

Oat Variety Trials – 2005

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Purpose: To provide unbiased yield, quality, and pest rating data for oat producers across the state. With this information, Texas oat producers can make an educated decision about the most appropriate variety for their geographic region.

Overview: This research is coordinated and implemented by numerous TCE and TAES faculty and staff from Dallas and College Station. We greatly appreciate the cooperation of Bob Beakley at the Ellis County location. We also appreciate the cooperation from numerous County Extension and IPM Agents. The oat trials were planted at 6 locations, with only 5 being harvested.

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Seed provided by:

Dallas - Turner Seed Co, Breckenridge, TX
Harrison – MBS Seed, Denton, TX
Horizon 314 – East Texas Seed Co, Tyler, TX
Horizon 474 – East Texas Seed Co, Tyler, TX
Plot Spike – Ragan & Massey Seed Co, Ponchatoula, LA
TAMO 397 – Douglas King Seed, San Antonio, TX
TAMO 405 – Douglas King Seed, San Antonio, TX



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Grain Yields (Bu/A) for each oat variety 2004-05

Variety	Average	Ellis	Prosper	Abilene	Brady	Castroville
	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A	Bu/A
Plot Spike	98.7	111	90	110	102	80
TAMO 405	93.3	97	75	86	88	120
Horizon 314	93.3	82	92	94	104	93
Horizon 321	91.9	81	57	109	89	124
*TX02Uvl 7344	89.9	87	89	90	101	83
Horizon 474	89.5	84	60	100	95	109
TAMO 397	84.0	97	91	74	106	52
*TX96D093	80.7	97	59	74	85	87
Harrison	78.5	81	71	76	92	72
Dallas	72.4	62	86	75	116	23
Grand Mean		88.00	77.02	88.85	97.83	84.42
CV		8.86	14.16	15.04	12.71	15.68
LSD (5%)		13.15	19.31	21.04	21.28	21.21

* Experimental wheat breeding lines

Test Weights (Lbs/Bu) for each Oat Variety

Variety	Average	ABI	BRD	CAS	CS
	lbs/bu	lbs/bu	lbs/bu	lbs/bu	lbs/bu
Plot Spike	31	32	33	30	30
TAMO 405	32	32	33	33	31
Horizon 314	30	32	33	28	27
Horizon 321	33	34	34	33	32
Horizon 474	34	34	35	34	33
*TX02Uvl 7344	31	32	33	29	30
*TX96D093	32	32	33	32	32
TAMO 397	29	29	32	27	27
Harrison	33	34	36	31	30
Dallas	29	30	33	28	25

* Experimental wheat breeding lines

Disease and Lodging Ratings.

Variety	C.S. Crown Rust**	Castroville Crown Rust**	McGregor Crown Rust**	C.S. Lodging (%)	Castroville Lodging (%)	McGregor Lodging (%)
Plot Spike	1	1	0	10	5	40
TAMO 405	Tr	Tr	0	0	10	20
Horizon 314	8	8	2	95	90	30
Horizon 321	2	1	0	0	10	5
Horizon 474	3	1	0	0	40	20
*TX02Uvl 7344	0	0	0	0	5	40
*TX96D093	7	5	1	5	Tr	0
TAMO 397	7	8	1	25	70	0
Harrison	9	7	2	95	60	30
Dallas	9	9	3	100	100	10

* Experimental wheat breeding lines

** Crown rust ratings (0-9) with 0 being no observed disease

Height and Maturity Ratings.

Variety	C.S. Hgt.	Castroville Hgt.	McGregor Hgt.	Brady Maturity	Castroville Maturity	McGregor Maturity
Plot Spike	46	47	43	L	ML	ML
TAMO 405	32	38	31	ME	ME-E	ME
Horizon 314	37	37	37	ML	M-ML	M
Horizon 321	37	39	36	M	M	M
Horizon 474	42	45	40	ME	E	ME
*TX02Uvl 7344	39	43	40	L	ML	ML
*TX96D093	31	38	31	L	L	L
TAMO 397	42	44	38	ML	ME	M
Harrison	45	42	43	M	M	ME
Dallas	33	36	38	ML	ML	M

* Experimental wheat breeding lines