



BONNEVILLE

Salt Tolerant Perennial Ryegrass

BONNEVILLE perennial ryegrass offers the golf and turf professional the latest in enhanced gray leaf spot resistance. It has better salt tolerance and improved overall turf quality. Originally developed at Rutgers University, reselected and code named MJK, BONNEVILLE is among the top performers in current testing in many important geographic areas. BONNEVILLE perennial ryegrass has a high endophyte level that enhances turf performance. Endophyte works with the developing and mature plant to enhance stress tolerance and improve insect resistance.



Two major improvements that BONNEVILLE offers are a new level of gray leaf spot and salt tolerance. These problems plague 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.

BONNEVILLE is assured to offer the golf and turf pro as well as homeowner the latest in improved turf and gray leaf spot resistance. It is sure to benefit high sodic soils as well.



- **Top dormant overseeding results**
- **Proven salt tolerance**
- **High NTEP performance**
- **Quick establishing/ Low growing**
- **HIGH traffic tolerance NTEP**
- **Endophyte enhanced**

Permanent Northern Turf:
 New Lawns: 6# per 1000 square feet
 Overseed: 3# per 1000 square feet
 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



**Burlingham
Seeds**



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Quality Seed Since 1911



2010 National Perennial Ryegrass Test

2011-14 Data

Final Report NTEP No. 15-7

- *Top dormant overseeding results*
- *Proven salt tolerance*
- *High NTEP performance*
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- *Endophyte enhanced*

Variety	Bonneville	High	Low	LSD
Summary of Quality Statistics	5.5	6.0	3.1	0.3
Northeast Region Quality	5.1	6.3	2.0	0.5
Transition Region Quality	5.6	6.3	3.0	0.5
North Central Region Quality	5.4	5.9	3.1	0.5
Riverside, CA Quality (Southwest Region)	6.7	7.7	5.3	0.4
Corvallis, OR Quality (Pacific Region)	6.1	6.4	4.9	0.3
AMMI Analysis Quality for LPI Group 1 (2011)	5.3	7.4	0.9	0.8
AMMI Analysis Quality for LPI Group 2 (2011)	5.0	6.0	2.1	0.8
AMMI Analysis Quality for LPI Group 3 (2011)	5.7	6.1	3.8	0.8
AMMI Analysis Quality for LPI Group 4 (2011)	6.2	6.5	4.7	0.8
AMMI Analysis Quality for LPI Group 1 (2012)	5.6	6.5	3.5	0.8
AMMI Analysis Quality for LPI Group 2 (2012)	6.0	6.4	2.6	0.8
AMMI Analysis Quality for LPI Group 3 (2012)	5.8	6.2	3.1	0.8
AMMI Analysis Quality Mean at 11 Locations (2013)	5.4	5.9	3.0	0.3
AMMI Analysis Quality for LPI Group 1 (2014)	5.4	6.2	2.6	1.1
AMMI Analysis Quality for LPI Group 2 (2014)	5.4	6.7	3.3	1.0
Overseeding Quality (AL1)	6.8	7.0	5.2	0.4
Overseeding Quality (AZ1)	5.7	7.4	3.9	1.7
Overseeding Quality (FL1)	7.8	8.0	6.9	2.2
Traffic Stress Quality (CA1) (2011-12)	4.0	4.3	2.4	0.8
Traffic Stress Quality (PA1) (2011-14)	90.3	95.0	75.1	3.6
Traffic Stress Quality (VA1) (2011-13)	4.7	6.2	3.0	2.5
Traffic Stress Quality (WI1) (2012)	4.7	5.7	3.8	1.0
Percent Cover for Salt Tolerance (RI2)	31.0	69.3	-	23.3
Drought Stress Quality at Blacksburg, VA	70.7	81.3	23.3	58.7
Drought Stress Quality at Puyallup, WA	4.8	5.4	3.8	0.4
Genetic Color	6.2	7.8	3.6	0.4
Leaf Texture	6.2	6.7	4.0	0.8
Spring Density	6.3	6.7	3.3	1.0
Summer Density	5.0	7.3	3.7	0.9
Fall Density	6.3	7.0	3.0	0.9
Spring Greenup	5.3	6.1	4.7	0.8
Seedling Vigor	6.2	6.7	4.0	0.8
Percent Establishment (IL1 & MA1)	60.8	70.8	45.0	9.4
Percent Establishment (MI2)	31.7	38.3	17.5	11.5
Percent Living Ground Cover Spring	86.8	94.2	80.2	8.5
Percent Living Ground Cover Summer	91.6	96.6	68.9	11.9
Percent Living Ground Cover Fall	82.0	87.7	65.9	16.7
Percent Winter Kill	80.0	97.7	20.0	38.6
Winter Kill	2.0	2.7	1.0	1.0
Stem Rust	7.3	7.7	3.2	1.6
Dollar Spot (MO1)	4.3	6.7	2.7	2.2
Dollar Spot at Adelphia, NJ	3.8	8.0	2.5	1.3
Red Thread	5.2	6.3	3.8	1.7
Brown Patch (Warm Temp.)	4.7	6.2	2.2	1.2
Pythium Blight (VA1)	3.3	6.3	1.3	1.7
Crown Rust (MO1)	7.0	8.0	1.7	1.8
Gray Leaf Spot (MD1)	8.0	8.7	3.0	2.0
Gray Leaf Spot (NJ1)	6.8	7.9	1.0	1.0
Pink Snow Mold (MN1)	4.3	7.3	2.7	2.4
Seedhead Ratings (NJ2)	3.3	9.0	1.0	1.5
Mowing Quality	4.0	7.2	2.8	1.4
Percent Poa Annu (MD1)	3.3	45.8	0.8	9.4
Poa Annu Counts (MA1)	47.8	110.8	8.7	27.8
Wear Tolerance at Amherst, MA	5.2	6.5	3.7	0.8
Locations By Region				
Northeast Region - MA1, NJ2 & PA1				
Transition Region - MD1, MO1 & VA1				
North Central Region - IA1, IL1, MI1, MN1 & NE1				
green highlight = ranks within top LSD				

Turf Features

Germination Time - Fast

5 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

Compatibility - with Kentucky bluegrasses and fine fescues, turf type tall fescues

Color - Dark green

Shade tolerance - Fair - likes full sun

Salt tolerance - Very Good

Endophyte enhanced - Yes - helps insect and stress tolerance

Preferred use - Home and commercial lawns, sports fields, golf fairways, tees and roughs

Salt Tolerant

GLSR