

Wildrice

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Cultivated wildrice is grown on about 20,000 acres in Minnesota. Though some wildrice paddies are grown with shattering types, most growers use varieties with nonshattering tendencies.

For flexibility in harvesting, plant varieties resistant to shattering, disease and lodging. Where early killing frost is common, growers should favor varieties of early to medium maturity.

Varieties

Dawn SR – Very early maturing non-shattering variety derived from K2. Apparently fixed for nonshattering. Seeds longer than Itasca by at least 1/64 inch. Approximately 95% of A-width kernels are long-grain. Medium height, with a variety of panicle types. Not resistant to foliar diseases when population density is high. Moderate lodging resistance. Heading date at least two weeks earlier than Itasca. Released 2008 by Minn. AES under licensing agreement.

Itasca – High-yielding, tall, medium-late-maturing variety with superior resistance to seed shattering and fungal brown spot (FBS) disease. Very lodging resistant. Yield is about 50% higher than Petrowske Purple and Franklin.

Shattering loss is about one-third less than Franklin or Petrowske Purple. Significantly more FBS-resistant than Franklin. Taller than Franklin by 3 inches and Petrowske Purple by 4 inches.

Slightly later maturing than Petrowske Purple. Flowers 2 to 3 days after Petrowske Purple

or Franklin. Average seed length is somewhat short, similar to Petrowske Purple and GIB-C9, but shorter than Franklin by 1/64 inch.

Panicle type is mixed, including a noticeable percentage of bottlebrush panicles, but declining from 50% frequency without continued selection for the trait.

Released 2002 exclusively to Minnesota growers by the Minnesota Cultivated Wild Rice Council.

Itasca Cycle-12 – Selected from Itasca as a high-yielding, medium-late maturing, long-grain variety with superior resistance to seed shattering, fungal brown spot (FBS) disease and lodging.

Wildrice Planting Rate and Date

Bushel Weight, Pounds.....25
Seeds/Pound.....7,900
Planting Rate, Pounds/Acre.....35
Planting Rate, Seeds/Sq.Ft.....6
Planting Date.....Late Fall

Yield, shattering and lodging ratings for wildrice varieties.

Variety	Grand Rapids				Clearbrook/Gonvick			Aitkin				3-Location Average			
	Yield Lb/A ¹	Shattering % ²	Lodging Score ³	FBS Score ⁴	Yield Lb/A ¹	Shattering % ²	Lodging Score ³	Yield Lb/A ¹	Shattering % ²	Lodging Score ³	FBS Score ⁴	Yield Lb/A ¹	Shattering % ²	Lodging Score ³	FBS Score ⁴
Dawn SR5	1,345	6	1.3	5.6	1,930	9	1.2	1,908	2	1.4	4.3	1,705	5	1.3	4.6
Itasca	2,611	5	1.3	4.1	2,852	3	1.2	3,387	3	1.5	3.3	2,895	4	1.3	3.4
Itasca Cycle-12	2,827	6	1.3	4.1	2,708	3	1.3	3,289	4	1.5	3.5	2,898	5	1.3	3.6
LSD 5%	327	2	0.4	0.6	419	2	0.3	490	2	0.4	0.8	233	1	0.2	0.4
Years Represented	08-10	08-10	08-10	09-10	08,10,11	08,10	08,10,11	08-09	08-09	08-09	09	08-11	08-11	08-11	09-10

¹ Adjusted to 40% moisture.

² Expressed as a percentage of shattered seed plus grain yield per unit area.

³ Using a 1-5 scale where 1 = stems completely erect, 3 = stems averaging 45° angle, 5 = stems prostrate.

⁴ Fungal Brown Spot rating using a 1-9 scale where 1 = no significant disease lesions and 9 = completely susceptible (dead).

⁵ Dawn SR suffered disproportionately high bird damage at Clearbrook in 2008 because of its early maturity. Bird damage ratings averaged 68% for Dawn SR, 15% for Itasca, and 18% for Itasca Cycle-12.

Seeds 3/64" longer than Itasca, with a substantially higher percentage of long-grain seeds (>20/64") than Itasca. Equivalent to Itasca in yield, shattering resistance, FBS resistance, lodging resistance and maturity.

Panicle type is mixed, including a noticeable percentage of bottlebrush

panicles, but declining from 50% frequency without continued selection for the trait.

Released 2007 exclusively to Minnesota growers by the Minnesota Cultivated Wild Rice Council.

Test Plot Research

Dan Braaten, Jacques Duquette and Henry Schumer supervised test plot establishment and management..

Seed length and percent long in A-grade.

Variety	Grand Rapids		Clearbrook/Gonvick		Aitkin		3-Location Average	
	Seed Length, 64ths in.	Long in A-grade, %	Seed Length, 64ths in.	Long in A-grade, %	Seed Length, 64ths in.	Long in A-grade, %	Seed Length, 64ths in. ¹	Long in A-grade, % ²
Dawn SR	25.0	95	23.4	95	26.2	99	24.7	96
Itasca	25.5	98	24.3	98	26.3	98	25.2	98
Itasca Cycle-12	26.0	98	24.4	98	26.2	99	25.5	98
LSD 5%	0.7	2	0.6	2	0.8	2	0.4	1
Years Represented	2008-10	2008-10	2008,10,11	2008,10,11	2008-09	2008-09	2008-11	2008-11

¹ Dried, hulled, whole seeds.

² Percentage of A-grade seeds (width >3.75/64 in.) that are in the long-grain length category (>20/64 in.), calculated on an estimated volume basis.