

# **BERMUDAGRASS PASTURES AND HAY MEADOWS - POSTEMERGENT CONTROL OF PERENNIAL ANNUAL GRASS WEEDS**

## General Information

### GENERAL INFORMATION

Plateau herbicide is an aqueous solution to be mixed with water and an adjuvant and applied as a spray solution to provide weed control and/or turf height suppression on pastures, rangeland (see "GUIDELINES FOR RANGELAND USE" section), Federal Conservation Reserve Program (CRP) land and noncropland areas including noncropland areas that may be grazed or cut for hay.

Examples of noncropland areas include, but are not limited to railroad, utility, pipeline and highway rights-of-way, railroad crossings, utility plant sites, petroleum tank farms, pumping installations, non-agricultural fence rows, storage areas, non-irrigation ditchbanks, prairie sites, airports, industrial turf, golf courses, recreational and non-residential turf and other similar areas. Plateau may be used for the release of bermudagrass, bahiagrass, smooth bromegrass, wheatgrass, "wildtype" common Kentucky bluegrass, native prairiegrass, wildflowers, crown vetch, other grasses and certain legumes. Plateau can also be used for weed control during the establishment of native prairiegrasses and other grasses (see "REVEGETATION WITH PRAIRIEGRASSES AND OTHER FORAGE GRASSES" section). Plateau may also be used for conifer plantation site preparation.

Plateau is readily absorbed through leaves, stems, and roots and is translocated rapidly throughout the plant, with accumulation in the meristematic regions. Treated plants stop growing soon after spray application. Chlorosis appears first in the newest leaves, and necrosis spreads from this point. In perennials, the herbicide is translocated into, and kills, underground storage organs which prevents regrowth. Chlorosis and tissue necrosis may not be apparent in some plant species for several weeks after application.

Complete kill of plants may not occur for several weeks after application. Adequate soil moisture is important for optimum Plateau activity. When adequate soil moisture is present, Plateau will provide residual control of susceptible germinating

weeds.

Activity on established weeds will depend on the weed species and rooting depth. Plateau is rainfast one hour after application.

Plateau will control annual and perennial grasses and broadleaf weeds and vine species. Plateau will provide residual control of labeled weeds which germinate in the treated area. Certain brush species and ornamentals may be injured by direct application of Plateau to their foliage. This product may be applied either preemergence or postemergence to the weeds. However, postemergence application is the method of choice in most situations, particularly for perennial species. For maximum activity, weeds should be growing vigorously at the time of postemergence applications and the spray solution should include an adjuvant (see "SPRAY ADJUVANTS FOR POSTEMERGENCE APPLICATIONS" section). These solutions may be applied as a broadcast or as a spot treatment using backpack, or ground equipment.

Plateau may be applied in the dormant or growing season for weed control.

Tolerance of desirable grass species to Plateau may be reduced when grasses are stressed due to insect damage, disease,

environmental conditions, shade, poorly drained soils or other causes.

Depending on the turf type being treated, some yellowing of turf may occur with applications during the growing season. Depending on weather conditions, yellowing will usually disappear in 2 to 4 weeks.

Plateau should not be applied to newly seeded or sprigged grass stands, unless otherwise stated in the label (see "REVEGETATION WITH PRAIRIEGRASSES AND OTHER FORAGE GRASSES" section).

**Aerial Application Methods and Equipment:** Use 2 or more gallons of water per acre. The actual minimum spray volume per acre is determined by the spray equipment used. Use adequate spray volume to provide accurate and uniform distribution of spray particles over the treated area and to avoid spray drift.

**Ground Application (Broadcast):** Use 5 or more gallons of water per acre. The actual minimum spray volume per acre is determined by the spray equipment used. Use adequate spray volume to provide accurate and uniform distribution of spray

particles over the treated area and to avoid spray drift.

## SPRAYING INSTRUCTIONS

DO NOT apply during windy or gusty conditions unless applications are being made with a drift control agent and/or an enclosed or shielded spray system. DO NOT apply if rainfall is threatening. Rainfall within 1 hour after Plateau application may reduce weed control.

## GROUND APPLICATIONS:

Uniformly apply with properly calibrated ground equipment in 2 or more gallons of water per acre. Application equipment, specially designed to make low volume application should be used when making applications using less than 10 gallons of water per acre. A spray pressure of 20 to 40 psi is recommended.

To achieve acceptable control of the target vegetation, good spray coverage of the weed foliage (postemergence) or soil surface (preemergence) is required. To achieve good spray coverage the sprayer must be calibrated to deliver the recommended spray volume and pressure and adjust the spray boom height to ensure proper coverage of weed foliage or soil surface (according to the manufacturer's recommendation). Avoid overlaps when spraying.

## SPOT TREATMENTS:

To prepare the spray solution, thoroughly mix in water 0.25 to 1.5% (0.3 to 1.9 oz/gallon water) Plateau plus an adjuvant (see "SPRAY ADJUVANTS FOR POSTEMERGENCE APPLICATIONS" section). A methylated seed oil at 1% v/v is the recommended spray adjuvant except when treating seedling prairiegrasses and wildflowers.

When making spot applications, spray coverage should be sufficient to moisten the leaves of the target vegetation, but not to the point of run-off. See section on desired species and DO NOT exceed the recommended Plateau rate per acre. Also see "WEEDS CONTROLLED" and "SPECIAL WEED CONTROL" sections for specific rate and/or tank-mix recommendations.

## AERIAL APPLICATION:

All precautions should be taken to minimize or eliminate spray drift.

Fixed wing aircraft and helicopters can be used to apply Plateau herbicide, however, when making applications by fixed wing aircraft maintain appropriate buffer zones to prevent spray drift out of the target area. Aerial equipment designed to minimize spray drift such as a helicopter equipped with a MICROFOIL™ boom, or THRU-VALVE™ boom or raindrop nozzles, must be used and calibrated. Except when applying with a MICROFOIL boom, a drift control agent may be added at the recommended label rate. To avoid drift, applications should not be made during inversion conditions, when winds are gusty, or under any other conditions that promote spray drift.

Uniformly apply recommended amount of Plateau, using enough water volume to provide adequate coverage of target area or foliage. Include an adjuvant in the spray solution (see “SPRAY ADJUVANTS FOR POSTEMERGENCE APPLICATIONS” section). A foam reducing agent may be added at the recommended rate, if needed. Aerial application to target species growing under the canopy of trees and brush may not receive sufficient spray coverage for effective control. For weed species with a recommended fall application timing (see “SPECIAL WEED CONTROL” section), delaying the aerial application until trees and brush have dropped their leaves can improve weed control and reduce the potential for tree and brush injury (see “TOLERANCE OF TREES AND BRUSH TO PLATEAU HERBICIDE” section).

**IMPORTANT:** Thoroughly clean application equipment, including landing gear, immediately after use of this product. Prolonged exposure of this product to uncoated steel (except stainless steel) surfaces may result in corrosion and failure of the exposed part.

The maintenance of an organic coating (paint) may prevent corrosion.

Avoid overlaps when spraying.

#### SPRAY ADJUVANTS FOR POSTEMERGENCE APPLICATIONS

Postemergence applications of Plateau require a spray adjuvant.

See “SPECIAL WEED CONTROL” section. Due to variations in surfactant contents, certain surfactants containing high amounts of alcohols, paraffin based petroleum oils, and other compounds which can increase phytotoxicity to desirable vegetation,

it is recommended to choose a low phytotoxic surfactant.

**Methylated Seed Oils or Vegetable Oil Concentrates:** Instead of a surfactant, a methylated vegetable-based seed oil concentrate containing 5 to 20% surfactant and the remainder methylated vegetable oil is the preferred adjuvant for use with Plateau and may be used at the rate of 1.5 to 2 pints per acre. Methylated seed oils provide their greatest effects at 30 GPA or less. At spray volumes above 50 GPA, their advantage appears negated. When using spray volumes greater than 30 gallons per acre methylated seed oil or vegetable based seed oil concentrates should be mixed at a rate of 1% of the total spray volume or alternatively use a nonionic surfactant as described below. Research indicates these oils may aid in deposition and uptake of Plateau for hard-to-control perennials, waxy leaf species or when plants are under moisture or temperature stress. DO NOT use a methylated seed oil or vegetable oil concentrate when making applications to newly emerged seedling prairiegrasses or wildflowers as injury may occur.

**Nonionic Surfactants:** Use a nonionic surfactant at the rate of 0.25% v/v or higher (see manufacturer's label) of the spray solution (0.25% v/v is equivalent to 1 quart in 100 gallons). For best results, select a nonionic surfactant with a HLB (hydrophilic to lipophilic balance) ratio between 12 and 17 and having at least 60% surfactant in the formulated product (alcohols, fatty acids, oils, ethylene glycol or diethylene glycol should not be considered as surfactants to meet the above requirements).

**Silicone-Based Surfactants:** See manufacturer's label for specific rate recommendations. Silicone-based surfactants may reduce the surface tension of the spray droplet allowing greater spreading on the leaf surface as compared to conventional nonionic surfactants. However, some silicone-based surfactants may dry too quickly, limiting herbicide uptake and higher spray volumes may exhibit "run-off".

**Fertilizer/Surfactant Blends:** Nitrogen-based liquid fertilizers such as 28%N, 32%N, 10-34-0, or ammonium sulfate, may be added at the rate of 2 to 3 pints per acre in combination with the recommended rate of nonionic surfactant or methylated seed oil.

Research indicates that nitrogen based fertilizers aid in the burndown of annual weeds and increase Plateau uptake through waxy leaf species. However, fertilizers may increase phytotoxicity to desired species and newly emerged seedling

prairiegrasses and wildflowers. The use of liquid fertilizers at a rate of 2 to 3 pints per acre in a tank-mix without a nonionic surfactant or a methylated seed oil is not recommended and may result in herbicide failure.

Only when liquid fertilizer is used as the spray carrier is no additional spray adjuvant required.

Refer in the label regarding tank mix information.

#### Limitations, Restrictions, and Exceptions

In bermudagrass pastures and hay meadows, even and thorough spray coverage is necessary to achieve the desired level of weed control. To ensure proper spray coverage, the sprayer must be calibrated to deliver the recommended spray volume and pressure and the spray boom height adjusted to ensure proper coverage of weed foliage (according to the manufacturer's recommendation). The use of boomless or flood type nozzles is not recommended and may result in decreased weed control.

DO NOT apply PLATEAU to drought stressed bermudagrass.

DO NOT use PLATEAU for the establishment of sprigged or seeded bermudagrass.

DO NOT use PLATEAU on World Feeder varieties of bermudagrass.

DO NOT apply PLATEAU during transition from dormancy to full green-up.

AVOID applications of PLATEAU to newly aerated fields for 30 days after aeration.

General rate recommendations: For early applications when target weeds are small and have not been subjected to multiple cuttings, the lower recommended rate should be used. For later applications as target weeds become older, larger or have been subjected to multiple cuttings, then the higher recommended rate should be used.

For summer perennial grass control apply 6 to 12 oz per acre of PLATEAU postemergence following bermudagrass green-up. If higher rates (8 to 12 oz per acre) are needed for control of target species, PLATEAU can be applied in the fall before killing frost occurs. When making a fall application, if bermudagrass has been cut for hay, allow sufficient regrowth of target species before making

application. Always add a surfactant when applying PLATEAU unless liquid fertilizer is being used as the spray carrier.

Note:

- Summer annual grasses that are older, larger or have been subjected to multiple cuttings should be treated with the higher rate.

- Dallisgrass, Smutgrass: Suppression

Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

Rates

[field\\_rates 0](#)

[field\\_rates 1](#)

•

Restricted Entry Interval

12 hours

Timings

[Postemergence \(Weed\)](#)