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For Immediate Release

VIEWS WITH VAN

EARLY SPRING FREEZE

When looking at spring freeze this time of year it will depend on plant growth stage, temperature at plant level and length of duration of exposure to cold. Waiting five to seven days of warming trend weather after such an event is a good time to evaluate plants. When wheat is in the joint stage and the growth point is 2 - 3 inches above the crown, the temperatures that can cause some concern are about 20-24 degrees for 2 hours at the soil level. The majority of wheat I have seen has not been that advanced. Don't worry about browned or purpleish leaves until you pull up some tillered plants. Take a close look at the general plant stand; how thick it is, and soil moisture, these factors will give some insulative properties to wheat. For early wheat, pull up some tillers and run your fingers up the stem. As you slide the stem between your fingers, it should glisten and be shiny, and a very pale lime green color. It will look rather moist and turgid. It will look much like the color of the inner most hearts of celery stalks. Stems having damage will be wilted or brownish, will be dry or the stem parts will show signs of decaying. A common sign of damage to tillers is that you will see the stems just sitting there, not elongating much and young, new tillers will start to grow around it if the wheat crown is still healthy and in good condition.

Most wheat terminal growth points(where the wheat head will come from in stem elongation) was at the crown level perhaps below the surface or slightly above. Wheat in a thick canopy and damp soil are usually more resistant to cold as opposed to thinner or drier more exposed plants with little canopy, thus I see more leaf tip burn, stunting and damage by the earlier drier weather and some recent freezing temps at this time.. As I travel the area for the most part this is what I see

Seedling alfalfa that has just been planted and has less than 3 leaves may have a tough time. Usually the researchers will like to say that in the fall, 3-4 leaves is needed before a 25 degree killing frost. Alfalfa that was tall and is burned back may be at risk as alfalfa weevil may be attacking new emerging growth. Keep a close eye for weevil or cutworms in alfalfa after top growth is burned back, as this can cause added stress to the early first crop.

Whenever we have an early spring, there is a concern that we may lose plants if the weather suddenly turns cold. Actually, losing plants due to sudden cold is much more a concern in the fall rather than the spring. If plants do not have an opportunity to harden off properly in the fall, a sudden cold snap can freeze tissue and cause tremendous damage and even death. We normally do not have that type of succulent tissue in the early spring and so any damage we see is usually minimal. Leaves may be burned back (looks just like summer scorch) and flowers and early buds may be killed but the plant itself is not significantly damaged. For trees, We will see some leaf scorching and possibly even terminal shoots being killed but tree death is unlikely. If all the growth on the tree or shrub is killed, dormant buds will become active and the plant will eventually put out new growth.

Some evergreens will show burn symptoms and these will most likely re-grow around these spots. Perennial shrubs that are newly transplanted or have been there will suffer some top burn but will send out new shoots. The reproductive parts of all flowering buds is very sensitive to temperature extremes and if there were any plants or trees budding or pollinating, then it is pretty certain that there is damage to those parts. Apricot trees are the most sensitive at this time as well as blooming or new growth of tulips, crocus and other bulbs. Flowering trees and shrubs (redbud, forsythia, Van Houtte spirea) may most likely lose their foliage and flowers much faster but it will re-grow leaves later. At petal fall or fruit set a 28° temperature can cause 15% kill of fruit.

Our most hardy vegetables can withstand temperatures in the mid to lower teens without damage. These would include many cole crops cabbage, broccoli, cauliflower, Brussels sprouts, even asparagus, carrots, turnips and kale. Those that are frost tolerant and can take a light frost include Chinese cabbage, collards, Irish potatoes, Bibb lettuce, mustard, radishes, spinach, Swiss chard and leaf lettuce.

Perennial crops such as rhubarb and asparagus could be frozen back to ground level but should send out new growth. Potatoes that are growing may burn back but will re-sprout.

New seedlings that were planted such as radishes and beets may be damaged if the top portions of their growth points were frozen. Plant sets like broccoli will be affected similarly if a major portion of the upper growing parts are severely damaged. If you set out some annual bedding plants like Pansy's or Geraniums and the like you may have to re-set them since they are not perennials. And a reminder that for warm loving plants don't even think about setting out peppers, tomatoes, starting melons and squash and other vine crops till mid to late May.

For Wheat producers – your local Extension Office has an excellent publication “Spring Freeze Injury to Kansas Wheat” or go to ksre.ksu.edu and search for publication C-646

AREA WIDE FARM SAFETY PROGRAM

Farm safety program for youth 14-15 who want to work for a farmer or any agricultural firm will be held at the Graham County 4-h building April 28th, start at 8:00am to about 4:30pm. Please call your local Twin Creeks K-State Extension office and register and pick up study materials. Program follows the USDA program to familiarize youth to farm work environments. There is a cost for meal and refreshments and materials and booklet. Farm employers and parents must have youth 14-15 certified in this program according to the child labor Laws