

Reception: MSC Ballroom

Shuttle vans will run every 10-15 minutes from the Best Western (Waller) hotel to the university between 3:30 pm and 5 pm. Return from the university to the hotels will be between 7:30 pm and 8:30 pm.

Parking Lot 91 – reserved spaces for ACMAP (see map on the last page)

2:00 PM – 6:00 PM		Registration
4:30 PM – 5:00 PM	Welcome	Conference Program Co-Chairs: Aruna Weerasooriya, Ph.D. Prairie View A&M University Diana Roopchand, Ph.D., Rutgers University Vice President, Research & Innovation, Prairie View A&M University: Magesh Rajan, Ph.D. Dean, College of Agriculture Food & Natural Resources, Prairie View A&M University: Gerard D'Souza, Ph.D. Executive Director, Cooperative Agriculture Research Center, Prairie View A&M University: Memili Erdogan, Ph.D. Executive Director ACMAP: Fabricio Medina-Bolivar, Ph.D., Arkansas State University President ACMAP: Nirmal Joshee, Ph.D., Fort Valley State University

5:00 PM – 6:00 PM	Plenary	O1. Bhimu Patil, Ph.D. Texas A&M University, USA “Climate resilience and its influence on bioactive compounds in fruits and vegetables: Implications for health and gut microbiota”
6:15 PM – 7:30 PM	Reception	Reception Ballroom D
7:30 PM – 8:00 PM	Meeting	ACMAP Board Meeting

Day 2: October 4, 2024 (Friday)

Prairie View A&M University

Registration and sessions I-IV: Cooperative Extension Program (CEP) Building Auditorium

Lunch: CEP

Poster session: CEP

Shuttle vans will run every 10-15 minutes from the assigned Best Western hotel to the university between 7:30 am and 8:30 am. Return from the university to the hotels will be between 6:30 pm and 7:30 pm.

Parking Lot 14 – reserved spaces for ACPMAP (see map on the last page)

7:45 AM – 8:15 AM	Registration	
	Session I	Ethnobotany and Bioprospecting
	Chair	Nirmal Joshee Fort Valley State University, USA
	Co-chair	Surendra Surujdeo-Maharaj Prairie View A&M University, USA
8:15 AM – 8:45 AM	Keynote	O2. Seethapathy G Saroja Fort Valley State University, USA “Ethnobotany of dioecious species and future perspectives in bioprospecting”

8:45 AM – 9:05 AM	Invited I	<p>O3. Emma Browning Robins Air Force Base, USA</p> <p>“Conserving the proposed federally threatened Ocmulgee skullcap (<i>Scutellaria ocmulgee</i>) on Robins Air Force Base, Georgia”</p>
9:05 AM – 9:25 AM	Invited II	<p>O4. Joshua Kellogg Penn State University, USA</p> <p>“A double-edged sword? Participatory research into traditional plant benefits and toxicity”</p>
9:25 AM –9:40 AM	Oral I	<p>O5. Nurya Abdurhman Birhanu Wollo University, ETHIOPIA</p> <p>“Ethnobotany and DNA barcoding of medicinal and cosmetic plants in Kalu and Bati Districts of Amhara Region, Ethiopia”</p>
9:40 AM–9:55 AM	Oral II	<p>O6. K. P. N. G. Kanuwana Gampaha Wickramarachchi University of Indigenous Medicine, SRI LANKA</p> <p>“Heritage of healing, use of medicinal plants in treating envenoming- case of villages in the dry zone tank cascade systems in Sri Lanka with reference to “Bellankadawala” cascade?”</p>
9:55 AM-10:10 AM	Oral III	<p>O7. Bipul K Biswas Fort Valley State University, USA</p> <p>“Neem and turmeric, two incredible medicinally active plants, an overview of many known and rarely known information to help the community”</p>
10:10 AM–10:30 AM	Coffee Break	
	Session II	Chemistry of Medical Plants
	Chair	Joshua Kellogg Penn State University, USA
10:30 AM–11:00 AM	Keynote	<p>O8. Kevin Tidgewell University of Kentucky, USA</p> <p>“Investigation of the secondary metabolites of Cameroonian plants used as antinociceptives”</p>

11:00 AM–11:20 AM	Invited I	O9. Khumoekae Richard Wister Institute, USA “Potent HIV-1 latency reversal by an African medicinal plant extract, <i>Croton megalobotrys</i> , in primary cells from people living with HIV and humanized mice”
11:20 AM–11:40 AM	Invited II	O10. Melanie Rodriguez University of Texas Southwestern Medical Center, USA “Steroid based synthesis of a dual-PROTAC targeting oncogenic and resistance drivers in metastatic castration resistant prostate cancer (mCRPC)”
11:40 AM–11:55 AM	Oral I	O11. Edward Okey Federal Polytechnic University, NIGERIA “Phyto-GCMS analysis on leaves and stems of <i>Triumfetta tomentosa</i> Boj and <i>Triumfetta rhomboidea</i> Jacq.”
11:55 AM –12:10 PM	Oral II	O12. Wesley Gray Southern University and A&M College, USA “Isolation and purification of antimicrobial activity and RNASeq exploration induced by <i>Cola acuminata</i> ”
12:10 PM – 1:10 PM	Lunch CEP - Auditorium Workshop: “The Balancing Act: Life, Career, and the Pursuit of Happiness in Science” Andrea Doseff, Ph.D. (Michigan State University, USA)) Sepideh Mohammadhosseinpour, Ph.D. (MD Anderson Cancer Center, USA) Panelists: Andrea Doseff, Ph.D. (Michigan State University) Joshua Kellogg, Ph.D. (Penn State University) Fabricio Medina-Bolivar, Ph.D. (Arkansas State University)	

	Session III	Hemp and Medical Cannabis
	Chair	Diana Roopchand Rutgers University, USA
	Co-chair	Aruna Weerasooriya Prairie View A&M University, USA

1:10 PM – 1:40 PM	Keynote	O13. Youbin Zheng University of Guelph, Canada “ Medicinal Cannabis production in controlled environments ”
1:40 PM – 2:00 PM	Invited I	O14. Josee Guindon Texas Tech University Health Sciences Center, USA “ Cannabinoids for the treatment of chronic pain and cancer: new insights and mechanisms of action ”
2:00 PM – 2:20 PM	Invited II	O15. Jan Frederik Stevens Oregon State University, USA “ AI-assisted discovery of bioactive minor cannabinoids from hemp ”
2:20 PM – 2:35 PM	Oral I	O16. Wesley Raup-Konsavage Penn State College of Medicine, USA “ High cannabigerol hemp extract moderates colitis and modulates the microbiome in an inflammatory bowel disease model ”
2:35 PM – 2:50 PM	Oral II	O17. Negusse F. Kidane Prairie View A&M University, USA “ Evaluation of the nutritional profile of different hemp plant biomass and spent hemp biomass (SHB) as a potential feed supplement for goats ”

2:50 PM – 3:10 PM	Coffee Break
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	Session IV	Production, Strategies, and Challenges
	Chair	Ram Ray Prairie View A&M University, USA
	Co-Chair	Sanjita Gurau Prairie View A&M University, USA
3:10 PM – 3:40 PM	Keynote	O18. Ram Ray Prairie View A&M University, USA “ Climate change impact on medicinal plants growth and spatial distributions ”
3:40 PM – 4:00 PM	Invited I	O19. Abdul L Khan University of Houston, USA “ Frankincense biosynthesis pathway: a lead for new medicinal products development ”

4:00 PM – 4:20 PM	Invited II	O20. Russell A. Jessup Texas A&M University, USA “The Hemp Conversion Program: Developing a public hemp germplasm collection with maximized genetic diversity”
4:20 PM – 4:35 PM	Oral I	O21. Sirimal Premakumara, Ph.D. University of Colombo, SRI LANKA “Multifunctional health food/supplement properties of Ceylon cinnamon <i>Cinnamomum zeylanicum</i> ”
4:35 PM – 4:50 PM	Oral II	O22. Samikshya Bhattarai Texas A&M University, USA “Supplemental lighting influences the antioxidant content and associated kinetic attributes in greenhouse-grown tomatoes”
5:00 PM – 7:00 PM	Poster Presentation	

Day 3: October 5, 2024 (Saturday)

Prairie View A&M University

Registration and sessions V-VIII: Willie A. Tempton Memorial Student Center (MSC) Auditorium

Lunch boxes: Outside auditorium

Gala Dinner: MSC ballroom

Shuttle vans will run every 10-15 minutes from the assigned Best Western hotel to the university between 7:30 am and 8:30 am. Return from the university to the hotels will be between 6:30 pm and 7:30 pm

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8:00 AM – 8:30 AM	Registration	
	Session V	Bioactive Compounds of Plants and Their Roles in Human Health I–Cancer

	Chair	Jeremy Johnson University of Illinois Chicago, USA
8:30 AM – 9:00 AM	Keynote I	O23. Chendil Damodaran Texas A&M University “A modified natural small molecule for triple-negative Breast cancer”
9:00 AM – 9:20 AM	Invited I	O24. Bal L. Lokeshwar Georgia Cancer Center at Augusta University “Molecular hybrids of natural products against multidrug-resistant advanced bladder cancers”
9:20 AM – 9:40 AM	Invited II	O25. C.V. Rao Oklahoma University College of Medicine “Colorectal cancer interception by medicinally active plant compounds”
9:40 AM – 9:55 AM	Oral I	O26. Srinandhini Chandran University of Houston, USA “Immunostimulatory and anti-cancer effects of <i>Calocybe indica</i> mushroom”
9:55 AM – 10:10 AM	Oral II	O27. Ahmed Darwish Texas A&M University, USA “Bioactive metabolites and cytotoxicity for eight blueberry cultivars”
10:10 AM – 10:30 AM	Coffee Break	

	Session VI	Bioactive Compounds of Plants and Their Roles in Human Health II – Inflammatory Diseases and Beyond
	Chair	Andrea Doseff Michigan State University, USA
	Co-chair	Sepideh Mohammadhosseinpour MD Anderson Cancer Center, USA

10:30 AM–11:00 AM	Keynote	O28. Susanne Talcott Texas A&M University, USA “Microbiome-polyphenol-host Interactions in obesity – The gut-brain axis”
11:00 AM–11:20 AM	Invited I	O29. Dingbo (Daniel) Lin Oklahoma State University, USA “Zeaxanthin metabolism in type 2 diabetes: A microbiome perspective”
11:20 AM–11:40 AM	Invited II	O30. Andrea Doseff Michigan State University, USA “Flavonoids as biomedicines: Regulation of microbiome-immune cell function in obesity-induced fatty liver disease”
11:40 AM–11:55 AM	Oral I	O31. Murendeni Nethengwe Cape Peninsula University of Technology, SOUTH AFRICA “Potential impact of <i>Anchomanes difformis</i> aqueous extract on testes and epididymis of diabetic animal model”
11:55 AM –12:10 PM	Oral II	O32. Rocio Rivera Rodriguez University of Illinois at Chicago, USA “Dietary phytochemicals modulate inflammatory response in ulcerative colitis patient-derived colonoids”
12:10 PM – 1:00 PM		
1:00 PM – 2:00 PM	Lunch	
	Session VII	Medicinal / Functional Foods
	Chair	Rao Mentreddy Alabama A&M University, USA
	Co-chair	Sun-Ok Lee University of Arkansas, USA
2:00 PM – 2:30 PM	Keynote	O33. Charles Cantrell USDA-ARS-NPURU, USA “Capsiate enriched extracts from <i>Capsicum</i> sp. fruit and its associated pharmacological activities”

2:30 PM – 2:50 PM	Invited I	<p>O34. Diana N. Obanda University of Maryland, USA</p> <p>“<i>Urtica dioica</i>: A Functional food for protection against dysbiosis, Inflammation, insulin resistance and obesity”</p>
2:50 PM – 3:10 PM	Invited II	<p>O35. Vikas Dadwal Texas A&M University, USA</p> <p>“Synergistic effects of citrus terpenoid and dietary fibers on <i>Lactobacillus</i> growth and metabolite production”</p>
3:10 PM – 3:25 PM	Oral I	<p>O36. Chamila VL Jayasinghe Wayamba University of Sri Lanka, SRI LANKA</p> <p>“Hypoglycaemic effect of <i>Coccinia grandis</i> leaves extract encapsulated herbal porridge”</p>
3:25 PM – 3:40 PM	Oral II	<p>O37. Srinivasa Rao Mentreddy Alabama A&M University, USA</p> <p>“Brassicas: What makes them functional foods”</p>
3:40 PM – 4:00 PM	Coffee Break	
	Session VIII	Emerging technologies in medicinal plant research
	Chair	Alok Arun California State University Stanislaus, USA
	Co-Chair	Fabricio Medina-Bolivar Arkansas State University, USA
4:00 PM – 4:20 PM	Invited I	<p>O38. Sonia Peter, Ph.D Biocultural Education and Research Programme, BARBADOS</p> <p>“Tea phenols and citizen science for health”</p>
4:20 PM – 4:40 PM	Invited II	<p>O39. Luis Pietro, Ph.D. Science, Technology and Research Trust, PUERTO RICO</p> <p>“Exploring Puerto Rican biodiversity through mass spectrometry based metabolomics: initial studies in natural products discovery”</p>

4:40 PM – 4:55 PM	Oral I	O40. Gaurav Gajurel Arkansas State University, USA “Production of bioactive isoflavones in elicited hairy root cultures of pigeon pea”
4:55 PM – 5:10 PM	Oral II	O41. Deepak Kumar Jha Texas A&M University, USA “Seed nanoprimering with nitrogen-doped carbon dots enhances yield, quality, and potential health-promoting attributes in tomato fruit”
5:10 PM – 5:25 PM	Oral III	O42. Pariksha Thapa University of Illinois at Chicago, USA “Screening of xanthones from <i>Garcinia mangostana</i> to target the allosteric site in BiP to overcome drug resistant prostate cancer”
6:30 PM – 8:00 PM	<p style="text-align: center;">Closing Ceremony (Gala Dinner) and Awards (additional pre-registration required)</p> <p>President Executive Editor- JMAP Awards 2025 ACMAP Conference Announcement Executive Director</p>	

Day 4: October 6, 2024 (Sunday)

9:00 AM – 12 PM	<p style="text-align: center;">Field Trip</p> <p style="text-align: center;">Bayou Citi Hemp Company (Houston) (https://www.bayoucityhemp.com)</p> <p style="text-align: center;">(roundtrip transportation included – additional pre-registration required)</p> <p style="text-align: center;">Pick-up time at hotel: 9 am Tour: 10 am – 11 am Return to hotel: 12 pm (driving time between the hotel and Houston, ~ 1 hour)</p>
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Poster Presentations

P1 - Glucosyloxybenzyl 2R-benzylmalate and glucosyloxybenzyl 2R-isobutylmalate derivatives from *Arundina graminifolia*

Opeyemi Joshua Olatunji¹ and Florence Auberon². ¹ African Genome Center, Mohammed VI Polytechnic University, Benguerir, 43150, Morocco *and* Strasbourg University, Faculty of Pharmacy, UMR 7200, 67400 Illkirch-Graffenstaden, France. E-mail: joshua.olatunji@um6p.ma

P2 - Antioxidant properties of selected anti-cancer plant extracts cued from Sri Lankan Traditional Medicine

Jivendra Wickramasinghe¹, Vajira Dissanayaka², Preethi Udagama¹, Aruna Weerasooriya³, Hemali Goonasekera². ¹Faculty of Science, University of Colombo, Sri Lanka, ²Faculty of Medicine, University of Colombo, Sri Lanka, and ³Prairie View A&M University, Texas. E-mail: jivendra@sci.cmb.ac.lk; hemali@anat.cmb.ac.lk

P3 - Impact of soil quality on cannabinoid and terpene content of hemp

Francisco T. Chacon¹, Shawn A. Raup-Konsavage², Kelly Greenland³, Robert Gearhart³, Dhimant Desai², Shouhao Zhou⁴, Joshua J. Kellogg¹, and Wesley M. Raup-Konsavage² ¹ Department of Veterinary & Biomedical Sciences, Penn State University, State College, PA, USA ² Department of Pharmacology, Penn State University College of Medicine, Hershey, PA, USA ³ Keystone State Testing Laboratories, Harrisburg, PA, USA ⁴ Department of Public Health Sciences, Penn State University College of Medicine, Hershey, PA, USA; sraupkonsavage@pennstatehealth.psu.edu

P4 - Assessing the antiproliferative effects of *Thalassia* sp. extracts on metastatic colorectal cancer cell line

Abner J. Colón Colón, Rosalinda Aybar Batista, Gerardo Laureano Rosario, Naiomy Ríos Colón, Ángel R. Núñez Marrero & Alok Arun*. Institute of Sustainable Biotechnology, Inter American University of Puerto Rico, Barranquitas, PO Box 517, Puerto Rico, USA. E-mail: abncol9666@br.uipr.edu; *alok_arun@br.inter.edu

P5 -

P6 - High throughput screening of NCI-Natural Product Repository extracts that inhibit androgen receptor-variants in castration resistant prostate cancer

Neha Tyagi¹, Sepideh Hosseiniporgham², Ashish Tyagi¹, Balaji Chandrasekaran¹, Katherine Bonilla², Inna Krieger², James Sacchetti², Chendil Damodaran¹ ¹ Department of Pharmaceutical Sciences, Texas AM University, College Station, TX 77842, USA, ² Department of Biochemistry and Biophysics, Texas A&M University, College Station, TX, USA. neha.tyagi@tamu.edu

P7 - Evaluating the antiproliferative capacity of extracts from *Syringodium filiforme* in colorectal cancer cell line

Aníbal José Nieves Martínez² Rosalinda Aybar Batista^{1,2} Angel Nuñez Marrero^{1,2} Alok Arun^{1,2,1} Institute of Sustainable Biotechnology ²Inter American University of Puerto Rico Barranquitas, Puerto Rico, 00794 E-mail: aninie3989@br.uipr.edu.

P8 - A natural plant derived small molecule for treatment of chemoresistant colorectal cancer

Ashish Tyagi¹, Arun K Sharma², Chendil Damodaran¹ ¹Texas A&M Rangel College of Pharmacy, Reynolds Medical Bldg., College Station, Texas. ²Department of Pharmacology, Biochemistry and Molecular Biology, Penn State College of Medicine, Hershey, Pennsylvania.
ashishtyagi@tamu.edu

P9 - Biochemical profiling of *Garcinia livingstonei* aqueous leaf extract: A preliminary study

Oluwafemi O. Oguntibeju^a, Murendeni Nethengwe^a, Nasifu Kerebba^b, Kunle Okaiyeto^a & Chinyerum S. Opuwari^c. ^aPhytomedicine and Phytochemistry Group, Department of Biomedical Sciences, Faculty of Health and Wellness Sciences, Cape Peninsula University of Technology, Bellville, 7535, South Africa. ^bDepartment of Chemistry, Makerere University, Kampala 7062, Uganda. ^cDepartment of Medical Biosciences, University of the Western Cape, Bellville, 7535, South Africa. Email: oguntibeju@cput.ac.za; bejufemi@yahoo.co.uk

P10 - Protective consequences of *Dicliptera roxburghiana* against CCl₄ induced renal toxicity In cice

Bushra Ahmad¹, Muhammad Rashid Khan², Arshad Jamil³ ¹Department of Biochemistry, Shaheed Benazir Bhutto Women University, Peshawar, 29000, Pakistan. ²Department of Biochemistry, Faculty of Biological Sciences, Quaid-i-Azam University Islamabad, 45320, Pakistan. ³Department of Plant Breeding and Genetics, University of Agriculture, Dera Ismail Khan, 25000, Pakistan. bushraahmad@sbbwu.edu.pk

P11 -

P12 - Promising anti-diabetic and wound healing activities of biopolymers loaded natural products using cell lines and enzyme inhibition models

J. Achyutha Devi ¹Department of Zoology, R.B.V.R.R. Women's College, Narayanaguda, Hyderabad-500027, Telangana, India. E-mail: achyuthadevi@gmail.com

P13 - Unveiling the medicinal potential of the underutilized crop *Arracacia xanthorrhiza*

Myrna Rodriguez González^{*1}, Luis Prieto², Jacobo Morales¹, Rosalinda Aybar Batista¹ & Alok Arun¹ ¹Institute of Sustainable Biotechnology, Inter American University of Puerto Rico, PO Box 517, Barranquitas, Puerto Rico, 00794, USA. ²University of Puerto Rico Recinto de Rio Piedra PO Box 23341, San Juan, Puerto Rico, 00931, USA. Email: Myrnalizr@gmail.com*

P14 - Antimicrobial effects of extracts from *Liriodendron tulipifera* on AMR *Staphylococcus aureus*

Mojetoluwa Afolabi^{*}, Zhigang Xiao², Qunying Yuan¹. ¹Department of Biological Sciences, Alabama A&M University. Normal, Alabama, 35762. ²Department of Electrical Engineering and Computer Sciences, Alabama A&M University. Normal, Alabama, 35762. E-mail: mojetoluwa.afola@bulldogs.aamu.edu

P15 - Inhibition of angiotensin-converting enzyme (ACE) activity by cannabinoids from *Cannabis sativa* L.

Francisco T. Chacon¹, Kent Vrana³, Joshua J. Kellogg^{1,2}. ¹Intercollege Graduate Degree Program in Plant Biology, ²Department of Veterinary and Biomedical Sciences, Pennsylvania State University, University Park, State College, PA, USA ³Department of Pharmacology, Penn State College of Medicine, Hershey, PA, USA email: jjk6146@psu.edu

P16 - Determination of ingredient ratios in a dye used to protect American Ginseng (*Panax quinquefolius*) from poaching in the Shenandoah National Park

Shyleigh A. Good¹, Dr. Chiara Elmi², and Dr. Lindsay K. Caesar¹. ¹Department of Chemistry and

Biochemistry; ²Department of Geology and Environmental Science, James Madison University, Harrisonburg, VA 22807. E-mail: goodsa@dukes.jmu.edu; elmicx@jmu.edu; caesarlk@jmu.edu

P17 - Identification of terpenes in Industrial Hemp (*Cannabis sativa* L.)

Shamika Piumal Raja Hewage¹, Surendra Surujdeo-Maharaj², Aruna Weerasooriya² and Harshica Fernando¹ ¹Department of Chemistry and ²Cooperative Agricultural Research Center, College of Agriculture, Food & Natural Resources, Prairie View A&M University, Prairie View, TX. E-mail: rwishvajith@pvamu.edu; hufernando@pvamu.edu

P18 - Evaluating the role of LED grow lights in enhancing hemp biomass

Jayland J. J. Jones¹, A.D. Weerasooriya¹ and S. Surujdeo-Maharaj¹, ¹Cooperative Agricultural Research Center, College of Agriculture, Food and Natural Resources, Prairie View A&M University, Prairie View, TX 77446. Presenting author's E-mail: jjones449@PVAMU.EDU; Corresponding author E-mail: susurujdeomaharaj@pvamu.edu

P19 - Exploring the anticancer properties of *Asparagopsis taxiformis* algae; as a potential therapeutic agent against cancer and its application in modern medicine

Sebastián Alicea De Jesús¹, Jacobo Morales and Alok Arun. Institute of Sustainable Biotechnology, Inter American University of Puerto Rico, Barranquitas, PO Box 517, Puerto Rico, USA. Email: sebali9839@br.uipr.edu; Presenting author: sebali9839@br.uipr.edu

P20 - Production of genistein and its prenylated analog isowiglightone in pigeon pea hairy roots and their cytotoxic effect on breast cancer cells

Carlos Balmaceda¹, Gaurav Gajurel^{1,2}, and Fabricio Medina-Bolivar^{2,3}. ¹Arkansas Bioscience Institute, ²Molecular Biosciences Graduate Program, ³Department of Biological Sciences, Arkansas State University, Jonesboro, AR 72401. E-mail: cbalmacedacuena@astate.edu; fmedinabolivar@astate.edu

P21 - Dietary phytochemicals modulate inflammatory responses in ulcerative colitis patient-derived colonoids

Rocío Rivera Rodríguez¹, Torunn Bruland³, Ingunn Bakke³, and Jeremy James Johnson^{1, 2}. ¹Department of Pharmaceutical Sciences and ²Department of Pharmacy Practice, University of Illinois Chicago, Chicago, IL 60612 and ³Department of Clinical and Molecular Medicine, Norwegian Institute of Science and Technology, Trondheim, Norway 7030. E-mail: rriver49@uic.edu; jjjohn@uic.edu

P22 - The effects of nitrogen fertilization on the yield and nutritional content of Purslane (*Portulaca oleracea*)

Eniola Faluyi, Peter A.Y. Ampim, Eric Obeng and Selamawit Woldesenbet. College of Agriculture, Food and Natural Resources, Prairie View A&M University, Prairie View, TX 77446. E-mail: paampim@pvamu.edu. efaluyi@PVAMU.EDU

P23 - Ecologically inspired co-cultures of anti-fungal bacteria to combat white-nose syndrome

Evelyn Haugh¹, Alexa Lee¹, Ashley Clements¹, Diana Northup², Paris Salazar-Hamm², Lindsay Caesar¹. ¹Dept. of Chemistry and Biochemistry, James Madison University, Harrisonburg, VA 22807, ²Dept. of Biology, University of New Mexico, Albuquerque, NM 87131. E-mail: haughpg@dukes.jmu.edu; caesarlk@jmu.edu

P24 - Comparison of health-beneficial compounds: Lycopene and citrulline retention in watermelon juice

UPDATED – September 26, 2024

using high-pressure homogenization vs. heat processing

Jayashan Adhikaria,b, Rakesh Singhc, Koushik Adhikarid, Bhimanagouda S. Patila,b* aVegetable and Fruit Improvement Center, Department of Horticultural Sciences, Texas A&M University, 1500 Research Parkway, Suite A120, College Station, TX 77845-2119, U.S.A. bDepartment of Food Science and Technology, Texas A&M University, 1500 Research Parkway, Suite A120, College Station, TX 77845-2119, U.S.A. cDepartment of Food Science and Technology, University of Georgia, 100 Cedar St., Athens, GA 30602, U.S.A. dDepartment of Food Science and Technology, University of Georgia, 1109 Experiment St., Griffin, GA 30223, U.S.A.

P25 - Utilizing biopolymers from lactic acid bacteria to enhance the stability, bioactivity, and antimicrobial efficacy of eugenol

Sangeeta Balyan, Vikas Dadwal and Bhimanagouda S. Patil* Vegetable and Fruit Improvement Center, USDA, National Center of Excellence, Department of Horticultural Sciences, Texas A&M University, 1500 Research Parkway, Suite A120, College Station, TX 77845, USA. Email: Sangeetabalyan05@tamu.edu; Bhimanagouda.Patil@ag.tamu.edu

P26 - Extraction, characterization, and assessment of the stress-releasing ability of essential oil extracted from violet water lily

CVL Jayasinghe^{1*}, AGSS Premarathna¹, A Chandrasekara², K Yakandawala³. ¹Department of Food Science and Technology, ²Department of Applied Nutrition, Faculty of Livestock, Fisheries and Nutrition, and ³Department of Horticulture and Landscaping Gardening, Faculty of Agriculture and Plantation Management, Wayamba University of Sri Lanka, Makandura. Gonawila, 60170, Sri Lanka. Email: cjayasinghe@wyb.ac.lk

P27 - Protection of gut-liver axis by gut recycled herbal components during chemotherapy

Vesna Tumbas Saponjac^{1,2}, Zicong Zheng¹, Rongjin Sun¹, Jie Chen¹, Songpol Srinual¹, Terry Yin¹, Ming Hu^{1,2} and Rashim Singh^{1,2}. ¹Department of Pharmacological and Pharmaceutical Sciences, University of Houston College of Pharmacy, 4349 Martin Luther King Boulevard, Houston, TX 77204-5000 and ²Sanarentero LLC, University of Houston Technology Bridge, Research Park, 5000 Gulf Fwy, Bldg 5, Rm 116, Houston, TX 77023. E-mail: vtumbass@central.uh.edu

P28 -

P29 - Antioxidant, anti-diabetics, and anti-inflammatory bioactives of banana (*Musa paradisiaca*) inflorescence in a processed salad

C.V.L. Jayasinghe^{1*}, G.V.S.Y. Jayarathna¹ and P.U.S. Peiris². ¹Department of Food Science and Technology; ²Office of the Dean, Wayamba University of Sri Lanka, Makandura, Gonawila, 60170, Sri Lanka. Email: cjayasinghe@wyb.ac.lk

P30 - Discovery and development of anxiolytic agents from tropical marine macroalgae

Lymelsie Aponte Ramos⁴, María F. Acevedo Kury², Geraldine M. Ortiz Sosa², Janiennid Alicea Tirado³, Ricardo M. Cruz Sánchez¹, Eduardo Caro Díaz⁵, Ricardo Chiesa¹. ¹Department of Biology, ²Department of Natural Sciences, ³Department of Chemistry, ⁴Department of Social Sciences, University of Puerto Rico, Cayey, Puerto Rico, and ⁵UPR – Medical Science Campus. E-mail: lymelsie.aponte@upr.edu and ricardo.chiesa@upr.edu

P31 - Study of the chemical composition and biological activities of *Piper* sp.

Natalia Rivera-Colón¹, Pablo E. Vivas-Mejía², Lilliam Villanueva-Alicea², José Rodríguez-Medina²

and Claudia A. Ospina-Millán¹. ¹Dept. of Natural Sciences and Mathematics, Inter American University of Puerto Rico, Bayamón, PR 00957 and ²Dept. of Biochemistry, University of Puerto Rico, Medical Sciences Campus, PR 00936. E-mail: nrivera2619@interbayamon.edu; ospina@bayamon.inter.edu

P32 - Tannin concentration and bioactivity of field grown *Lespedeza* species

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P33 - Isolation and chemical modification of cembrane diterpenes from *Nicotiana tabacum*

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P34 - Isolation, preparation, and evaluation of quassinoids as STAT3 inhibitors in breast cancer

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P35 - Maternal broccoli sprout consumption: A novel strategy to reprogram offspring gut microbiome and prevent early-life obesity

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P36 - Evaluating the anti-cancer potential of *Padina* Extracts in colorectal cancer cell lines

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P37 - Determining the anti-proliferative capacity of colorectal cancer cell line treated with extracts derived from *Sargassum*

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P38 - Effects of low-temperature plasma on germination, seedling growth and nutrient profile of microgreens

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P39 - Use of emerging technologies in advancing medicinal plant research: a Prospective

Aftab Siddique¹ and Thomas H. Terrill¹. ¹Fort Valley State University, GA, 31030. E-mail: aftab.siddique@fvsu.edu

P40 - Health benefits of peanuts: A deep dive into medicinal properties

Poonam Khatri, and Nirmal Joshee. Graduate Program in Biotechnology, Agricultural Research Station, Fort Valley State University, Fort Valley, GA 31030, USA. E-mail: fnu.poonam@fvsu.edu; josheen@fvsu.edu

P41 - Physico-chemical evaluation and anti-diabetic property of *Clerodendrum splendens* (G. Don) leaves (Verbenaceae) on alloxan induced diabetic Albino wistar rats

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P42 - Isolation and anticancer effects of tularoydilactone and glaucarobinone quassinoids from *Simarouba tulae*

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P43 - Utilizing biopolymers from lactic acid bacteria to enhance the stability, bioactivity, and antimicrobial efficacy of eugenol

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P44 - Characterization of elemental contents and volatile compounds in *Moringa oleifera* leaves grown in Southern Texas

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P45 - Phytochemistry of milk thistle (*Silybum marianum*) and its therapeutic potential

Mohammad Asif Gawhari,¹ Baljinder Kaur¹ ¹Punjabi University, Patiala

P46 - Mechanistic interplay in broccoli glucoraphanin-induced beneficial effects on obesity prevention

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P47 - Plant-based functional foods of the Sultanate of Oman: Innovation and future perspectives

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Prairie View A&M University Campus Map

<https://www.pvamu.edu/wp-content/uploads/2022/07/campus-map-2020.pdf>

Reserved Parking on October 3 and October 5 is at Lot 91. Parking on October 4 is at Lot 14.
See red circles for parking lots and yellow circles for event locations.

