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Livestock and Natural Resources

Vesicular Stomatitis

I guess 2020 is the year of viruses; unfortunately, Vesicular Stomatitis has made its way to Kansas.

This virus is a viral disease that primarily affects horses and cattle. Pigs, sheep, goats, llamas, alpacas, and deer can also be infected, and on rare occasions, humans can be infected. The disease normally occurs in western and southwestern United States during the summer months. However, we now have cases of VS in Kansas.

Most animals do not die from this disease, but the economic losses can be significant in the lack of milk production and weight loss. The biggest concern is distinguishing it from foot and mouth disease and swine vesicular disease, both foreign animal diseases with similar clinical signs.

The disease characteristics include fever at the onset. The most commonly recognized sign is excessive salivation or drooling. If the mouth is examined in the early stages, it will reveal blister-like lesions known as vesicles. Normally, they have burst, and ulcers or erosions of the inner lining of the lips, tongue, and dental pad and gums will be seen. Sometimes crusty sores can be seen on the lips, nostrils, teats, vulva, and hocks. Due to the pain and discomfort, animals will be reluctant to eat and drink. Animals could be lame due to the foot lesions. The disease normally resolves in 10 to 14 days.

We don't know why the disease shows up in some years and not others. Insects, animal movement, and mechanical transmission probably play a part in spreading the disease. Once it is in the herd, the disease moves from animal to animal through contact with the saliva or the ruptured vesicles of an infected animal.

There is no specific treatment for the disease. You can give supportive care by offering soft food, rest, and water. Your veterinarian can attempt to control pain and treat any secondary bacterial infections.

There is no vaccine available, so your prevention is a good biosecurity plan, isolate any newly purchased animals for at least 30 days. Diagnosis of VSV is by a blood test if you suspect VSV get in touch with your veterinarian immediately.

David G. Hallauer
District Extension Agent
Crops & Soils/Horticulture

Coming Down to the End

Most weather models six to eight weeks ago suggested a warmer than normal summer with below-normal precipitation. For much of northeast Kansas, the temperature part may have been true, but precipitation has come at just the right time. We dodged a disaster if you will.

Still, moisture stress isn't out of the question. Much of our corn crop is in the blister to dough stage, with 40 plus days to maturity – or a point when moisture is no longer needed by the crop. The requirement for the crop at this point? Seven to ten inches of water is still needed.

Soybeans see a similar requirement. Much of the crop is more than 40 days away from maturity, requiring nine-plus inches of water to finish. Interestingly enough, soybeans, even at the full seed stage (pods contain a green seed filling the cavity in one of the four uppermost nodes on the main stem), require three and a half inches of rain to get to maturity. It's one of the most critical stages of the soybean life cycle and can have huge impacts on yield.

What's the forecast for the next 45 days? Most models show neutral moisture possibilities (equal chances of above or below normal). What actually happens is anyone's guess, but few will argue with a good moisture profile in late July. For a more in-depth outlook, check out this article in the last KSU eUpdate at https://webapp.agron.ksu.edu/agr_social/article_new/kansas-weather-early-fall-2020-outlook-398-6.

Iris Division Window Now Open

As one growing season winds down, it's time to start planning for another. If maintaining a healthy iris crop for 2021 is of interest to you, some work now is in order.

Iris grow quite well here and multiply quickly, requiring division (every three to five years) to help rejuvenate plantings. Failure to do so can result in loss of vigor in the centers of flower clumps and even reduced flowering. Late July through August is the window to do so.

Divide clumps by digging up the entire clump consisting of system of thick rhizomes and smaller feeder roots. Cut the rhizomes apart, leaving each division with a fan of leaves plus a section of the rhizome. The best divisions are made from a double fan consisting of two small rhizomes attached to a larger one, which forms a Y-shaped division. This leaves each of the small rhizome with a fan of leaves and tends to result in more flowers in the first year after planting (single fans take a year to build up strength).

Before replanting, inspect the root system for disease/insects. Some soft rot damage can be physically removed if not severe. The same is true for iris borers. Discard excessively affected root material.

Cut leaves back by two thirds before replanting in to a weed free area. Fertilize according to soil test recommendations or by applying a balanced fertilizer at the rate of one pound of nitrogen plus phosphorous plus potassium per 100 square feet. Fertilizer should be mixed into the soil to a depth of six inches. Avoid over-fertilization of areas previously fertilized.

Cindy Williams
Meadowlark Extension District
Food, Nutrition, Health, and Safety

Time to Grill? Think Food Safety First

As BBQ season goes on, a food thermometer can be a best friend when grilling. Home cooks often hail Memorial Day as the beginning of grilling season, so buddy up with a familiar kitchen utensil.

A food thermometer should be your best friend. You should never determine meat doneness based on color. Use a food thermometer and make sure meat is cooked to the recommended minimum internal temperature. For the three most common types of grilled meats, those recommendations include:

*Steaks, chops, and roasts---145 degrees Fahrenheit.

*Ground meat---160 degrees Fahrenheit.

*All poultry---165 degrees Fahrenheit.

A food thermometer should be inserted into the center of the thickest part of the meat, away from bone, fat, and gristle. For ground meats, such as hamburger patties, insert into the side so that the thermometer is positioned through the center of the food.

There are many types of thermometers to choose from when cooking. For checking food temperature, a digital or dial food thermometer is best. Digital temperatures can sense temperature at the tip of the probe and give a quick temperature response. Digital thermometers cannot be left in the food during cooking.

Other food thermometers have a temperature probe connected to a separate digital display. If grilling, use one designated for the high heat of grilling. For large cuts of meat—such as roasts—a meat thermometer can be inserted into the roast and left in during cooking.

Here are some other food safety tips as you gear up for outdoor grilling:

*Use separate plates and utensils for raw meats and cooked meats.

*Keep hot foods hot and cold foods cold. Hot foods should be maintained at a

Temperature above 140°F, while cold foods should be kept below 40°F.

*Wash your hands frequently, especially after handling raw foods, before and during meal preparation, and before eating.

*Prepare several ice chests to keep food cold and to separate items. Keep beverages in one chest, ready-to-eat foods in another, and raw meats in a third.

*Do not wash meat or poultry before cooking. This increases the chance for cross-contamination and is not necessary. Cooking meat to the proper internal

Temperature is your best defense.

Some non-food safety tips include positioning the grill away from flammable areas, checking the charcoal or gas supply, so you don't run out while preparing meals, and keeping children and pets away from the hot grill.

Nancy Nelson
Meadowlark Extension District
Family Life

4-H'er Shares Winning Recipe

Faith Bloom's chocolate chiffon cake entry was designated the Champion Cake at the 2020 Jackson County Fair. Faith is a Soldier Boosters 4-H Club member and the daughter of Corey and Anissa Bloom. Her other interests include beef, goats, clothing buymanship, modeling, buymanship display, photography, and cooking. Faith enjoys volunteering and hanging out with the other kids during the fair and yearly activities.

A sophomore at Wetmore High School, Faith's hobbies include volleyball, cheerleading, track, reading, talking on her phone, and hanging out with friends. When preparing this recipe, make sure to use only cake flour and that your eggs are at room temperature.

Chocolate Chiffon Cake

7 large eggs, separated
1/2 cup baking cocoa
3/4 cup boiling water
1-3/4 cups cake flour
1-3/4 cups sugar
1-1/2 teaspoons baking soda
1 teaspoon salt
1/2 cup canola oil
2 teaspoons vanilla extract
1/4 teaspoon cream of tartar

Icing

1/3 cup butter
2 cups confectioners' sugar
2 ounces unsweetened chocolate, melted and cooled
1-1/2 teaspoons vanilla extract
3 to 4 tablespoons hot water
Chopped nuts, optional

Let eggs stand at room temperature for 30 minutes. In a bowl, combine cocoa and water until smooth: cool for 20 minutes. In large bowl combine flour, sugar, baking soda, and salt. In a bowl, whisk the egg yolks, oil, and vanilla; add to dry ingredients along with the cocoa mixture. Beat until well blended. In another large bowl and with clean beaters, beat egg whites and cream of tartar on high speed until stiff peaks form. Gradually fold into egg yolk mixture.

Gently spoon batter into an ungreased 10-inch tube pan. Cut through the batter with a knife to remove air pockets. Bake on lowest rack at 325°F for 60-65 minutes or until top springs back when lightly touched. Immediately invert cake onto a serving plate.

For icing, melt butter in a saucepan. Remove from the heat: stir in the confectioners' sugar, chocolate, vanilla, and water. Drizzle over cake. Sprinkle with nuts if desired. Yield: 16-20 servings