

**News From Your County Agent**  
**By Marcel Valdez, CEA-ANR**  
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**Zavala County**

Winter finally made it's way through south Texas with a strong cold front on Monday causing our first freeze of the year on Tuesday morning with lows recorded at 30 degrees or so in most of the county. Our average first freeze is not until the last week of November or the first week of December so for all practical purposes old man winter paid us an early visit this year by about 18 days or so early. Greetings to all of you and thank you for reading this week.

**Clover Kids Information and Updates**

At this time we are in the process of ordering awards for the companion rabbit show for our 4-H Clover kid participants. It is very important that we have an accurate count of all 4-H kids in the county that will show a rabbit.

4-H Clover kids must be registered by December 10 and have a rabbit by this date. Clover kids can register online on 4-H connect. THERE IS NOT CHARGE for clover kids. If you already have a rabbit That is great if you need us to get you one please call the office and get put on our OFFICIAL LIST of clover kids needing rabbits. For additional questions regarding this project please contact the Zavala County Office of the Texas A&M AgriLife Extension Service at 830-374-2883. I will have the rabbits ready for distribution on December 5, 2019 after 5 p.m. DEADLINE TO BE PLACED ON THE NEED A RABBIT LIST IS 5:00 P.M. TUESDAY, NOVEMBER 26, 2019. COST PER RABBIT IS \$10.00 EACH. The rabbit show will be held on Friday, January 10, 2020 at 10:00 a.m. so plan your days off from work and make arrangements as needed.

**Major Show Entries Due Next Week:**

All Zavala county exhibitors that validated an animal project through the Texas State validation program and plan to attend a mjr show in Texas your entries are due next week on Friday November 22, 2019. Remember if you do not have a Texas quality county number you are required to do the training on line at <https://www.texaslivestockvalidation.com/qc/qcregister.aspx> to take the online course and exam. Once completed and you pass the exam you will receive your quality counts number which you must provided to the major show you are entering. All Exhibitors that validated an animal project for major shows received a stockshow entry packet for you to complete. Please do this as soon as possible. If you need assistance in completing the entry process contact the Zavala County Office of the Texas A&M AgriLife Extension Service at 830-374-2883.

**Tip of the Week: How To Make Your Peppers Hot Next Spring**

Everybody I know enjoy planting a few pepper plants in the garden every spring. They are easy to grow and provide heat and flavor to salsas and a little kick to many dishes in which they are used. So if you have peppers in the garden how do you make sure you are picking them at their peak of hotness? Research has been done over a few growing seasons and this is what has been determined.

Anyone who has tasted a hot chili pepper has felt the burn of capsaicinoids, the compounds that give

peppers their spiciness, as well as possible health benefits. Related pepper compounds, called capsinoids, have similar properties, minus the heat, so they are attractive as potential functional food ingredients and supplements. Now, researchers reporting in ACS' Journal of Agricultural and Food Chemistry have measured amounts of both compounds in three types of chili peppers as they ripen.

Hot peppers are cultivated all over the world for use as foods, spices and ingredients. The spiciness, or pungency, of chili peppers depends on the accumulation of capsaicinoids. Although capsinoids have similar structures to capsaicinoids, they are about 1,000 times less pungent. Scientists have reported health benefits for both groups of compounds, including antioxidant, anti-inflammatory, pain-relieving, anticancer and anti-obesity effects. However, the lower pungency of capsinoids could make them more promising candidates for the development of drugs, supplements and functional foods. Ana Garcés-Claver and colleagues wanted to analyze the capsaicinoid and capsinoid content of three types of chili peppers as they ripened: the spicy Chiltepin and Tampiqueño 74 from Mexico, and the super-hot Bhut Jolokia from India.

The researchers grew and collected the three types of peppers at various stages of fruit development. Using a sensitive mass spectrometry technique, they found that capsinoids in all three peppers began to accumulate 20 days after flower opening, reaching a peak at 40 days, and then decreasing until 60 days after flowering. In contrast, capsaicinoid accumulation varied between the super-hot Bhut Jolokia and the other two peppers. In Chiltepin and Tampiqueño 74, capsaicinoid accumulation followed a similar pattern, although at higher levels, as capsinoids. But in Bhut Jolokia, capsaicinoids were detected earlier (at 10 days post-flowering) and reached a maximum later (60 days post-flowering), allowing the pepper to accumulate much higher levels of the spicy compound. These results could guide future breeding studies to understand factors that affect capsaicinoid and capsinoid accumulation, the researchers say. So the bottom line if you have peppers in your garden next spring it will be best to harvest them at about 45-50 days after flowering. Good idea for you to do your own little study with your peppers this coming growing season. Have a great week. M.V.

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