

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

PROCEDURES AND RATIONAL

August 2020

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

Kind and Cultivars	Min. Pure Seed %	Min. Germ. %	Pure Live Seed Min. %	Min. Germ. Plus Hard Seed %	Weed Seed Not to Exceed %	<u>LIMITATIONS</u>
*Tall Fescue Cultivars:	98	90	88.20%	--	0.25	<u>RES. NOX.</u>
*Kentucky Bluegrass	98	85	83.30%	--	0.25	<u>WEEDSEEDS</u>
*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	<u>WEEDSEEDS</u>
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	<u>LAWN & TURF</u>
Rye (Winter Rye) Cultivars:	98	85	83.30%	--	0.25	<u>REST. NOX</u>
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^{1*}

2nd Millennium	Fesnova	Mustang 4	SR8650
3rd Millennium SRP	Firebird	Nightcrawler	Standout
4th Millennium SRP	Firebird 2	Paramount	Sunset Gold
Amity	Firecracker SLS	Monument	Supersonic
Annapolis	Firewall	Moondance GLX	South Fork
AST 5112	Hudson	Penn RK4	Summer
AST 7002	Jaguar 4G	Rain Dance	Swagger
AST 7003	Foxhound	Persuasion	Xtremegreen
AST 9002	Gazelle II	Pro Gold	Technique
AST 9003	Golconda	Raptor III	Temple
Avenger	Gold Medallion	Rebel Exeda	Terrano
Avenger II	Grande 3	Rebel IV	Thor
Barrington	GTO	Rebel V	Titan Rx
Barvado	Guardian 41	Rebounder	Titan Ultra
Birmingham	Hemi,	Reflection	Titanium
Black Tail	Hot Rod	Regenerate	Titanium 2LS
Bladerunner 2	Houndog 5	Rendition RX	Traverse II SRP
Bloodhound	Houndog 8	Rhambler 2 SRP	Trending
Bullseye	Hover	Rhizing Moon	Trinity
Caesar	Inferno	Rockwell	Titanium 2LS
Catalyst	Integrity	Rowdy	Turbo
Crossfire 4	Justice	Saltillo	Turbo RZ
Dakota	Kingdom	Screamer LS	Turfway
Diablo	Leonardo	Shenandoah Elite	Valkyrie LS
Doubletake	Lifeguard	Shenandoah III	VanGogh
Embrace	Maestro	Sidewinder	Venture
Falcon IV	Magellan	Speedway	Vert
Falcon V	Meridian	Rebel XLR	Wichita
Fantasia	Michelangelo	Six Point	Xtender
Fayette	Moondance	Spyder LS	WATKINS

Fine Fescue^{1*}

Chewings Fescue

Ambrose	Cascade	Compass II	Shadow 2
Tiffany	Longfellow II	Radar	Fairmont
Intrigue 2	Longfellow 3	Treasure II	Wrigley 2
Zodiac	Momentum		

Red Fescue^{*}

Jasper 2	Navigator	Razor	
Wendy Jean	Navigator II	Chantilly	Seamist

Hard Fescue^{*}

Aurora Gold	Beacon	Berkshire	Brigade
Chariot	Gladiator	Gotham	Jetty
Minimus	Predator	Reliant IV	Spartan II
SR3100	Sword	Bighorn GT	Resolute

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⁽⁵⁾

Bighorn⁽⁵⁾

Quatro⁽⁵⁾

Perennial Ryegrass^{1*}

Applaud	Evolve	JetFire	Slugger 3GL
All Star 3	Fastball 3GL	Karma	Soprano
All Star Fore	Fiesta 4	Legacy 2	SP 4660ST
Alloy	Fiesta Cinco	Line Drive GLS	Spike GLS
Apple 3GL	Goalkeeper	Monsieur	SR 4650
Apple GL	Grand Slam GLD	Octane	SR 4700
Apple SGL	Gray Fox	Palmer V	Stamina
ASAP	Gray Wolf	Pirouette	Stellar 3 GL
Aspire	Greenland	Pizzazz	Stellar 4GL
Bandalore	Homerun	Rio Vista	Superstar GL
Banfield	Homerun LS	Seabiscuit	Thrive
Benchmark	Infusion	Shield	TransGlobal
Big League	Infusion	Sidways	Umpqua
Black Pearl	Integra Supreme	Signet	Wicked
Diligent	Intense	Silver Spot	Xcelerator

Kentucky Bluegrass^{1*}

Apollo H2O	Courtyard	Legend	Shannon
Conquistador	Crest	Mazama	Skye
Aramintha	Deja Blue	Mercury	Solar Eclipse
Aries	Delta Blue	Merlot	Sombrero
Baron	Diva	Midnight	SPF30
Barserati	Endurance	New Moon	Starr
Barvette HGT	Cloud	Mystee H2O	Sudden Impact
Amaze	Everglade	NiGlade	Sudden Impact3
Beyond	Full Back	Nurish	Syrah
Blue Bank	Dauntless	Noble	Tejas
Babe	Granite	Orion	Thermal Blue
Blue Coat	Finish Line	NuChicago	Touché
Blue Devil	Hampton	Pivot	Twilight
Blue Note	Jersey	Oasis	United
Blue Gem	Heidi	Raven	Volt
Bolt	Keeneland	Quantum Leap	Wildhorse
Cabernet	Impact	Ridgeline	Yellowstone
Bombay	Kenblue	Selway	

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Bermudagrass¹

Bermudagrass – Varietal differences in texture and winter hardiness are important considerations. If no notation follows the variety name this indicates it has performed in the top statistical category at both Blacksburg and HRAREC in Virginia Beach. Varieties with the notation # are only recommended in Virginia's warmest regions due to cold tolerance concerns. No guarantees can be made regarding any bermudagrass cultivar's winter survival in the transition zone, as damage to any cultivar is possible in an extreme winter.

Category I – Recommended vegetatively propagated bermudagrass varieties: Celebration, Latitude 36, Northbridge, Patriot, Premier Pro brand (variety name is Premier), Tahoma 31, TifTuf (DT-1), and Tifway.

Category II – Promising vegetatively propagated bermudagrass varieties: Iron Cutter.

Category III – Recommended seeded bermudagrass varieties: Princess-77, Riviera, and Yukon.

Category IV – Promising seeded bermudagrass varieties: Arden 15, Monaco, Rio, and SWI-1070.

Coastal Plain Region only:

Del Sol

Piedmont Region only:

Sahara

Savannah

Yukon

Zoysiagrass¹

Zoysiagrass – (Varietal differences in texture and winter hardiness are important considerations.)

Category I – Recommended vegetatively propagated zoysiagrass varieties: Meyer and Zeon

Category II – Recommended seeded zoysiagrass varieties: Zenith

Coastal Plain Region only:

Cathay

Zen 300

Zenith

Blue Grama¹

Hachita

Weeping Lovegrass

Common

Miscellaneous Grasses

Tufted Hairgrass¹

Barcampsia

Colonial bentgrass¹

SR7100

Idaho bentgrass¹

Golfstar

Crested Hairgrass/Prairie Junegrass¹ (*Koeleria cristata*)

Barkoel

Barleria

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Orchardgrass¹

Potomac
Takena

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