



Colorado State University Extension  
Golden Plains Area

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**For Immediate Release**

## **TESTING DORMANT WHEAT FOR LIFE**

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Environmental conditions affect plant growth in many ways. Conditions that are too dry or too wet, too cold or too hot can all affect wheat production and survival. Determining whether wheat plants are alive in the spring due to adverse growing conditions should be done before spending production dollars on those acres.

Visual inspection:

1. Dig 10 wheat plants from the worst spots in the field, (hilltops, driest areas, etc.).
2. Cut plants diagonally and examine inside the root/shoot areas, especially inside the crown area.
3. Healthy plants will exhibit cream or light colored internal "plumbing" (plant tissue).
4. Discolored or brown colored internal plant tissue indicated dead plants.

Growth test to determine if wheat plants are alive before active growth begins in the spring:

1. Remove the top three inches of soil containing the plant crown.
2. Thaw the samples and warm to room temperature.
3. Remove soil from the roots and wash with cool water to remove attached soil.
4. Cut off fall growth to within 1 inch above the crown and roots below the crown.
5. Rinse the crowns with cool water.
6. Place 10 wet crowns in a labeled plastic bag, inflate the bag and tie shut.
7. Place the bags in a lighted room, but not in direct sunlight.
8. After four to six days, the crown should show about two inches of growth.
9. Plants that are not growing after six days should be considered dead when estimating survival.
10. Some plants may grow poorly and develop molds. Molds live on dead or injured plants. Plants with mold developing should be considered not viable.

Fields should be abandoned if more than 50% of plants are dead and dead plants are uniformly distributed. In addition, if large areas are found not viable, then those areas should be considered not productive and also be considered for abandonment.

Source: Crop Watch