

Cooperator: Jim and Pat Todahl
Nearest Town: Fertile
Soil Type: Flaming sandy loam
Tillage: Fall chiseled, spring cultivated
Previous Crop: Soybeans
Variety: See table
Planting Date: May 27, 2002
Row Width: 8"
Fertilizer: 3 ton/a turkey manure applied fall 2001
Weed Control: Harrowed 2 times
Planting Population: 1.5 million seeds/a
Harvest Date: August 23, 2002
Experimental Design: Randomized complete block with 4 replications

Purpose of Study

To evaluate yield and test weight of oat varieties grown under a certified organic production system.

Results

Differences in yield, test weight, crop height, population and lodging were found in this study. The top three yielding varieties were significantly greater yielding than the four lowest yielding varieties.

Variety	Yield ¹ (bu/a)	Test weight (lb/bu)	Crop Height (inches)	Population (million plants/a)	Lodging ²	Weed Pressure ³
Morton	74.9	33.3	41.6	1.19	1.6	1.3
Richard	65.3	32.4	40.3	1.10	3.5	1.8
HiFi	64.6	33.8	39.9	1.17	1.4	1.3
Wabasha	62.6	32.6	37.3	1.28	3.8	1.6
Sesqui	61.3	33.1	37.8	1.13	4.0	1.6
Youngs	55.7	33.0	45.6	1.14	3.0	1.9
Buff	53.5	41.3	37.0	1.14	4.4	1.9
Hyttest	51.6	33.1	40.4	1.39	4.8	1.8
Ebeltoft	50.8	34.7	37.9	1.04	2.9	1.5
Leonard	49.5	30.4	39.4	1.16	4.8	1.9
LSD (0.05)	10.8	2.3	1.5	0.14	1.3	NS

¹ Corrected to 14% moisture

² Lodging score: 1=no lodging, 5=flat on the ground

³ Weed pressure score at end of the season: 1=no weeds, 5=very weedy