To All Ag Reporter Email Recipients:

Here is your weekly update for ag information. Click on the topic and it will take you directly to that article. In order of appearance:

Extension Office closed on Monday in observance of Labor Day

The UW-Extension office in Columbia County will be closed to observe Labor Day. We will reopen for business on Tuesday morning, September 4th. We wish you and your family a safe and enjoyable Holiday.

Salmonella Vaccine Reduces Animal Disease and Foodborne Illness

Some types of *Salmonella* cause disease in food animals, like pigs. Others cause foodborne illness in humans. A new vaccine developed by Agricultural Research Service (ARS) scientists in Ames, Iowa, protects against these types of *Salmonella* in food animals.

Most *Salmonella* vaccines only protect against one type of the pathogen. This leaves pigs susceptible to disease from other *Salmonella* pathogens. While some *Salmonella* vaccines reduce disease in pigs, they may not protect against *Salmonella* that causes foodborne illness in humans.

Microbiologists Shawn Bearson and Brad Bearson, at ARS's Food Safety and Enteric Pathogens Research Unit and ARS's Agroecosystems Management Research Unit, respectively, developed a new vaccine that protects food animals against both human and animal disease-causing *Salmonella*.

In experiments, the vaccine protected pigs against two types of *Salmonella*—*Typhimurium* and *Choleraesuis*. It also protected turkeys against *Typhimurium* and a multidrug-resistant *Salmonella* type, Heidelberg—the bacterium responsible for a 2011 outbreak in ground turkey.

Choleraesuis, the source of major U.S. and global outbreaks in swine in the 1980s and 1990s, causes a severe disease that can kill animals. According to ARS scientists, if an outbreak occurs in the United States, the new vaccine could provide protection against *Choleraesuis*, along with other foodborne *Salmonella* such as *Typhimurium*. The vaccine is also a DIVA—Differentiation of Infected from Vaccinated Animals—meaning it shouldn't interfere with specific tests used to detect natural *Salmonella* infections in pigs. Thus, a producer can differentiate vaccinated animals from those naturally exposed to *Salmonella*.

The scientists believe that the vaccine will protect against other types of *Salmonella* in addition to the three strains tested. ARS has filed a patent application for this vaccine technology.

UW Insect Diagnostic Lab—Fruit Insect Report: August 31st, 2017

By: PJ Liesch

Reports suggest that **Japanese beetle** pressure is finally starting to taper off for the year. This insect has been particularly destructive in the southern two thirds of the state this year and growers should continue to monitor for additional beetles if high numbers have been observed the past few weeks.

Fall webworms have been popping up throughout the state the past few weeks. The silken tents are quite obvious in southern portions of the state. Farther north, caterpillars are small, so thorough scouting can help prevent issues before significant damage occurs.

Several samples of apples with **codling moth** caterpillar damage have recently come in to the UW Insect Diagnostic Lab. These have typically been from backyard growers that had not been using monitoring traps for this pest.

Many **stink bug** samples have come into the UW Insect Diagnostic Lab recently. Nymphs (juveniles) of the **green stink bug** have been spotted in southern Wisconsin for several weeks. Recent cases have found small nymphs in the northern part of the state, including Bayfield county. **Brown Marmorated Stink Bug** eggs and nymphs were recently confirmed from a raspberry patch in Waukesha county after a physical specimen was sent in. Few reports of nymphs have occurred this year, but the find suggests potential issues for berry growers in coming years. Sightings of adults Brown Marmorated Stink Bugs are expected to increase dramatically in the coming weeks as the adult stink bugs attempt to move into homes when seeking overwintering spots.

We're approaching the peak period for **yellowjackets** and **paper wasps** throughout the state. While these insects typically won't damage sound fruit, they can be common opportunistic scavengers of compromised fruits. Activity is likely going to be conspicuous into October before colonies die out for the year.

Wisconsin Crop Manager News Articles for September 1, 2017

Research: Key Management Practices That Explain Soybean Yield Gaps
http://bit.ly/2vRhaUD

Slugs in a Cereal Rye Cover Crop
http://bit.ly/2wYqB9E

Putting Farm Safety into Practice, Silage and Grain Harvest
http://bit.ly/2vyt22c

Wisconsin Fruit News-Sept 1, 2017
http://go.wisc.edu/26h2r5

Wisconsin DATCP Pest Bulletin August 31, 2017
http://bit.ly/2eqvxc9

UW/UWEX Plant Disease Diagnostic Clinic (PDDC) Update, Sept 1
http://bit.ly/2eqNzef

UWEX Vegetable Crop Updates 18-19 posted

http://bit.ly/2ew0j78

Weekly Emails Online!
http://columbia.uwex.edu/ag-calendar-and-deadlines/

The Ag Reporter "Snapshot" is presented to you each week by George Koepp, Columbia County UW-Extension Agriculture Agent. If you have any questions about these articles or need other ag-related information, please contact George at 608-742-9682 or by email george.koepp@ces.uwex.edu.