

# Milestone®

## GUIDELINES FOR WARM-SEASON ROADSIDE WEED CONTROL.

### SPECIALTY HERBICIDE

#### Warm season grasses and bermudagrass release programs in the Southeast.

##### Benefits

- Milestone® herbicide + Accord® XRTII herbicide tank mixes control winter annual weeds in warm season grasses, bermudagrass, and other established grasses found on roadside right-of-ways
- Earlier greenup than in untreated areas or in areas treated with tank mixes of Oust
- Residual control of broadleaf weeds lasts through the season and often eliminates the need for another application (with MSMA)

Winter and early spring herbicide programs for warm-season grass and bermudagrass release typically start in January and end in late March or early April. Traditional programs consist of 6 to 16 fl oz of Accord XRT II + Oust at ¼ to 1/3 oz of product per acre. Some programs also include Telar at ¼ oz. Years of consistent use of these herbicides have changed weed species/weed pressure and have favored weeds that are less susceptible particularly to Oust and Oust/Telar. Also, use of Oust on bermudagrass usually delays green-up in the spring by about one month. The delay of green-up in combination with the right weather conditions can promote germination and vigorous growth of many tall growing summer annual weeds. When these weeds are allowed to occupy the right-of-way in large numbers the weed canopy shades out the bermudagrass (or other warm season grass). In many cases, the desirable grass stand declines or dies due to a combination of delayed green-up, shading by weeds and competition from the weeds that are subsequently out-competing the bermudagrass or other warm season grass turf.

Milestone® herbicide, developed by Dow AgroSciences specifically for roadside weed control, can replace Oust and Oust/Telar in winter/spring programs with unprecedented results. A typical program applied January through late March is 5 to 7 fl oz. per acre of Milestone herbicide + 6 to 8 fl oz of Accord® XRTII per acre. One application typically controls most troublesome winter annual weeds. Removal of the winter weed canopy and lack of Oust induced delayed green-up, speeds warm-season grass green-up by allowing sunlight to get to the emerging shoots and leaves and to the soil for faster spring warm up. Milestone not only does not delay bermudagrass (or other warm season grass) green-up it actually speeds green-up over untreated weedy areas. Another added benefit from the use of Milestone in a winter/spring roadside program is the soil residual activity that provides control of many tall growing summer broadleaf annuals as they begin to germinate in late spring and early summer.

##### Another benefit

Milestone use on rights-of-way is the product of choice for longer-term reduction of troublesome broadleaf weeds. Several rights-of-way managers have commented that they are seeing reductions as high as 50% in broadleaf weed populations the following year after the previous year's application of Milestone or Milestone combinations with other herbicides.

Many problem winter and cool-season broadleaf weeds controlled by Milestone® herbicide + Accord® XRTII winter/spring applications include: henbit, Carolina geranium, hop clover, wild garlic, wild onion, cudweed, wild lettuce, sowthistle species, cornflower, Carolina false dandelion, Virginia pepperweed, red sorrel, catsear dandelion, purple deadnettle, white and red clovers, hop clover, wild strawberries, catchweed bedstraw, corn speedwell, vetch, shepherdspurse, hairy bittercress, violet, buttercup, dock, cutleaf evening primrose, mayweed, and thistles such as musk, bull, plumeless, yellow and Canada. For a complete list of weeds controlled, see list at the end of this herbicide use guide.

Historically warm-season grass and bermudagrass release programs in the Southeast have included a second herbicide treatment (following the winter/early spring applications) that usually is applied in May/June and consists of MSMA at about 2 to 3 pts/acre or Garlon® 3A (12- 16 fl oz) + Plateau (3-6 fl oz). MSMA has been phased out in many Southeastern states roadside programs and the EPA has

#### Weeds controlled by Milestone® herbicide + Accord XRTII or Milestone herbicide + Journey/ Plateau Herbicide programs:

bedstraws
beggarticks
beggarweed
bitter sneezeweed
black medic
blackberry (suppression)
buttercup
camphorweed
Carolina false dandelion
Carolina geranium
carpetweed
catsear dandelion
chamberbitter
chickweed
chicory
clover species
cocklebur
common lespedeza
common pokeweed
common purslane
common Venus lookingglass
corn speedwell
cornflower
croton, tropic
cudweed
dandelion
dayflower
dichondra
dock
fireweed
Florida pusley
ground ivy
ground cherry

announced that it will not be re-registered. If this cancellation occurs, MSMA will not be available for use in a couple of years. Luckily, a significantly better May/June program has been developed that consists of Milestone® + Journey (imazapic + glyphosate) or Milestone + Plateau herbicide (imazapic). Rates are 5 to 7 fl oz of Milestone + 8 to 12 fl oz of Journey or 5 to 7 fl oz of Milestone + 3 to 4 fl oz of Plateau. These mixtures also provide some seedhead and grass growth suppression and excellent control of most tall growing summer annual broadleaf weeds. Also, the soil residual activity of Milestone herbicide and imazapic provides broad spectrum weed control that can last throughout the summer following a single May/June application.

Another strategy that is rapidly being adopted in the Southeast is a split program which consists of winter/spring applications of 3.5 fl oz of Milestone® + 6 to 8 fl oz of Accord XRT II followed by a May/June application of 3.5 fl oz of Milestone + 8 to 12 fl oz of Journey or 3 to 6 fl oz of Plateau. This provides an economical use rate for the roadside manager and fits into the Milestone herbicide label guidelines of 7 fl oz per acre max use rate per annual growing season.

**Warm and cool season grass mixes and release programs.**

Large portions of the Southeast are not simply warm season grass roadside rights-of-way. Many of these roadsides, particularly in the Piedmont, upper piedmont, Blue Ridge and Cumberland plateau regions are mixtures of warm season grasses –bermudagrass, bahiagrass, blue stem grasses (Andropogon species) and cool season grasses – tall fescue and some Kentucky bluegrass. In these areas the winter/early spring programs with Oust can cause significant damage to most of the cool season grasses, resulting in bare ground which provides excellent conditions for germinating weed seeds and woody plant/tree seed germination and opens up these areas for erosion. As long as low rates (6 to 8 fl oz per acre) of Accord® XRT II are used in these warm/cool season grass mixtures, this does not create a problem and can provide desirable growth suppression, seedhead suppression and some annual grass control/suppression such as Italian (annual) ryegrass. Milestone® fits into these programs very well too because desirable grasses are tolerant to Milestone, and it provides excellent broadleaf winter broadleaf weed control and residual control of later germinating weed seed as described above. Recommendations for these warm/cool season grass regions are 5 to 7 fl oz per acre of Milestone + 6 to 8 fl oz per acre of Accord XRT II.

These applications can extend well into April and even May without significantly damaging these mixed grasses. The later applications typically provide a little better seedhead suppression and longer soil residual activity of Milestone into the summer months. Another strategy for warm/cool season grass regions is to skip the winter/early spring program completely, and usually after the first mowing in May/June, apply a broadleaf only program of 5 to 7 fl oz of Milestone herbicide + a tank mix partner such as 2,4-D, dicamba, Garlon® 3A, or Vista® XRT. Consult individual labels for specific rates to mix with Milestone for broad spectrum weed control that can last throughout the rest of the season with one May/June application.

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**Dow AgroSciences**

*Solutions for the Growing World*



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**Weeds controlled by Milestone® herbicide + Accord XRTII or Milestone herbicide + Journey/ Plateau Herbicide programs:**

groundsel
hairy bittercress
hairy fleabane
hemp dogbane
henbit
honeysuckle
hop clover
hop hornbeam copperleaf
horsenettle
hoesweed (marestail)
ironweed
knotweed
kudzu
lambquarters
matchweed
mayweed
mugwort
microstegium
nightshades
partridgepea
peppervine
pigweeds
purple deadnettle
ragweed
red sorrel
shepherdspurse
sida
smartweed
Spanish needles
spurge (suppression)
thistles; bi-annual, Canada
verbain (Verbena species)
vetch
violet
Virginia pepperweed
wild garlic
wild lettuce
wild onion
wild strawberries