2008 VARIETAL RECOMMENDATION

Carter

WestBred, LLC request that 'Carter' hard red winter wheat be considered for "Variety Recommendation in the State of Montana".

A motion that Carter be recommended as a hard red winter wheat for Districts 2, 3, 4, 5 and 6.

Carter is a hard red winter wheat selected from the progeny of the cross Jagger x Rampart. PVP will be applied for.

Over a 3 year period, 24 station years of data, Carter has performed as well as or slightly better than the check varieties except CDC Falcon (Table 1). The average test weight is greater or equal to check varieties. (Table 1). Percent protein is equal to Genou, slightly less than Rampart, but greater than CDC Falcon (Table 1). Carter is a semidwarf variety with its plant height being less than all of the check varieties (Table 2). The average heading date of Carter is similar to the check varieties CDC Falcon and Genou and 1 day earlier than Rampart (Table 2). Carter is a semi-solid variety with tolerance to the wheat stem sawfly (Tables 3, 4 and 5) Individual location data are on Tables 7 through 14.

Disease data from Kalispell and Bozeman show Carter to have moderate resistance to stripe rust (Table 5).

Winter survival and winterkill data show Carter to have better survival than Genou and Rampart, but not as winter hardy as CDC Falcon (Table 6).

Milling and Baking data from MSU 2005-2006 show Carter to be an acceptable quality wheat (Table 15 and 16).

Submitted by Craig Cook, WestBred, LLC

Table 1. 2004-2007 Intrastate Winter Wheat Test (Exp. 3501): Combined Locations Yield, Test Weight and Protein

	Cultivar/Line	Grain Yield (bushels/acre) [1/]			Test Weight (lb/bu)			Protein (%)		
		2007	2006-2007	2005-2007	2007	2006-2007	2005-2007	2007	2006-2007	2005-2007
	location-years	8	16	24	8	16	24	8	16	24
#	**Carter**	**78.0**	**67.3**	**67.2**	**61.2**	**61.4**	**61.1**	**13.0**	**13.3**	**13.1**
	CDC Falcon	81.5	72.5	71.0	60.3	61.2	60.6	12.4	12.2	12.3
	Genou	71.1	65.9	64.8	60.5	61.4	60.9	13.2	13.3	13.3
	Rampart	66.4	62.6	62.7	60.1	61.1	61.1	13.7	13.9	13.9
	Average***	74.0	67.3	66.5	60.4	61.3	60.9	12.8	12.9	12.9
	LSD (0.05)	6.4	4.5	4.8	1.0	0.6	0.9	0.6	0.4	0.4
	C.V.	8.8	9.6	12.6	1.7	1.3	2.6	4.4	4.9	5.0

+ = new for 2007, # = paid entry

[1/] LSD for Yield based on test means for each year.

** = indicates highest value within a column

* = indicates varieties with values equal to highest variety within a column based on Fisher's protected LSD (p=0.05)

*** Averages and statistics are based on the entire Intrastate trial (49 entries)

Table 2. 2004-2007 Intrastate Winter Wheat Test (Exp. 3501): Combined Locations Heading Date, Height, and Lodging

	Cultivar/Line	Heading Date (Julian)			Plant Height (in)			Lodging Score (0-9)	
		2007	2006-2007	2005-2007	2007	2006-2007	2005-2007	2005	2004-2005
#	**Carter**	**158.9**	**156.7**	**158.5**	**31.7**	**29.2**	**30.0**	**0.1**	
	CDC Falcon	158.3	156.2	158.1	32.6	29.7	30.5	0.0	0.0
	Genou	157.9	156.4	158.7	38.6	35.8	36.3	0.8	0.7
	Rampart	159.7	157.7	159.6	38.5	35.4	36.1	3.9	2.6
	Average***	158.7	156.7	158.5	36.8	34.2	34.8	0.9	0.9
	LSD (0.05)	1.3	0.9	0.7	1.6	1.1	0.8	2.1	ns
	C.V.	0.9	0.8	0.7	4.5	4.6	4.2	119	146

+ = new for 2007, # = paid entry

** = indicates highest value within a column

* = indicates varieties with values equal to highest variety within a column based on Fisher's protected LSD (p=0.05)

*** Averages and statistics are based on the entire Intrastate trial (49 entries)

Table 3. 2006 Intrastate Winter Wheat Test (Exp. 35): Multi-Location Stem Solidness (5-25)

	Cultivar/Line	Bozeman	Havre	Conrad	3 Loc
	Rampart	22.7**	22.3**	23.1**	22.7**
	Genou	19.9	18.8	19.5	19.4
#	**Carter**	**14.2**	**14.4**	**14.5**	**14.4**
	Ledger	11.5	13.1	10.3	11.6
	Average***	15.6	15.7	15.5	15.6
	LSD (0.05)	2.4	2.3	2.2	1.3
	C.V. (%)	8.9	8.6	8.3	8.8
	P-value (Varieties)	<.0001	<.0001	<.0001	<.0001

Locations were non-significant (P= .1804)

+ = new for 2006 # = paid entry

** = indicates highest value within a column

* = indicates varieties with values equal to highest variety within a column based on Fisher's protected LSD (p=0.05)

*** Averages and statistics are based on 11 entries

Table 4. 2007 Intrastate Winter Wheat Test (Exp. 35): Multi-Location Stem Solidness (5-25)

	Cultivar/Line	Bozeman	Havre	Moccasin	Conrad	4 Loc
	Rampart	19.7**	24.2**	21.6**	24.3**	22.4**
	Genou	16.8	21.3	20.8	18.2	19.3
#	**Carter (BZ9W02-2060)**	**12.6**	**16.3**	**15.5**	**15.7**	**15.0**
	CDC Falcon	6.3	7.3	7.3	7.2	7.0
	Average***	14.5	18.5	16.5	17.0	16.6
	LSD (0.05)	2.4	2.1	1.6	1.7	1.0
	C.V. (%)	10.0	6.7	5.8	5.9	7.1
	P-value (Varieties)	<.0001	<.0001	<.0001	<.0001	<.0001
	% stems with tunneling	2.6	29.2	2.1	23.1	

Locations were significant (P= <.0001)

+ = new for 2007, # = paid entry

** = indicates highest value within a column

* = indicates varieties with values equal to highest variety within a column based on Fisher's protected LSD (p=0.05)

*** Averages and statistics are based on 13 entries

Table 5. 2004-2007 Intrastate Winter Wheat Test (Exp. 3501): Combined Locations Sawfly Cutting and Stripe Rust						
	Cultivar/Line	Sawfly Cutting (%) Havre			Stripe Rust (%) Bozeman and Kalispell	
		2007	2006-2007	2005-2007	2007	2006-2007
	location-years	1	2	3	2	4
#	**Carter**	**13.9**	**18.2**	**18.1**	**3.4**	**18.0**
	CDC Falcon	28.2	27.6	28.5	9.5	29.2
	Genou	7.9	8.1	11.4	12.6	30.2
	Rampart	0.0	1.4	3.5	0.0	5.7
	Average***	26.7	25.6	26.7	9.6	20.3
	LSD (0.05)	19.5	18.4	14.2	16.0	17.9
	C.V.	42.1	35.3	32.4	83	63
+ = new for 2007, # = paid entry						
** = indicates highest value within a column						
* = indicates varieties with values equal to highest variety within a column based on Fisher's protected LSD (p=0.05)						
*** Averages and statistics are based on the entire Intrastate trial (49 entries)						

Table 6. 2003-2006 Intrastate Winter Wheat Test (Exp. 3501): Combined Locations Winter Survival and assocoated Yield								
		Locations: Williston (2003-2007), Sidney (2003-2006), Conrad and Moccasin in 2004 = 11 locations						
	Cultivar/Line	Winter Survival (%)			Yield [1/] under Winterkill			
		2007	2006	2005-2006	2007	2006	2005-2006	
	location-years	1	3	5	1	3	5	
#	**Carter**	**61.7**	**50.6**	**62.7**	**66.2**	**46.1**	**49.8**	
	CDC Falcon	75.0	67.0*	74.8*	74.9*	57.7*	58.1*	
	Genou	58.3	52.1	61.8	57.4	45.3	46.4	
	Rampart	40.0	38.3	48.6	51.1	40.3	42.8	
	Average***	59.0	55.5	62.4	63.1	49.5	49.9	
	LSD (0.05)	13.8	11.3	9.2	9.2	7.2	4.9	
	C.V.	14.5	12.4	11.8	9.0	8.9	7.8	
+ = new for 2007, # = paid entry								
** = indicates highest value within a column								
* = indicates varieties with values equal to highest variety within a column based on Fisher's protected LSD (p=0.05)								
*** Averages and statistics are based on the entire Intrastate trial (49 entries)								

Table 7. 2004-2007 Intrastate Winter Wheat Test (Exp. 3518): Conrad Yield, Test Weight and Protein										
	Cultivar/Line	Grain Yield (bushels/acre) [1/]			Test Weight (lb/bu)			Protein (%)		
		2007	2006-2007	2005-2007	2007	2006-2007	2005-2007	2007	2006-2007	2005-2007
			2 yr	3 yr		2 yr	3 yr		2 yr	3 yr
#	**Carter**	**60.9***	**65.2***	**70.7**	**62.6**	**62.8**	**63.1**	**13.1**	**13.2**	**13.4**
	CDC Falcon	60.9*	70.7*	75.2*	62.0	62.9*	63.1	12.3	12.4	12.5
	Genou	56.8	66.9*	73.3	60.1	61.8	62.7	12.8	13.2	12.9
	Rampart	49.6	60.4	63.5	60.0	62.2	62.5	13.7	14.1*	14.2**
	Average***	56.1	64.8	71.1	61.0	62.1	62.5	12.8	13.0	13.1
	LSD (0.05)	6.6	10.1	8.0		1.9	1.2		0.8	0.6
	C.V.	6.8	7.6	6.8		1.5	1.2		3.1	2.9
+ = new for 2007, # = paid entry				[1/] LSD for Yield based on test means for each year.						
** = indicates highest value within a column										
* = indicates varieties with values equal to highest variety within a column based on Fisher's protected LSD (p=0.05)										
*** Averages and statistics are based on the entire Intrastate trial (49 entries)										

Table 8. 2004-2007 Intrastate Winter Wheat Test (Exp. 3502): Havre Yield, Test Weight and Protein										
	Cultivar/Line	Grain Yield (bushels/acre) [1/]			Test Weight (lb/bu)			Protein (%)		
		2007	2006-2007	2005-2007	2007	2006-2007	2005-2007	2007	2006-2007	2005-2007
			2 yr	3 yr		2 yr	3 yr		2 yr	3 yr
#	**Carter**	**56.6**	**54.5**	**56.6**	**59.3**	**61.4**	**60.8**	**15.2**	**14.5**	**13.6**
	CDC Falcon	60.1	59.4	60.8	59.1	61.2	60.9	14.2	13.3	12.7
	Genou	56.7	55.3	57.7	59.4	61.4	60.8	14.8	14.3	13.7
	Rampart	55.0	53.5	55.4	58.5	61.1	60.4	15.5	14.9	14.5*
	Average***	54.8	54.9	55.2	59.6	61.2	61.1	14.4	13.9	13.4
	LSD (0.05)	8.0	ns	ns	1.0	1.2	0.8		0.8	0.9
	C.V.	8.3	7.7	8.7	0.9	1.0	0.8		2.7	4.3
+ = new for 2007, # = paid entry				[1/] LSD for Yield based on test means for each year.						
** = indicates highest value within a column										
* = indicates varieties with values equal to highest variety within a column based on Fisher's protected LSD (p=0.05)										
*** Averages and statistics are based on the entire Intrastate trial (49 entries)										

Table 9. 2004-2007 Intrastate Winter Wheat Test (Exp. 3507): Moccasin Yield, Test Weight and Protein										
	Cultivar/Line	Grain Yield (bushels/acre) [1/]			Test Weight (lb/bu)			Protein (%)		
		2007	2006-2007	2005-2007	2007	2006-2007	2005-2007	2007	2006-2007	2005-2007
			2 yr	3 yr		2 yr	3 yr		2 yr	3 yr
#	**Carter**	**75.2**	**62.2**	**54.2**	**63.9***	**61.4**	**60.3**	**9.9**	**11.7**	**13.2**
	CDC Falcon	74.6	64.2*	55.8	62.4	61.2	60.1	9.9	10.9	12.7
	Genou	72.4	62.2	52.7	62.9	61.4	60.3	9.5	10.9	13.0
	Rampart	60.4	52.7	46.7	61.2	61.1	59.9	11.1	11.4	13.7
	Average***	72.4	62.5	55.2	61.9	62.4	60.4	10.0	11.2	12.9
	LSD (0.05)	8.5	10.7	7.1	0.9	1.7	1.4		ns	ns
	C.V.	6.8	8.4	7.8	0.7	1.3	1.4		4.4	6.7
+ = new for 2007, # = paid entry				[1/] LSD for Yield based on test means for each year.						
** = indicates highest value within a column										
* = indicates varieties with values equal to highest variety within a column based on Fisher's protected LSD (p=0.05)										
*** Averages and statistics are based on the entire Intrastate trial (49 entries)										

Table 10. 2004-2007 Intrastate Winter Wheat Test (Exp. 3503): Sidney Yield, Test Weight and Protein										
	Cultivar/Line	Grain Yield (bushels/acre) [1/]			Test Weight (lb/bu)			Protein (%)		
		2007	2006-2007	2005-2007	2007	2006-2007	2005-2007	2007	2006-2007	2005-2007
			2 yr	3 yr		2 yr	3 yr		2 yr	3 yr
#	**Carter**	**71.3***	**57.1**	**54.3**	**61.4**	**61.4**	**61.6**	**11.7**	**12.6**	**11.6**
	CDC Falcon	71.1*	66.4	61.5	60.4	61.0	61.3	11.1	11.4	10.9
	Genou	55.1	53.8	49.5	58.8	60.0	60.8	13.6	14.3	12.6
	Rampart	53.5	49.4	46.2	60.5	60.4	60.9	13.3	13.3	12.4
	Average***	60.4	55.7	51.8	60.2	60.6	61.0	11.9	12.5	11.6
	LSD (0.05)	7.8	10.0	7.4	1.4	1.3	0.9		1.6	1.4
	C.V.	7.6	8.8	8.7	1.3	1.0	0.9		6.4	7.2
+ = new for 2007, # = paid entry				[1/] LSD for Yield based on test means for each year.						
** = indicates highest value within a column										
* = indicates varieties with values equal to highest variety within a column based on Fisher's protected LSD (p=0.05)										
*** Averages and statistics are based on the entire Intrastate trial (49 entries)										

Table 11. 2004-2007 Intrastate Winter Wheat Test (Exp. 3501): Bozeman Yield, Test Weight and Protein									
	Cultivar/Line	Grain Yield (bushels/acre) [1/]			Test Weight (lb/bu)			Protein (%)	
		2007	2006-2007	2005-2007	2007	2006-2007	2005-2007	2007	2006-2007	2005-2007
			2 yr	3 yr		2 yr	3 yr		2 yr	3 yr
#	**Carter**	**106.5**	**90.1**	**96.0**	**61.6**	**61.5**	**60.4**	**12.6**	**12.0**	**13.1**
	CDC Falcon	111.6	94.6*	95.9	61.7	61.7	60.3	11.6	11.3	12.3
	Genou	96.7	83.9	87.2	61.3	62.1	61.4	13.2	12.3	13.3
	Rampart	97.0	88.7	91.2	61.4	62.3	61.7	14.3	13.2	13.9
	Average***	104.5	91.4	94.4	61.3	62.0	61.3	12.8	12.0	12.8
	LSD (0.05)	11.0	13.8	9.3	0.9	1.0	0.9		0.8	0.7
	C.V.	6.1	9.6	6.0	0.8	0.8	0.9		3.4	3.5
+ = new for 2007, # = paid entry				[1/] LSD for Yield based on test means for each year.						
** = indicates highest value within a column										
* = indicates varieties with values equal to highest variety within a column based on Fisher's protected LSD (p=0.05)										
*** Averages and statistics are based on the entire Intrastate trial (49 entries)										

Table 12. 2004-2007 Intrastate Winter Wheat Test (Exp. 3504): Williston Yield, Test Weight and Protein									
	Cultivar/Line	Grain Yield (bushels/acre) [1/]			Test Weight (lb/bu)			Protein (%)	
		2007	2006-2007	2005-2007	2007	2006-2007	2005-2007	2007	2006-2007	2005-2007
			2 yr	3 yr		2 yr	3 yr		2 yr	3 yr
#	**Carter**	**66.2**	**47.7**	**52.5**	**58.7**	**58.0**	**59.3**	**14.8**	**15.0**	**14.4**
	CDC Falcon	74.9	55.8	59.0	58.3	57.8	59.1	13.9	13.8	13.3
	Genou	57.4	41.7	46.2	59.7	58.2	59.5	14.6	15.1	14.6
	Rampart	51.1	37.9	43.0	59.5	58.0	59.0	15.3	15.6	15.2
	Average***	63.1	48.4	51.1	59.2	58.6	59.6	14.0	14.2	13.8
	LSD (0.05)	9.2	8.9	6.5	1.2	2.0	1.3		0.8	0.8
	C.V.	9.0	9.0	7.8	1.0	1.7	1.3		2.7	3.4
+ = new for 2007, # = paid entry				[1/] LSD for Yield based on test means for each year.						
** = indicates highest value within a column										
* = indicates varieties with values equal to highest variety within a column based on Fisher's protected LSD (p=0.05)										
*** Averages and statistics are based on the entire Intrastate trial (49 entries)										

Table 13. 2004-2007 Intrastate Winter Wheat Test (Exp. 3505): Kalispell Yield, Test Weight and Protein									
	Cultivar/Line	Grain Yield (bushels/acre) [1/]			Test Weight (lb/bu)			Protein (%)		
		2007	2006-2007	2005-2007	2007	2006-2007	2005-2007	2007	2006-2007	2005-2007
			2 yr	3 yr		2 yr	3 yr		2 yr	3 yr
#	**Carter**	**99.2**	**79.7**	**75.8**	**58.7**	**62.2**	**61.8**	**12.8**	**13.2**	**12.8**
	CDC Falcon	104.1	80.5	77.0	57.5	62.0	59.4	12.7	12.3	12.0
	Genou	86.8	77.1	74.2	59.5	63.0	60.5	12.9	12.7	12.7
	Rampart	81.6	77.8	83.0	59.3	62.8	63.1	13.8	13.8	13.4
	Average***	91.1	75.6	74.5	59.2	62.3	60.0	12.7	12.8	12.6
	LSD (0.05)	10.2	16.4	25.5		2.1	ns		1.1	0.9
	C.V.	6.9	10.7	20.9		1.6	6.3		4.4	4.4
+ = new for 2007, # = paid entry				[1/] LSD for Yield based on test means for each year.						
** = indicates highest value within a column										
* = indicates varieties with values equal to highest variety within a column based on Fisher's protected LSD (p=0.05)										
*** Averages and statistics are based on the entire Intrastate trial (49 entries)										

Table 14. 2004-2007 Intrastate Winter Wheat Test (Exp. 3508): Huntley Yield, Test Weight and Protein									
	Cultivar/Line	Grain Yield (bushels/acre) [1/]			Test Weight (lb/bu)			Protein (%)		
		2007	2006-2007	2005-2007	2007	2006-2007	2005-2007	2007	2006-2007	2005-2007
			2 yr	3 yr		2 yr	3 yr		2 yr	3 yr
#	**Carter**	**86.0**	**81.6**	**77.5**	**61.0**	**61.7**	**61.6**	**13.7**	**14.4**	**13.2**
	CDC Falcon	88.3	88.4	83.1	60.8	60.8	60.5	12.9	12.2	12.2
	Genou	89.1	86.2	77.4	61.3	62.6	61.5	13.2	13.9	13.5
	Rampart	83.0	80.4	72.7	60.0	61.1	61.0	14.4	14.9	13.8
	Average***	89.1	84.8	78.9	60.8	61.2	61.0	13.5	13.5	12.7
	LSD (0.05)	9.1	9.1	7.5	1.0	2.0	1.5		1.6	1.1
	C.V.	6.0	5.3	5.8	0.9	1.6	1.5		5.9	5.5
+ = new for 2007, # = paid entry				[1/] LSD for Yield based on test means for each year.						
** = indicates highest value within a column										
* = indicates varieties with values equal to highest variety within a column based on Fisher's protected LSD (p=0.05)										
*** Averages and statistics are based on the entire Intrastate trial (49 entries)										

Table 15. 2005 Means across 4 Locations (Exp. 35) Intrastate Winter Wheat Nursery - Mill & Bake and Noodle Data																	
	Bozeman, Havre, Huntley, Conrad																
							Flour Color							Test Bake			
VARIETY	CLASS	Single Kernel Hardness	Wheat protein, % (12 m.b.)	Flour Yield %	Flour Protein%(14%m.b)	L*brightness	A*green-red	B*blue-yellow	Wheat Ash, %	Flour Ash, %	Tolerance	Mixing Time Min	Water Absorption%	Mixing Time Min	Water Absoption%	Loaf Volume	Crumb Grain Score
Carter	**HRW**	**86.8****	12.7	69.2	10.9	90.0	-1.23	10.90	1.54	0.40	4.3	5.9	**60.8***	11.8	**74.4***	**1014***	3.3
CDC Falcon	**HRW**	72.9	12.6	65.4	11.0	90.4	-0.91	9.50	**1.44***	0.42	4.3	4.6	59.4	7.8	70.1	**1038***	4.0
Genou	**HRW**	**82.9***	**13.2***	70.3	11.5	90.8	-1.30	10.15	1.56	0.38	4.0	4.6	**60.9***	9.2	71.4	**1078****	4.0
Rampart	**HRW**	77.6	**13.9***	69.7	**12.2***	90.3	-1.46	11.79	**1.52***	0.40	4.3	4.4	**62.0***	10.1	**75.0****	**1060***	4.0
Average***		**77.9**	**12.7**	**68.8**	**11.0**	**90.5**	**-1.28**	**10.79**	**1.55**	**0.39**	**4.0**	**4.7**	**60.1**	**7.4**	**71.3**	**1009**	**3.7**
LSD (0.05)		**5.5**	**1.0**	**1.3**	**0.9**	**0.5**	**0.14**	**0.41**	**0.12**	**0.03**	**0.9**	**1.0**	**1.9**	**2.1**	**2.4**	**72**	**ns**
C.V.		**5.0**	**5.8**	**1.3**	**6.0**	**0.3**	**7.5**	**2.7**	**5.5**	**4.8**	**15.4**	**14.6**	**2.3**	**20.2**	**2.4**	**5.1**	**13.1**
P-Value		**<.0001**	**<.0001**	**<.0001**	**<.0001**	**<.0001**	**<.0001**	**<.0001**	**0.0266**	**<.0001**	**<.0001**	**<.0001**	**<.0001**	**<.0001**	**<.0001**	**<.0001**	**0.3491**
*** Averages and statistics are based on the entire Intrastate trial (49 entries)																	

Table 16. 2006 Means across 4 Locations (Exp. 35) Intrastate Winter Wheat Nursery - Mill & Bake and Noodle Data																		
	Havre,Moccasin, Huntley, Conrad																	
								Flour Color				Mixograph			Test Bake			
VARIETY	CLASS	PPO	Single Kernel Hardness	Wheat protein, % (12 m.b.)	Flour Yield %	Flour Protein%(14%m.b)	L*brightness	A*green-red	B*blue-yellow	Wheat Ash, %	Flour Ash, %	Tolerance	Mixing Time Min	Water Absorption%	Mixing Time Min	Water Absoption%	Loaf Volume	Crumb Grain Score
Carter	**HRW**	0.572	86.2	**13.6***	70.7	**12.2***	89.8	-1.26	11.7	**1.37***	0.45	4.0	5.8	**65.1****	10.4	**76.4****	**1076***	3.8
CDC Falcon	**HRW**	0.829	71.9	12.0	67.0	10.6	90.4	-1.04	9.6	**1.34***	0.45	2.8	4.4	59.5	6.6	69.6	976	3.8
Genou	**HRW**	0.772	79.9	**13.3***	**71.0***	**12.2***	90.5	-1.30	10.3	**1.36***	0.43	3.5	4.1	62.7	6.7	72.5	**1073***	4.0
Rampart	**HRW**	0.624	78.8	**13.9***	70.4	**12.6***	90.0	-1.58	12.1	**1.37***	0.45	2.8	4.3	**63.7***	8.6	**74.5***	**1064***	4.0
Average* **		**0.604**	**76.1**	**12.9**	**69.5**	**11.5**	**90.3**	**-1.35**	**11.1**	**1.37**	**0.43**	**3.0**	**4.1**	**61.4**	**5.9**	**71.2**	**991**	**3.7**
LSD (0.05)		**0.148**	**6.6**	**1.2**	**1.3**	**1.0**	**0.4**	**0.11**	**0.50**	**0.12**	**0.02**	**0.9**	**0.7**	**2.1**	**1.8**	**2.3**	**71**	**0.6**
C.V.		**17.4**	**6.1**	**6.8**	**1.3**	**6.1**	**0.3**	**5.8**	**3.4**	**6.0**	**2.7**	**22.6**	**13.1**	**2.5**	**21.1**	**2.4**	**5.1**	**10.6**
P-Value		**<.0001**	**<.0001**	**0.0057**	**<.0001**	**<.0001**	**0.0001**	**<.0001**	**<.0001**	**0.0381**	**<.0001**	**<.0001**	**<.0001**	**<.0001**	**<.0001**	**<.0001**	**<.0001**	**<.0001**
*** Averages and statistics are based on the entire Intrastate trial (49 entries)																		