

Haxby

Haxby is a two rowed awned feed barley that was tested as MT950186 from 1995-2002. The initial cross was made between MT860756 and MT83533 in 1990. Both MT860756 (Gallatin / Bellona) and MT83533 (Clark/ Lamont) were MSU advanced selections that were tested but not released. F1 plants were planted and harvested in 1991 and single heads from F2 populations were harvested in 1992.

Single seed descent in the ABS Plant Growth Center was utilized in 1992-1993 to advance two generations and F5 head rows were harvested in 1993. F6 two row plots were selected in 1994 based on various agronomic and quality characteristics. MT950186 was entered in the preliminary yield trial in 1995, the early yield trial in 1996, the dryland and irrigated intrastate trials from 1997-2002, and the dryland off station trials from 1999-2002.

Over all Montana intrastate locations from 1998 to 2002, Haxby yielded 96.3 bu/ac Baronesse 97.0 bu/ac, Valier 94.2 bu/ac and Gallatin 91.0 bu/ac (table 1). Test weights for all locations from 1998 to 2002 were: Haxby 52.5 lb/bu, Baronesse 50.2 lb/bu, Valier 51.0 lb/bu and Gallatin 50.9 lb/bu (table 1.) At the Havre, Sidney, Moccasin and Huntley dryland locations, Haxby yielded 64.2 bu/ac, Baronesse 65.8 bu/ac, Valier 62.2, and Gallatin 61.8 bu/ac respectively (table 2). Test Weights for the same dryland locations were: Haxby 50.9 lb/bu, Baronesse 48.1 lb/bu, Valier 49.0 lb/bu, and Gallatin 49.1 lb/bu respectively (table 2).

Under irrigated conditions Haxby yielded 124.3 bu/ac while Baronesse 124.5, Valier 122.3, and Gallatin yielded 117.3 bu/ac (table 3). Test weights under irrigated locations were Haxby 52.9 lb/bu, Baronesse 51.3, Valier 51.7, and Gallatin 51.8 lb/bu (table 3). Haxby is approximately one day later in heading date than Gallatin but earlier than Harrington, Valier, and Baronesse. (tables 1, 2, 3 & 9).

Haxby is similar to Valier in plant height (tables 1,2,3, &10). Haxby should be adapted to the dryland and higher moisture areas in Montana and the Northern Great Plains.

Table 1. 1998-2002 SPRING BARLEY Haxby OVERALL SUMMARY ⁽¹⁾

All Locations

ID	Pedigree	# Yield		# Test Wt		# Plump		# Heading		# Plant Ht.		# Protein	
		Yrs	(bu/ac)	Yrs	(lb/bu)	Yrs	(%)	Yrs	Date	Yrs	inches	Yrs	%
PI491534	Gallatin (Check)	52	91.0	51	50.9	52	69.2	49	175.2	52	30.9	50	13.5
MT950186	Haxby	52	96.3	51	52.5	52	75.5	49	176.3	52	30.5	50	13.3
PI610264	Valier	52	94.2	51	51.0	52	69.2	49	178.3	52	30.1	49	13.9
PI568246	Baronesse	52	97.0	51	50.2	52	72.7	49	178.5	52	28.2	50	13.4
SK 76333	Harrington	52	87.4	51	48.7	52	70.6	49	177.8	52	29.7	50	13.6
H3860224	H3860224	42	91.4	42	49.9	42	75.0	40	178.7	42	29.9	40	13.9
MT910189	MT910189	52	91.2	51	50.8	52	77.5	49	174.4	52	29.0	50	13.1
MTLB 13	MTLB 13	41	92.6	40	50.1	41	68.2	39	177.2	41	28.4	40	13.9
MT960099	MT960099	52	100.0	51	49.9	52	59.0	49	178.9	52	27.0	50	13.4
MT960100	MT960100	37	97.8	36	51.2	37	64.5	34	179.0	37	27.5	35	13.8
MT960101	MT960101	52	94.6	51	50.0	52	64.7	49	179.5	52	28.4	50	13.4
MT960222	MT960222	52	94.3	51	50.5	52	74.5	49	178.0	52	30.5	50	13.2
MT960226	MT960226	52	95.6	51	51.0	52	79.2	49	176.6	52	29.9	50	13.1
MT960228	MT960228	52	98.2	51	50.5	52	72.8	49	177.8	52	29.4	50	13.0
SITMEAN	SITMEAN	52	92.4	51	50.3	52	73.7	49	176.8	52	29.6	49	13.6

(1) comparable average.

Table 2. 1998-2002 SPRING BARLEY Haxby SUMMARY ⁽¹⁾ Dryland Locations ⁽²⁾

ID	Pedigree	# Yield		# Test Wt		# Plump		# Heading		# Plant Ht.		# Protein	
		Yrs	(bu/ac)	Yrs	(lb/bu)	Yrs	(%)	Yrs	Date	Yrs	inches	Yrs	%
PI491534	Gallatin (Check)	18	61.8	17	49.1	18	60.3	17	174.6	18	27.0	18	14.4
MT950186	Haxby	18	64.2	17	50.9	18	64.5	17	175.6	18	26.4	18	14.3
PI610264	Valier	18	62.2	17	49.0	18	55.9	17	178.7	18	25.5	17	15.0
PI568246	Baronesse	18	65.8	17	48.1	18	61.7	17	178.8	18	24.6	18	14.6
SK 76333	Harrington	18	58.4	17	46.8	18	60.9	17	177.7	18	25.4	18	14.7
H3860224	H3860224	15	62.0	15	48.0	15	64.3	14	178.6	15	25.7	15	14.9
MT910189	MT910189	18	61.3	17	49.4	18	70.6	17	174.6	18	25.5	18	13.9
MTLB 13	MTLB 13	14	62.2	13	48.1	14	53.3	13	178.2	14	24.5	14	14.8
MT960099	MT960099	18	66.5	17	47.7	18	44.7	17	179.4	18	22.8	18	14.6
MT960100	MT960100	11	61.5	10	49.6	11	53.3	10	179.2	11	23.4	11	15.1
MT960101	MT960101	18	63.1	17	48.1	18	54.5	17	180.0	18	24.0	18	14.4
MT960222	MT960222	18	64.2	17	48.7	18	66.3	17	178.1	18	26.4	18	14.4
MT960226	MT960226	18	65.9	17	49.1	18	72.0	17	176.7	18	26.1	18	14.2
MT960228	MT960228	18	65.8	17	48.6	18	65.2	17	177.7	18	25.2	18	14.0
SITMEAN	SITMEAN	18	61.6	17	48.5	18	63.9	17	176.7	18	25.6	18	14.6

(1) comparable average.

(2) Low Moisture locations: Havre, Sidney, Moccasin and Huntley.

Table 3. 1998-2002 SPRING BARLEY Haxby SUMMARY
Irrigated locations⁽³⁾

ID	Pedigree	# Yrs	Yield (bu/ac)	# Yrs	Test Wt (lb/bu)	# Yrs	Plump (%)	# Yrs	Heading Date	# Yrs	Plant Ht. inches	# Yrs	Protein %
PI491534	Gallatin (Check)	24	117.3	24	51.8	24	77.7	23	174.8	24	33.9	22	12.7
MT950186	Haxby	24	124.3	24	52.9	24	84.0	23	176.1	24	33.5	22	12.6
PI610264	Valier	24	122.2	24	51.7	24	80.5	23	177.5	24	33.2	22	13.0
ND 9866	Stark	19	117.9	19	52.4	19	87.5	18	172.5	19	34.8	18	13.0
PI568246	Baronesse	24	124.5	24	51.3	24	82.5	23	178.0	24	30.7	22	12.5
SK 76333	Harrington	24	112.8	24	49.5	24	78.3	23	177.4	24	32.7	22	12.6
H3860224	H3860224	19	116.7	19	51.0	19	84.1	19	178.4	19	32.7	17	13.0
MT910189	MT910189	24	117.3	24	51.1	24	81.9	23	173.8	24	31.4	22	12.5
MTLB 13	MTLB 13	19	118.8	19	50.8	19	79.1	18	176.2	19	31.1	18	13.1
MT960099	MT960099	24	129.3	24	50.9	24	71.7	23	178.3	24	29.8	22	12.5
MT960100	MT960100	20	128.6	20	51.8	20	75.8	19	178.6	20	30.6	18	12.7
MT960101	MT960101	24	122.4	24	50.7	24	74.2	23	179.0	24	31.3	22	12.5
MT960222	MT960222	24	121.0	24	51.3	24	82.0	23	177.6	24	33.1	22	12.3
MT960226	MT960226	24	122.4	24	51.9	24	85.1	23	176.0	24	32.5	22	12.2
MT960228	MT960228	24	125.9	24	51.4	24	79.8	23	177.3	24	32.3	22	12.2
SITMEAN	SITMEAN	24	119.5	24	51.1	24	81.6	23	176.4	24	32.3	21	12.8

(3) Irrigated Locations: Kalispell (High moisture), Sidney, Huntley, Conrad and Bozeman.

Table 4. 1998 - 2002 Spring Barley Haxby Individual Dryland Location Summary

Yield (bu/ac)																	
Variety	Havre						Sidney						Moccasin				
	1998	1999	2000	2001	2002	Ave.	1998	1999	2000	2001	2002	Ave.	1998	1999	2001	2002	Ave.
Gallatin (Chk)	69.2	63.8	65.5	31.6	52.4	56.5	87.4	89.1	87.4	83.4	52.4	79.9	67.8	72.9	71.1	48.1	65.0
Haxby	77.0	65.9	66.0	28.9	51.2	57.8	100.6	93.9	86.7	78.2	51.2	82.1	79.2	71.1	77.4	56.6	71.1
Valier	72.4	71.0	62.4	30.2	45.4	56.3	99.3	98.9	79.9	98.1	45.4	84.3	72.3	67.0	69.7	42.7	62.9
Baronesse	70.4	85.3	62.5	32.2	51.2	60.3	93.8	98.5	93.3	95.4	51.2	86.5	75.6	77.2	71.7	51.8	69.1
Harrington	59.4	71.8	53.5	31.2	49.5	53.1	72.2	98.5	84.6	83.5	49.5	77.7	70.2	70.6	62.8	43.3	61.7
MT910189	72.2	57.8	65.8	29.5	49.7	55.0	88.3	85.2	83.3	78.0	49.7	76.9	81.0	71.9	67.4	44.8	66.3
MT960099	70.6	80.6	64.5	30.9	57.5	60.8	88.9	100.8	97.4	95.2	57.5	88.0	87.1	84.2	67.8	44.4	70.9
MT960100	***	***	60.7	28.2	48.5	***	***	***	82.2	89.3	48.5	***	***	***	72.8	44.9	***
MT960101	68.1	79.2	56.8	26.8	42.2	54.6	86.8	103.1	90.7	89.7	42.2	82.5	79.3	79.6	66.0	48.2	68.3
MT960222	71.0	78.4	64.1	30.6	45.0	57.8	98.5	89.6	92.7	90.3	45.0	83.2	72.1	80.9	69.1	54.3	69.1
MT960226	76.0	74.8	61.8	25.7	46.4	56.9	101.4	92.8	87.6	87.8	46.4	83.2	71.1	80.4	77.0	52.9	70.4
MT960228	74.2	80.6	63.5	28.1	54.4	60.2	90.9	97.6	92.5	93.6	54.4	85.8	80.6	75.1	73.4	53.6	70.7
SITMEAN	68.5	69.5	60.8	29.5	49.4	55.5	87.0	89.4	85.4	84.1	49.4	79.1	72.7	74.1	69.8	48.2	66.2

Variety	Huntley					Conrad					Bozeman					Dryland Ave.	
	1999	2000	2001	2002	Ave.	1998	1999	2000	2001	2002	Ave.	1998	1999	2000	2001		2002	Ave.
Gallatin (Chk)	68.6	38.6	44.3	18.5	42.5	100.5	87.6	50.9	23.9	78.7	68.3	102.5	82.9	122.7	100.4	57.7	90.9
Haxby	64.9	33.0	47.2	26.6	42.9	105.1	90.0	62.8	22.4	76.2	71.3	105.2	83.6	133.3	113.1	76.9	101.7
Valier	62.7	38.8	49.0	13.6	41.0	100.6	95.0	62.9	22.5	78.9	72.0	99.9	79.3	123.9	119.4	63.4	96.5
Baronesse	67.8	34.4	48.2	23.1	43.4	103.9	91.3	57.8	27.9	82.6	72.7	108.4	87.5	129.7	117.6	68.3	100.8
Harrington	64.2	35.3	39.3	11.6	37.6	79.8	93.8	53.2	20.4	81.7	65.8	100.5	79.2	118.7	104.5	52.6	88.8
MT910189	72.1	48.8	33.7	23.8	44.6	84.3	97.9	61.4	20.4	82.1	69.2	98.3	81.1	120.8	114.9	59.9	94.2
MT960099	64.1	54.3	42.8	7.6	42.2	106.5	96.2	52.3	21.0	88.7	73.0	117.6	84.6	126.0	126.1	80.1	104.2
MT960100	***	57.3	47.7	10.7	***	***	***	44.4	21.5	85.0	***	***	***	117.7	117.6	75.6	***
MT960101	60.9	63.2	44.0	9.6	44.4	100.3	90.0	47.7	24.6	85.6	69.6	108.9	82.8	128.7	115.8	61.4	97.2
MT960222	60.5	45.0	50.3	17.3	43.3	94.1	96.5	51.8	20.5	78.9	68.4	114.5	79.3	135.9	107.2	65.3	96.9
MT960226	72.0	51.7	52.4	28.7	51.2	101.2	104.2	51.1	24.6	82.5	72.7	89.7	87.4	132.8	112.0	61.7	98.5
MT960228	69.0	42.5	45.3	15.4	43.1	111.5	98.2	58.8	21.4	91.3	76.2	113.5	78.7	132.5	120.6	75.9	101.9
SITMEAN	65.7	39.2	45.4	20.4	42.7	95.2	90.5	55.2	21.5	78.0	68.1	101.5	81.3	125.9	112.4	69.8	97.3

Table 5. 1998 - 2002 Spring Barley Haxby Individual Irrigated & High Moisture Location Summary

Yield (bu/ac)																	
Variety	Kalispell (1)						Sidney						Huntley				
	1998	1999	2000	2001	2002	Ave.	1998	1999	2000	2001	2002	Ave.	1999	2000	2001	2002	Ave.
Gallatin (Chk)	101.6	140.6	184.5	181.4	139.9	149.6	95.0	118.6	115.4	64.2	85.6	95.8	119.0	132.6	144.6	131.9	132.0
Haxby	113.8	160.0	196.9	181.1	151.3	160.6	90.5	123.1	130.6	73.2	87.4	100.9	127.5	120.5	163.3	164.6	144.0
Valier	112.8	144.7	179.0	173.6	146.4	151.3	95.9	113.1	124.2	63.3	80.0	95.3	143.2	124.8	166.6	151.8	146.6
Baronesse	121.5	151.9	184.6	173.5	144.1	155.1	92.1	133.0	133.3	64.2	77.8	100.1	127.1	135.3	158.4	141.6	140.6
Harrington	96.8	152.0	197.3	178.5	129.6	150.8	88.2	100.2	113.6	61.9	71.0	87.0	110.8	130.7	131.5	135.9	127.2
MT910189	113.0	147.8	192.3	189.1	136.3	155.7	90.7	104.1	108.2	56.8	74.3	86.8	121.8	131.7	164.1	161.8	144.9
MT960099	105.6	155.0	200.2	183.8	159.1	160.8	95.2	131.0	135.8	72.0	81.9	103.2	149.5	156.6	146.4	144.8	149.3
MT960100	***	159.8	193.9	167.7	151.3	***	***	133.6	133.5	51.1	73.5	***	145.3	148.6	174.9	168.7	***
MT960101	118.7	161.0	187.1	187.2	148.4	160.5	89.8	124.2	127.3	55.6	75.8	94.5	121.4	142.0	129.4	142.1	133.8
MT960222	120.8	152.7	179.8	144.7	150.8	149.8	101.0	124.0	131.2	67.0	84.1	101.4	132.8	137.6	153.9	133.3	139.4
MT960226	114.2	148.7	192.7	166.6	151.2	154.7	98.5	120.7	131.9	67.5	74.2	98.6	137.8	123.0	149.0	137.8	136.9
MT960228	120.8	160.7	190.7	147.6	139.2	151.8	96.9	126.4	132.0	60.7	82.9	99.8	125.6	152.4	172.6	163.6	153.6
SITMEAN	111.0	149.4	186.8	174.2	143.3	152.9	89.6	115.0	122.7	63.1	77.4	93.5	126.2	127.1	152.7	146.5	138.1

Variety	Conrad						Bozeman						Irrigated Ave.
	1998	1999	2000	2001	2002	Ave.	1998	1999	2000	2001	2002	Ave.	
Gallatin(Chk)	99.9	121.1	88.4	70.0	117.1	99.3	93.3	102.7	137.6	134.6	95.0	112.6	117.3
Haxby	114.6	118.9	88.6	76.9	123.9	104.6	96.4	95.3	155.7	131.4	98.4	115.4	124.3
Valier	100.1	113.8	113.1	74.7	106.0	101.5	108.8	95.6	161.8	139.6	98.9	120.9	122.2
Baronesse	107.8	136.0	104.4	85.9	119.9	110.8	99.9	106.7	163.1	127.3	98.2	119.0	124.5
Harrington	70.3	134.0	80.7	67.7	106.9	91.9	89.2	92.0	139.6	138.4	90.6	110.0	112.8
MT910189	83.7	117.2	85.9	64.3	110.0	92.2	97.3	90.6	143.9	134.1	97.4	112.7	117.4
MT960099	103.7	136.2	119.9	73.5	129.5	112.6	102.8	98.2	161.0	149.0	112.8	124.8	129.3
MT960100	***	123.4	99.8	80.5	120.1	***	***	107.8	157.5	151.7	115.2	***	***
MT960101	89.6	132.3	107.2	72.7	125.0	105.4	96.0	95.6	161.3	142.8	104.2	120.0	122.4
MT960222	98.5	133.1	97.6	81.6	116.4	105.4	95.6	102.7	152.2	121.0	91.8	112.7	121.0
MT960226	103.8	133.8	114.4	71.4	117.7	108.2	87.4	102.4	150.7	140.1	101.6	116.4	122.4
MT960228	112.5	143.8	111.1	83.0	118.4	113.7	102.6	96.3	150.1	131.6	100.5	116.2	125.9
SITMEAN	92.5	123.1	92.8	71.6	116.0	99.2	97.9	100.2	149.6	135.2	103.4	117.3	119.5

(1) Kalispell high moisture

1998-2002 Spring Barley Haxby T-Paired Results All Locations

Table 6. Yield (bu/ac)

ID	NAME	ACTUAL MEAN	NO. OBS	MEAN DIFF	T-PAIRED VALUE	P-VALUE
PI491534	Gallatin (	91.0	52	-5.3	-4.5	.000
PI610264	Valier	94.2	52	-2.1	-1.7	.091
ND 9866	Stark	94.7	41	-3.9	-3.9	.000
11231-11	Logan	95.3	29	-5.7	-4.4	.000
PI568246	Baronesse	97.0	52	.7	.6	.529
BZ594-19	WPB Xena	85.5	31	-2.5	-2.0	.055
SK 76333	Harrington	87.4	52	-8.9	-5.5	.000
MT960099	MT960099	100.0	52	3.7	2.3	.028
MT960100	MT960100	100.3	37	1.5	.8	.457
MT960101	MT960101	94.6	52	-1.7	-1.0	.299
MT960222	MT960222	94.3	52	-2.0	-1.4	.164
MT960226	MT960226	95.6	52	-.7	-.5	.593
MT960228	MT960228	98.2	52	1.9	1.4	.171
SITMEAN	SITMEAN	92.4	52	-3.9	-4.5	.000

THE MEAN FOR THE REFERENCE VARIETY (Haxby) IS: 96.3 (N= 52)

Table 7. Test Weight (lb/bu)

ID	NAME	ACTUAL MEAN	NO. OBS	MEAN DIFF	T-PAIRED VALUE	P-VALUE
PI491534	Gallatin (	50.9	51	-1.6	-8.4	.000
PI610264	Valier	51.0	51	-1.5	-8.2	.000
ND 9866	Stark	52.4	40	-.5	-3.5	.001
11231-11	Logan	52.4	28	-1.1	-5.7	.000
PI568246	Baronesse	50.2	51	-2.3	-10.0	.000
BZ594-19	WPB Xena	50.5	30	-2.4	-9.8	.000
SK 76333	Harrington	48.7	51	-3.8	-12.5	.000
MT960099	MT960099	49.9	51	-2.6	-11.9	.000
MT960100	MT960100	50.8	36	-1.4	-5.9	.000
MT960101	MT960101	50.0	51	-2.5	-10.4	.000
MT960222	MT960222	50.5	51	-2.0	-8.3	.000
MT960226	MT960226	51.0	51	-1.5	-8.7	.000
MT960228	MT960228	50.5	51	-2.0	-8.9	.000
SITMEAN	SITMEAN	50.3	51	-2.2	-12.8	.000

THE MEAN FOR THE REFERENCE VARIETY (Haxby) IS: 52.5 (N= 51)

Table 8. Plump Percent (over # 6 screen)

ID	NAME	ACTUAL MEAN	NO. OBS	MEAN DIFF	T-PAIRED VALUE	P-VALUE
PI491534	Gallatin (	70.6	51	-6.4	-4.1	.000
PI610264	Valier	70.5	51	-6.4	-4.4	.000
ND 9866	Stark	84.5	41	7.9	4.2	.000
11231-11	Logan	83.4	29	6.9	3.2	.003
PI568246	Baronesse	74.1	51	-2.8	-1.8	.079
BZ594-19	WPB Xena	76.9	31	1.6	1.0	.316
SK 76333	Harrington	71.9	51	-5.0	-3.1	.003
MT960099	MT960099	61.3	50	-16.9	-8.7	.000
MT960100	MT960100	67.3	36	-9.6	-4.7	.000
MT960101	MT960101	66.0	51	-11.0	-6.2	.000
MT960222	MT960222	76.0	51	-1.0	-.6	.563
MT960226	MT960226	80.8	51	3.8	2.5	.016
MT960228	MT960228	74.3	51	-2.7	-1.8	.070
SITMEAN	SITMEAN	75.1	51	-1.9	-1.6	.119

THE MEAN FOR THE REFERENCE VARIETY (Haxby) IS: 75.5 (N= 52)

1998-2002 Spring Barley Haxby T-Paired Results All Locations

Table 9. Heading Date (days from Jan. 1)

ID	NAME	ACTUAL MEAN	NO. OBS	MEAN DIFF	T-PAIRED VALUE	P-VALUE
PI491534	Gallatin (	175.2	49	-1.1	-5.1	.000
PI610264	Valier	178.3	49	2.0	7.1	.000
ND 9866	Stark	171.9	39	-2.9	-8.2	.000
11231-11	Logan	171.2	28	-4.0	-8.1	.000
PI568246	Baronesse	178.5	49	2.2	6.8	.000
BZ594-19	WPB Xena	176.8	30	1.2	2.9	.008
SK 76333	Harrington	177.8	49	1.6	5.4	.000
MT960099	MT960099	178.9	49	2.7	7.4	.000
MT960100	MT960100	179.2	34	2.9	7.2	.000
MT960101	MT960101	179.5	49	3.2	9.2	.000
MT960222	MT960222	178.0	49	1.7	7.3	.000
MT960226	MT960226	176.6	49	.3	1.1	.283
MT960228	MT960228	177.8	49	1.5	7.1	.000
SITEMEAN	SITEMEAN	176.8	49	.6	2.7	.009

THE MEAN FOR THE REFERENCE VARIETY (Haxby) IS: 176.3 (N= 49)

Table 10. Plant Height (inches)

ID	NAME	ACTUAL MEAN	NO. OBS	MEAN DIFF	T-PAIRED VALUE	P-VALUE
PI491534	Gallatin (	30.9	52	.4	1.5	.133
PI610264	Valier	30.1	52	-.4	-1.5	.143
ND 9866	Stark	32.3	41	1.4	5.1	.000
11231-11	Logan	32.1	29	-.5	-1.5	.143
PI568246	Baronesse	28.2	52	-2.3	-9.7	.000
BZ594-19	WPB Xena	29.8	31	-.9	-2.6	.014
SK 76333	Harrington	29.7	52	-.8	-3.5	.001
MT960099	MT960099	27.0	52	-3.5	-14.3	.000
MT960100	MT960100	27.0	37	-3.0	-11.2	.000
MT960101	MT960101	28.4	52	-2.1	-8.6	.000
MT960222	MT960222	30.5	52	-.0	-.1	.947
MT960226	MT960226	30.0	52	-.6	-2.5	.016
MT960228	MT960228	29.3	52	-1.2	-4.8	.000
MT990249	MT990249	25.0	17	-1.0	-2.3	.038
SITEMEAN	SITEMEAN	29.6	52	-.9	-5.2	.000

THE MEAN FOR THE REFERENCE VARIETY (Haxby) IS: 30.5 (N= 52)

Table 11. Protein Percent (dry weight basis)

ID	NAME	ACTUAL MEAN	NO. OBS	MEAN DIFF	T-PAIRED VALUE	P-VALUE
PI491534	Gallatin (	13.5	50	.3	2.1	.043
PI610264	Valier	13.8	49	.6	3.8	.000
ND 9866	Stark	13.3	40	.3	2.1	.043
11231-11	Logan	13.2	29	.5	7.1	.000
PI568246	Baronesse	13.4	50	.2	1.2	.231
BZ594-19	WPB Xena	13.9	31	.7	3.7	.000
SK 76333	Harrington	13.6	50	.3	2.8	.008
MT960099	MT960099	13.4	50	.1	1.2	.219
MT960100	MT960100	14.1	35	.4	2.8	.009
MT960101	MT960101	13.4	50	.1	.7	.462
MT960222	MT960222	13.2	50	-.0	-.4	.703
MT960226	MT960226	13.1	50	-.1	-1.4	.165
MT960228	MT960228	13.0	50	-.2	-2.1	.043
SITEMEAN	SITEMEAN	13.6	49	.3	4.0	.000

THE MEAN FOR THE REFERENCE VARIETY (Haxby) IS: 13.3 (N= 50)