

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

**PROCEDURES AND RATIONAL**

**August 2014**

**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>

Avenger Greenkeeper WAF <sup>(5)</sup> Mustang 3 <sup>(5)</sup>	Barrington Justice Rebel Exeda	Coronado Gold Magellan Shenandoah	Firebird 2nd Millenium <sup>(5)</sup> Shenandoah II
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### Additional Varieties

2nd Millennium <sup>4</sup> Bingo <sup>4</sup> Constitution <sup>4</sup> , Essential, Garrison, Guardian 21 <sup>4</sup> , Integrity, Monet, Penn RK <sup>4</sup> , Rendition RX, Sidewinders <sup>3</sup> , SR8650, Tarheel II <sup>4</sup> , Titanium LS, VanGogh, Corona	3rd Millennium SRP Bladerunner 2 Dakota, Falcon IV, Gazelle II, Hemi, Justice, Montana <sup>4</sup> , Raptor II, Rhambler SRP <sup>3</sup> , Skyline, Sunset Gold, Titan Rx, Traverse, Venture Turbo RZ.	Avenger <sup>4</sup> Bullseye Darlington, Falcon V, Gold Medallion, Hounddog 5 <sup>4</sup> , LS 1200, Mustang 4 <sup>3</sup> , Rebel IV, Shenandoah III, Speedway, Tahoe II, Titan Ultra TulsaTime <sup>3</sup> , Wolfpack II,	Barvado <sup>4</sup> Catalyst Davinci <sup>4</sup> , Firecracker LS, Greenkeeper WAF <sup>4</sup> , Inferno <sup>4</sup> , Magellan, Pedigree, Rebel Exeda <sup>4</sup> , Shenandoah Elite, Spyder LS, Talladega, Titanium <sup>4</sup> , Turbo, Xtremegreen.
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## Fine Fescue<sup>1</sup>

### Chewings Fescue

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

7 Seas Intrigue 2 Zodiac	Longfellow II Longfellow 3	Radar Treasure II	Fairmont Wrigley 2
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## Red Fescue

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

Wendy Jean	Navigator II	Chantilly
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## Hard Fescue

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

Berkshire Firefly Bighorn GT	Predator <sup>4</sup> Spartan II	Chariot Sword	Beacon Gotham
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Varieties marked with superscript notations denote the following:

- (1) to be considered for removal in 2013 due to declining performance relative to other varieties.
- (2) to be considered for removal in 2013 due to declining seed quality.
- (3) to be considered for removal in 2013 due to the absence of recent testing of certified seed lots in MD and VA.
- (4) to be considered for removal in 2013 due to lack of recent testing in MD and VA.
- (5) This footnote indicates the possible removal of the variety in 2015 for seed no availability

1 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.

# Sheeps Fescue

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

Bighorn<sup>(5)</sup>

Quatro<sup>(5)</sup>

# Perennial Ryegrass<sup>1</sup>

Applaud  
Linedrive

ASAP  
Pirouette

Goalkeeper  
Pizzazz

Legacy 2

## Additional Varieties

Apple GL<sup>4</sup>,  
Divine<sup>4</sup>,  
Homerun<sup>4</sup>,  
Soprano<sup>4</sup>,  
Amazing A+,  
Dilligent,  
Haven,  
Pacific Gem,  
Provost,  
Sideways,  
Thrive,

ASP6004<sup>4</sup>,  
Fiesta 4,  
Line Drive GLS<sup>4</sup>,  
Stellar GL<sup>4</sup>,  
Apple SGL,  
Evolution,  
Karma,  
Pangea GLR,  
Rinovo,  
Sox Fan,  
Wicked.

Banfield,  
Gator 3<sup>4</sup>,  
Palmer V,  
Stellar 3 GL,  
Aspire,  
Fastball RGL,  
Monsieur,  
Pizzazz 2 GLR,  
Rio Vista,  
SR 4650,

Charismatic II GLSR<sup>4</sup>,  
Grand Slam GLD,  
Paragon GLR<sup>4</sup>,  
Unos.  
Bandalore,  
Green Supreme,  
Octane,  
Premium,  
Salina II,  
Stamina,

# Kentucky Bluegrass<sup>1</sup>

Baron  
Brooklawn  
Mallard

Beyond  
Impact  
Midnight Star

Kenblue  
NuGlade

## Additional Varieties

Aries  
Everglade  
Quantum Leap  
Sudden Impact  
Cabernet  
Keeneland  
Oasis

Bluenote  
Granite  
NiGlade  
Touché  
Endurance  
Legend  
Rush

Courtyard  
Impact  
Raven  
Barcette HGT  
Fullback  
Noble  
Skye

Diva  
Midnight  
Solar Eclipse  
Bluecoat  
Hampton  
Nu Chicage  
Wildhorse<sup>(1)</sup>

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<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.

<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.

## **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

## White Dutch Clover

Common

# Companion or Temporary Species

## Annual Ryegrass

Common

## Barley

Common

## Cereal Rye

Abruzzi  
Balboa

## German/Foxtail Millet

Common