

# ALFALFA VARIETY YIELD TRIALS

January 15, 2001

# W.S.H.G.A. ALFALFA VARIETY TRIALS

Tom Cline, William P. Ford, & Robert G. Stevens<sup>1</sup>

Six alfalfa trials were harvested for yield in irrigated central Washington State in 2000. Two trials (PE 57 and 60B) were conducted by the Washington State Hay Growers Association (WSHGA) with cooperation by WSU near Othello, WA. Four trials (PE 55, 58, 61 and 62) were conducted by the WSHGA with cooperation by WSU near Pasco, WA.

The Othello site is located on the WSU Othello research farm 6 miles ESE of Othello, WA at 46° 28' N, 119° 3' W and at an elevation of 1191 feet. The Pasco site is located on Glade Road at the north edge of Pasco, WA at 46° 17' N, 119° 7' W at an elevation of 339 feet.

The soils were a Shano silt loam (coarse-silty, mixed-mesic Xerollic Camborthids) at Othello and a sand to loamy sand (series undetermined) at Pasco. All trials were sprinkler irrigated throughout the April-October growing season. The frost-free growth (32°F) period extended 139 days from 7 May to 23 September at Othello, and 140 days from 6 May to 23 September at Pasco.

Each trial was arranged in a randomized complete block (RCB) design with 4 replications. All were seeded at about 15lbs/A in rows spaced 6 inches apart with a 1 foot interplot separation. Some trials contained experimental entries, which are not available for commercial planting.

Forage yields for each harvest in 2000, the total yield in 2000, and the total for all years of the trials to date are reported in these tables. Yields were determined from whole plot fresh weights converted to a dry matter basis using a constant dry matter fraction of 0.20.

## Dormancy and Pest Resistance Ratings

For dormancy ratings, disease and insect resistance ratings, and marketers who sell alfalfa varieties, use the Alfalfa Council's "2000/2001 Fall Dormancy and Pest Resistance Ratings for Alfalfa Varieties".

1) Agricultural Research Technician – WSU Prosser, WSU Cooperative Extension Emeritus, and Extension Soil Scientist – WSU Prosser, respectively

P.E.-62  
 Washington State Hay Growers Association  
Washington State University Alfalfa Yield Trials & Regrowth Ratings

Pasco, WA  
Seeded August 1999

Five (5) Cuttings/Year – Dry Hay T/a

<u>Entry</u>	<u>Origin<sup>1</sup></u>	<u>5/3</u>	<u>6/9</u>	<u>7/12</u>	<u>8/14</u>	<u>10/9</u>	<u>Total 2000</u>	<u>Average Regrowth<sup>2</sup></u>
UN139	UN	3.1	2.5	2.3	2.3	1.8	12.1	7.8
53V08	P	2.9	2.7	2.4	2.3	1.7	11.9	7.4
PLUMAS	ES	3.1	2.6	2.3	2.2	1.8	11.9	7.3
TANGO	ES	3.1	2.7	2.3	2.1	1.7	11.9	7.9
WL-327	WL	3.1	2.6	2.4	2.2	1.6	11.8	7.4
VERNEMA	USDA-WA	3.1	2.6	2.3	2.2	1.6	11.8	7.2
Y54Q25	P	3.0	2.6	2.3	2.2	1.5	11.7	8.1
983809	DS	3.0	2.6	2.4	2.2	1.5	11.7	7.8
983810	DS	2.8	2.6	2.4	2.2	1.6	11.6	7.7
983808	DS	2.8	2.6	2.3	2.2	1.7	11.6	7.8
WL334RK	WL	3.0	2.6	2.2	2.0	1.8	11.6	7.0
983811	DS	2.8	2.6	2.4	2.2	1.6	11.5	7.7
983812	DS	2.8	2.4	2.3	2.4	1.5	11.4	7.4
LOBO	ES	3.0	2.5	2.1	2.1	1.6	11.4	7.8
983813	DS	2.7	2.5	2.3	2.2	1.5	11.3	7.2
SAMURAI	ABI	2.6	2.5	2.1	1.9	1.5	10.6	7.0
*WINEMA	USDA-WA	2.6	2.3	2.1	2.0	1.4	10.4	7.1
VERNAL	WI	2.7	2.1	1.9	2.0	1.5	10.1	6.6
AV-T/AC		2.9	2.5	2.3	2.2	1.6	11.5	7.4
CV%		9.9	4.3	4.9	6.9	9.0	4.5	6.4
L.S.D. (0.05)		0.4	0.2	0.2	0.2	0.2	0.7	0.7

<sup>1</sup> ABI – ABI Alfalfa  
 DS – Dairyland Seed Co. Inc.  
 ES – Eureka Seeds/Seedtech  
 P – Pioneer Hi-Bred Int'l Inc.  
 UN – Union Seed  
 USDA – US Department of Agriculture  
 WA – Washington State University  
 WI – University of Wisconsin  
 WL – WL Research

<sup>2</sup> Regrowth ratings taken after cuts 2, 3, and 4. Scale: 1 = least, 9 = most  
 \* Winema planted as experimental W45.

P.E.-61.1  
Washington State Hay Growers Association  
Washington State University Alfalfa Yield Trials

Pasco, WA

Seeded September, 1998

Five (5) Cuttings/Year

<u>Entry</u>	<u>Origin<sup>1</sup></u>	<u>1999</u>	<u>2000</u>	<u>Total</u>
54Q53	P	12.4	13.0	25.3
Rebound	CX	12.0	13.3	25.2
CW6408	CW	12.3	12.8	25.1
*Select	UN	12.3	12.8	25.1
CW6425	CW	12.3	12.7	25.0
DK142	DK	12.1	12.8	24.9
Millenia	UN	12.2	12.5	24.7
ABT350	ABT	12.0	12.6	24.6
53V08	P	12.1	12.5	24.6
CW6410	CW	12.1	12.4	24.5
Archer II	ABI	12.0	12.4	24.4
UN50-8	UN	12.0	12.4	24.4
Tango	ES	12.0	12.3	24.3
*Mountaineer	CX	12.3	12.0	24.3
WL232HQ	WL	11.8	12.5	24.2
Rambo	ABI	11.5	12.4	24.0
ABT400SCL	ABT	12.0	11.9	23.9
9722	GS	11.5	12.3	23.8
9723	GS	11.6	12.2	23.7
Innovator +Z	ABI	11.7	12.0	23.7
*Laser	WS	11.7	12.0	23.7
Lobo	ES	12.0	11.7	23.7
Wintercrown	RS	11.9	11.8	23.6
Multi5301	GS	11.7	11.8	23.5
Magnum V	DS	11.9	11.6	23.5
Depend +EV	ABI	11.7	11.7	23.4
ZG9850	ABI	11.6	11.7	23.4
ZX9852	ABI	11.4	11.9	23.3
Vernema	USDA-WA	11.7	11.1	22.8
Winema	USDA-WA	11.3	11.2	22.5
Vernal	WI	10.3	10.3	20.7
UN41-8	UN	10.0	10.7	20.6
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	AV-T/AC	11.8	12.1	23.9
	CV (%)	2.5	4.0	2.4
	LSD 0.05(T/AC)	0.4	0.7	0.8

\* Select, Mountaineer, and Laser planted as experimental numbers 3G107, 3L115, and DS9102.

<sup>1</sup> ABI	ABI Alfalfa	P	Pioneer Hi-Bred Int'l Inc.
ABT	Agribiotech, Inc.	RS	Rainier Seeds, Inc.
CX	Cenex	UN	Union Seed
CW	Cal/West Seeds	USDA	U.S. Department of Agriculture
DK	De Kalb Genetics Corp.	WA	Washington State University
DS	Dairyland Seed Co., Inc.	WI	University of Wisconsin
ES	Eureka Seeds/Seedtech	WL	WL Research, Inc.
GS	Geertson Seed Farms	WS	Wagner Seed

P.E.-61.2  
Washington State Hay Growers Association  
Washington State University Alfalfa Yield Trials & Regrowth Ratings

Pasco, WA  
Seeded September 1998

Five (5) Cuttings/Year – Dry Hay T/a

<u>Entry</u>	<u>Origin<sup>1</sup></u>	<u>5/3</u>	<u>6/9</u>	<u>7/12</u>	<u>8/14</u>	<u>10/9</u>	<u>Total 2000</u>	<u>Average Regrowth<sup>2</sup></u>
REBOUND	CX	3.4	3.0	2.7	2.5	1.8	13.3	7.4
54Q53	P	3.7	2.8	2.5	2.4	1.6	13.0	7.4
CW6408	CW	3.6	2.7	2.5	2.3	1.7	12.8	7.3
*SELECT	UN	3.3	2.9	2.5	2.3	1.8	12.8	7.2
DK142	DK	3.5	2.9	2.5	2.3	1.7	12.8	7.2
CW6425	CW	3.3	2.8	2.4	2.5	1.7	12.7	7.6
ABT350	ABT	3.4	2.6	2.4	2.4	1.8	12.6	7.0
MILLENIA	UN	3.3	2.8	2.3	2.3	1.8	12.5	6.7
53V08	P	3.3	2.7	2.4	2.3	1.7	12.5	7.3
WL 232 HQ	WL	3.3	2.7	2.3	2.3	1.8	12.5	6.9
CW6410	CW	3.1	2.8	2.4	2.4	1.6	12.4	7.3
ARCHER II	ABI	3.2	2.8	2.5	2.3	1.6	12.4	7.3
UN 50-8	UN	3.4	2.7	2.5	2.3	1.5	12.4	7.7
RAMBO	ABI	3.3	2.7	2.3	2.3	1.8	12.4	6.7
9722	GS	3.3	2.9	2.5	2.2	1.5	12.3	7.6
TANGO	ES	3.3	2.7	2.4	2.3	1.6	12.3	7.4
9723	GS	3.5	2.6	2.4	2.2	1.5	12.2	7.3
*MOUNTAINEER	CX	3.2	2.7	2.3	2.2	1.6	12.0	6.8
INNOVATOR +Z	ABI	3.2	2.7	2.3	2.2	1.6	12.0	6.9
*LASER	WS	3.4	2.7	2.4	2.2	1.4	12.0	7.2
ABT 400 SCL	ABT	3.1	2.6	2.3	2.3	1.7	11.9	6.9
ZX 9852	ABI	3.0	2.6	2.4	2.3	1.4	11.9	7.4
WINTERCROWN	RS	3.2	2.7	2.2	2.1	1.3	11.8	7.3
MULTI 5301	GS	3.2	2.6	2.3	2.1	1.6	11.8	7.1
LOBO	ES	3.1	2.7	2.3	2.1	1.5	11.7	7.4
DEPEND +EV	ABI	3.1	2.6	2.2	2.1	1.6	11.7	7.1
ZG 9850	ABI	3.0	2.7	2.4	2.2	1.4	11.7	7.3
MAGNUM V	DS	3.4	2.6	2.3	2.1	1.2	11.6	7.3
WINEMA	USDA-WA	3.1	2.6	2.2	2.0	1.3	11.2	6.9
VERNEMA	USDA-WA	3.0	2.7	2.2	2.0	1.2	11.1	6.8
UN 41-8	UN	2.9	2.6	2.2	1.9	1.1	10.7	7.8
VERNAL	WI	3.0	2.4	1.9	1.9	1.2	10.3	6.8
AV-T/AC		3.3	2.7	2.4	2.2	1.6	12.1	7.2
CV%		8.9	5.6	5.4	6.5	10.4	4.0	8.5
L.S.D. (0.05)		0.4	0.2	0.2	0.2	0.2	0.7	0.9

\* Select, Mountaineer, and Laser planted as experimental numbers 3G107, 3L115, and DS9102.

<sup>1</sup> Origin – See PE-61.1

<sup>2</sup> Average Regrowth based on scale (1 = least, 9 = most) on 4 cuttings

P.E.-60B.1

Washington State Hay Growers Association  
Washington State University Alfalfa Yield Trials

Othello, WA

Seeded March 31, 1999

Four (4) Cuttings/Year

<u>Entry</u>	<u>Origin<sup>1</sup></u>	<u>1999</u>	<u>2000</u>	<u>Total</u>
Rebound	CX	6.7	9.1	15.8
*Mountaineer	CX	6.3	9.4	15.7
Archer II	ABI	6.4	9.3	15.7
53V08	P	6.0	9.6	15.6
Forecast 1001	DS	6.5	9.1	15.6
*Select	UN	6.6	9.0	15.6
CW6425	CW	6.6	8.9	15.5
ZX9453	ABI	6.8	8.7	15.5
54Q53	P	6.5	9.0	15.4
*Laser	WS	6.4	9.0	15.4
Magnum V	DS	6.4	9.0	15.4
WL232HQ	WL	6.6	8.9	15.4
CW6410	CW	6.6	8.8	15.4
DK134	DK	6.6	8.8	15.4
ZG9850	ABI	6.6	8.8	15.4
CW6408	CW	6.2	9.0	15.3
*Winema	USDA-WA	6.4	8.9	15.3
Wintercrown	RS	6.4	8.9	15.3
ABT400SCL	ABT	6.5	8.8	15.3
ABT350	ABT	6.4	8.8	15.2
ZX9852	ABI	6.5	8.7	15.2
Millenia	UN	6.3	8.8	15.1
Rhino	GS	6.4	8.7	15.1
Vernema	USDA-WA	6.2	8.8	15.0
Innovator +Z	ABI	6.1	8.6	14.7
Emperor	ABI	6.1	8.5	14.7
Multi5301	GS	6.3	8.1	14.4
Vernal	WI	6.0	8.2	14.3
Rambo	ABI	6.1	8.0	14.1
Vernal – certified	WI	5.9	8.2	14.0
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	AV-T/AC	6.3	8.8	15.2
	CV (%)	4.4	3.2	2.7
	LSD 0.05 (T/AC)	0.4	0.4	0.6

<sup>1</sup> ABI	ABI Alfalfa	P	Pioneer Hi-Bred Int'l Inc.
ABT	Agribiotech, Inc.	RS	Rainier Seeds, Inc.
CX	Cenex	UN	Union Seed
CW	Cal/West Seeds	USDA	U.S. Department of Agriculture
DK	De Kalb Genetics Corp.	WA	Washington State University
DS	Dairyland Seed Co, Inc.	WI	University of Wisconsin
GS	Geertson Seed Farms	WL	WL Research Inc.
		WS	Wagner Seed

\*Select, Laser, Mountaineer, and Winema planted as experimental 3G107, DS9102, 3L115, and W45

P.E.-60B.2  
 Washington State Hay Growers Association  
Washington State University Alfalfa Yield Trials & Regrowth Ratings

Othello, WA  
Seeded March 31, 1999

Four (4) Cuttings/Year – Dry Hay T/a

<u>Entry</u>	<u>Origin<sup>1</sup></u>	<u>5/19</u>	<u>6/23</u>	<u>7/28</u>	<u>9/8</u>	<u>Total 2000</u>	<u>Average Regrowth<sup>2</sup></u>
53V08	P	3.4	2.5	1.9	1.8	9.6	8.0
*MOUNTAINEER	CX	3.4	2.2	1.8	2.0	9.4	7.5
ARCHER II	ABI	3.3	2.3	1.9	1.9	9.3	8.2
REBOUND	CX	3.4	2.3	1.7	1.7	9.1	8.1
FORECAST 1001	DS	3.4	2.3	1.7	1.7	9.1	7.8
54Q53	P	3.3	2.2	1.7	1.7	9.0	8.1
CW6408	CW	3.4	2.1	1.7	1.7	9.0	7.3
*SELECT	UN	3.3	2.1	1.8	1.8	9.0	7.3
*LASER	WS	3.3	2.2	1.7	1.8	9.0	7.8
MAGNUM V	DS	3.3	2.2	1.7	1.8	9.0	7.9
CW6425	CW	3.3	2.3	1.7	1.7	8.9	7.8
WL 232 HQ	WL	3.2	2.1	1.7	1.8	8.9	7.3
*WINEMA	USDA-WA	3.2	2.2	1.8	1.7	8.9	7.4
WINTERCROWN	RS	3.4	2.1	1.7	1.8	8.9	7.4
ABT350	ABT	3.3	2.1	1.7	1.7	8.8	7.3
MILLENNIA	UN	3.4	2.1	1.6	1.7	8.8	7.2
CW6410	CW	3.2	2.2	1.6	1.8	8.8	7.7
ABT 400 SCL	ABT	3.2	2.1	1.6	1.8	8.8	7.1
ZG 9850	ABI	3.2	2.3	1.7	1.7	8.8	8.5
VERNEMA	USDA-WA	3.3	2.0	1.6	1.8	8.8	7.2
DK134	DK	3.4	2.1	1.7	1.7	8.8	7.1
RHINO	GS	3.3	2.0	1.6	1.8	8.7	6.8
ZX 9852	ABI	3.2	2.2	1.7	1.6	8.7	8.5
ZX9453	ABI	3.2	2.2	1.6	1.7	8.7	8.6
INNOVATOR +Z	ABI	3.3	2.1	1.5	1.7	8.6	6.8
EMPEROR	ABI	3.2	2.1	1.6	1.7	8.5	7.1
VERNAL	WI	3.1	1.8	1.6	1.7	8.2	6.5
VERNAL – certified	WI	3.1	1.7	1.6	1.7	8.2	6.5
MULTI 5301	GS	3.2	1.9	1.5	1.6	8.1	6.8
RAMBO	ABI	2.9	2.0	1.5	1.6	8.0	7.1
AV-T/AC		3.2	2.1	1.7	1.7	8.8	7.4
CV%		5.1	6.4	6.9	7.6	3.2	5.3
L.S.D. (0.05)		0.2	0.2	0.2	0.2	0.4	0.6

\* Winema, Select, Mountaineer, and Laser planted as experimental numbers W45, 3G107, 3L115, and DS9102.

<sup>1</sup> Origin – See PE-60B.1

<sup>2</sup> Average Regrowth based on scale (1 = least, 9 = most) after first three cuttings

P.E.-58.1

Washington State Hay Growers Association  
Washington State University Alfalfa Yield Trials

Pasco, WA

Seeded September 4, 1997

Five (5) Cuttings/Year

<u>Entry</u>	<u>Origin</u> <sup>1</sup>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>Total</u> <sup>2</sup>
*53V08	P	10.5	11.4	10.1	30.6
*54Q53	P	10.3	11.2	10.0	30.2
*Stellar	WL	10.5	11.2	9.9	30.2
WL325HQ	WL	10.9	11.3	9.7	30.2
Stamina	AS	10.5	11.5	9.6	29.6
Excalibur II	AS	10.5	11.1	9.6	29.6
NK04	NK	10.6	11.4	9.5	29.6
WH 80	WL	10.5	10.7	9.4	29.4
Accord	OS	10.3	11.1	9.5	29.3
*Abundance	EG	11.6	10.5	8.8	29.2
Multiqueen	LH	11.0	11.5	9.1	29.1
*Greenfeast	WL	10.2	10.5	9.0	28.2
DS9707/HYB	DS	10.4	10.7	8.6	27.7
Forecast 1000	DS	10.5	10.7	8.5	27.4
6420	GA	10.6	10.4	8.2	27.0
Vernema	USDA-WA	10.2	10.5	8.3	26.8
Sendero	AS	10.3	9.5	8.2	26.8
Magnum IV	DS	9.9	10.4	8.2	26.4
Vernal	WI	9.1	8.7	7.4	24.0
*Winema	(USDA-WA)	(9.9)	(10.0)	(8.2)	(28.1)
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	AV-T/AC	10.4	10.7	9.0	28.5
	CV(%)	5.5	3.7	6.3	4.7
	LSD 0.05(T/AC)	0.8	0.6	0.8	1.9

<sup>1</sup>AS Allied Seed Co-op

DS Dairyland Seed Co., Inc.

EG Eppich Grain

GA Garst Seed

LH L & H Seed, Inc.

NK Northrup King Co.

OS Olberding Seed

P Pioneer Hi-Bred International, Inc.

USDA US Department of Agriculture

WA Washington State University

WI University of Wisconsin

WL W-L Research, Inc.

<sup>2</sup> Differences in total yield column are due to rounding.

\* Abundance, Stellar, Greenfeast, Winema, 53V08, and 54Q53 planted as experimental numbers DS9410, C106, C133, W45, X53V08, and Y54Q53.



P.E.-58.2  
 Washington State Hay Growers Association  
Washington State University Alfalfa Yield Trials & Regrowth Ratings

Pasco, WA

Seeded September 4, 1997

Five (5) Cuttings/Year – Dry Hay T/a

<u>Entry</u>	<u>Origin<sup>1</sup></u>	<u>5/3</u>	<u>6/9</u>	<u>7/12</u>	<u>8/14</u>	<u>10/9</u>	<u>Total 2000</u>	<u>Average Regrowth<sup>2</sup></u>
* 53V08	P	2.8	2.2	2.0	1.8	1.3	10.1	5.5
* 54Q53	P	2.7	2.3	2.0	1.7	1.3	10.0	5.8
* STELLAR	WL	2.6	2.2	1.9	1.7	1.4	9.9	6.2
WL 325 HQ	WL	2.7	2.2	1.8	1.7	1.2	9.7	5.8
EXCALIBUR II	AS	2.7	2.0	1.8	1.8	1.3	9.6	5.5
STAMINA	AS	2.7	2.1	1.9	1.6	1.2	9.6	5.3
ACCORD	OS	2.7	1.9	1.8	1.6	1.5	9.5	5.2
NK 04	NK	2.6	2.1	1.8	1.7	1.3	9.5	5.3
WH 80	WL	2.5	2.0	1.8	1.8	1.4	9.4	5.4
MULTIQUEEN	LH	2.4	1.9	1.7	1.8	1.2	9.1	5.3
* GREENFEAST	WL	2.5	2.0	1.7	1.7	1.2	9.0	5.2
* ABUNDANCE	EG	2.5	1.7	1.6	1.8	1.2	8.8	4.9
DS 9707/HYB	DS	2.5	1.7	1.6	1.7	1.1	8.6	5.1
FORECAST 1000	DS	2.5	1.7	1.6	1.7	1.0	8.5	5.1
VERNEMA	USDA-WA	2.3	1.6	1.6	1.8	1.1	8.3	4.8
SENDERO	AS	2.2	1.6	1.7	1.7	1.1	8.2	5.2
6420	DS	2.4	1.7	1.5	1.6	1.0	8.2	4.8
MAGNUM IV	DS	2.5	1.5	1.5	1.6	1.1	8.2	5.0
VERNAL	WI	2.0	1.2	1.5	1.7	0.9	7.4	4.3
WINEMA	USDA-WA	(2.4)	(1.7)	(1.5)	(1.7)	(0.9)	(8.2)	---
AV-T/AC		2.5	1.9	1.7	1.7	1.2	9.0	5.2
CV%		7.6	9.1	8.3	8.8	15.3	6.3	12.5
L.S.D. (0.05)		0.3	0.2	0.2	0.2	0.3	0.8	0.9

\* Abundance, Stellar, Greenfeast, Winema, 53V08, AND 54Q53 planted as experimental numbers DS9410, C106, C133, W45, X53V08, and Y54Q53. Only two (2) plots of WINEMA (W45) seeded due to field size constraint and was not included in analysis.

<sup>1</sup> Origin – See PE-58.1

<sup>2</sup> Average Regrowth based on scale (1 = least, 9 = most) on 4 cuttings

P.E.-57.1  
Washington State Hay Growers Association  
Washington State University Alfalfa Yield Trials

Othello, WA  
Seeded August 22, 1997

Four (4) Cuttings/Year

<u>Entry</u>	<u>Origin</u> <sup>1</sup>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>Total</u> <sup>2</sup>
* 53V08	P	8.8	8.6	7.8	25.1
* 6420	GA	9.1	8.5	7.5	25.1
DK142	DK	9.0	8.6	7.5	25.1
* Abundance	EG	8.9	8.5	7.6	25.0
DK143	DK	8.9	8.1	7.4	24.4
WL325HQ	WL	8.3	8.2	7.8	24.3
*54Q53	P	8.6	8.1	7.6	24.3
*Greenfeast	WL	8.7	8.1	7.4	24.2
329	LH	8.9	8.0	7.2	24.1
* Stellar	WL	7.9	8.2	7.6	23.7
Forecast 1000	DS	8.3	8.1	7.2	23.6
WH80	WL	8.9	7.5	7.0	23.6
Stamina	AS	8.8	7.7	7.0	23.5
Accord	OS	8.4	7.6	7.2	23.2
Magnum IV	DS	8.1	7.8	7.1	23.0
* Winema	USDA-WA	8.3	7.7	7.1	22.9
NK04	NK	8.6	7.5	6.8	22.9
Excalibur II	AS	8.2	7.5	7.1	22.8
Vernema	USDA-WA	8.3	7.2	6.7	22.2
Multiqueen	LH	8.1	7.2	6.6	21.8
Vernal	WI	7.4	7.0	6.6	20.9
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	AV-T/AC	8.5	7.8	7.2	23.6
	CV(%)	5.9	3.7	5.4	3.4
	LSD 0.05 (T/AC)	0.7	0.4	0.6	1.1

<sup>1</sup> AS	Allied Seed Co-op	OS	Olberding Seed
DK	DeKalb Genetics Corp.	P	Pioneer Hi-Bred International, Inc.
DS	Dairyland Seed Co., Inc.	USDA	US Department of Agriculture
EG	Eppich Grain	WA	Washington State University
GA	Garst Seed	WI	University of Wisconsin
LH	L& H Seed, Inc.	WL	W-L Research, Inc.
NK	Northrup King Co.		

<sup>2</sup> Differences in Total Yield Column are due to rounding

\* Stellar, Greenfeast, Abundance, 6420, Winema, 53V08, and 54Q53 planted as experimental numbers C106, C133, DS9410, DS9612, W45, X53V08, and Y54Q53.

P.E.-57.2  
 Washington State Hay Growers Association  
Washington State University Alfalfa Yield Trials & Regrowth Ratings

Othello, WA  
Seeded August 22, 1997

Four (4) Cuttings/Year – Dry Hay T/a

<u>Entry</u>	<u>Origin<sup>1</sup></u>	<u>5/19</u>	<u>6/23</u>	<u>7/28</u>	<u>9/8</u>	<u>Total 2000</u>	<u>Average Regrowth<sup>2</sup></u>
* 53V08	P	2.7	2.0	1.6	1.4	7.8	8.2
WL 325 HQ	WL	2.8	1.9	1.6	1.5	7.8	8.1
* 54Q53	P	2.7	1.9	1.6	1.4	7.6	8.1
* ABUNDANCE	EG	2.8	1.9	1.5	1.5	7.6	7.6
* STELLAR	WL	2.6	2.0	1.6	1.4	7.6	8.5
DK142	DK	2.8	1.9	1.5	1.3	7.5	7.1
* 6420	DS	2.8	1.9	1.5	1.4	7.5	7.2
DK143	DK	2.7	1.9	1.5	1.3	7.4	7.4
* GREENFEAST	WL	2.7	1.8	1.4	1.4	7.4	7.0
FORECAST 1000	DS	2.5	1.9	1.4	1.3	7.2	7.3
329	LH	2.6	1.8	1.4	1.4	7.2	7.1
ACCORD	OS	2.6	1.8	1.5	1.4	7.2	6.8
EXCALIBUR II	AS	2.5	1.8	1.5	1.3	7.1	7.0
MAGNUM IV	DS	2.6	1.8	1.4	1.3	7.1	7.1
* WINEMA	USDA-WA	2.5	1.8	1.5	1.4	7.1	7.5
STAMINA	AS	2.4	1.8	1.4	1.3	7.0	7.2
WH 80	WL	2.3	1.8	1.5	1.4	7.0	7.3
NK 04	NK	2.4	1.7	1.4	1.3	6.8	6.9
VERNEMA	USDA-WA	2.4	1.6	1.3	1.3	6.7	7.0
MULTIQUEEN	LH	2.4	1.6	1.3	1.2	6.6	7.0
VERNAL	WI	2.6	1.5	1.3	1.2	6.6	6.3
AV-T/AC		2.6	1.8	1.5	1.4	7.2	7.3
CV%		7.1	5.4	6.4	7.7	5.4	6.2
L.S.D. (0.05)		0.3	0.1	0.1	0.1	0.6	0.7

\* Stellar, Greenfeast, Abundance, 6420, Winema, 53V08, and 54Q53 planted as experimental numbers C106, C133, DS9410, DS9612, W45, X53V08, and Y54Q53.

<sup>1</sup> Origin – See PE-57.1

<sup>2</sup> Average Regrowth based on a scale (1 = least, 9 = most) of 4 cuttings

P.E. – 55.1  
Washington State Hay Growers Association  
Washington State University Alfalfa Yield Trials\*\*

Pasco, Washington  
Seeded April 4, 1997

Three (3) Cuttings/1<sup>st</sup> Year

Five (5) Cuttings

<u>Entry</u>	<u>Origin</u> <sup>1</sup>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>Total</u> <sup>2</sup>
* Plumas	UN	5.0	12.0	10.9	10.3	38.2
LeafMaster	WE	4.8	12.4	11.0	9.7	37.8
* WL334RK	WL	4.4	11.8	10.9	9.8	36.9
ABT405	CS	4.6	11.4	10.8	9.8	36.7
LegenDairy 2.0	CX	4.8	12.0	10.4	9.5	36.6
WL325HQ	WL	4.8	11.6	10.3	9.4	36.1
Rainier	FG	4.5	11.6	10.5	9.3	36.0
Affinity+Z	ABI	4.5	11.5	10.3	9.6	35.9
WL324	WL	4.5	11.4	10.5	9.5	35.9
Stamina	AS	4.8	11.7	10.0	9.4	35.8
WL252HQ	WL	4.4	11.6	10.1	9.5	35.7
MP2000	CX	4.8	11.6	10.1	9.1	35.7
Aspen	ST	4.4	11.6	9.9	9.6	35.6
Treasure	CS	4.5	11.3	10.3	9.2	35.4
5396	P	4.6	11.7	10.2	8.9	35.4
* 53V08	P	4.6	12.0	10.0	8.8	35.4
ML330	WE	4.9	11.9	9.9	8.7	35.4
Class	OS	4.8	11.9	9.8	8.7	35.2
Accord	OS	4.7	11.6	9.7	9.1	35.1
Spur	AS	4.4	11.4	9.7	9.4	34.9
Magnum IV	DS	5.0	11.5	8.8	8.9	34.2
MultiQueen	LH	4.5	11.6	9.6	8.5	34.2
Supercuts	CS	4.6	10.9	9.6	8.9	34.1
Forecast 1000	DS	4.6	11.6	9.3	8.3	33.8
Rushmore	NK	4.7	11.4	9.2	8.3	33.6
Parade	UN	4.3	11.6	8.9	8.7	33.5
Lobo	ST	4.8	11.2	9.0	8.5	33.5
* Winema	USDA-WA	4.5	11.4	8.8	7.8	32.6
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AV-T/AC		4.6	11.6	10.0	9.1	35.3
CV (%)		9.4	5.3	6.5	7.9	5.1
LSD 0.05 (T/AC)		0.6	0.9	0.9	1.0	2.5

\* Winema, WL334RK, 53V08, and Plumas planted as experimental number W45, WS210, X53V08, and 3L102.

\*\* P.E. 55 was spring seeded. First cutting was discarded. First year yields consisted of 2nd, 3rd, & 4th cuttings.

<sup>1</sup> ABI	ABI Alfalfa	EU	Eureka Seed Co.	ST	Seed Tec International/Eureka
AS	Allied Seed Co-op	FG	Forage Genetics	TF	Tourneur-Freres, France
CG	Cargill Hybrid Seeds	GP	Great Plains Res. Co. Inc.	UN	Union Seed Co.
CLL	Cenex/Land O'Lakes	K	Keltgen/Mycogen	USDA	U.S. Dept. of Agriculture
CS	Clark Seeds, Inc.	LH	L & H Seed, Inc.	WA	Washington State University
CW	Cal/West Seeds	MBS	MBS, Inc.	WE	Wilbur Ellis
CX	Cenex	NK	Northrup King Co.	WI	University of Wisconsin
DK	DeKalb Genetics Corp.	OS	Olberding Seed	WL	W-L Research, Inc.
DS	Dairyland Seed Co., Inc.	P	Pioneer Hi-Bred International, Inc.		
EG	Eppich Grain, Inc.	RS	Research Seed		

<sup>2</sup> Differences in total yield column are due to rounding.

P.E.-55.2  
 Washington State Hay Growers Association  
Washington State University Alfalfa Yield Trials & Regrowth Ratings

Pasco, WA  
Seeded April 4, 1997

Three (3) Cuttings/1<sup>st</sup> Year

Five (5) Cuttings/Year – Dry Hay T/a

<u>Entry</u>	<u>Origin<sup>1</sup></u>	<u>5/3</u>	<u>6/9</u>	<u>7/12</u>	<u>8/14</u>	<u>10/9</u>	<u>Total 2000</u>	<u>Average Regrowth<sup>2</sup></u>
* PLUMAS	UN	2.7	2.2	2.0	1.9	1.5	10.3	5.6
* WL 334 RK	WL	2.4	2.2	2.0	2.0	1.3	9.8	4.9
ABT405	CS	2.5	2.1	1.9	1.8	1.4	9.8	5.5
LEAF MASTER	WE	2.4	1.9	2.0	2.1	1.4	9.7	5.1
ASPEN	ST	2.5	1.9	1.9	1.9	1.4	9.6	5.4
AFFINITY +Z	ABI	2.5	2.0	1.9	1.9	1.4	9.6	5.0
WL 324	WL	2.5	2.0	1.8	1.8	1.4	9.5	5.5
WL 252 HQ	WL	2.6	2.0	1.8	1.8	1.3	9.5	5.1
LEGEN DAIRY 2.0	CX	2.4	1.9	1.9	1.8	1.4	9.5	5.1
WL 325 HQ	WL	2.4	2.0	1.8	1.8	1.4	9.4	5.6
STAMINA	AS	2.4	1.9	1.8	1.9	1.3	9.4	4.8
SPUR	AS	2.5	1.9	1.8	1.8	1.4	9.4	5.1
RAINIER	FG	2.4	2.0	1.8	1.8	1.3	9.3	5.2
TREASURE	CS	2.4	1.9	1.7	1.7	1.4	9.2	4.8
MP-2000	CX	2.3	1.8	1.8	1.9	1.4	9.1	5.1
ACCORD	OS	2.4	1.9	1.8	1.7	1.4	9.1	5.0
5396	P	2.3	1.8	1.7	1.8	1.3	8.9	5.3
SUPERCUTS	CS	2.2	1.8	1.8	1.8	1.4	8.9	4.9
MAGNUM IV	DS	2.3	1.5	1.8	2.1	1.2	8.9	4.2
* 53V08	P	2.3	1.8	1.7	1.7	1.3	8.8	5.4
CLASS	OS	2.1	1.7	1.8	1.8	1.2	8.7	4.6
ML 330	WE	2.1	1.6	1.8	2.1	1.1	8.7	4.7
PARADE	UN	2.1	1.8	1.7	1.9	1.3	8.7	5.7
LOBO	ST	2.1	1.7	1.7	1.8	1.2	8.5	5.1
MULTIQUEEN	LH	2.1	1.7	1.8	1.8	1.2	8.5	5.0
FORECAST 1000	DS	2.3	1.6	1.7	1.7	1.2	8.3	4.8
RUSHMORE	NK	2.0	1.5	1.8	1.9	1.2	8.3	4.7
* WINEMA	USDA-WA	1.9	1.3	1.6	2.0	1.1	7.8	4.7
AV-T/AC		2.3	1.8	1.8	1.8	1.3	9.1	5.0
CV%		10.5	10.2	11.4	12.8	9.8	7.9	10.7
L.S.D. (0.05)		0.3	0.3	0.3	0.3	0.2	1.0	0.8

\* Winema, WL 334 RK, 53V08, and Plumas planted as experimental numbers W45, WS210, X53V08, AND 3L102.

<sup>1</sup> Origin – See PE-55.1

<sup>2</sup> Average Regrowth based on scale (1 = least, 9 = most) after each cutting

Washington State Hay Growers Association  
Washington State University Alfalfa Yield Trials

Othello, Washington

Seeded August 20, 1996Four (4) Cuttings/Year

<u>Entry</u>	<u>Origin</u> <sup>1</sup>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>Total</u> <sup>2</sup>	<u>Regrowth</u> <u>Rating</u> <sup>3</sup>	<u>Regrowth</u> <u>Rating</u> <sup>4</sup>
CW5440	CW	6.6	9.8	8.9	25.4	6.3	6.9
WL325HQ	WL	6.7	10.0	8.6	25.2	7.1	6.8
Archer II	ABI	6.6	9.8	8.3	24.7	7.2	6.5
Magnum IV	DS	6.5	9.7	8.3	24.5	6.2	6.3
ML330	WE	6.5	9.6	8.4	24.5	5.5	6.0
CW5406	CW	6.6	9.9	7.8	24.3	6.4	6.8
5396	P	6.4	9.9	8.0	24.3	7.0	6.6
DK127	DK	6.5	9.7	7.8	24.0	5.8	6.3
CW4429	CW	6.5	9.2	8.3	23.9	6.1	5.9
Plumas	UN	6.4	9.6	7.6	23.7	5.4	5.8
MP-2000	CX	6.1	9.6	7.7	23.5	6.1	5.9
Rushmore	NK	6.2	9.4	7.9	23.5	5.5	5.9
Imperial	ABI	6.3	9.3	7.8	23.4	5.5	5.6
Key	EG	6.4	9.2	7.4	23.1	5.3	5.5
Cimarron VR	EG	5.6	9.6	7.8	23.0	5.3	5.5
NK61	NK	6.2	9.3	7.4	22.9	5.3	5.5
DK133	DK	5.8	9.5	7.6	22.9	5.6	5.5
Magnum III	DS	6.1	9.2	7.4	22.7	6.0	5.8
WL334RK	WL	5.8	9.5	7.4	22.7	5.3	5.4
Reno	UN	6.5	9.2	6.9	22.6	5.5	5.4
LeafMaster	WE	6.1	9.1	7.4	22.6	5.0	5.7
Ultra	ST	6.1	9.2	7.4	22.6	4.2	5.5
WL324	WL	6.1	9.0	7.4	22.5	5.5	5.7
Vernema	USDA/WA	5.9	9.3	7.2	22.4	5.8	5.4
Affinity +Z	ABI	6.3	8.7	7.5	22.4	5.1	5.3
LegenDairy 2.0	CX	6.1	8.6	7.3	22.1	5.1	5.7
Blazer XL	CX	6.1	8.8	6.7	21.7	4.8	5.5
WL252HQ	WL	5.7	8.9	7.1	21.7	4.6	5.6
329	LH	5.6	8.9	7.0	21.5	5.0	5.5
Excalibur II	AS	6.1	8.9	6.4	21.4	5.5	6.1
5364	P	5.5	9.0	6.7	21.2	4.7	5.2
Aspen	ST	5.3	8.5	6.8	20.6	5.8	5.5
Vernal	USDA/WI	5.2	7.8	6.0	19.0	4.1	5.0
AV-T/AC		6.1	9.3	7.4	22.9	Mean 5.6	5.8
CV (%)		9.3	6.1	10.0	4.7		
LSD 0.05 (T/AC)		0.8	0.8	0.4	1.5		

<sup>1</sup> ABI	ABI Alfalfa	EU	Eureka Seed Co.	ST	Seed Tec International/Eureka
AS	Allied Seed Co-op	FG	Forage Genetics	TF	Tourneur-Freres, France
CG	Cargill Hybrid Seeds	GP	Great Plains Res. Co. Inc.	UN	Union Seed Co.
CLL	Cenex/Land O'Lakes	K	Keltgen/Mycogen	USDA	U.S. Dept. of Agriculture
CS	Clark Seeds, Inc.	LH	L & H Seed, Inc.	WA	Washington State University
CW	Cal/West Seeds	MBS	MBS, Inc.	WE	Wilbur Ellis
CX	Cenex	NK	Northrup King Co.	WI	University of Wisconsin
DK	DeKalb Genetics Corp.	OS	Olberding Seed	WL	W-L Research, Inc.
DS	Dairyland Seed Co., Inc.	P	Pioneer Hi-Bred International, Inc.		
EG	Eppich Grain, Inc.	RS	Research Seed		

<sup>2</sup> Differences in total yield column are due to rounding.<sup>3</sup> Regrowth ratings from visual estimates on 6/2, 7/9, & 8/12/98. Scale: 1 = least, 9 = most.

<sup>4</sup> Regrowth ratings from visual estimates on 6/4, 7/12, & 8/12/99. Scale: 1 = least, 9 = most