

RIO VISTA perennial ryegrass offers the golf and turf professional the latest in enhanced gray leaf spot resistance and improved overall turf quality. Originally developed from materials at Rutgers University, RIO VISTA is among the highest performing varieties in current testing.

RIO VISTA perennial ryegrass has a high endophyte level that enhances turf performance. This endophyte is a naturally occurring fungus. It works together with the developing and mature plant to enhance stress tolerance and improve insect resistance.

The major improvement that RIO VISTA offers is a new level of gray leaf spot tolerance. This disease plagues establishing and mature perennial ryegrass stands. In late summer during seeding establishment, gray leaf spot can infect turf stands and leave vast expanses with undesirable browning turf. During late summer season heat, established permanent perennial ryegrass lawns may also become infected.

RIO VISTA is assured to offer the golf and turf pro as well as homeowner the latest developments in improved turf and gray leaf spot resistance.

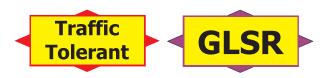
Permanent Northern Turf:

New Lawns: 6# per 1000 square feet Overseed: 3# per 1000 square fee Sports turf: 10# per 1000 square feet

Dormant Southern Overseeding: Lawns & Fairways: 8-15 # per 1000 square feet Tees and Greens: 20-35 # per 1000 square feet



- TOP NTEP performance
- Quick establishing
- Better traffic tolerance
- Improved greenup and cover
- Endophyte enhanced





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Quality Seed Since 1911



Variety	Rio Vista	High	Low	LSD
Summary of Quality Statistics	5.8	6.0	3.1	0.3
Northeast Region Quality	6.0	6.3	2.0	0.5
Transition Region Quality	5.7	6.3	3.0	0.5
North Central Region Quality	5.6	5.9	3.1	0.5
Riverside, CA Quality (Southwest Region)	6.7	7.7	5.3	0.4
Corvallis, OR Quality (Pacific Region)	6.2	6.4	4.9	0.3
AMMI Analysis Quality for LPI Group 1 (2011)	6.7	7.4	0.9	0.8
AMMI Analysis Quality for LPI Group 2 (2011)	5.7	6.0	2.1	0.8
AMMI Analysis Quality for LPI Group 3 (2011)	6.0	6.1	3.8	0.8
AMMI Analysis Quality for LPI Group 4 (2011)	6.4	6.5	4.7	0.8
AMMI Analysis Quality for LPI Group 1 (2012)	5.8	6.5	3.5	0.8
AMMI Analysis Quality for LPI Group 2 (2012)	6.3	6.4	2.6	0.8
AMMI Analysis Quality for LPI Group 3 (2012)	5.7	6.2	3.1	0.8
AMMI Analysis Quality Mean at 11 Locations (2013)	5.5	5.9	3.0	0.3
AMMI Analysis Quality for LPI Group 1 (2014)	5.8	6.2	2.6	1.1
AMMI Analysis Quality for LPI Group 2 (2014)	5.8	6.7	3.3	1.0
Overseeding Quality (AL1)	6.6	7.0	5.2	0.4
Overseeding Quality (AZ1)	6.7	7.4	3.9	1.7
Overseeding Quality (FL1)	7.6	8.0	6.9	2.2
Traffic Stress Quality (CA1) (2011-12)	3.5	4.3	2.4	0.8
Traffic Stress Quality (PA1) (2011-14)	90.6	95.0	75.1	3.6
Traffic Stress Quality (VA1) (2011-13)	4.8	6.2	3.0	2.5
Traffic Stress Quality (W1) (2012)	4.7	5.7	3.8	1.0
Percent Cover for Salt Tolerance (RI2)	16.5	69.3	-	23.3
Drought Stress Quality at Blacksburg, VA	50.0	81.3	23.3	58.7
Drought Stress Quality at Puyallup, WA	4.8	5.4	3.8	0.4
Genetic Color	6.5	7.8	3.6	0.4
Leaf Texture	6.0	6.7	4.0	0.8
Spring Density	6.3	6.7	3.3	1.0
Summer Density	5.7	7.3	3.7	0.9
Fall Density	6.0	7.0	3.0	0.9
Spring Greenup	5.6	6.1	4.7	0.8
Seedling Vigor	6.0	6.7	4.0	0.8
Percent Establishment (IL1 & MA1)	60.8	70.8	45.0	9.4
Percent Establishment (MI2)	32.5	38.3	17.5	11.5
Percent Living Ground Cover Spring	84.8	94.2	80.2	8.5
Percent Living Ground Cover Summer	89.0	96.6	68.9	11.9
Percent Living Ground Cover Fall	73.7	87.7	65.9	16.7
Percent Winter Kill	35.0	97.7	20.0	38.6
Winter Kill	1.0	2.7	1.0	1.0
Stem Rust	7.2	7.7	3.2	1.6
Dollar Spot (MO1)	4.0	6.7	2.7	2.2
Dollar Spot at Adelphia, NJ	4.2 5.0	8.0 6.3	2.5 3.8	1.3
Red Thread Brown Patch (Warm Temp.)	4.2	6.2	2.2	1.7
	2.0			
Pythium Blight (VA1) Crown Rust (MO1)	6.3	6.3 8.0	1.3	1.7 1.8
Gray Leaf Spot (MD1)	7.7	8.7	3.0	2.0
Gray Leaf Spot (NJ1)	6.1	7.9	1.0	1.0
Pink Snow Mold (MM1)	4.7	7.9	2.7	2.4
Seedhead Ratings (NJ2)	5.7	9.0	1.0	1.5
Mowing Quality	5.7	7.2	2.8	1.3
Percent Poa Annua (MD1)	3.3	45.8	0.8	9.4
Poa Annua Counts (MA1)	11.5	110.8	8.7	27.8
Wear Tolerance at Amherst, MA	5.3	6.5	3.7	0.8
Locations By Region	- 0.0	0.0	0.7	0.0
Northeast Region - MA1, NJ2 & PA1				
Transition Region - MD1, MO1 & VA1				
North Central Region - IA1, IL1, MI1, MN1 & NE1				
green highlight = ranks within top LSD				





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# 2010 National Perennial Ryegrass Test 2011-14 Data

Final Report NTEP No. 15-7

# **Turf Features**

**Germination Time** - Fast

7 to 10 days is normal in spring and fall with irrigation

**Growth habit** - bunch grass

**Drought Tolerance** - Good

Mowing Height - from .175 inch daily to 3 inches weekly

## Disease Resistance

Excellent resistance to gray leaf spot High resistance to dollar spot and red thread

Traffic tolerance - Good

### pH Tolerance

Ranges from 5.5 to 8.5, Ideally at 6.0 to 6.5

#### Texture

Fine leaf texture and dwarf vertical growth habit

<u>Compatibility</u> - with Kentucky bluegrasses and fine fescues, turf type tall fescues

Color - Dark green

Shade tolerance - poor to fair - likes full sun

Salt tolerance - Good

**Endophyte enhanced** - Yes - helps insect and stress tolerance

<u>Preferred use</u> - Home and commercial lawns, sports fields, golf fairways, tees and roughs