

**VIRGINIA DEPARTMENT OF TRANSPORTATION  
SPECIFICATIONS FOR STANDARD AND NON-STANDARD SEED  
Green Tag Program**

**PROCEDURES AND RATIONAL**

**September 2013**

**Justification:**

To provide an unbiased and scientific basis for selection of seed used by Virginia Department of Transportation [VDOT] on construction and roadside maintenance projects.

**VDOT Approved Species and Cultivars**

Previously VDOT and Virginia Tech conducted field trials to review new cultivars under Virginia roadside conditions before the cultivars were placed on the *VDOT Roadside Vegetation Management Approved Species & Cultivars* list which was known as the RD-4 list. Since VDOT and Virginia Tech have suspended the field trials it has been determined that the *VDOT Roadside Vegetation Management Approved Species & Cultivars* list will be developed by merging the RD-4 List revised, August 2007 with the current *Virginia Turfgrass Variety Recommendation* and the three previous published *Virginia Turfgrass Variety Recommendation*. The Virginia Crop Improvement Association will revise the *VDOT Roadside Vegetation Management Approved Species & Cultivars* list each time a new *Virginia Turfgrass Variety Recommendation* is published.

The *Virginia Turfgrass Variety Recommendation* is developed by the Maryland-Virginia Turfgrass Variety Recommendation Work Group meets each Spring to consider the previous year's data from Virginia and Maryland National Turfgrass Evaluation Program (NTEP) trials and to formulate these recommendations. Virginia and Maryland variety recommendations are essentially identical except for specialized grasses and research situations that differ due to adaptation and state regulation. To qualify for this recommended list turfgrass varieties: 1) must be available as certified seed or, in the case of vegetative varieties, as certified sprigs or sod; 2) must be tested at sites in both Virginia and Maryland; 3) must perform well, relative to other varieties, for a minimum of two years to make the list as a "promising" variety and for three years to make the "recommended" category. All test locations in Virginia and Maryland are considered in making these recommendations.

**Single Species Seeding with Base Seed with Nurse Crop and Additive Species**

When permanent seeding recommendation is to be completed by adding a base turf seed of a single common species or cultivar, nurse crop and additive species individually to the hydro seeder all common species and cultivars must be selected from the *VDOT Roadside Vegetation Management Approved Species & Cultivars* list. All seed must be green tagged.

### **Blends**

A blend is achieved when more three or more cultivar of a species of grass such as tall fescue\* is combined. A tall fescue blend\*, fine fescue blend\* or bluegrass blend\* for example could be presented for Green Tag consideration. When a blend is presented for green tag consideration a minimum of 65% by weight of the cultivars included in the blend must be from ***VDOT Roadside Vegetation Management Approved Species & Cultivars*** list.

When permanent seeding recommendation is to be completed by adding a blended species is added to a specified nurse crop and additive species in the hydro seeder application all seed must be green tagged.

### **Mixtures**

A mixture is achieved when more two or more species of grass such as tall fescue\* and bluegrass\* are combined. A mixture could be tall fescue blend\* or fine fescue blend\* to which supplemental species such as bluegrass\* or other species has been added could be presented for Green Tag consideration. When a blend is presented for green tag consideration a minimum of 65% by weight of the cultivars included in the blend must be from ***VDOT Roadside Vegetation Management Approved Species & Cultivars*** list. The supplemental species should not be more than 10% of the total mixture by weight.

Mixture	Crop / Percent	Crop/ Percent	Crop / Percent
Tall Fescue/Bluegrass	Tall Fescue 90%	Bluegrass 10%	
Tall Fescue/Fine Fescue	Tall Fescue 50%	Fine Fescue 50%	
Orchardgrass/Bluegrass	Orchardgrass 50%	Bluegrass 50%	
TF/Bluegrass/A. Ryegrass	Tall Fescue 85%	Bluegrass 10%	Annual Ryegrass 5%

When permanent seeding recommendation is to be completed when a mixture of species is added to a specified nurse crop and additive species in a hydro seeder application all seed must be green tagged.

The Virginia Crop Improvement Association (VCIA) will accept the turfgrass blends or mixtures for Green Tag consideration in accordance with established VCIA procedures and protocol.

### **Temporary Seeding**

The Temporary seeding recommendation can be met by a contractor's mixture of VNS fescue and a nurse crop or by a fescue cultivar selected from the ***VDOT Roadside Vegetation Management Approved Species & Cultivars*** list an approved blend or mixture and a selected nurse crop.

If the Contractor's mixture is selected then 70% by weight must be the VNS fescue. All seed must be green tagged.

VDOT Seed Standards

<b>Kind and Cultivars</b>	<b>Min. Pure Seed %</b>	<b>Min. Germ. %</b>	<b>Pure Live Seed Min. %</b>	<b>Min. Germ. Plus Hard Seed %</b>	<b>Weed Seed Not to Exceed %</b>	<b><u>LIMITATIONS</u></b>
*Tall Fescue Cultivars:	98	90	88.20%	--	0.25	<b><u>RES. NOX.</u></b>
*Kentucky Bluegrass	98	85	83.30%	--	0.25	<b><u>WEEDSEEDS</u></b>
*Fine Hard Fescue	98	85	83.30%	--	0.25	Same As VA Seed Law
*Fine Creeping Red Fescue	98	85	83.30%	--	0.25	
*Fine Chewings Fescue	98	85	83.30%	--	0.25	
*Fine Sheep Fescue	98	85	83.30%	--	0.25	
Bermudagrass:	98	85	83.30%	--	0.25	
Zoysiagrass:	98	85	83.30%	--	0.25	<b><u>WEEDSEEDS</u></b>
Common bermudagrass (2)	98	85	83.30%			Same As VA Seed Law
Foxtail Millet (German)	98	85	83.30%	--	0.25	
Annual Ryegrass	98	90	88.20%	--	0.25	<b><u>LAWN &amp; TURF</u></b>
Rye (Winter Rye) Cultivars:	98	85	83.30%	--	0.25	<b><u>REST. NOX</u></b>
Triticum aestivum Wheat	98	85	83.30%	--	0.25	10 Per ounce or 160 Per Pound
Hordeum vulgare (Barley)	98	85	83.30%	--	0.25	
Weeping Love Grass	98	80	78.40%	--	0.25	
Orchardgrass(1)	90	85	76.50%	--	0.5	
Sericea Lespedeza (2), (3)	98	40	73.50%	75	0.5	
Crownvetch Cultivars: (3)	98	36	69.58%	71	0.25	
Flat Pea (3)	99	38	74.25%	75	0.25	
White Dutch Clover (3)	99	80	89.10%	90	0.25	
Birdfoots Trefoil Cultivars: (3)	98	55	78.40%	80	0.5	

**\*Certified Seed Required For These**

- (1) Virginia origin or approved cultivars.
  - (2) Spring-Hulled, Fall-Unhulled [note hulled = hulls are removed]
  - (3) Seed must be inoculated with the appropriate strain and rate of bacteria.
- For hydroseeding, use a minimum of five times the dry seeding rate of inoculant.

## Tall Fescue<sup>1</sup>

Arabia <sup>(5)</sup>	Arid 2 <sup>(5)</sup>	Arid 3 <sup>(5)</sup>	Avenger <sup>(5)</sup>
Aztec <sup>(5)</sup>	Barlexas <sup>(5)</sup>	Barrera <sup>(5)</sup>	Barrington
Black Magic <sup>(5)</sup>	Bonsai 2000 <sup>(5)</sup>	Bravo <sup>(5)</sup>	Constitution
Coronado Gold	Covenant <sup>(5)</sup>	Coyote <sup>(5)</sup>	Coyote 2
Crewcut 2 <sup>(5)</sup>	Daytona	Dominion <sup>(5)</sup>	Durana <sup>(5)</sup>
Duster <sup>(5)</sup>	Endeavor	Falcon 2 <sup>(5)</sup>	Falcon 3 <sup>(5)</sup>
Finesse 2 <sup>(5)</sup>	Firebird	Focus <sup>(5)</sup>	Forte <sup>(5)</sup>
Gooden <sup>(5)</sup>	Grande <sup>(5)</sup>	Greenkeeper WAF	Greystone <sup>(5)</sup>
Jaguar 3 <sup>(5)</sup>	Jesup Minus <sup>(5)</sup>	Jesup Plus <sup>(5)</sup>	JT 6 <sup>(5)</sup>
Justice	Kittyhawk 2000 <sup>(5)</sup>	Magellan	Maximize MCN RC <sup>(5)</sup>
Micro <sup>(5)</sup>	Millenium <sup>(5)</sup>	2nd Millenium	Mustang 3
Olympic Gold <sup>(5)</sup>	On Cue <sup>(5)</sup>	Petite <sup>(5)</sup>	Phoenix <sup>(5)</sup>
Plantation(Penn1901)	Prospect <sup>(5)</sup>	Pure Gold <sup>(5)</sup>	Quest <sup>(5)</sup>
Raptor <sup>(3)(5)</sup>	Rebel Exeda	Rebel Sentry	Reserve <sup>(5)</sup>
Shenandoah <sup>(5)</sup>	Shenandoah 2 <sup>(5)</sup>	Signia <sup>(5)</sup>	Silverado <sup>(5)</sup>
Silverstar <sup>(5)</sup>	Southeast <sup>(5)</sup>	SR 8210 <sup>(5)</sup>	SR 8250 <sup>(5)</sup>
SR 8500 <sup>(5)</sup>	SR 8600 <sup>(5)</sup>	Stetson <sup>(5)</sup>	Stonewall <sup>(5)</sup>
Taos <sup>(5)</sup>	Tarheel	Tarheel 2	TF 66
Titan LTD <sup>(5)</sup>	Titanium <sup>(5)</sup>	Tomahawk RT <sup>(5)</sup>	Tracer <sup>(5)</sup>
Turbo	Virtue <sup>(5)</sup>	Wolfpack	Wolverine <sup>(5)</sup>
Wpeze <sup>(5)</sup>	Wyatt <sup>(5)</sup>		

### Additional Varieties

3rd Millennium SRP	AST 9003	Barvado	Bingo
Blackwatch	Bullseye	Cochise III	Crossfire II <sup>(4)</sup>
Dakota	Davinci	Faith	Falcon IV
Falcon V	Fidelity	Firecracker LS	Grande II
Guardian 21	Hounddog 5	Inferno	Masterpiece
Matador GT	Monet	Montana	Mustang 4
Pedigree	Raptor II	Rebel IV	Regiment II
Rendition	Rhambler SRP	Shenandoah Elite	Sidewinder
Skyline	Spyder LS	Titanium LS	Tombstone
TulsaTime	Wolfpack II		
Aggressor	AST 7002	AST 7003	AST 9002
Bladerunner 2	Braveheart	Cannavaro	Carona
Catalyst	Cezanne RZ	Cochise IV	Compete
Darlington	Escalade	Essential	Falcon V
Falcon NG	Fat Cat	Finelawn Xpress	Firenza
Garrison	Gazelle II	Gold Medallion	Greenbrooks
Hemi	Hudson	Integrity	Jamboree
Lindbergh	LS 1010	LS 1200	Patagonia
Penn RK4	Rendition Rx	Renovate	Reunion
Rocket	Shenandoah III	Speedway	SR8550
SR8600	SR8650	Stetson II	Sunset Gold
Tahoe II	Talladega	Tanzania	Terrier
Titan Rx	Titan Ultra	Toccoa	Traverse SRP
Trio	Turbo RZ	Umbrella	VanGogh
Venture	Xtremegreen		

Varieties marked with superscript notations denote the following:

- <sup>(1)</sup> to be considered for removal in 2013 due to declining performance relative to other varieties.
- <sup>(2)</sup> to be considered for removal in 2013 due to declining seed quality.
- <sup>(3)</sup> to be considered for removal in 2013 due to the absence of recent testing of certified seed lots in MD and VA.
- <sup>(4)</sup> to be considered for removal in 2013 due to lack of recent testing in MD and VA.
- <sup>(5)</sup> This footnote indicates the possible removal of the variety in 2014 for seed no availability.

# Fine Fescue<sup>1</sup>

## Chewings Fescue

Ambrose  
Bridgeport<sup>(5)</sup>  
Brittany<sup>(5)</sup>  
Banner 3<sup>(5)</sup>  
Cascade  
Intrigue<sup>(5)</sup>  
K 2<sup>(5)</sup>  
Shadow 2  
Tiffany  
Treasure<sup>(5)</sup>

### Additional Varieties

7 Seas	Lacrosse
Longfellow II	Radar
SR 5130	Treasure II
Fairmont	Zodiac
Intrigue 2	

## Red Fescue

Aruba<sup>(5)</sup>  
Audubon<sup>(5)</sup>  
Badger<sup>(5)</sup>  
Bargena 3<sup>(5)</sup>  
Celestial<sup>(5)</sup>  
Flyer Flyer 2<sup>(5)</sup>  
Jasper 2  
Kenicott<sup>(5)</sup>  
Navigator  
Razor  
Shademark<sup>(5)</sup>  
Shademaster 2<sup>(5)</sup>  
Weston JG<sup>(5)</sup>

### Additional Varieties

Wendy Jean  
Navigator II

## Hard Fescue

Aurora Gold  
Brigade  
Chariot  
Discovery<sup>(5)</sup>  
Minotaur<sup>(5)</sup>  
Nordic  
Rescue 911<sup>(5)</sup>  
SR 3100<sup>(5)</sup>  
Scaldis 2  
Vernon<sup>(5)</sup>

### Additional Varieties

Berkshire	Predator
Chariot	Beacon
Firefly	Spartan II
Gotham	

## Sheeps Fescue

Azure Blue<sup>(5)</sup>  
Bighorn<sup>(5)</sup>  
Quatro<sup>(5)</sup>

<sup>1</sup> Requires minimum plot coverage of 70% or greater over a three year evaluation period to be included on the VDOT Approved Species and Cultivar list.

# Perennial Ryegrass<sup>1</sup>

Applaud  
ASAP  
Goalkeeper  
Legacy 2  
Linedrive  
Pirouette  
Pizzazz

## Additional Varieties

Affirmed<sup>(3)</sup>  
Apple GL  
ASP6004  
Buena Vista  
Catalina II<sup>(3)</sup>  
Charismatic II GSLR Divine  
Fiesta 4  
Homerun  
Jet  
Line Drive GLS  
Palmer V  
Paragon GLR  
Silver Dollar  
Soprano  
Stellar GL  
Uno.

# Kentucky Bluegrass<sup>1</sup>

Baron	Baronette <sup>(5)</sup>	Barzan <sup>(5)</sup>	Beethoven <sup>(5)</sup>
Beyond	Blue Chip <sup>(5)</sup>	Blue Max <sup>(5)</sup>	Blue Ridge <sup>(5)</sup>
Blue Star <sup>(5)</sup>	Brooklawn	Canon <sup>(5)</sup>	Champlain <sup>(5)</sup>
Denim <sup>(5)</sup>	Equator <sup>(5)</sup>	Excursion <sup>(5)</sup>	Haga <sup>(5)</sup>
Impact	Kenblue	Langara <sup>(5)</sup>	Liberator <sup>(5)</sup>
Mallard	Midnight Star	Monte Carlo <sup>(5)</sup>	NuBlue <sup>(5)</sup>
NuGlade	Royale <sup>(5)</sup>	Rugby 2 <sup>(5)</sup>	Total Eclipse <sup>(5)</sup>
Tsunami <sup>(5)</sup>	Unique <sup>(5)</sup>	Voyager <sup>(5)</sup>	

## Additional Varieties

Bluenote	Courtyard	Diva	
Everglade	Granite	Juliet	
Midnight	Quantum Leap	Raven	
Solar Eclipse	Sudden Impact	Touché	Yankee
Aries	Durablue	ThermalBlue	ThermalBlue Blaze
Wildhorse <sup>(1)</sup>			

Durablue, ThermalBlue, and ThermalBlue Blaze (commonly called hybrid bluegrasses but classified by USDA as Kentucky bluegrasses) have performed best in the traditionally warmer climates of Virginia, particularly in mixtures with turf-type tall fescues for sod production.

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## **Bermudagrass<sup>1</sup>**

*Coastal Plain Region only:*  
Del Sol

*Piedmont Region only:*

Sahara  
Savannah  
Yukon

## **Zoysiagrass<sup>1</sup>**

*Coastal Plain Region only:*  
Cathay  
Zen 300  
Zenith

## **Blue Grama<sup>1</sup>**

Hachita

## **Weeping Lovegrass**

Common

## **Miscellaneous Grasses**

### **Tufted Hairgrass<sup>1</sup>**

Barcampsia

### **Colonial bentgrass<sup>1</sup>**

SR7100

### **Idaho bentgrass<sup>1</sup>**

Golfstar

### **Crested Hairgrass/Prairie Junegrass<sup>1</sup>** (*Koeleria cristata*)

Barkoel  
Barleria

### **Orchardgrass<sup>1</sup>**

Potomac  
Takena

<sup>1</sup> Requires minimum plot coverage of 70% or greater over a three year evaluation period to be included on the VDOT Approved Species and Cultivar list.

## **Legumes**

### **Birdsfoot Trefoil**

AuDewey  
Empire  
Norecen

### **Crownvetch**

Chemung  
Emerald  
Penngift

### **Flat Pea**

Common

### **Sweet Pea**

Common

### **Sericea Lespedeza**

Common

## **Companion or Temporary Species**

### **Annual Ryegrass**

Common

### **Barley**

Common

### **Cereal**

#### **Rye**

Abruzzi  
Balboa

### **German/Foxtail Millet**

Common