

White Food Grade Corn: 2002 Performance – Allen Geyer, Peter Thomison, and Rich Minyo

White corn is one of several specialty crops receiving greater attention by Ohio growers as an alternative to yellow dent corn. Premiums are available for white corn grown under contract. We conducted a white corn test in Ohio at the OARDC NW Branch at Hoytville in 2002 as part of a multi-state testing program coordinated by Dr. Larry Darrah, USDA-ARS and the University of Missouri. This is our sixth year of participation in these tests. Results of the 2002 Ohio trial are shown in Table 1. In 2002, 17 white corn hybrids were evaluated along with 3 yellow dent check hybrids. Test results provide growers with a basis for comparing the relative performance of commercial white corn hybrids and yellow corn hybrids. Unfavorable early season growing conditions (cool, wet weather) followed by drought sharply cut the yield potential at Hoytville in 2002. Table 2 provides an overview of white corn performance at Hoytville since 1996.

Multi-state white corn yield test program results are published yearly in "White Food Corn – 2002 Performance Tests, Spec. Rep. 547." Data presented in the publication include food quality characteristics as well as the typical agronomic traits. For information about the food corn tests and annual field day, check the following web site:
http://www.agron.missouri.edu/ars_columbia/fcpt&fd.html

For more information on specialty corns, including white corn, used in value added or identity preserved grain production check out the Ohio State University web site *Specialty Corns for Value-Added Grain Production* at: <http://www.oardc.ohio-state.edu/hocorn/>

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Table 1. Yield and agronomic data from the 2002 Early White Food Grade Corn Performance Test at Hoytville, OH.

Brand/Hybrid	Yield	Moist	Stalk Lodged	Days to Flower
	----Bu/A----	-----%-----	-----%-----	-----no-----
Asgrow RX776W	108.6	25.2	7.6	70.0
Guelph CGX004W	60.9	19.6	7.8	70.0
Guelph CGX010W	56.5	24.2	9.0	71.0
Guelph CGX013W	60.7	19.5	7.7	69.7
Monsanto EXP 162W	63.0	24.8	8.3	73.0
NC+ 4950W	74.1	21.6	6.0	69.0
NC+ 5642W	61.1	24.9	8.0	73.0
Pioneer Brand 32A85	62.8	25.5	4.4	70.0
Pioneer Brand 32K72	85.3	24.1	6.0	68.0
Pioneer Brand 33T17	89.0	25.2	12.7	70.7
Pioneer Brand 34P93	61.9	23.1	8.2	68.0
Vineyard V433W	74.7	23.7	6.6	70.3
Vineyard Vx7120W	76.5	24.3	5.1	71.7
Whisnand 50AW	66.8	24.2	9.6	73.3
Whisnand 100W	71.6	24.8	9.0	74.3
Zimmerman 1790W	71.5	26.2	11.1	75.0
Zimmerman WX7528	82.6	25.7	8.0	74.7
Yellow Check B73 x Mo17	55.8	23.7	12.3	73.0
Yellow Check Pioneer Brand 32W86	83.6	24.3	5.1	70.0
Yellow Check Pioneer Brand 3394	72.1	23.7	1.4	69.3
Mean	72.0	23.9	7.7	71.2
LSD (0.05)	19.1	0.9	NS	1.7
CV%	16.3	2.2		1.5

Table 2. Yield and agronomic data from the Early White Food Grade Corn Tests at Hoytville, 1996 to 2002.

Year	Type	Entries ----no----	Yield ---Bu/A---	Stalk Lodging -----%-----	Moist -----%-----
1996	White Avg	58	84	95	18.9
	Range		77-103	88-100	15.8-24.1
	Yellow Check Avg	2	91	97	19.2
	Range		88-93	95-100	18.5-19.8
1998	White Avg	33	140	5	24.8
	Range		99-169	0-20	22.2-27.8
	Yellow Check Avg	2	162	6	24.0
	Range		158-165	5-8	22.8-25.1
1999	White Avg	26	161	13	17.4
	Range		124-188	0-33	16.4-19.2
	Yellow Check Avg	2	154	8	16.8
	Range		140-169	7-8	16.6-17.0
2000	White Avg	24	114	-	20.7
	Range		95-137		19.7-26.6
	Yellow Check Avg	2	131	-	22.4
	Range		131-132		20.1-24.7
2001	White Avg	21	138	17	23.4
	Range		107-171	3-52	21.0-25.9
	Yellow Check Avg	2	134	19	19.8
	Range		123-144	6-32	19.2-20.3
2002	White Avg	17	72	8	23.9
	Range		57-109	4-13	19.6-26.2
	Yellow Check Avg	3	71	6	23.9
	Range		56-84	1-12	23.7-24.3