Table 1. Monthly precipitation for 2006-07 SAREC location, as compared to 30 year average\*.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Month | 2006 Precipitation | 2007Precipitation | 2008Precipitation | 30 Year Avg. Precip. |
| January | .18 | .13 | .10 | .31 |
| February | .36 | .13 | .18 | .40 |
| March | 1.88 | .76 | .25 | .70 |
| April | .32 | 1.48 | .42 | 1.68 |
| May | .38 | 1.46 | 1.91 | 2.54 |
| June | .59 | .21 | 2.43 | 2.09 |
| July | .57 | .99 | 1.4 | 1.78 |
| August | 1.94 | 0.28 | 2.44 | 1.19 |
| September | .05 | 0.25 | 1.04 | 1.27 |
| October | .48 | 1.53 | .55 | .95 |
| November | -0- | 0.09 | .34 | .57 |
| December | .27 | 0.99 | .04 | .36 |
| TOTAL | 7.02 | 8.3 | 11.1 | 13.84 |

\*Actual weather station data collected on-site

Table 2. Nutrient analysis of winter pea plots, 2007 WS05-117 Dryland cropping system project.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Date | Rep | Plot | DM | CP | ADF | NEM | NEG | NEL | TDN | Ca | P |
|  |  |  | % | % DM | % DM | Mcal/lb | Mcal/lb | Mcal/lb | % DM | % DM | % DM |
| 05/19/07 | A | NE | 18.65 | 22.34 | 20.48 | 0.87 | 0.55 | 0.79 | 76.19 | 0.82 | 0.39 |
| 05/19/07 | B | NE | 19.50 | 19.17 | 20.30 | 0.88 | 0.55 | 0.79 | 76.39 | 0.93 | 0.36 |
| 05/19/07 | C | NW | 18.79 | 22.85 | 15.97 | 0.94 | 0.61 | 0.85 | 81.18 | 1.32 | 0.34 |
| 05/19/07 | D | NW | 17.18 | 25.09 | 20.30 | 0.88 | 0.55 | 0.79 | 76.39 | 0.83 | 0.40 |
| 05/19/07 | E | SE | 17.27 | 25.32 | 22.66 | 0.84 | 0.51 | 0.77 | 73.77 | 0.98 | 0.47 |
| 05/19/07 | F | SE | 16.67 | 26.37 | 21.90 | 0.85 | 0.52 | 0.78 | 74.62 | 0.83 | 0.45 |
| 05/19/07 | G | SW | 17.31 | 20.85 | 20.64 | 0.87 | 0.54 | 0.79 | 76.01 | 1.13 | 0.37 |
| 05/19/07 | H | SW | 17.77 | 23.00 | 20.15 | 0.88 | 0.55 | 0.80 | 76.55 | 0.77 | 0.41 |
| 06/01/07 | A  | NE | 20.14 | 19.59 | 22.26 | 0.85 | 0.52 | 0.77 | 74.22 | 0.91 | 0.27 |
| 06/01/07 | B | NE | 17.85 | 25.45 | 22.41 | 0.84 | 0.52 | 0.77 | 74.05 | 1.30 | 0.30 |
| 06/01/07 | C | NW | 21.42 | 18.89 | 22.09 | 0.85 | 0.52 | 0.77 | 74.40 | 1.15 | 0.17 |
| 06/01/07 | D | NW | 18.26 | 22.78 | 22.44 | 0.84 | 0.52 | 0.77 | 74.02 | 1.26 | 0.20 |
| 06/01/07 | E | SE | 18.48 | 18.46 | 23.58 | 0.83 | 0.50 | 0.75 | 72.76 | 1.26 | 0.18 |
| 06/01/07 | F | SE | 19.80 | 19.81 | 22.60 | 0.84 | 0.51 | 0.77 | 73.84 | 1.16 | 0.22 |
| 06/01/07 | G | SW | 19.75 | 18.71 | 23.08 | 0.83 | 0.51 | 0.76 | 73.31 | 1.14 | 0.22 |
| 06/01/07 | H | SW | 19.47 | 21.72 | 23.64 | 0.83 | 0.50 | 0.75 | 72.69 | 1.00 | 0.27 |
| 06/15/07 | A | NE | 32.39 | 17.05 | 22.74 | 0.84 | 0.51 | 0.76 | 73.69 | 1.06 | 0.23 |
| 06/15/07 | B | NE | 26.12 | 20.59 | 23.92 | 0.82 | 0.50 | 0.75 | 72.38 | 1.06 | 0.22 |
| 06/15/07 | C | NW | 41.05 | 17.34 | 22.38 | 0.84 | 0.52 | 0.77 | 74.08 | 1.10 | 0.17 |
| 06/15/07 | D | NW | 48.54 | 13.79 | 26.26 | 0.79 | 0.46 | 0.72 | 69.79 | 1.28 | 0.16 |
| 06/15/07 | E | SE | 29.05 | 16.71 | 23.00 | 0.84 | 0.51 | 0.76 | 73.40 | 1.06 | 0.18 |
| 06/15/07 | F | SE | 25.23 | 20.00 | 23.33 | 0.83 | 0.50 | 0.76 | 73.03 | 1.07 | 0.22 |
| 06/15/07 | G | SW | 29.21 | 18.27 | 25.32 | 0.80 | 0.48 | 0.73 | 70.83 | 1.09 | 0.19 |
| 06/15/07 | H | SW | 26.48 | 18.16 | 24.53 | 0.81 | 0.49 | 0.74 | 71.70 | 1.07 | 0.20 |
| 07/01/07 | A | NE | 48.37 | 14.36 | 21.37 | 0.86 | 0.53 | 0.78 | 75.20 | 1.18 | 0.28 |
| 07/01/07 | B | NE | 32.93 | 15.36 | 25.61 | 0.80 | 0.47 | 0.73 | 70.51 | 1.21 | 0.15 |
| 07/01/07 | C | NW | 51.05 | 11.15 | 28.84 | 0.75 | 0.42 | 0.69 | 66.93 | 1.52 | 0.14 |
| 07/01/07 | D | NW | 69.05 | 15.60 | 24.45 | 0.81 | 0.49 | 0.74 | 71.79 | 1.77 | 0.24 |
| 07/01/07 | E | SE | 34.12 | 19.50 | 20.27 | 0.88 | 0.55 | 0.80 | 76.42 | 1.22 | 0.24 |
| 07/01/07 | F | SE | 38.49 | 17.19 | 23.83 | 0.82 | 0.50 | 0.75 | 72.48 | 1.27 | 0.18 |
| 07/01/07 | G | SW | 36.65 | 19.48 | 22.65 | 0.84 | 0.51 | 0.77 | 73.78 | 1.30 | 0.23 |
| 07/01/07 | H | SW | 39.67 | 13.64 | 26.22 | 0.79 | 0.46 | 0.72 | 69.83 | 1.28 | 0.16 |

Table 3. Pea Forage Sampling @ SAREC for SW05-117 Dryland Cropping System Project, June 1, 2007

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Weight:** | **Bag** | **Bag + Peas** | **Peas**  | **Dry Peas** | **DM** | **Average** | **St. Dev** | **CV** | **Fresh lb/acre** | **Average** | **St. Dev** | **CV** | **DM lb/acre** | **Average** | **St. Dev** |
| NE | 22 | 176 | 154 | 34.27 | 22.25% |  |  |  | 1372.43 |  |  |  | 305.41 |  |  |
| NE | 22 | 34.51 | 12.51 | 2.7 | 21.58% |  |  |  | 111.49 |  |  |  | 24.06 |  |  |
| NE | 22 | 119.86 | 97.86 | 21.02 | 21.48% |  |  |  | 872.12 |  |  |  | 187.33 |  |  |
| NE | 22 | 63.68 | 41.68 | 8.56 | 20.54% | 20.64% | 0.0156 | 7.58 | 371.45 | 681.87 | 558.20 | 81.86 | 76.29 | 148.27 | 124.94 |
| NW | 22 | 85.63 | 63.63 | 16.76 | 26.34% |  |  |  | 567.06 |  |  |  | 149.36 |  |  |
| NW | 22 | 199 | 177 | 43.58 | 24.62% |  |  |  | 1577.41 |  |  |  | 388.38 |  |  |
| NW | 22 | 126.58 | 104.6 | 22.14 | 21.17% |  |  |  | 932.01 |  |  |  | 197.31 |  |  |
| NW | 22 | 137.34 | 115.3 | 23.28 | 20.18% | 22.00% | 0.0297 | 13.5 | 1027.90 | 1026.09 | 417.74 | 40.71 | 207.47 | 235.63 | 104.94 |
| North Total |  |  |  | 21.32% | 0.0237 | 11.1 |  | 853.98 | 492.12 | 57.63 |  | 191.95 | 116.57 |
| SE | 22 | 284 | 262 | 51.58 | 19.69% |  |  |  | 2334.92 |  |  |  | 459.68 |  |  |
| SE | 22 | 257 | 235 | 46.04 | 19.59% |  |  |  | 2094.30 |  |  |  | 410.30 |  |  |
| SE | 22 | 151 | 129 | 26.11 | 20.24% |  |  |  | 1149.63 |  |  |  | 232.69 |  |  |
| SE | 22 | 257 | 235 | 53.43 | 22.74% | 20.09% | 0.0142 | 7.08 | 2094.30 | 1918.29 | 524.84 | 27.36 | 476.16 | 394.71 | 111.58 |
| SW | 22 | 40.17 | 18.17 | 4.26 | 23.45% |  |  |  | 161.93 |  |  |  | 37.96 |  |  |
| SW | 22 | 114.97 | 92.97 | 19.01 | 20.45% |  |  |  | 828.54 |  |  |  | 169.42 |  |  |
| SW | 22 | 182 | 160 | 34.09 | 21.31% |  |  |  | 1425.90 |  |  |  | 303.81 |  |  |
| SW | 22 | 76.651 | 54.65 | 11.1 | 20.31% | 20.79% | 0.0145 | 6.97 | 487.04 | 725.85 | 540.26 | 74.43 | 98.92 | 152.53 | 114.26 |
| South Total |  |  |  | 20.44% | 0.0142 | 6.93 |  | 1322.07 | 805.85 | 60.95 |  | 273.62 | 166.40 |

Table 4. Average spring percent row cover, fall-sown.

 Variety 2008 2009

Austrian Winter Pea 31.25a 100.00a

Laramie Medic 26.25a 55.00c

Common Hairy Vetch 27.00a 100.00a

Namoi Wolly Pod Vetch 1.00b 88.75b

Rasina Vetch 0.00d 0.00d

Morava Vetch 0.00d 0.00d

Indian Head Lentil 0.00d 0.00d

Toni Lentil 5.25 b 90.00b

a,b,c,d Items in columns with differing superscripts differ P<0.05.

Table 5. Average forage production and dry matter analysis in pounds per acre fall-sown.

 Variety 2008 2009

Austrian Winter Pea 2144.53a 7117.37a

Laramie Medic 5939.93a 5439.03a,b

Common Hairy Vetch 4797.98a 5239.12a,c,d

Namoi Wolly Pod Vetch 0.00b 4437.87b,c,d

Rasina Vetch 0.00b 0.00f

Morava Vetch 0.00b 0.00f

Indian Head Lentil 0.00b 0.00f

Toni Lentil 0.00b 1558.26e

a,b,c,d,e,f Items in columns with differing superscripts differ P<0.05.

Table 6. Average forage production and dry matter analysis in pounds per acre spring-sown.

 Variety 2008 2009

Austrian Winter Pea 3038.25a 2449.29b

Common Hairy Vetch 948.69d,f 1229.34c

Namoi Wolly Pod Vetch 2159.97b,c,d 2893.64a,b

Rasina Vetch 2742.31a,b 2686.82b

Morava Vetch 3141.66a 3233.78a

Indian Head Lentil 1477.03c,e,f 935.35c

Toni Lentil 1016.45d,e 364.81d

a,b,c,d,e,f Items in columns with differing superscripts differ P<0.05.

Table 7. Medic variety comparison average number of plants\m2 plot.

 Variety Fall Spring

Phrygia Medic 51.83a 50.83a

Laramie Medic 164.83b 156b

a,b Items in columns with differing superscripts differ P<0.05.

Table 8. Nutrient analysis of fall 2007 sewn varieties which survived winter.

 Variety CP TDN RFV

Laramie Medic 18.9 58.3 148

Phrygia Medic 18.9 64.0 150

Austrian Winter Pea 31.8 73.3 245

Common Hairy Vetch 25.5 63.8 168