Cold Weather and Wind Chill – Does it Hurt Plants?

KRISTA HARDING, HORTICULTURE AGENT



We have just barely dipped into winter and so far it's not been too bad. Living in southeast Kansas, we all know that can change in the blink of an eye! We continue to be in a drought situation with the counties being classified in the severe to extreme drought categories. The extent of the drought on our landscape ornamentals will show up this spring. Unfortunately, the drought has already taken out some green giant arborvitae in the area.

More than likely, we still have the potential for extremely cold weather in the next month. How will it affect our landscape ornamentals? Of course low temperatures can directly

damage plants, especially those that produce fruit. For example, fruit buds of peaches and nectarines are likely to be damaged at 5° to -5° F. Blackberries are generally damaged at temperatures near 5° F though some of the newer varieties can withstand temperatures to -10° F. Some fruit buds of apple cultivars, however, can survive temperatures as low as -20° to -25° F.

What about wind chills? Are wind chills harmful to plants? Not really. Wind chills have a huge effect on warm-blooded animals and their ability to keep warm. But plants do not respond to wind chills indexes because they do not need to maintain a temperature above that of the outside temperature. For example, a -40°F wind chill at 0 degrees F will not cause any more cold injury to plant tissue than a wind chill of -20°F at 0 degrees F.

However, the wind alone can dry out plant tissues. A high wind velocity can cause moisture loss from plant tissues and even cause enough loss to injure or even kill tissues, especially in smaller size wood that is found in peach tree twigs, apple spurs and blackberry canes.



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Because we haven't had moisture on a regular basis this fall and winter, landscape plants will need some additional water to survive. Any newly transplanted woody plants and evergreens should be high on your priority list for watering. Water all of the area from the trunk to the edge of the outermost branches and not just near the trunk. In order for the water to soak in, wait until the temperature is above freezing and the soil is unfrozen.

Landscapes have a tendency to be dark and rather drab this time of year. But certain kinds of plants can add color and interest to the winter landscape. If you're looking to brighten your landscape in the winter, consider planting a red or yellow twig Dogwood shrub this spring. The Red Osier Dogwood has bright red young stems during the winter months that become even more intense closer to spring. The Yellow Twig Dogwood is much like the red except the twigs are bright yellow instead of red.

Krista Harding is a K-State Research and Extension Agricultural agent assigned to Southwind District. She may be reached at kharding@ksu.edu or 620-244-3826.

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