

## GrazonNext® HL

HERBICIDE

## Chaparral™

HERBICIDE

## Control Weeds While Handling Clover

Many grazing managers tend to be hesitant to use pasture herbicides due to the temporary loss of legumes such as white and red clover. *While legumes can be an important part of a good grazing system many producers have suffered an economic loss due to lower stocking rates brought on by allowing heavy pasture weed pressure to persist in pastures.* This foregone loss in beef production has cost many producers more money than many of them have ever made from having legumes in grass stands.

Consider the following when debating whether or not to use herbicides on legume laden pastures with significant weed pressure:

- Once 15–20% of your pasture is taken out of production from weed pressure the potential profit from increasing your stocking rate after herbicide renovation can easily pay for the cost of the herbicide.
- A clover stand's production and nitrogen fixing ability is dependent on good soil fertility. If you haven't monitored and made necessary corrections to soil phosphorus /potassium levels or adjusted soil pH, your legumes may be contributing little to your grazing system.
- Legumes should make up a minimum of 25–30% of your pasture tonnage in order to maximize their benefit not 30% of the area. It usually takes 40–50% total cover to reach this 30% mark. Just because you have clover doesn't mean you have enough to gain a benefit.
- Common or wild type white clovers commonly found in U.S. pastures are low yielding and tend to only contribute to pasture production during cooler months not during the summer when forage availability becomes critical. This is another reason to consider improved varieties after herbicide renovation.
- Increased forage production by inter-seeding newer, higher yielding legume species and varieties after renovation could have a greater impact on future pasture and beef production.
- White clover naturally comes back. White clover makes a lot of "hard seed" meaning that seed shed by plants may lie in the soil for weeks or maybe even years before germinating. Most herbicides will only have an effect on seed germination for 1–6 months, allowing white clover to come back over time.



Balancing the control of troublesome broadleaf weeds in rangeland and pastures with the desire to encourage legumes can be challenging. Therefore, improved legume restoration within the framework of an integrated weed control program is an important need for many cattle producers.

## Control Weeds While Handling Clover

Controlling weeds that compete with forages in pastures can lead to greater forage productivity and availability to livestock and more efficient forage utilization.

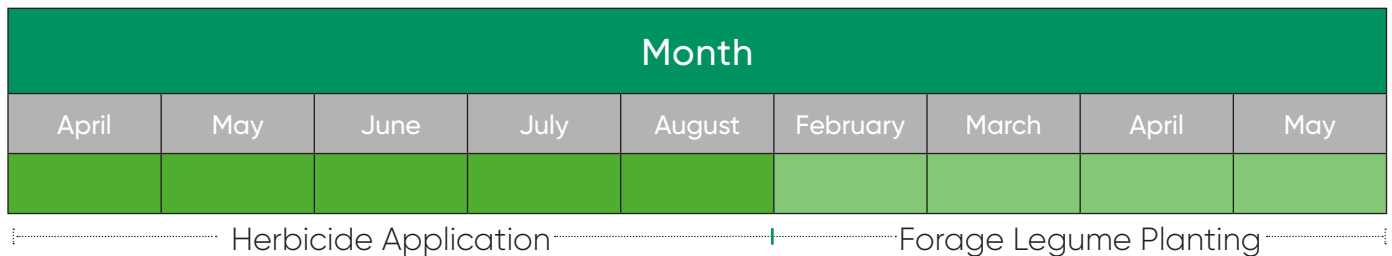
However, balancing the control of troublesome broadleaf weeds in rangeland and pastures with the desire to minimize forage legume injury is challenging. Improving forage legume stands during pasture renovation programs is an important need for many cattle producers. It is important to know how to incorporate herbicides into pasture renovation programs and how herbicides impact forage legume establishment. Use of Corteva Agrisciences' herbicides not only allows control of weeds that reduce pasture forage yield and quality, but also provide a means to replace agronomically obsolete forage legumes in weed infested pastures with improved forage legume varieties.

Over the past decade there have been a several experiments conducted to determine the interval between application of GrazonNext® HL and Chaparral™ herbicides, planting and successfully establishing forage legumes such as red clover, white clover, birdsfoot trefoil, and alfalfa. These experiments were conducted in cooperation with weed and pasture management specialists at the University of Nebraska, Iowa State University, University of Missouri, University of Wisconsin, University of Kentucky, Virginia Tech University, Pennsylvania State University, and the University of Georgia.

### Cool Season Grass Pasture Recommendations

GrazonNext® HL up to 1.5 pints/A or Chaparral up to 2 oz/A:

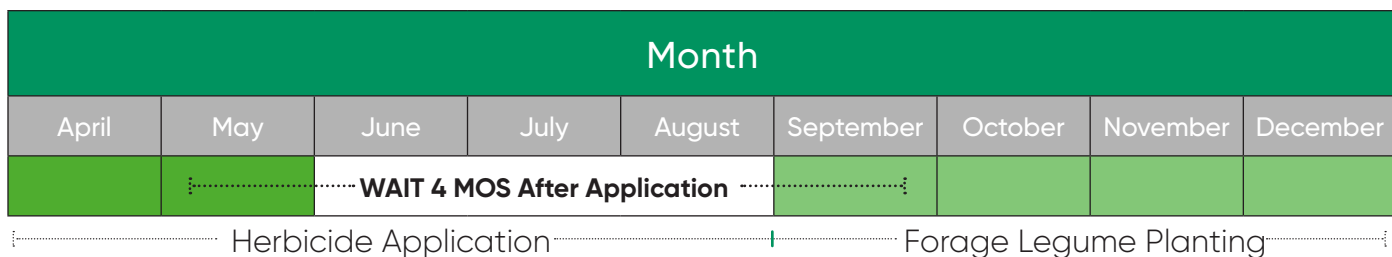
Perennial clover can be (frost) seeded in the spring when applications are made no later than Sept. 15th of the previous year



### Winter Forage For Bermuda Grass Pasture Recommendations

GrazonNext® HL up to 1.5 pints/A or Chaparral up to 2 oz/A:

Annual clover can be seeded in the fall four months or more following application



### GUIDELINES

- Follow your state's Extension recommendations for optimal forage legume planting dates, seedbed preparation, and planting techniques.
- In other states not listed in above recommendations or if the herbicide rates are greater than those mentioned here, a bioassay using forage legumes that will be planted should be conducted before planting.
- Always read and follow herbicide label instructions.