

Table 5 October 2012 Arethusa Farm Physical Soil Characteristics (n=24, 4 per treatment)

Treatment	Top Bulk Density (g/cm <sup>3</sup> )	Bottom Bulk Density (g/cm <sup>3</sup> )	Compaction at 6 inches (psi)	Compaction at 12 inches (psi)	Compaction at 18 inches (psi)	Aggregate stability (%)
Fallow	N/A	N/A	277.0	437.3	397.5	N/A
Lupine	N/A	N/A	221.5	424.5	406.0*	N/A
Mix	N/A	N/A	263.5	449.0	361.5	N/A
Radish	N/A	N/A	236.0	404.5	392.5	N/A
Rye	N/A	N/A	269.5	460.0*	372.5	N/A
Vetch	N/A	N/A	303.0*	451.0	380.5	N/A
Mean	N/A	N/A	261.8	437.7	385.1	N/A

\*Indicates highest measurement. Bold indicates no significant difference from highest measurement.

Table 6 October 2012 Intervale Center Physical Soil Characteristics (n=24, 4 per treatment)

Treatment	Top Bulk Density (g/cm <sup>3</sup> )	Bottom Bulk Density (g/cm <sup>3</sup> )	Compaction at 6 inches (psi)	Compaction at 12 inches (psi)	Compaction at 18 inches (psi)	Aggregate stability (%)
Fallow	N/A	N/A	60.0*	187.0	315.0*	N/A
Lupine	N/A	N/A	58.5	220*	277.0	N/A
Mix	N/A	N/A	50.0	199.5	289.0	N/A
Radish	N/A	N/A	52.0	204.5	265.5	N/A
Rye	N/A	N/A	24.5	170.5	282.0	N/A
Vetch	N/A	N/A	48.5	217.0	297.0	N/A
Mean	N/A	N/A	48.9	199.8	287.6	N/A

\*Indicates highest measurement. Bold indicates no significant difference from highest measurement.

Table 7 October 2012 Adam's Berry Farm Physical Soil Characteristics (n=24, 4 per treatment)

Treatment	Top Bulk Density (g/cm <sup>3</sup> )	Bottom Bulk Density (g/cm <sup>3</sup> )	Compaction at 6 inches (psi)	Compaction at 12 inches (psi)	Compaction at 18 inches (psi)	Aggregate stability (%)
Fallow	N/A	N/A	224.5	295.0*	300.0	N/A
Lupine	N/A	N/A	212.5	282.0	294.5	N/A
Mix	N/A	N/A	241.5*	293.5	324.5*	N/A
Radish	N/A	N/A	223.5	273.0	270.5	N/A
Rye	N/A	N/A	229.5	295.0*	287.5	N/A
Vetch	N/A	N/A	225.5	281.5	308.0	N/A
Mean	N/A	N/A	226.2	289.7	297.5	N/A

\*Indicates highest measurement. Bold indicates no significant difference from highest measurement.

Table 8 May 2013 Arethusa Farm Physical Soil Characteristics (n=24, 4 per treatment)

Treatment	Top Bulk Density (g/cm <sup>3</sup> )	Bottom Bulk Density (g/cm <sup>3</sup> )	Compaction at 6 inches (psi)	Compaction at 12 inches (psi)	Compaction at 18 inches (psi)	Aggregate stability (%)
Fallow	1.17*	1.12	238.0	<b>271.0</b>	367.0	<b>31.5</b>
Lupine	1.12	1.24*	225.5	<b>283.0</b>	350.5	<b>34.3</b>
Mix	1.13	1.24*	243.5	<b>309.0*</b>	372.0	<b>35.0</b>
Radish	1.14	1.19	230.5	261.5	345.5	26.8
Rye	1.17*	1.23	220.0	<b>307.0</b>	359.5	<b>36.0*</b>
Vetch	1.16	1.23	249.0*	<b>306.0</b>	395.5*	<b>30.8</b>
Mean	1.15	1.20	234.4	289.6	365.0	32.4

\*Indicates highest measurement. Bold indicates no significant difference from highest measurement.

Table 9 May 2013 Intervale Center Physical Soil Characteristics (n=18, 3 per treatment)

Treatment	Top Bulk Density (g/cm <sup>3</sup> )	Bottom Bulk Density (g/cm <sup>3</sup> )	Compaction at 6 inches (psi)	Compaction at 12 inches (psi)	Compaction at 18 inches (psi)	Aggregate stability (%)
Fallow	0.83	0.96	N/A	N/A	N/A	67.3
Lupine	<b>0.98</b>	0.97	N/A	N/A	N/A	68.3
Mix	<b>0.99</b>	1.07*	N/A	N/A	N/A	62.3
Radish	<b>1.03</b>	1.02	N/A	N/A	N/A	72.3*
Rye	<b>1.14*</b>	1.07*	N/A	N/A	N/A	63.3
Vetch	<b>0.91</b>	1.01	N/A	N/A	N/A	70.8
Mean	0.98	1.02	N/A	N/A	N/A	67.3

\*Indicates highest measurement. Bold indicates no significant difference from highest measurement.

Table 10 May 2013 Adam's Berry Farm Physical Soil Characteristics (n=24, 4 per treatment)

Treatment	Top Bulk Density (g/cm <sup>3</sup> )	Bottom Bulk Density (g/cm <sup>3</sup> )	Compaction at 6 inches (psi)	Compaction at 12 inches (psi)	Compaction at 18 inches (psi)	Aggregate stability (%)
Fallow	<b>0.98</b>	<b>1.10</b>	197.5	250.5	319.5	63.8
Lupine	0.97	<b>1.19*</b>	188.8	242.5	255.6	68.0
Mix	<b>1.05</b>	1.04	205.5*	350.0*	335.3*	66.0
Radish	<b>1.00</b>	<b>1.16</b>	180.9	264.5	274.0	64.8
Rye	<b>1.04</b>	<b>1.15</b>	181.5	245.5	267.0	71.0
Vetch	<b>1.10*</b>	<b>1.16</b>	186.8	283.4	287.0	63.8
Mean	1.02	1.13	190.1	266.9	289.7	66.1

\*Indicates highest measurement. Bold indicates no significant difference from highest measurement.

Table 11 August 2013 Arethusa Farm Physical Soil Characteristics (n=24, 4 per treatment)

Treatment	Top Bulk Density (g/cm <sup>3</sup> )	Bottom Bulk Density (g/cm <sup>3</sup> )	Compaction at 6 inches (psi)	Compaction at 12 inches (psi)	Compaction at 18 inches (psi)	Aggregate stability (%)
Fallow	N/A	1.25	286.5*	346.0	368.0	<b>31.0</b>
Lupine	N/A	1.30*	267.5	355.0	354.0	<b>33.8</b>
Mix	N/A	1.25	267.5	382.5	373.5	26.8
Radish	N/A	1.30*	251.5	259.0	371.0	<b>34.5</b>
Rye	N/A	1.28	251.0	286.0*	391.5*	<b>35.3*</b>
Vetch	N/A	1.25	240.5	352.0	354.0	<b>30.0</b>
Mean	N/A	1.30	260.8	363.4	368.7	31.9

\*Indicates highest measurement. Bold indicates no significant difference from highest measurement.

Table 12 October 2013 Adam's Berry Farm Physical Soil Characteristics (n=18, 3 per treatment)

Treatment	Top Bulk Density (g/cm <sup>3</sup> )	Bottom Bulk Density (g/cm <sup>3</sup> )	Compaction at 6 inches (psi)	Compaction at 12 inches (psi)	Compaction at 18 inches (psi)	Aggregate stability (%)
Fallow	0.83	0.93	221.3	258.7	278.7	<b>83.7*</b>
Lupine	<b>0.97</b>	1.10	238.0	256.0	226.0	<b>76.9</b>
Mix	<b>0.87</b>	0.97	<b>360.0*</b>	318.0	<b>334.7</b>	<b>82.2</b>
Radish	<b>0.85</b>	1.07	<b>319.3</b>	333.3	306.0	<b>76.3</b>
Rye	<b>0.90</b>	0.97	265.3	<b>433.3*</b>	<b>402.0*</b>	<b>82.2</b>
Vetch	<b>1.0*</b>	<b>1.23*</b>	255.3	271.3	245.3	69.1
Mean	0.91	1.04	276.6	311.8	298.8	78.4

\*Indicates highest measurement. Bold indicates no significant difference from highest measurement.