

Anne A Osano
Associate Professor, Department of Natural Sciences
Bowie State University

Peer Reviewed Publications

- Anne **Osano** (2020). Metabolomic and Elicitation Approaches Enhance the Plant Metabolite Level and Play a complementary role in Plant Breeding: In Principles of plant genetics and breeding by George Acquaah, 3rd Wiley-Blackwell.
- Britany Font, **Anne Osano**, Jaya Manyasi Tracyline , Cyprian Syeunda , Paul Kimurto , and Joshua Ogendo .2020. Analysis of Nutrient Profile of Finger Millet (*Eleusine coracana* L.Gaertn) for Baby Food Formulation Using Pigeon Pea as Protein Source Journal of Agricultural Science and Technology B 10 (2020) 308-316 doi: 10.17265/2161-6264/2020.05.005 .
- Luke Muller Erick Cheruiyot, Lilian Ouma, **Anne Osano** and Joshua Ogendo. 2020. Evaluation of Potential Fodder Sorghum Genotypes for Prussic Acid, Lignin and Cellulose Content. 2020. Journal of Agricultural Science and Technology Journal Agriculture A, Vol 10, Number 1, Vol 10, Jan Feb 2020.
- **Osano A.**; Bonsu, E; Fultang, Norman and Davis,J. " Exogenous Pre-Harvest Treatment with Methyl Jasmonate and Chitosan Elicits Lycopene Biosynthesis in Tomato Plants" Journal of Environmental Science and Engineering, Vol.6,No.11A,2017.
- **Osano A.**; Bonsu, E; Fultang, Norman and Jeanin Osei. Pre-Harvest Treatment with Salicylic Acid Stimulates Beta-Carotene Accumulation In Carrot Plants (*Daucus carota*), Submitted for publication at journal of Environmental Science and Engineering".
- **Osano A.** and Davila A. F. Analysis of Photosynthetic Activity of Cyanobacteria Inhabiting Halite Evaporites of Atacama Desert, Chile.45th Lunar and Planetary Science Conference (2014) [#2919).
- Davila AF, Hawes I, Araya JG, Gelsinger DR, DiRuggiero J, Ascaso C, **Osano A** and Wierchos J (2015). In situ metabolism in halite endolithic microbial communities of the hyperarid Atacama Desert.Front. Microbiol. 6:1035. doi: 10.3389/fmicb.2015.01035
- **Osano A.A.**, Siboe G. M; Kokwaro J. O and Ochanda J.O. 2013. Biodegradation of DDT (1,1,1, Trichloro –2,2 – Bis 4 chlorophenyl Ethane by *Pleurotus luteoalbus* Discovery and Innovation. October 2014 issue.
- **Osano A.A.**, Siboe G., Kokwaro J.O and Ochanda J.O. (2004). Biodegradation properties of the white rot fungi of Karura Forest, Kenya. Discovery and Innovation, June 2004 issue.
- Ghislain B. Tchomobe, 1* **Anne Osano** ^{1*}, Maria T. Laux ^{2*}, and Manuel A. Aregullin. ^{2*} Bowie State University¹ and Cornell University ². Invitro Antibiotic, Allelopathic and Cytotoxicity of Ethnopharmacologically selected Medicinal Plants from Dominican Republic. Penn Science Vol11: Issue 1, Fall 2012- Spring 2013.
- Jephther Bauhen, **Anne Osano**, *, Maria T. Laux, and Manuel A. Aregullin . 2013. Bowie State University*1 and Cornell University2 “Bioactive properties of six medicinal plants in the Dominican Republic. . Accepted for Publication. Penn Science.

Other Publications, Conferences Presentations/Abstracts

- Rita Dill¹ and **Anne Osano**¹ and Devanand Luthria (Dave). Analysis of Isoflavones in Soybeans using LC-MS and UV spectral analysis. Emerging Researchers Conference, Emerging Researchers National (ERN) Conference in STEM book of abstracts. Feb, 2018. Conference proceedings.
- Baraka Gathure¹ and **Anne Osano**¹ and Devanand Luthria (Dave). Metabolite analysis and comparative study of medicinal plant *Azadirachta indica* (Neem) and related species *Melia azadirach* from Kenya. Emerging Researchers Conference, Emerging Researchers National (ERN) Conference in STEM book of abstracts. Feb, 2018. Conference proceedings.
- David Darko, **Anne Osano** and Davanand Luthria. Analyzing Metabolites in Passion Fruit using Spectral Finger printing. Emerging Researchers Conference, Emerging Researchers National (ERN) Conference in STEM book of abstracts. March 2017. Conference proceedings.
- Alex Brames, **Anne Osano** and Eric Bonsu: The Elicitation of Beta-Carotene in *Daucus carota*, with the use of Benzoic Acid and Salicylic acid, Emerging Researchers Conference, Washington DC, Mar 2-4, 2017. Emerging Researchers National (ERN) Conference in STEM book of abstracts. March 2017. Conference proceedings
- Cybrena Sablon ¹ and **Anne Osano**¹ and Devanand Luthria. High Performance Thin Layer Chromatography studies of Metabolite profiles of *Azadirachta indica* (Neem) and closely related species *Melia azadirach* from Kenya. Emerging Researchers Conference, Emerging Researchers National (ERN) Conference in STEM book of abstracts. Feb, 2018. Conference proceedings.
- Alexandria Brame¹, Jarrett Davis¹, David Darko¹. **Anne Osano**. Comparative Ethnopharmacological studies and Metabolite Diversity analysis of *Azadirachta indica* and *Melia* Leon Sparks² and Anne Osano¹. University of Nairobi, Kenya¹; Bowie State University², Natural Science Department Abstract Emerging Researchers National (ERN) Conference in STEM book of abstracts March 2017 Conference proceedings.
- Sarah Fernandes¹ and **Anne Osano**¹ and Devanand Luthria (Dave)². Analysis of Fatty Acid Methyl Esters (FAMES) in Soybeans using Gas Chromatography with Flame Ionization Detection (GC-FID) 1- Natural Sciences Department, Bowie State University, 2- Food Composition and Methods Development Laboratory; United States Department of Agriculture, (USDA) Agricultural Service (ARS). Emerging Researchers Conference, Abstract Emerging Researchers National (ERN) Conference in STEM, Feb 22- 24th 2018.
- **Anne Osano**, Meryl Collins, Alfonso F. Davila. Gary R. Bauchan . Photosynthetic activity, confocal microscopy and x-ray diffraction studies of cyanobacteria inhabiting halite evaporites of the atacama desert, chile. Astrobiology Science Conference 2015 (AbSciCon2015) will be held at the Hilton Chicago in downtown Chicago, Illinois, on June 15–19, 2015.
- **Osano** and Davila A. F. Analysis of Photosynthetic Activity of Cyanobacteria Inhabiting Halite Evaporites of Atacama Desert, Chile. 45th Lunar and Planetary Science Conference (2014), March 17-21, 2014 at the woodlands, Texas.

- Norman Fultan, **Anne Osano** and Eric Bonsu. Elicitation for Enhance Lycopene biosynthesis in tomatoes, (*Solanum lycopersicum*) by Exogenous application of methyl jasmonate. Plant Biology Conference, 7/26/2015 to 7/30/2015, Minneapolis, Minnesota
- Nicholas Dickson, **Anne Osano** and Eric Bonsu, Benzoic acid effect on production of β Carotene by carrots, *Daucus carota* (L); A focus on effects of the Acid on plant growth. Emerging Researchers' conference in 2015, Washington DC, Feb 18-20th.
- Janeen Osei, **Anne Osano** and Eric Bonsu . Salicylic acid effect on production of β Carotene by carrots, *Daucus carota* (L); A focus on effects of the Acid on plant growth Emerging Researchers' conference in 2015, Washington DC, Feb 18-20th.
- Rosemary Edet, Alexis Solis 1, **Anne Osano** 1 and Pei Chen 2. Differentiation of major black pepper Piper, *nigrum* species using Gas Chromatography - Mass Spectrometry Fingerprinting Method. Emerging Researchers' conference in 2015, Washington DC, Feb 18-20th, 2015.
- **Anne A. Osano**,^{1a} Chanea Fraser, ^{1b} Akinola Vaughan, ^{1c} Martin J. Spiering ² and Edward Eisenstein, ². A DNA Barcoding Approach to Species Authentication and Validation of *Actaea racemosa* (Black Cohosh), Ranunculaceae. American Society of Plant Biology, July 20 -24, 2013; Providence Rhode Island.
- Ghislain B. Tchomobe, 1* **Anne Osano** 1*, Maria T. Laux, and Manuel A. Aregullin Bowie State University*1 and Cornell University2. Invitro Antibiotic, Allelopathic and Cytotoxicity of Ethnopharmacologically selected Medicinal Plants from Dominican Republic. Annual Biomedical Research Conference for Minority Students (ABRCMS), November 7-10, 2012, Sano Jose, California
- Meryl Collins 1* **Anne Osano** 1*, Maria T. Laux, and Manuel A. Aregullin Bowie State University*1 and Cornell University2 Biological Activities of Medicinal Plants in the Dominican Republic Annual Biomedical Research Conference for Minority Students (ABRCMS), November 7-10, 2012, Sano Jose, California
- Charles Waller 1* **Anne Osano** 1*, Maria T. Laux, and Manuel A. Aregullin Bowie State University*1 and Cornell University2. Cytotoxicity and antimicrobial and allopathic properties of medicinal plants in Dominican Republic. Annual Biomedical Research Conference for Minority Students (ABRCMS), November 7-10, 2012, Sano Jose, California
- **Osano A.** A1.; Maria T. Laux2, and Eloy Rodriguez, Bowie State University*1 and Cornell University2. Bioactivity of Lectins from *Musa acuminta* and anti-cancer properties American Association of Plant Biologists (ASPB) Conference- Aug 6 - 10, 2011, Minneapolis, Minnesota.
- Fraser Chanea, **Osano A. A.** DNA Barcoding Approach to Species Authentication and Validation of *Actaea racemosa* (Black Cohosh) . Emerging Researchers National (ERN) Conference in STEM, February 23-25 2012, Atlanta.
- Jephther Bauhen, **Anne Osano**, *, Maria T. Laux, and Manuel A. Aregullin Bowie State University*1 and Cornell University2 “Bioactive properties of six medicinal plants in the Dominican Republic. Presented by my student Jephther Bauhen. Emerging Researchers National (ERN) Conference in STEM, February 23-25 2012, Atlanta.
- Vaughan A; **Osano A. A.** DNA Barcoding Approach to Species Authentication and Validation of *Actaea racemosa* (Black Cohosh). 27th Annual Career Fair and Training Conference March 29 - 31, 2012, The Westin Peachtree Plaza | Atlanta, GA MANRRS: Planting the Seeds for Global Success.

- Jephther Bauhen, **Anne Osano** *, Maria T. Laux, and Manuel A. Aregullin Bowie State University*1 and Cornell University2 “Bioactive properties of six medicinal plants in the Dominican Republic. Presented by my student Jephther Bauhen. 27th Annual Career Fair and Training Conference March 29 - 31, 2012, The Westin Peachtree Plaza | Atlanta, GA MANRRS: Planting the Seeds for Global Success!
- Fraser Chanae and **Anne Osano**, March, 2012. DNA Barcoding Approach to Species Authentication and Validation of *Actaea racemosa* (Black Cohosh) . 5th Annual University Grants Expo Poster Presentations.
- Jephther Bauhen and Anne **Osano** *, Maria T. Laux, and Manuel A. Aregullin Bowie State University*1 and Cornell University2 “Bioactive properties of six medicinal plants in the Dominican Republic. 5th Annual University Grants Expo Poster Presentations.
- Appalachian Center for Ethnobotanical Research Symposium on June 24, 2011 at John Hopkins Mt Washington, Conference Center.
- **Osano A.A.** (1988). Resistance of potato late blight pathogen. *Phytophthora infestans* to metalaxyl in Kenya. In proceedings of the Fungicide Resistance in Crop Protection Workshop, an International Workshop in sub-Saharan Africa at ICIPE, Mbita Point Field Station, Kenya.
- **Osano A.A.**, Siboe G. and Kokwaro J. (1992). The Ecology and Identity of some wood inhabiting Basidiomycetous fungi of Karura Forest, Kenya. In Proceedings from symposium on “The Ecology and Management of Indigenous Forests in Southern Africa held in Harare, Zimbabwe.
- **Osano A.A.**, Siboe G., Kokwaro J.O and Ochanda J.O. (1995). Biodegradation properties of the white rot fungus *Pleurotus luteoalbus* Beeli. In proceedings of Fungal Diversity Workshop held in Dar-es-Salaam.
- **Osano A.A.**, Siboe G. M; Kokwaro J. O and Ochanda J.O. (1996). Biodegradation of DDT (1,1,1, Trichloro –2,2 – Bis 4 chlorophenyl Ethane by *Pleurotus luteoalbus* In proceedings of first Pan-African Conference on Biochemistry and Molecular Biology held in Nairobi, Kenya.
- Jefwa J., Maundu P. and **Osano A.A.** (1997). the importance of fungi in natural habitat conservation and their potential as food source. In proceedings of the conference on Ethnobotany on held in Nairobi, Kenya.
- **Osano A.A.**, G.M. Siboe, J.O. Ochanda and J.O. Kokwaro (1999). Biodegradation of DDT. The Role of *Pleurotus* A lignicolous Fungus. In Proceedings of “In Situ and On-site Bioremediation Conference. The fifth International Symposium, April 19-22, 1999; San Diego, California.

Collaborators & Other Affiliations

- A. Elizabeth (Betsy) Arnold, Professor, School of Plant Sciences; Jointly appointed, Dept. of Ecology and Evolutionary Biology; 1885 Scholar and Fellow, Bart Cardon Academy for Teaching Excellence; Curator, Robert L. Gilbertson Mycological Herbarium, The University of Arizona
- Tucson, AZ 85721; Co-Director, NSF NRT: Building Resources for InterDisciplinary training in Genomic and Ecosystem Sciences (BRIDGES).

- Eike Reich, President. International Association for the Advancement of High Performance Thin-Layer Chromatography HPTLC Association Dianastrasse 10 CH-4310 Rheinfelden / Switzerland.
- Sheila Okoth, Ph.D.School of Biological Sciences ,University of Nairobi, P.O. Box 30197 - 00100, Nairobi, Tel; + 254 720006908.
- Prof Joshua O. Ogendo, Co-Principal Investigator, Egerton University P.O. Box 536 – 20115, EGERTON, Kenya; Tel: Tel: +254 51 2217808; Mobile: +254 722 892504; Email: jogendo@egerton.ac.ke.
- Kevin M. Doyle; Envista Farms, LLC
- Lawrence Schaefer, CEO,Schaefer Global Management, LLC; 7416 Garrison Road, Manassas, VA 20111-1524, P: (202) 315-8029 E: larry@schaeferglobal.com
- Edward Eisenstein, Institute of Biotechnology and Bioscience, University of Maryland. Research of Authentication and Validation of *Actaea racemosa*,
- Manuel Aregullin, PhD, Cornell University, Minorities in Research and Training (MIRT-MIH): Research on Bioassays of Biologically active compounds in Medicinal Plants.
- Ellen W. Harris, DrPH , Associate Director , Beltsville Agricultural Research Center, Beltsville, MD 20705. Collaboration in hosting Bowie State Food Day symposium.
- Guleryuz, Gul and E. Fatimah Hasan, Prince George's Countywide Planning Division, Maryland-National Capital Park and Planning Commission. Healthy food system study of PG County.
- Davenand Luthria and James Harnly; Human Nutrition Research Center. The USDA, Bowie State Research Initiative.