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.

<table>
<thead>
<tr>
<th>Mixture</th>
<th>Crop / Percent</th>
<th>Crop / Percent</th>
<th>Crop / Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tall Fescue/Bluegrass</td>
<td>Tall Fescue 90%</td>
<td>Bluegrass 10%</td>
<td></td>
</tr>
<tr>
<td>Tall Fescue/Fine Fescue</td>
<td>Tall Fescue 50%</td>
<td>Fine Fescue 50%</td>
<td></td>
</tr>
<tr>
<td>Orchardgrass/Bluegrass</td>
<td>Orchardgrass 50%</td>
<td>Bluegrass 50%</td>
<td></td>
</tr>
<tr>
<td>TF/Bluegrass/A. Ryegrass</td>
<td>Tall Fescue 85%</td>
<td>Bluegrass 10%</td>
<td>Annual Ryegrass 5%</td>
</tr>
</tbody>
</table>

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

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

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

**Additional Varieties**

| 3rd Millenium SRP | AST 9003 | Barvado | Bingo |
| Blackwatch       | Bullseye | Cochise III | Crossfire II |
| Dakota           | Davinci | Faith | Falcon IV |
| Falcon V         | Fidelity | Firecracker LS | Grande II |
| Guardian 21      | Houndog 5 | Inferno | Masterpiece |
| Matador GT       | Monet | Montana | Mustang 4 |
| Pedigree         | Raptor II | Rebel IV | Regiment II |
| Rendition        | Rambler 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 | Speedy | SR8550 |
| SR8600           | SR8650 | Stetson II | Sunset Gold |
| Tahoe II         | Talladega | Tanzania | Terrier |
| Titan Rx         | Titan Ultra | Tococa | Traverse SRP |
| Trio             | Turbo RZ | Umbrella | VanGogh |
| Venture          | Xtremegreen | | |

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 2014 for seed no availability.
Fine Fescue
Chewings Fescue
Ambrose
Bridgeport¹
¹Brittany
Banner 3 (5)
Cascade
Intrigue (5)
K 2 (5)
Shadow 2
Tiffany
Treasure (5)
Additional Varieties
7 Seas
Longfellow II
SR 5130
Fairmont
Intrigue 2
Chillicothe
Lacrosse
Radar
Treasure II
Zodiac

Red Fescue
Aruba (5)
Audubon (5)
Badger (5)
Bargena 3 (5)
Celestial (5)
Flyer Flyer 2 (5)
Jasper 2
Kenicott (5)
Navigator
Razor
Shademaster (5)
Shademaster 2 (5)
Weston JG (5)
Additional Varieties
Wendy Jean
Navigator II

Hard Fescue
Aurora Gold
Brigade
Chariot
Discovery (5)
Minotaur (5)
Nordic
Rescue 911 (5)
SR 3100 (5)
Scalds 2
Vernon (5)
Additional Varieties
Berkshire
Chariot
Firefly
Gotham
Predator
Beacon
Spartan II

Sheeps Fescue
Azure Blue (5)
Bighorn (5)
Quatro (5)

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.
Perennial Ryegrass

Applaud
ASAP
Goalkeeper
Legacy 2
Linedrive
Pirouette
Pizzazz

Additional Varieties

Affirmed\(^{(3)}\)
Apple GL
ASP6004
Buena Vista
Catalina II\(^{(3)}\)
Charismatic II GSLR Divine
Fiesta 4
Homeron
Jet
Line Drive GLS
Palmer V
Paragon GLR
Silver Dollar
Soprano
Stellar GL
Uno.

Kentucky Bluegrass

Baron
Beyond
Blue Star\(^{(5)}\)
Denim\(^{(5)}\)
Impact
Mallard
NuGlade
Tsunami\(^{(5)}\)
Baronette\(^{(5)}\)
Blue Chip\(^{(5)}\)
Brooklawn
Equator\(^{(5)}\)
Kenblue
Midnight Star
Royale\(^{(5)}\)
Unique\(^{(5)}\)

Additional Varieties

Bluenote
Everglade
Midnight
Solar Eclipse
Aries
Wildhorse\(^{(1)}\)
Courtyard
Granite
Quantum Leap
Sudden Impact
Durablue

\(^{(1)}\) 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.

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.

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 2014 for seed no availability.
Bermudagrass

Coastal Plain Region only:
Del Sol

Piedmont Region only:
Sahara
Savannah
Yukon

Zoysiagrass

Coastal Plain Region only:
Cathay
Zen 300
Zenith

Blue Grama

Hachita

Weeping Lovegrass

Common

Miscellaneous Grasses

Tufted Hairgrass

Barcampsia

Colonial bentgrass

SR7100

Idaho bentgrass

Golfstar

Crested Hairgrass/Prairie Junegrass (Koeleria cristata)

Barkoel
Barleria

Orchardgrass

Potomac
Takena

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.
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