Newsletter

Southeastern Game Bird Breeders & Hunting Preserve Association

No. 6, 2020

Recently, the White House rejected a bill intended to help save the postal service from running out of money in September 2020. Please lend us your assistance on this issue and <u>take action now</u>.

Along with the other members of the <u>Bird Shippers of America</u>, we are seeking as many signatures as possible on our petition to encourage the administration to support full funding of the essential and vital services of the USPS so that we can continue to provide poultry and services to backyard enthusiasts, homesteaders, small farmers, farm stores, and connected industries and individuals across the United States.

Add your name, and then share this post across your social media channels. **Sign the Petition**

Pandemic Best Practices Highlighted at Poultry Conference

2020 National Safety Conference for the Poultry Industry planned for Aug. 10-12 in Florida
PUBLISHED ON June 4, 2020

TUCKER, Ga. — The poultry industry is constantly affected by change, and this year has been no exception. However, one thing is certain – employee safety remains a top priority. Each year, poultry and egg industry safety professionals convene at the National Safety Conference for the Poultry Industry to discuss best practices to ensure the continuous safety of their employees. This year's conference is scheduled for Aug. 10-12 at the Hilton Sandestin Beach Golf Resort & Spa in Destin, Florida. The conference is sponsored by the Georgia Tech Research Institute/ATRP and the U.S. Poultry & Egg Association (USPOULTRY).

As USPOULTRY is currently planning to move forward with the seminar,

the health and safety of everyone who attends is a top priority. Guidelines from the Centers for Disease Control and Prevention (CDC) and state and local governments regarding COVID-19 will be followed, and regular updates will be provided to all stakeholders if the situation warrants. For instance, in addition to the hotel sanitation practices outlined by Hilton, seating will be configured to allow for social distancing if necessary. "USPOULTRY's National Safety Conference will offer a variety of presentations, focused on trending industry topics and updates on government safety policies for poultry industry personnel," said Frank Cruice, senior director of safety and security for Perdue Farms, and program committee chairman. "This is an incredible opportunity for furthering education and connecting with your peers. You will not want to miss it." A variety of topics will be covered, including Safety Best Practices During a Pandemic...Moving Forward; Automation/Ergonomic Best Practices; Improving Safety During Sanitation; Importance of Leading Indicators to Prevent Injuries; Incident Investigation Do's and Don'ts; OSHA Standards Updates; and more. There will also be an opportunity to gain valuable advice from attorneys in the Ask a Lawyer session. As well, a series of roundtable discussions will allow attendees to convene in smaller groups to discuss and learn from each other about best practices and challenges.

The 2020 USPOULTRY National Safety Conference planning committee consists of experienced poultry industry safety personnel. The committee includes Adrienne Allison, Tyson Foods, Inc.; Doug Britton, Georgia Tech Research Institute/ATRP; Frank Cruice, Perdue Farms (committee chairman); Josh Dozier, Simmons Foods; James Ferrell, Foster Poultry Farms; Ronnie Franklin, Fieldale Farms Corporation; Gary Hubbard, Koch Foods; Reggie McLee, Wayne Farms LLC; Ashley Peterson, National Chicken Council; Lisa Picard, National Turkey Federation; Kyle Price, Farbest Foods, Inc.; Chad Randolph, Pilgrim's; Kenneth Sandlin, George's Inc.; David Schaller, Valley Proteins, Inc.; Douglas Sikes, Crider Foods; Larry Stine, Wimberly Lawson Steckel Schneider & Stine; Pete Vanderlyke, Peco Foods; and Kari Waters, Pilgrim's. USPOULTRY would like to also remember program committee member Mike Nations of Harrison Poultry Inc., who passed away May 21.

To view the full agenda and to register for the 2020 National Safety Conference for the Poultry Industry, click <u>here</u> or visit <u>www.uspoultry.org</u>.

-USPOULTRY

Could there be another use for quail eggs?

Egg-Based Coating Preserves Fresh Produce

Rice University lab's protein coating extends shelf life of perishable fruits and vegetables PUBLISHED ON June 8, 2020

HOUSTON — Eggs that would otherwise be wasted can be used as the base of an inexpensive coating to protect fruits and vegetables, according to Rice University researchers.

The Brown School of Engineering lab of materials scientist Pulickel Ajayan and colleagues have developed a micron-thick coating that solves problems both for the produce and its consumers, as well as for the environment. When the coating was applied to produce by spraying or dipping, it showed a remarkable ability to resist rotting for an extended period comparable to standard coatings like wax but without some of the inherent problems. The work by Rice undergraduate students Seohui (Sylvia) Jung and Yufei (Nancy) Cui is detailed in Advanced Materials.

The coating relies on eggs that never reach the market. As the United States produces more than 7 billion eggs a year and manufacturers reject 3% of them, the researchers estimate more than 200 million eggs end up in landfills. Even before the impact of the new coronavirus, the world wasted a third of the food produced around the globe, the researchers wrote.

"Reducing food shortages in ways that don't involve genetic modification, inedible coatings or chemical additives is important for sustainable living," Ajayan said. "The work is a remarkable combination of interdisciplinary efforts involving materials engineers, chemists and biotechnologists from multiple universities across the U.S."

Along with being edible, the multifunctional coating retards dehydration, provides antimicrobial protection and is largely impermeable both to water vapor to retard dehydration and to gas to prevent premature ripening. The coating is all-natural and washes off with water.

"If anyone is sensitive to the coating or has an egg allergy, they can easily eliminate it," Jung said.

Egg whites (aka albumen) and yolks account for nearly 70 percent of the coating. Most of the rest consists of nanoscale cellulose extracted from wood, which serves as a barrier to water and keeps produce from shriveling, a small amount of curcumin for its antimicrobial powers and a splash of glycerol to

add elasticity.

Lab tests on dip-coated strawberries, avocadoes, bananas and other fruit showed they maintained their freshness far longer than uncoated produce. Compression tests showed coated fruit were significantly stiffer and more firm than uncoated and demonstrated the coating's ability to keep water in the produce, slowing the ripening process.

An analysis of freestanding films of the coating showed it to be extremely flexible and able to resist cracking, allowing better protection of the produce. Tests of the film's tensile properties showed it to be just as tough as other products, including synthetic films used in produce packaging. Further tests proved the coating to be nontoxic, and solubility tests showed a thicker-than-usual film is washable.

Rinsing in water for a couple of minutes can completely disintegrate it, Ajayan said.

The researchers continue to refine the coating's composition and are considering other source materials. "We chose egg proteins because there are lots of eggs wasted, but it doesn't mean we can't use others," said co-corresponding author Muhammad Rahman, a research scientist in Ajayan's Rice lab, who mentored and led the team.

Jung noted the team is testing proteins that could be extracted from plants rather than animal produce to make coatings.

-Rice University

Reusing Chicken Litter Shows Benefits

Reusing chicken litter can save costs, however health & safety concerns must be addressed PUBLISHED ON June 10, 2020

WASHINGTON — Chicken is the most consumed protein in the United States. According to the National Chicken Council, the U.S. produced more than 9.2 billion broiler chickens in 2019. US consumers spent more than 95 billion dollars on chicken products.

All these broilers – chickens raised for meat – need millions of tons of litter, or bedding material. Reusing chicken litter can save costs. There exists some health and safety concerns though.

A new study shows that the environment in reused poultry litter can deter growth of pathogens like Salmonella.

"When you read or hear that broiler litter is reused to raise multiple flocks of

chickens, the typical reaction is that it must be bad for food safety," says Adelumola Oladeinde, a co-author of the recent study. "Our study demonstrates the exact opposite."

Oladeinde is a researcher at the USDA's National Poultry Research Center in Athens. He and his colleagues found that 'good' bacteria in used poultry litter can hinder Salmonella growth.

"It may be worthwhile to invest time and resources to characterize the bacteria in reused litter," says Oladeinde. "We can develop the promising ones into beneficial microbes for better chicken gut health."

The study also explored litter characteristics, such as moisture and ammonia levels. These characteristics can dramatically affect the litter microbiome – the mix of bacteria, fungi, and viruses in litter.

"Our findings provide new information on the relationship between the physical environment of broiler litter and its microbiome," says Oladeinde. "Management techniques that account for both factors may help reduce

Salmonella in chickens."

Chicken litter plays a big role in determining broiler health. After a broiler chick gets to a farm, it usually spends the next several weeks pecking and living on litter.

In fact, chicks begin to eat litter even before eating from feeding troughs or drinking. The microbiome present in the litter likely become the 'first settlers' in the guts of the chicks.

"These first microbes play a key role in determining gut health," says Oladeinde. "Therefore, it is critical to determine what a beneficial litter microbiome looks like."

The team collected samples of reused poultry litter from the University of Georgia Poultry Research Center. The litter was used to raise three flocks of broiler chickens under conditions like those used in broiler farms. "Each sample represents a unique broiler litter environment," says Oladeinde. In the lab, researchers measured characteristics of the litter samples. Then they added Salmonella to each sample. After that, the samples were tested for levels of Salmonella, other bacteria, and physical characteristics.

Within two weeks of adding Salmonella, most samples developed predictable microbiomes. Certain microbes, such as Nocardiopsis bacteria, seemed to reduce growth of Salmonella.

That makes sense, according to Oladeinde. Some species of Nocardiopsis bacteria are known to produce antibiotics and toxins. These compounds could be keeping Salmonella levels low in the litter samples.

A key aspect of reusing broiler litter is how long to wait before reuse. This

waiting period is called litter downtime.

"For farmers, a shorter downtime will result in growing more birds through the year," says Oladeinde. However, we know little about how downtime affects litter microbiome.

Results from the study show that surveying levels of specific bacteria could help determine if litters have had enough downtime. That could be of big help to farmers.

"Poultry litter is a complex environment to study," says Oladeinde. "We showed that the reused litter after two weeks of downtime had a microbiome that was unfavorable to Salmonella."

Oladeinde aims to repeat these experiments with litter from various sources. He also wants to test for multiple Salmonella strains. "These studies will tell us about the underlying mechanisms behind reusing litter and reducing Salmonella," he says.

American Society of Agronomy

Recognizing and Managing Rural Stress

With limited access to mental health services, rural communities are hard hit PUBLISHED ON June 11, 2020

FREEPORT, Ill. — Stress on farmers, ranchers and their families caused by lower crop prices, retracting global markets and natural disasters is still an ongoing issue especially in rural areas. Even before the coronavirus outbreak, rural communities across the Midwest were dealing with additional economic stressors including the closing of coal-fired electric plants, offshored manufacturing and reduced demand for oil and gas due to overproduction globally.

As a result, rural communities have seen increasing levels of suicide from within a variety of industries and occupations. With limited access to mental health services rural communities are usually the hardest hit.

Having the ability to recognize and manage stress is crucial. The University of Illinois Extension has designed a program, Recognizing and Managing Stress Webinar, that will provide participants with: (1) methods for identifying stress within themselves and others; (2) techniques on providing empathy and active listening; (3) examples of constructive emotion-focused coping skills; and (4) a guide to identifying warning signs of suicide and effective research-based actions to take if you feel someone is having

thoughts of death or dying.

"This program is a follow up to the session we hosted in the spring of 2019, which provided basic information about farm stress and its affects," said Margaret Larson, County Director, University of Illinois Extension. "We are hoping that this webinar will allow us to continue the conversation and provide more useful facts and strategies for our local audience (partners, ag business people, etc)."

The Recognizing and Managing Stress Webinar will be offered twice, Tuesday, July 14 at 1 p.m. and Tuesday, July 28 at 5 p.m. There is no charge to attend, but registration is required and can be completed on-line at https://extension.illinois.edu/jsw.

The presenter, Pam Schallhorn, is an Extension Specialist in Community & Economic Development. For the last two years, she has been working with a small team of professors and Extension specialists led by Michigan State University teaching Farm Stress training to Farm Service Agency employees, and members of the American Farm Bureau and National Farmers Union. For more information about this program,

visit https://extension.illinois.edu/jsw or call the office at 815-235-4125. Additional farm stress resources can be found

at: https://extension.illinois.edu/jsw/commercial-agriculture.

— University of Illinois Extension

Secretary's Corner

I am in a quandry as most people probably are. What can I do to help with the pandemic and racial issues? I feel helpless and speechless. I practice the advised health safety issues. In addition, I have never discriminated against anyone or race. It hurts to see what's happening to our country. We are all human, we all share the same planet earth. I hope some day we all can live together peacefully.

Please stay safe and be well.

Happy Hunting

Dr. Gary S. Davis, Exec. Sec.

SEGB&HPA

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