

Release of Wyandot soybean cultivar by the OARDC Crop Variety Release and Distribution Committee

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‘Wyandot’ (previously designated OHS201 and HF02-0005) originated as an F₄-derived selection from the three-parent cross (Northrup King S29-18 × PI 274.421) × Ohio FG1. The cross was made in the winter of 1996-7 at Wooster. The selection HF02-0005 was made at Wooster in 2001 and evaluated in the Ohio Preliminary Test in 2002, the Ohio Large-Seeded Test in 2003-2005 (Table 1), and the Ohio Advanced Line Test A in 2005 (Table 2). In 2005, the line was also evaluated in the Ohio Soybean Performance Trials (Table 3) and in the Uniform Regional Tests (Table 4).

Wyandot has white flowers, gray pubescence, brown pods, and yellow (clear) hila. It is classified as 2.9 relative maturity. Assays conducted by Dr. Anne Dorrance indicate that Wyandot has the *Rps3* gene for resistance to Phytophthora root and stem rot. Protein content of Wyandot has been similar to that of Ohio FG1 and Ohio FG3, with higher oil content (Table 5). Its relatively high protein and lack of hilum pigments make Wyandot acceptable for the soy food market; its high yield makes it appropriate for general production.

Table 1. Three-year means for Wyandot in Ohio Large-Seeded Test (2003-05)

Entry	Maturity mo./day	Lodging 1-5 [†]	Height in.	Seed weight g/100 seed	Yield (bu/a)				
					So. Charleston	Lakeview	Hoytville	Wooster	Location mean
Ohio FG3	9/15	1.3	32	19.9	46.7	41.8	42.5	58.8	47.1
Wyandot	9/18	1.3	29	17.5	52.3	51.8	54.5	70.1	57.0
Dilworth	9/20	1.5	34	14.2	53.6	55.3	50.9	61.9	55.1
Ohio FG1	9/24	1.4	31	22.0	51.2	51.5	46.3	64.8	52.9
Kottman	9/25	1.3	32	13.1	56.9	63.2	55.9	76.5	62.6
Ohio FG4	9/27	1.6	30	22.3	49.9	56.7	48.1	69.3	55.4
Ohio FG5	9/27	1.6	31	22.7	55.0	54.6	49.6	72.2	57.2

[†]rated from 1 (erect) to 5 (prostrate)

Table 2. Performance of Wyandot in Ohio Advanced Line Test A, 2005

Entry	Maturity mo./day	Lodging score ^a	Height in.	Yield (bu/a)					
				So. Charleston	Plain City	Lakeview	Hoytville	Wooster	Location Mean
Flint	9/12	1.4	33	53.5	56.6	55.4	51.0	51.7	53.6
Wyandot	9/14	1.3	31	52.2	56.9	46.6	55.4	50.6	52.3
Dilworth	9/17	1.4	36	49.0	62.5	58.3	48.1	57.5	55.1
Ebberts 1314	9/18	1.3	37	56.8	67.6	64.8	62.2	59.5	62.2
HS0-3243	9/20	1.3	34	57.3	68.1	59.1	58.1	54.8	59.5
OHS301	9/20	1.5	36	70.2	64.8	61.8	52.7	60.0	61.9
Kottman	9/22	1.2	35	56.9	70.4	56.1	57.8	64.4	61.1
Wellman 343	9/23	1.2	32	60.4	79.8	65.7	58.5	67.1	66.3
OHS302	9/23	1.3	36	61.2	70.2	51.1	57.6	59.9	60.0

Table 3. Performance of Wyandot in Ohio Soybean Performance Trials, 2005

Entry	Maturity	Rps	Partial	Yield (bu/a)				Protein	Oil
	Rating	Genes	Resistance ^a	North Region	Central Region	South Region	Location Mean	%	%
Sandusky	2.8	1k	4.3	47.1	40.0	55.2	47.4	38.7	22.7
Wyandot	3.0	3a	3.2^b	47.9	51.0	-	-	39.9	21.7
Dilworth	3.1	1k+3a	-	54.9	51.8	62.5	56.4	41.0	21.6
Wellman 313	3.2	1k+3a	-	62.0	53.9	-	-	41.4	20.8
Ohio FG1	3.4	3a	5.8	49.0	44.4	55.2	49.5	42.0	20.2
Resnik	3.4	1k	4.7	48.4	47.6	59.0	51.7	42.4	21.0
OHS301	3.4	1k+3a	-	58.0	54.0	67.7	59.9	40.9	21.3
Kottman	3.7	1k+3a	3.0	56.5	52.2	62.7	57.1	41.6	21.0
OHS302	3.8	1k+3a+8	3.3	57.0	53.3	64.7	58.3	42.0	20.4

^aresponse to *P. sojae* rated from 1 (highly resistant) to 9 (slightly susceptible)

^bretest gave a value of 5.3

Table 4. Performance of Wyandot in Uniform Preliminary Test II, 2005 (11 Midwestern Locations)

Entry	Yield	Rank†	Maturity	Lodging	Height	Seed weight	Seed quality	Protein	Oil
	(bu/a)		days‡	score¶	in.	g/100 seed	score¶	%	%
IA 2068	59.9	8	0	1.6	32	12.9	1.7	37.3	21.6
IA 2065	61.0	7	-0.1	1.6	30	14.6	1.6	38.8	23.1
IA 2073	57.6	22	-2.3	1.4	29	12.7	1.5	39.1	20.9
Wyandot	54.1	36	4.4	1.3	33	17.0	2.5	39.7	20.7

†rank in yield, out of 39 entries

‡days after IA 2068, which matured September 12

¶rated from 1 (best) to 5 (worst)

Table 5. Protein and Oil Content of Wyandot in Ohio Large-Seeded Test, 2003-04

Entry	So.	Hoytville	Wooster	So.	Hoytville	Wooster	Mean
	Charleston			Charleston			
	2003	2003	2003	2004	2004	2004	
Wyandot	41.4†	44.2	40.6	40.9	40.2	41.0	41.4
	19.4	18.8	19.8	19.4	19.0	19.2	19.3
Ohio FG1	43.9	42.1	39.6	40.7	40.5	39.6	41.1
	18.2	19.1	19.9	19.0	18.2	18.5	18.8
Ohio FG3	43.3	38.9	39.8	44.0	44.1	38.1	41.4
	18.3	19.6	19.8	18.2	17.1	16.5	18.3
Ohio FG4	44.6	43.6	40.5	41.2	42.4	42.8	42.5
	17.8	17.8	19.8	19.2	18.0	17.7	18.4
Ohio FG5	43.6	43.1	38.8	43.4	42.7	42.7	42.4
	18.8	17.5	19.1	18.3	18.5	18.2	18.4

†upper figure is protein, lower figure oil, both expressed as percent of total seed weight on a dry-weight basis