

# Herbicide Application Program

# DESERT SOUTHWEST

## Weed Management Plans: The Key To Future Success

Herbicide resistance is forcing end-users to change the way they manage their turf. Discovery of new herbicide active ingredients is becoming increasingly rare. If we don't maximize the performance and usage life of what is available now, we could lose its efficacy in the future.

That's why a weed management plan is vital to our success. Creating and implementing a year-round weed control plan with a foundation of sound agronomic practices will help ensure we get the most out of our pesticide options.

### A successful program includes:

- ★ Combination products with multiple modes of action
- ★ Herbicides that offer broad-spectrum control with one application
- ★ Herbicide rotation
- ★ Proper application timing and use rates
- ★ Annual evaluation of the weed management plan



RESISTANCE MANAGEMENT



BROADLEAF WEEDS



GRASSY WEEDS



SEDGES



HERBICIDE ROTATION



PROPER TIMING & USE RATES



ANNUAL PLAN EVALUATION

PRODUCT	ACTIVE INGREDIENTS										USE RATES	
	LB. 2,4-D A.E./GAL.	LB. MCPA A.E./GAL.	LB. MCPP-P A.E./GAL.	LB. TRICLOPYR ACID/GAL.	LB. DICAMBA A.E./GAL.	LB. FLAZASULFURON A.I./LB. FORMULATED PRODUCT	LB. PENOXULAM/GAL.	LB. CARFENTHAZONE/GAL.	LB. SULFENTHAZONE/GAL.	LB. QUINCLORAC ACID/GAL.	RATE/ACRE (COOL SEASON GRASSES)	RATE/ACRE (WARM SEASON GRASSES)
Avenue™ South Broadleaf Herbicide for Turfgrasses	0.53				0.15		0.06		0.06		2.7 - 6 pt.	3 - 5 pt.
‡  Katana® Turf Herbicide						0.25					N/A	1.5 - 3 oz.
PowerZone® Broadleaf Herbicide for Turf		2.21	0.44		0.22			0.04			3.5 - 5 pt.	2 - 4 pt.
Q4® Plus Broadleaf Herbicide for Grassy & Broadleaf Weeds	0.88				0.10			0.06	0.75		7 - 8 pt.	5 - 7 pt.
‡  SpeedZone® Broadleaf Herbicide for Turf	1.53		0.48		0.14			0.05			3 - 5 pt.	2 - 4 pt.
‡  SpeedZone® Southern Broadleaf Herbicide for Turf	0.52		0.20		0.05			0.04			4 - 6 pt.	1.5 - 5 pt.
‡  Surge® Broadleaf Herbicide for Turf	1.40		0.50		0.22			0.06			3.25 - 4 pt.	2.75 - 3.25 pt.
‡  Trimec® 992 Broadleaf Herbicide	2.38		0.63		0.21						1.8 - 4 pt.	3 - 4 pt.
‡  TZone™ SE Broadleaf Herbicide for Tough Weeds	1.75			0.50	0.20			0.06			3.25 - 4 pt.	2 - 2.25 pt.

PRODUCT	WEEDS CONTROLLED														
	DANDELION	CLOVER	CRABGRASS	NUTSEGE	KYLLINGA	GOOSEGRASS	SPURGE	VIRGINIA BUTTONWEED	POA ANNUA	HENBIT	WILD VIOLET	GROUNDIVY	PLANTAIN	OXALIS (YELLOW WOODSORREL)	DOLLARWEED (PENNYWORT)
Avenue™ South Broadleaf Herbicide for Turfgrasses	★	★		⬇			★	★*		★	★*	★*	★*	★	★
‡  Katana® Turf Herbicide	★	★	★	★*	★		⬇		★	★	★			★	
PowerZone® Broadleaf Herbicide for Turf	★	★					★	★		★	★	★	★	★	★
Q4® Plus Broadleaf Herbicide for Grassy & Broadleaf Weeds	★	★	★*	★*			★	★*		★	★*	★	★	★	★
‡  SpeedZone® Broadleaf Herbicide for Turf	★	★				★	★	★		★	★	★	★	★	★
‡  SpeedZone® Southern Broadleaf Herbicide for Turf	★	★					★	★		★	★	★	★	★	★
‡  Surge® Broadleaf Herbicide for Turf	★	★		⬇			★	★		★	★	★	★	★	★
‡  Trimec® 992 Broadleaf Herbicide	★	★					★	★*		★		★	★	★	★
‡  TZone™ SE Broadleaf Herbicide for Tough Weeds	★	★					★	★		★	★**	★	★	★	

★ = control, ⬇ = suppression

\* Hard-to-control weeds. May require higher use rates and/or a second application within the rate range.

\*\* For best results, apply in the spring when wild violets are blooming, or apply a late fall application followed by a spring application.

‡ New Mexico - These products are restricted within your state. Contact your state or local authorities for more information.

## Program 1: Recommended Application - Cool-Season Turf

APP#	PRODUCT	MOA	WSSA CODE	RATE PER ACRE	PRE/POST	TIMING	TARGETED WEEDS
1	<b>Pre-emergent</b> <i>(choose a product that best fits your weed management goals)</i>	Rotate MOAs annually		Refer to label	PRE	Refer to label	Crabgrass, Broadleaf Weeds
2	<b>SpeedZone® Broadleaf Herbicide for Turf‡</b>	Synthetic Auxins PPO Inhibitor	4 14	4 pt.	POST	April	Broadleaf Weeds
3	<b>Surge® Broadleaf Herbicide for Turf‡</b>	Synthetic Auxins PPO Inhibitor	4 14	1.5 fl. oz./1,000 ft²	Spot Treatment	June	Broadleaf Weeds
4	<b>Q4® Plus Turf Herbicide for Grassy &amp; Broadleaf Weeds*‡</b>	Synthetic Auxins PPO Inhibitor	4 14	7 - 8 pt.	POST	July	Crabgrass, Broadleaf Weeds, Yellow Nutsedge

\* Do not apply Q4® Plus to Bentgrass.

‡ 2,4-D is limited to two applications per year. The maximum application rate to ornamental turf is 1.5 pounds of 2,4-D acid equivalent per acre per application. The maximum seasonal rate is 3.0 pounds of 2,4-D acid equivalent per acre, excluding spot treatments.

## Program 2: Recommended Application - Non-Overseeded Bermuda/Zoysia

APP#	PRODUCT	MOA	WSSA CODE	RATE PER ACRE	PRE/POST	TIMING	TARGETED WEEDS
1	<b>Pre-emergent</b> <i>(choose a product that best fits your weed management goals)</i>	Rotate MOAs annually		Refer to label	PRE	Refer to label	Crabgrass
2	<b>Katana® Turf Herbicide*</b>	ALS Inhibitor	2	2.5 - 3 oz.	POST	March	<i>Poa annua</i> , Broadleaf Weeds
3	<b>Pre-emergent</b> <i>(choose a product that best fits your weed management goals)</i> <b>SpeedZone® Broadleaf Herbicide for Turf‡</b>	Rotate MOAs annually Synthetic Auxins PPO Inhibitor	 4 14	 Refer to label 2 - 4 pt.	 PRE POST	 May	 PRE-Crabgrass, PRE-Goosegrass Broadleaf Weeds
4	<b>SpeedZone® Broadleaf Herbicide for Turf‡</b>	Synthetic Auxins PPO Inhibitor	4 14	1.47 fl. oz./1,000 ft²	Spot Treatment	June / August	Goosegrass 2 spot applications 30 days apart
5	<b>Q4® Plus Turf Herbicide for Grassy &amp; Broadleaf Weeds**‡</b>	Synthetic Auxins PPO Inhibitor	4 14	5-7 pt.	POST	August	Crabgrass, Yellow Nutsedge, Broadleaf Weeds
6	<b>Katana® Turf Herbicide*</b> <b>Pre-emergent</b> <i>(choose a product that best fits your weed management goals)</i>	ALS Inhibitor Rotate MOAs annually	2	2.5 oz.	POST PRE	September / October	<i>Poa annua</i> , Broadleaf Weeds

\* Avoid application during transition into or out of dormancy.

\*\* Refer to label for more information on Bermuda/Zoysia turf sensitivity.

‡ 2,4-D is limited to two applications per year. The maximum application rate to ornamental turf is 1.5 pounds of 2,4-D acid equivalent per acre per application. The maximum seasonal rate is 3.0 pounds of 2,4-D acid equivalent per acre, excluding spot treatments.

## Program 3: Recommended Application - Overseeded Bermudagrass

APP#	PRODUCT	MOA	WSSA CODE	RATE PER ACRE	PRE/POST	TIMING	TARGETED WEEDS
1	<b>Pre-emergent</b> <i>(choose a product that best fits your weed management goals)</i>	Rotate MOAs annually		Refer to label	PRE	Refer to label	Crabgrass
2	<b>SpeedZone® Broadleaf Herbicide for Turf‡</b>	Synthetic Auxins PPO Inhibitor	4 14	4 pt.	POST	March	Broadleaf Weeds
3	<b>Pre-emergent</b> <i>(choose a product that best fits your weed management goals)</i> <b>Katana® Turf Herbicide*</b>	Rotate MOAs annually ALS Inhibitor	 2	 2.5 oz.	 POST	 June	 PRE-Crabgrass, PRE-Goosegrass Sedges, Broadleaf Weeds, overseeded transition
4	<b>Q4® Plus Turf Herbicide for Grassy &amp; Broadleaf Weeds*‡</b>	Synthetic Auxins PPO Inhibitor	4 14	5 - 7 pt.	POST	August	Crabgrass, Yellow Nutsedge, Broadleaf Weeds
5	<b>Pre-emergent</b> <i>(choose a product that best fits your weed management goals)</i>	Rotate MOAs annually		Refer to label	PRE	Refer to label	<i>Poa annua</i>

\* Do not apply Q4® Plus to Bentgrass.

‡ 2,4-D is limited to two applications per year. The maximum application rate to ornamental turf is 1.5 pounds of 2,4-D acid equivalent per acre per application. The maximum seasonal rate is 3.0 pounds of 2,4-D acid equivalent per acre, excluding spot treatments.

