

May 2014

FORAGE RESPONSE TO FROST/FREEZE

Frosts and freezes last week is causing some concern for alfalfa and other forages. Warmer weekend temperatures make it possible to now estimate damage and take action if needed.

To assess damage to alfalfa from last week's cold, don't just look for frozen or wilting leaves. You need to determine if the growing point was killed. This growing point, also called the apical meristem, is the initial development source of all new leaves, stems, and branches on alfalfa. It is located inside a dense cluster of unfolded leaves near the top of the main stem.

Because it is inside a cluster of leaves, the growing point is somewhat protected from cold injury. Exposed leaves and stems all around it can be frozen, wilted, and dying while the growing point cluster survives. If the growing points in your alfalfa survived the freeze, just wait for growth to begin again.

When the growing point is killed, however, growth ceases on that stem. New growth must come from new shoots at the crown or from lower branches. Regrowth often begins a little sooner if plants are cut but it rarely pays to cut and just leave the clippings in the field. However, if the value of the hay that comes from harvesting current growth will pay for the harvest costs, it often is worth taking that harvest. I haven't seen many damaged fields with that much growth so most of you should just wait for plants to come back on their own.

New seedlings of grasses and legumes usually tolerate quite cold temperatures so most of them should be safe unless plants were clearly frozen and killed. Then replanting might be needed.

Don't rush to harvest or replant. Check to see if your plants are truly damaged. Then decide whether to harvest, replant, or just wait.

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