



# Drought Conditions and Spraying Broadleaf Weeds in Pastures



## Drought Conditions and Spraying Broadleaf Weeds in Pastures

Spraying for broadleaf weeds in grazing pastures is not just a good practice, it is a necessary one. Broadleaf weeds, especially perennial and biennial plants, easily rob water and nutrients that our growing forages need, therefore leaving the valuable forages in a less valuable state for our grazing livestock. This is where introducing herbicides like DuraCor®, GrazonNext® HL, MezaVue® and Surmount®, help return the value back to our forages by controlling many of the broadleaf weed species that are found in the pastures.

For example, summer of 2022 brought about more challenges than the typical broadleaf weed problem. The U.S Drought Monitor showed that the West and Southwest states were in an extreme to exceptional drought during 2022. In Texas, three-quarters of the state was in this condition, and the southeastern states had dry conditions. This can leave the rancher who is trying to control broadleaf weeds and even brush, at a point of aggravation and asking the question 'What do I do'?

**"Many weeds that were sprayed had symptomology from the herbicide used, yet the plant seemed to have no translocation. Not growing and not dying. What would cause this, seemed to be the question on most minds. This is a common plant response when the plant is in "Drought Stress".**

### Drought Stress in Plants

Drought stress within plants occurs when there is not an adequate amount of water in the soil for the plant to survive as well as increased temperature. Water is a very important element for proper plant growth and development. The plant then undergoes what is called plasmolysis, where the plant cells start to die. The plant leaf builds up a thick, waxy cuticle surface to help conserve moisture within the plant. This can leave the plant in a stunted stage and drastically reduce what is taken in through the leaf surface and root system.



### What to Look For

When an herbicide is applied to a plant that is under this type of stress, the plant will display epinasty (twisting and curling) only to a degree. The plant stops translocation of applied herbicide, leaving the plant in semi-permanent epinastic response (below). The plant continues to be present, sometimes green, but not growing or dying.

First, if you are in a severe drought situation, have applied herbicide and the appears to be in the epinastic stagnate stage, a respray very seldom helps. There is no translocation through the plant for optimal results. The plant has shut down, leaving you with no return on investment if you spray the weeds again.

Second, if adequate rainfall occurs in a timely manner after the application (i.e., 14 days after application) there could be activity within the plant cells and root uptake (with residual herbicide) to control the weed species. Be patient, as this could offer the results needed. If adequate rainfall has occurred and the plant does not seem to be dying, another application of herbicide with a methylated seed oil or crop oil may be effective under the right conditions. This helps the waxy buildup on the leaf, allowing the herbicide to enter the plant.

Lastly, if nothing has changed with the plant and the pasture has no adequate rainfall, then a mechanical removal of weeds can take place. This can be simply for aesthetic or for herd health safety if the plant is toxic.

### For More Information




Please feel free to contact your local Corteva Agriscience Range and Pasture Specialist for further information and for a ranch visit consultation. Find your local Corteva Range and Pasture Specialist at [www.rangeandpasture.com/specialist](http://www.rangeandpasture.com/specialist).



---

Central Texas July 6, 2022  
Drought Stress Broom Snakeweed (P)



-  Follow us on Facebook @CortevaPastures
-  Follow us on Twitter @CortevaPastures
-  Follow us on Instagram @CortevaPastures



Visit us at [rangeandpasture.com](https://rangeandpasture.com)

<sup>TM</sup> Trademarks of Corteva Agriscience and its affiliated companies.  
MezaVue® and Surmount® are a Restricted Use Pesticides.

**This reference guide is not intended as a substitute for the product label for the product(s) referenced herein. Product labels for the above product(s) contain important precautions, directions for use, and product warranty and liability limitations, which must be read before using the product(s). Applicators must be in possession of the product label(s) at the time of application. Always read and follow all label direction and precautions for use when using any pesticide alone or in tank-mix combinations.**

Under normal field conditions DuraCor® is non-volatile. DuraCor and GrazonNext® HL have no grazing or haying restrictions for any class of livestock, including lactating dairy cows, horses (including lactating mares) and meat animals prior to slaughter. Label precautions apply to forage treated with DuraCor to manure and urine from animals that have consumed treated forage. MezaVue is not registered for sale or use in all states. Grazon-Next HL is not for sale, distribution, or use in New York State and San Luis Valley of Colorado. Always Contact your state pesticide regulatory agency to determine if a product is registered for sale or use in your state. Not all products are registered for sale or use in all states. Contact your state pesticide regulatory agency to determine if a product is registered for sale or use in your state.

Always read and follow label directions. ©2022 Corteva. CR47-000-026 COR (07/22)

