SOUTHERN REGIONAL RESEARCH CENTER

On the Bayou



TEMBER 2020



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Committee Members Michael Santiago **Christine Sickler** Terri Von Hoven



Message from the Director

Dr. Deepak Bhatnagar

Not since 2005, and Hurricane Katrina have we faced such disruption in our everyday lives. Yet this time, we are sharing the uncertainty and anxiety with the rest of the world.

Like during post-Katrina, the Agency has provided us with the resources to sustain ourselves during this time, while we conduct mission essential research. And like our recovery after Hurricane Katrina, this time shall also pass. Hopefully soon, we will move on with our lives somewhat renewed, learning novel ways of conducting business, and more positive about our future - like we did after Katrina.

For now, we must all work together and be there for each other. I know the entire management team and I are working in the best interest of our entire staff. We want to make sure that all of you take good care of yourself and stay safe. If we all work together to face the challenges that come our way, we can overcome them more easily. We need to approach this time with grace and confidence, and we will come back stronger.

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Events and Observances

Cultural Diversity Day

Submitted by: Jeannine Moraitis and Jade Smith (Co-Chairs of Cultural Diversity Month)

Each year, Cultural Diversity Day is celebrated in person at SRRC during the month of August. Employees gather to partake in international food tastings prepared by fellow employees/cooks. This event is organized to welcome and celebrate the diversity that exists in the workforce at SRRC. Along with the variety of ethnic food preparation, other cultural aspects, such as clothing, music, and cultural norms are also demonstrated at this event.

Due to COVID-19 this year, our celebration turned virtual like so many other monthly special emphasis programs. A cookbook was our version of going virtual. Through the generosity of our twenty participating cooks, we assembled twenty-three recipes from around the world. Pictures and write-ups further personalized the cookbook. SRRC employees were invited to try recipes from the cookbook and share their photos for On The Bayou.

Please see the attachment in Dr. Bhatnagar's email for a copy of the 2020 Cultural Diversity Day Cookbook. Previous years' cookbooks are available on the SRRC Intranet page: http://nola.srrc.usda.gov:8000/srrcmenf.htm, under the link SRRC Information, Organizations and Policies.

We would like to take this opportunity to thank all the cooks who submitted recipes this year: John Beaulieu, Shannon Beltz, Deepak Bhatnagar, SeChin Chang, H.N. Cheng, Zhongqi He, Ping Li, Isabel Lima, Thomas Klasson, Soheila Maleki, Jane McBride, Sunghyun Nam, Kanniah Rajasekaran, Kandan Sethumadhavan, Jay Shockey, Sophie Uchimiya, Qijian Wei, and Suhad Wojkowski.













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Events and Observances

Seminar for Nominations for 2019 SRRC Outstanding Paper

Submitted by: Gregory Thyssen, Awards Committee Chair and Matt Lebar

Top 4 SRRC Papers of the Year Competition

On September 1, the Awards Committee hosted an All-Hands Zoom seminar for the presentation of the four best paper award finalists. The seminar allows the 4 senior authors to each give a 10 minute Center-wide presentation, followed by 5 minutes of Q&A.

The Committee's goal here was to: a) actively involve the Center in listening to colleagues,

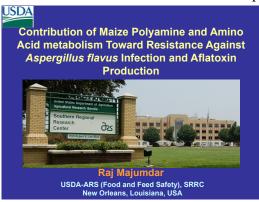
- b) open our eyes to the great work coming out the SRRC, and
- c) seek our own scientific community's involvement in the form of meaningful questions for our authors. This seminar likewise is used to help guide our final Committee vote to select the winner for the Outstanding Paper of the Year at SRRC.

The guidelines state that presentations should:

Clearly state the objective(s), the originality, what research was accomplished, the salient results, and what was the most significant and relevant impact (current or potential).

The 4 presentations were:

Rajtilak Majumdar, Minocha R, Matt Lebar, Kanniah Rajasekaran, S. Long, Carol Carter-Wientjes, Subhash Minocha, and Jeffrey W. Cary (2019). Contribution of Maize Polyamine and Amino Acid Metabolism Toward Resistance Against *Aspergillus flavus* Infection and Aflatoxin Production. Frontiers in Plant Science 10:692. doi: 10.3389/fpls.2019.00692.



Jacqueline B. Nesbit, Catherine H. Schein, Benjamin A. Braun, Stephen A.Y. Gipson, Hsiaopo Cheng, Barry K. Hurlburt, Soheila J. Maleki (2020). Epitopes with similar physicochemical properties contribute to cross reactivity between peanut and tree nuts. Molecular Immunology, 122. pp. 223-231.

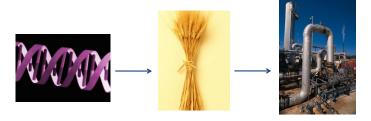


Events and Observances

Top 4 SRRC Papers of the Year Competition (cont.)

Jay Shockey, Ida Lager, Sten Stymne, Hari Kiran Kotapati, Jennifer Sheffield, Catherine Mason, and Philip D. Bates (2019). Specialized lysophosphatidic acid acyltransferases contribute to unusual fatty acid accumulation in exotic Euphorbiaceae seed oils. Planta 249(5):1285-1299. doi: 10.1007/s00425-018-03086-y

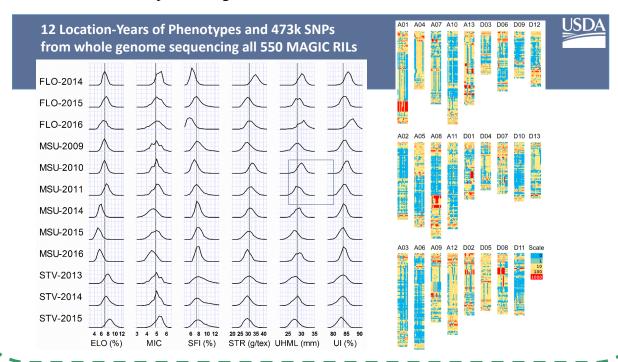
Specialized lysophosphatidic acid acyltransferases contribute to unusual fatty acid accumulation in exotic *Euphorbiaceae* seed oils



<u>Jay Shockey</u>, Ida Lager, Sten Stymne, Hari Kiran Kotapati, Jennifer Sheffield, Catherine Mason, Philip D Bates

Planta (2019) 249: 1285-1299. doi 10.1007/s00425-018-03086-y

Gregory Thyssen, Johnie N. Jenkins, Jack C. McCarty, Linghe Zeng, Bruce C. Campbell, Christopher D. Delhom, Md.S. Islam, Ping Li, Don C. Jones, Brian Condon, and David D Fang. (2019) Whole genome sequencing of a MAGIC population identified genomic loci and candidate genes for major fiber quality traits in cotton (*Gossypium hirsutum L*.). Theoretical and Applied Genetics 132:989-999. https://doi.org/10.1007/s00122-018-3254-8.





ARS Administrator Dr. Chavonda Jacobs-Young kicked off the Agri-Culture Seminar Series as its inaugural Super Speaker on September 2. Dr. Jacobs-Young has provided pivotal support for the creation of the ARS Postdoc Network. The seminar series will continue through the Fall with many presentations provided by ARS Postdocs and career scientists.

AgriCulture is a hub for ARS Postdocs and the scientific community to share their research with a large and adept community, gain valuable presentation skills, receive feedback, and foster collaboration across ARS.



The focus of the series is to provide an opportunity for our scientists to gain valuable presentation experience, as well as hosting Super Speakers and Professional Development Speakers. These nominated speakers will include presentations from accomplished ARS scientists sharing their research, as well as other USDA members addressing topics relevant to postdocs, including resource management, professional development, hiring, etc.

The schedule for the Fall 2020 AgriCulture seminar series includes our own **Dr. Rebecca Sweany**. She will present "Fighting aflatoxin contamination of corn with biocontrols and antifungal peptides" on Wednesday, November 4. Some of the seminar series schedule is provided below and will also be posted to the ARS Postdoc Network Axon Page. Keep a look out for an Outlook invitation containing Zoom information from ARS-PostdocNetwork@USDA.GOV.

Fall 2020 Schedule

Wednesday, September 16 @ 2:30 PM Eastern/11:30 AM Pacific

Dr. Keshav Sharma, Research Molecular Biologist Postdoc

"Analysis of organellar genome variants and their role in evolution, development and defense response in wheat"

Dr. Mackenzie Tietjen, Research Entomologist Postdoc

"Population Genetics and Ecology of Ticks and the New World Screwworm"

Wednesday, October 7 @ 2:30 PM Eastern/11:30 AM Pacific

Dr. Lidong Li, Research Postdoc

"Microbial Dynamics, Climatic Factors and Management Effects on Biogeochemical Cycles of Soil Carbon and Nitrogen in Agroecosystems"

Wednesday, October 21 @ 2:30 PM Eastern/11:30 AM Pacific

Dr. Jamie Honeycutt, Research Physiologist Postdoc

"Characterization of a leptin receptor paralog and its response to fasting in rainbow trout (Oncorhynchus mykiss)"

Dr. Jessica Yactayo-Chang, Research Chemist Postdoc

"The impact of cooking on sweetcorn aroma"

Dr. Aaron David, Research Ecologist Postdoc

"Establishment of Lygodium- microphyllum biological control agents: Population dynamics, bottom-up effects, and integrated weed management"

ARS Postdoc Network Seminar Series Fall 2020 (cont.)

Wednesday, November 4 @ 2:30 PM Eastern/11:30 AM Pacific

Dr. Rebecca Sweany, Research Postdoc
"Fighting aflatoxin contamination of corn with biocontrols and anti-fungal peptides"

Dr. Candace Bever, Research Microbiologist Postdoc

"Rapid, portable detection of amanitins (amatoxins) by lateral flow immunoassay: Applications using mushrooms and urine samples"

Thank you for being a part of this exciting new endeavor and we look forward to your participation!

Click here for full AgriCulture calendar

Dawn Reed leaves SRRC

Submitted by: Deepak Bhatnagar

Ms. Dawn Reed, Program Support Assistant for Cotton Fiber Bioscience and Food Processing and Sensory Quality Research Units has accepted a position with the Army Corps of Engineers as a Workforce Management Specialist, and her last day at SRRC will be September 11, 2020. This is a great opportunity for career growth and we wish her the best in her new position.

Dawn joined ARS in 1997 as an Office Automation Clerk in the Administrative Office. She has worked in several administrative positions, Administrative Assistant and Financial Technician to



name a few. She joined the Cotton Structure and Sensory Quality Research Unit in 2005 as a Biological Science Technologist after she received her Bachelor of Science degree with a Minor in Chemistry from Southern University. In August of 2005, she transitioned to a Travel Specialist Assistant position with the Mid South Area Office to assist with the processing of the New Orleans location travel authorizations and travel vouchers after Hurricane Katrina. She also assisted in developing Safe Haven procedures for the agency. In 2006, she accepted the position to work as a Program Support Assistant with the Cotton Fiber Bioscience Research Unit. She later earned her Master of Arts degree from Southern University.

Ms. Reed has served ARS in many capacities and fostered dynamic relationships, demonstrating leadership by completing the USDA Aspiring Leaders Program in 2009. Serving as the Senior Chair of the National Advisory Council of Office Professionals from 2012 to 2020, hosting the 2019 Workshop Training for Office Professionals throughout the agency, serving as Technical Advisor and Junior Chair to the Southeast Area Council of Office Professionals, serving on the ACES Design Team, Human Resources Team Advisory Group, PSA Position Description Update Team, Your 2 Cents Council and the New Orleans Federal Executive Board Public Service Recognition Committee, where she served as the Mall Exhibition Chairperson. She is the Co-Chair for the African American History Committee and has served on the Human Relations Committee at SRRC. She served as the Editor in Chief and Co-Editor of On the Bayou Newsletter. She was the Employee Benefits Club President and has served on many observance committees throughout her career.

She will be greatly missed.

ARS Launches Website Highlighting Research Impacting People Around the World

ARS announced the launch of its <u>Scientific Discoveries 2020 website</u> to highlight the national and international impact of ARS research on agriculture from the farmer's field to the consumer's table.

"ARS researchers are global leaders in agricultural innovation and take great pride in delivering scientific solutions to agricultural challenges with excellence and integrity," said ARS Administrator Chavonda Jacobs-Young. "The accomplishments in this year's Scientific Discoveries are just a fraction of the amazing work our scientists perform year after year."

The multimedia website highlights prime research in the Northeast, Southeast, Midwest, Plains and Pacific West regions of the United States as well as international locations in Europe, Australia and South America.

Highlights include one of our own:

<u>Northeast</u>: ARS scientists are using gene editing to assist in the development of a vaccine for African Swine Fever, which has devastated the pork industry in the eastern part of the world.

<u>Southeast</u>: A team of researchers, including ARS scientists, is on the cusp of releasing the world's first treatment for peanut allergy. The team developed an oral immunotherapy drug that is nearing final approval by the U.S. Food and Drug Administration.

<u>Midwest</u>: ARS researchers found that adding hops—an important ingredient in beer—to cattle feed may reduce overall cattle feed requirements and cut the animals' excretion of ammonia into the environment.

<u>Plains</u>: ARS scientists and their collaborators have developed a rapid, affordable test that can accurately detect the Zika virus by just shining a beam of light for a few seconds on the species of mosquito that spreads it.

<u>Pacific West</u>: ARS scientists found success in controlling cheatgrass, an aggressive invasive weed, using pre-emergent herbicides as part of an integrated management plan.

<u>International</u>: ARS researchers at the European Biological Control Laboratory's substation in Thessaloniki, Greece, have developed a molecular method that could revolutionize the surveil-

lance of sand flies. Leishmaniasisis a disease transmitted by the sand fly and although it is not common in the United States, it poses a major threat to the U.S. military deployed overseas.

For more information on ARS Scientific Discoveries website, go to:
https://

scientificdiscoveries.ars.usda.gov/



Safety Corner

Submitted by: Shannon Beltz

If you are requesting to come into SRRC for a quick visit (1-2 hours), please:

- 1. Get approval from your RL
- 2. Tell me WHEN (date & time) and WHERE (all rooms/locations). I will clear you once I check other visitors & occupants' locations.

Typically, this is the time of year that I would schedule flu shots at SRRC. So I wanted to send everyone a reminder to get a flu shot and protect yourself this season. Flu Shots are typically no cost with insurance and are offered at many pharmacies and your physician's office.



Stay safe and take care.



10 Steps All Workplaces Can Take to Reduce Risk of Exposure to Coronavirus

Submitted by: Shelia Parker

All workplaces can take the following infection prevention measures to protect workers:

- 1. Encourage workers to stay home if sick.
- 2. Encourage respiratory etiquette, including covering coughs and sneezes.
- 3. Provide a place to wash hands or alcohol-based hand rubs containing at least 60% alcohol.
- 4. Limit worksite access to only essential workers, if possible.
- 5. Establish flexible worksites (e.g., telecommuting) and flexible work hours (e.g., staggered shifts), if feasible.
- 6. Discourage workers from using other workers' phones, desks, or other work tools and equipment.
- 7. Regularly clean and disinfect surfaces, equipment, and other elements of the work environment.
- 8. Use Environmental Protection Agency (EPA)-approved cleaning chemicals with label claims against the coronavirus.
- 9. Follow the manufacturer's instructions for use of all cleaning and disinfection products.
- 10. Encourage workers to report any safety and health concerns immediately.



R. PRESIDENT

HOW LONG

OME! WAIT

Women's Equality Day – August 26, 2020 Celebration of the 100th Anniversary of the Ratification of the **Nineteenth Amendment**

Submitted by: Christine Sickler

The History of Women's Equality Day

At the behest of Rep. Bella Abzug (D-NY), in 1971 and passed in 1973, the U.S. Congress designated August 26 as "Women's Equality Day." The date was selected to commemorate the 1920 certification of the 19th Amendment to the Constitution, granting women the right to



vote. This was the culmination of a massive, peaceful civil rights movement by women that had its formal beginnings in 1848 at the world's first women's rights convention, in Seneca Falls, New York. The observance of Women's Equality Day not only commemorates the passage of the 19th Amendment, but also calls attention to women's continuing efforts toward full equality. Workplaces, libraries, organizations, and public facilities now participate with Women's Equality Day programs, displays, video showings, or other activities.

The Campaign for Voting Rights

The campaign for women's voting rights lasted more than seven decades. Considered the largest reform movement in United States history, suffragists believed that securing the vote was essential to achieving women's economic, social, and political equality. Determined women organized, lobbied, paraded, petitioned, lectured, and picketed for years.

The Nineteenth Amendment was passed in the House of Representatives in January 1918, followed by the Senate in June 1919. Tennessee became the 36th state to ratify the Nineteenth Amendment, securing the required threefourths majority of the states. On August 26, 1920, Secretary of State Bainbridge Colby signed the amendment into law, enfranchising millions of American women who had not previously had the right to vote. Three months later, in a presidential election year, millions of women across the country could vote for the first time. (Louisiana ratified the Nineteenth Amendment on June 11, 1970.)

Yet this victory was limited. The amendment did not cover Native Americans, women living in some of the U.S. territories, women of Asian descent, and others excluded from obtaining citizenship. Many African American women were systematically prevented from voting until the civil rights movement in the 1960s. Extending women's rights, through educated use of their votes and efforts to pass an equal rights amendment, began immediately after ratification and continues to this day.



For more information about the 19th Amendment Centennial Events, go to:

Virtual Events from the National Archives Virtual Events from the National Women's History Museum https://prologue.blogs.archives.gov/2020/07/31/19thamendment-at-100-the-19th-amendment/

Human Resources Corner

Submitted by: Janell Becker

New Employee

Please welcome Jean Beacorn to SRRC.

Jean Beacorn is a recent graduate from North Carolina State University where she obtained her M.S. in Plant Pathology. Jean will be working as a Biological Science Technician with Dr. Isabel Lima in the Commodity Utilization Research Unit.



Are you receiving your emergency messages via OMNILERT?

If you have not already done so, I would like to encourage everyone to register for the Omnilert Messaging Service in order to receive work related emergency messages. In the past, we have used Omnilert to notify employees of security issues, weather advisories, and to communicate information during the last shutdown.

To register for this service, click (or copy and paste into your browser) on this link:

https://axon.ars.usda.gov/Employee Tools/Pages/Omnilert.aspx

You can sign up to receive messages via text, voicemail, or email. Be sure to list your personal cell or landline number and email. If you use your work email, you will not receive the messages during a shutdown or when unable to use government equipment or email.

If you are already registered, please log in to ensure that your information is current.

If you prefer, you can send your information to Janell, and I will enter it in to the OMNILERT system for you.

Death of Former Employee



Mary Frances Perkins transitioned into the eternal presence of the Lord Jesus Christ on Friday August 21, 2020. Teacher, Intercessor, Caretaker, Mother, Grandmother and Great Grandmother. Sister Mary Frances Perkins joined fellowship and was baptized at Greater Asia Baptist Church, later in life she joined Pilgrim Rest Baptist Church #2 where she served over 50 years. Mary Frances retired from the U.S. Department of Agriculture with 39 years of Federal Service.

Message from the Editorial Board

We would like to thank Dawn Reed for her contributions to the *On the Bayou*. She has been part of the Editorial Board since the newsletter was restarted in 2017.

We wish her the very best as she leaves SRRC to pursue other career opportunities.

Activities

Submitted by Terri von Hoven

Trying to stay active?

New Orleans Recreational Department (NORD) is offering free live group fitness classes via Zoom. NORD offers a variety of classes from Barre and Cardio (Blast and Hip Hop) to Yoga and Zumba. Check out their website for fall classes, instructions to join, and passwords: https://nordc.org/activities/fitness/

Movement Mondays is offered by the Ogden Museum of Southern Art and is designed to inspire children to get up and move with educational activities inside and outside the house. See website for details. https://ogdenmuseum.org/event/movement-mondays/all/

Missing Joy, Art, and Music?

Check out **JAMNOLA**, an "experiential pop-up that takes audiences on a topsy-turvy stroll through the cultural gems that make the Crescent City so special." Enjoy this interesting and quintessentially New Orleans immersive experience as told through the eyes of over 20 local artists with private tours. For more details: https://jamnola.com/

The Curtain Call Ball supporting Le Petit Theatre will be held virtually September 10 at 6:30 pm. The ball promises to be the "most entertaining gala of the year" with performances by Broadway stars, local actors and an auction. For tickets and more information: http://www.lepetittheatre.com/

Civic minded?

The Young Leadership Council is offering a two-part webinar discussing "leadership strategies used to enact meaningful change in the community" hosted by two former legislators, Julie Stokes and Walt Leger: Part 1: *Demystifying the Legislative Process* will be held September 8, 11am-12 pm. Part 2: *Lessons in Legislative Leadership* will be held September 15, 11am-12 pm. These webinars are intended to "introduce the state legislature structure and processes, as well as share how the average citizen can work with the legislature to create a meaningful impact on their community." Free for YLC members, \$10 for friends of YLC.

The YLC is also seeking volunteers for either a morning or afternoon shift to assist with The Department of Sanitation's Household Hazardous Waste Materials Collection Day. The event will be held on Saturday September 26, 2020 at 2829 Elysian Fields Ave from 8am to 1pm. See the website for more information, go to: https://ylcnola.org/

Library Events

The **New Orleans Public Library** has several interesting virtual options for September. Register at http://nolalibrary.org/

- Virtual Story Time, Monday, Sept 14, 21, 28 from 3:00 to 3:30 pm allows children to play, read, sing and write with children's librarians.
- ♦ Virtual Guided Meditations, Thursday, Sept 3 and 17 from 12:30 to 1 pm focus on mindfulness and compassion through calming meditations led by Dr. William Thiele.
- Research Matters: How Health Research Impacts All of Us, Thursday Sept 3, 10, 17, from 2:00 to 3:00 pm, hosts a series of discussions involving health research.
- Virtual Popular Fiction Book Club, Tuesday Sept 15 from 6:00 to 7:15 pm discusses a new book every month.

The **Jefferson Parish Library** has an events calendar for the East Bank Regional Branch and the West Bank Regional branch as well as local branches. The calendars are best viewed at their website, http://www.jplibrary.net/calendar/calendar.htm

A Step Back in Time at SRRC

Submitted by: Christine Sickler



May 1, 1947: The Cowles Dissolver Unit. SRRL, E.J. McCourtney.

February 23, 1943: Machinery in the textile mill. Cotton Processing Research Division, SRRL.



Recent SRRC Publications

Submitted by: Suhad Wojkowski

Full text pdfs of SRRC publications are available in the Eprints database via "Library" link on the SRRC Intranet page: http://nola.srrc.usda.gov:8000/srrcmenf.htm

Click on the article's title below to launch the pdf from Eprints.

Beaulieu, John C. and Reed, Shawndrika and Obando-Ulloa, Javier M. and Boue, Stephen M. and Cole, Marsha (2020) <u>Green Processing</u>, <u>Germinating and Wet Milling Brown Rice (Oryza sativa) for Beverages: Physicochemical Effects</u>. Foods, 9 (1016). pp. 1-19.

Cheng, H.N. and Biswas, Atanu and Vermillion, Karl and Melendez-Rodriguez, Beatriz and Lagaron, Jose Maria (2020) *NMR Analysis and Triad Sequence Distributions of Poly (3-Hydroxybutyrate-Co-3-Hydroxyvalerate)*. Polymer Testing, 90 (106754). pp. 1-7.

Nesbit, Jacqueline B. and Schein, Catherine H. and Braun, Benjamin A. and Gipson, Stephen A.Y. and Cheng, Hsiaopo and Hurlburt, Barry K. and Maleki, Soheila J. (2020) *Epitopes with Similar Physicochemical Properties Contribute to Cross Reactivity Between Peanut and Tree Nuts.* Molecular Immunology, 122. pp. 223-231.

Thyssen, Gregory and Jenkins, Johnie N. and McCarty, Jack C. and Zeng, Linghe and Campbell, Bruce C. and Delhom, Christopher D. and Islam, Md.S. and Li, Ping and Jones, Don C. and Condon, Brian and Fang, David D. (2019) *Whole Genome Sequencing of a MAGIC Population Identified Genomic Loci and Candidate Genes for Major Fiber Quality Traits in Upland Cotton (Gossypium hirsutum L.).* Theoretical and Applied Genetics. 132:989-999. pp. 1-11. https://doi.org/10.1007/s00122-018-3254-8.

Uchimiya, Minori and Spaunhorst, Douglas J. (2020) <u>Influence of Summer Fallow on Aromatic Secondary Products in Sugarcane (Saccharum spp. Hybrids).</u> Journal of Agriculture and Food Research, 2 (100064). pp. 1-7.

Wang, Yimin and Li, Ming and Jiang, Chun-yu and Liu, Ming and Wu, Meng and Liu, Ping and Li, Zhong-pei and Uchimiya, Minori and Yuan, Xu-yin (2020) <u>Soil Microbiome-Induced Changes in the Priming Effects of 13C-Labelled Substrates from Rice Residues.</u> Science of the Total Environment, 726 (138562). pp. 1-11.