Data for Experiment #2

12/17/01: Nothing

12/18/01: S6.6a sprout; S6.8b sprout

12/19/01: S6.6a sprout more, seed of pea starting to show; S6.8b looks same; S7.2a sprout; S7.8b sprout and seed showing; V5.6a seed coming up; V6.4a sprout coming up 0.06mm

12/20/01: Sprouts show for S5.2b, S5.6b, S6.0a, S6.2a, S6.4a. S6.8a, S6.8b, S7.2a, S7.8b; S6.6a- 0.03mm; V6.4a- 0.06mm; V7.4b- 0.04mm

12/21/01: Sprouts show for same as above, including S5.4a, S5.6a, S5.8b, S6.6b; Sprouts show except V5.2b, V5.8a, V6.0a, V6.0b, V6.4b, V7.2b, V7.4a, V7.6b, V7.8a, V7.8b

12/22/01: All spouts can be measured. Data table shows seed size and height of each square in millimeters:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Seed size | Soil (a) | Soil (b) | Vermiculite (a) | Vermiculite (b) |
| 5.2 | sprout | 2.0 | 1.5 | sprout |
| 5.4 | 1.4 | 1.2 | 1.6 | 1.7 |
| 5.6 | 2.5 | 1.5 | 1.8 | 1.7 |
| 5.8 | 1.5 | 3.5 | n/a | 2.5 |
| 6.0 | 5.0 | 1.4 | 1.0 | n/a |
| 6.2 | 5.9 | 0.4 | 2.0 | 2.0 |
| 6.4 | 3.0 | 1.3 | 2.0 | 1.0 |
| 6.6 | 3.5 | 2.5 | 1.5 | 2.4 |
| 6.8 | 2.3 | 1.8 | 1.1 | 1.8 |
| 7.0 | 0.8 | 3.0 | 1.2 | 1.5 |
| 7.2 | 4.0 | 2.0 | 1.9 | 0.6 |
| 7.4 | 2.4 | 2.5 | sprout | 1.4 |
| 7.6 | 0.9 | 2.3 | 1.0 | n/a |
| 7.8 | n/a | 3.0 | sprout | sprout |
| 8.0 | 2.8 | 1.5 | 1.1 | 1.5 |

12/23/01:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Seed size | Soil (a) | Soil (b) | Vermiculite (a) | Vermiculite (b) |
| 5.2 | 1.5 | 3.8 | 3.2 | 1.5 |
| 5.4 | 2.6 | 2.5 | 3.5 | 3.5 |
| 5.6 | 4.5 | 2.5 | 3.0 | 1.8 |
| 5.8 | 2.5 | 5.5 | n/a | 3.5 |
| 6.0 | 7.0 | 2.4 | 2.0 | 3.4 |
| 6.2 | 8.4 | 0.9 | 4.5 | 3.0 |
| 6.4 | 6.5 | 3.4 | 2.5 | 2.5 |
| 6.6 | 6.8 | 4.5 | 3.0 | 4.4 |
| 6.8 | 4.4 | 3.5 | 2.5 | 2.5 |
| 7.0 | 2.5 | 4.6 | 2.6 | 3.4 |
| 7.2 | 6.3 | 4.1 | 2.6 | 1.5 |
| 7.4 | 4.5 | 4.0 | 0.9 | 2.5 |
| 7.6 | 2.3 | 3.6 | 2.0 | 0.6 |
| 7.8 | n/a | 5.7 | 1.5 | 1.2 |
| 8.0 | 3.6 | 2.6 | 2.6 | 3.6 |

12/24/01:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Seed size | Soil (a) | Soil (b) | Vermiculite (a) | Vermiculite (b) |
| 5.2 | 2.8 | 5.5 | 5.0 | 3.0 |
| 5.4 | 4.5 | 3.5 | 4.5 | 5.1 |
| 5.6 | 7.6 | 5.0 | 4.0 | 2.0 |
| 5.8 | 4.5 | 8.5 | n/a | 5.9 |
| 6.0 | 9.0 | 4.8 | 3.0 | 7.0 |
| 6.2 | 11.4 | 1.9 | 6.9 | 5.8 |
| 6.4 | 9.9 | 5.7 | 3.0 | 3.6 |
| 6.6 | 9.5 | 6.5 | 5.5 | 6.7 |
| 6.8 | 6.4 | 6.5 | 3.6 | 4.5 |
| 7.0 | 4.8 | 6.5 | 4.0 | 6.0 |
| 7.2 | 9.8 | 6.0 | 5.3 | 2.7 |
| 7.4 | 7.9 | 6.5 | 2.4 | 4.1 |
| 7.6 | 3.1 | 5.3 | 4.0 | 1.7 |
| 7.8 | n/a | 7.9 | 2.0 | 2.9 |
| 8.0 | 5.5 | 4.5 | 4.4 | 5.5 |

12/25/01:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Seed size | Soil (a) | Soil (b) | Vermiculite (a) | Vermiculite (b) |
| 5.2 | 4.7 | 7.0 | 7.0 | 4.5 |
| 5.4 | 8.0 | 6.4 | 7.6 | 6.9 |
| 5.6 | 10.5 | 8.6 | 7.0 | 4.5 |
| 5.8 | 7.9 | 11.0 | n/a | 10.1 |
| 6.0 | 11.5 | 7.0 | 6.0 | 10.0 |
| 6.2 | 14.2 | 3.3 | 10.5 | 9.5 |
| 6.4 | 12.5 | 6.9 | 4.5 | 6.4 |
| 6.6 | 11.7 | 10.0 | 8.4 | 11.1 |
| 6.8 | 8.5 | 9.1 | 6.8 | 7.9 |
| 7.0 | 7.8 | 10.1 | 7.4 | 9.5 |
| 7.2 | 13.0 | 9.7 | 9.6 | 6.5 |
| 7.4 | 11.4 | 9.8 | 5.5 | 6.6 |
| 7.6 | 5.6 | 8.9 | 7.5 | 3.5 |
| 7.8 | n/a | 11.5 | 3.3 | 5.6 |
| 8.0 | 8.5 | 7.2 | 7.0 | 7.6 |

12/26/01:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Seed size | Soil (a) | Soil (b) | Vermiculite (a) | Vermiculite (b) |
| 5.2 | 7.8 | 10.4 | 8.5 | 6.5 |
| 5.4 | 10.5 | 8.9 | 11.9 | 8.9 |
| 5.6 | 12.1 | 10.1 | 9.5 | 7.0 |
| 5.8 | 10.9 | 13.9 | n/a | 13.0 |
| 6.0 | 15.0 | 8.6 | 8.6 | 12.5 |
| 6.2 | 16.1 | 5.9 | 13.1 | 12.1 |
| 6.4 | 15.5 | 9.6 | 6.6 | 8.3 |
| 6.6 | 15.3 | 12.7 | 11.2 | 14.6 |
| 6.8 | 10.5 | 12.4 | 8.8 | 10.6 |
| 7.0 | 10.1 | 12.4 | 9.5 | 12.5 |
| 7.2 | 15.9 | 12.5 | 12.5 | 9.4 |
| 7.4 | 14.0 | 13.9 | 9.0 | 9.4 |
| 7.6 | 8.2 | 11.5 | 11.4 | 6.4 |
| 7.8 | n/a | 15.0 | 6.0 | 9.0 |
| 8.0 | 11.9 | 11.1 | 11.0 | 9.9 |

12/27/01:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Seed size | Soil (a) | Soil (b) | Vermiculite (a) | Vermiculite (b) |
| 5.2 | 9.4 | 11.4 | 10.1 | 8.5 |
| 5.4 | 12.0 | 10.0 | 13.0 | 11.1 |
| 5.6 | 14.7 | 13.6 | 12.0 | 8.5 |
| 5.8 | 12.7 | 16.1 | n/a | 14.0 |
| 6.0 | 15.9 | 11.4 | 10.0 | 15.0 |
| 6.2 | 18.5 | 8.9 | 15.5 | 14.9 |
| 6.4 | 19.4 | 14.0 | 7.9 | 10.5 |
| 6.6 | 17.5 | 15.4 | 13.7 | 15.5 |
| 6.8 | 12.5 | 15.0 | 8.8 | 12.0 |
| 7.0 | 13.0 | 14.9 | 9.8 | 14.2 |
| 7.2 | 17.0 | 14.9 | 15.0 | 9.9 |
| 7.4 | 17.8 | 16.9 | 10.0 | 12.0 |
| 7.6 | 11.0 | 14.6 | 13.9 | 8.0 |
| 7.8 | n/a | 18.5 | 7.0 | 10.4 |
| 8.0 | 14.0 | 14.6 | 13.0 | 13.4 |

12/29/01:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Seed size | Soil (a) | Soil (b) | Vermiculite (a) | Vermiculite (b) |
| 5.2 | 13.7 | 14.0 | 13.2 | 10.0 |
| 5.4 | 18.0 | 12.2 | 16.6 | 13.2 |
| 5.6 | 19.4 | 14.9 | 15.1 | 8.6 |
| 5.8 | 15.5 | 19.2 | n/a | 17.6 |
| 6.0 | 20.6 | 14.5 | 13.6 | 18.2 |
| 6.2 | 22.7 | 12.5 | 19.6 | 17.3 |
| 6.4 | 23.0 | 16.3 | 11.4 | 13.6 |
| 6.6 | 22.3 | 18.5 | 18.5 | 19.7 |
| 6.8 | 14.5 | 19.6 | 9.0 | 14.9 |
| 7.0 | 19.6 | 18.9 | 10.2 | 18.2 |
| 7.2 | 21.5 | 19.7 | 19.5 | 13.4 |
| 7.4 | 19.6 | 20.2 | 10.1 | 18.3 |
| 7.6 | 16.0 | 18.4 | 16.3 | 8.7 |
| 7.8 | n/a | 19.6 | 11.1 | 13.9 |
| 8.0 | 19.5 | 20.3 | 17.8 | 17.4 |

12/31/01:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Seed size | Soil (a) | Soil (b) | Vermiculite (a) | Vermiculite (b) |
| 5.2 | 14.1 | 17.3 | 17.0 | 12.7 |
| 5.4 | 20.3 | 14.5 | 18.2 | 15.9 |
| 5.6 | 21.2 | 16.0 | 18.1 | 8.7 |
| 5.8 | 18.5 | 22.5 | n/a | 20.9 |
| 6.0 | 23.5 | 17.1 | 17.0 | 21.4 |
| 6.2 | 26.0 | 16.2 | 22.8 | 21.1 |
| 6.4 | 25.5 | 20.0 | 16.2 | 16.2 |
| 6.6 | 26.4 | 21.4 | 23.2 | 23.1 |
| 6.8 | 17.0 | 24.0 | 9.1 | 16.1 |
| 7.0 | 21.7 | 22.9 | 12.6 | 23.4 |
| 7.2 | 25.5 | 25.6 | 23.0 | 17.2 |
| 7.4 | 24.2 | 25.6 | 10.3 | 21.6 |
| 7.6 | 21.1 | 23.6 | 20.2 | 9.1 |
| 7.8 | n/a | 24.2 | 16.5 | 15.7 |
| 8.0 | 24.0 | 26.4 | 21.1 | 22.6 |

1/2/01:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Seed size | Soil (a) | Soil (b) | Vermiculite (a) | Vermiculite (b) |
| 5.2 | 14.5 | 19.5 | 19.5 | 15.6 |
| 5.4 | 23.6 | 16.8 | 24.1 | 18.6 |
| 5.6 | 23.1 | 18.0 | 24.0 | 8.9 |
| 5.8 | 23.9 | 26.0 | n/a | 23.6 |
| 6.0 | 27.0 | 21.9 | 21.9 | 24.4 |
| 6.2 | 30.5 | 22.0 | 26.4 | 24.5 |
| 6.4 | 29.3 | 24.1 | 21.1 | 19.0 |
| 6.6 | 30.0 | 25.9 | 28.5 | 29.9 |
| 6.8 | 21.4 | 28.5 | 9.3 | 19.0 |
| 7.0 | 27.5 | 27.7 | 14.0 | 30.0 |
| 7.2 | 30.5 | 30.3 | 26.0 | 21.0 |
| 7.4 | 30.0 | 30.0 | 10.6 | 25.9 |
| 7.6 | 26.0 | 28.7 | 24.0 | 9.5 |
| 7.8 | n/a | 30.0 | 21.5 | 18.5 |
| 8.0 | 27.4 | 32.0 | 26.2 | 27.0 |

1/4/02:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Seed size | Soil (a) | Soil (b) | Vermiculite (a) | Vermiculite (b) |
| 5.2 | 15.1 | 21.5 | 20.1 | 17.5 |
| 5.4 | 24.0 | 19.0 | 25.1 | 21.2 |
| 5.6 | 23.6 | 21.6 | 25.5 | 9.6 |
| 5.8 | 24.1 | 26.5 | n/a | 26.1 |
| 6.0 | 27.7 | 22.9 | 23.9 | 25.0 |
| 6.2 | 31.0 | 23.1 | 27.1 | 24.9 |
| 6.4 | 30.4 | 24.6 | 21.5 | 19.1 |
| 6.6 | 32.0 | 28.0 | 29.3 | 30.0 |
| 6.8 | 22.5 | 29.4 | 9.5 | 19.1 |
| 7.0 | 30.1 | 29.0 | 14.4 | 34.1 |
| 7.2 | 32.0 | 33.0 | 28.0 | 23.5 |
| 7.4 | 30.5 | 30.5 | 10.9 | 27.9 |
| 7.6 | 27.1 | 30.0 | 29.0 | 15.0 |
| 7.8 | n/a | 34.0 | 22.0 | 18.8 |
| 8.0 | 27.5 | 34.5 | 28.9 | 28.0 |

1/6/02:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Seed size | Soil (a) | Soil (b) | Vermiculite (a) | Vermiculite (b) |
| 5.2 | 15.9 | 21.9 | 22.1 | 17.5 |
| 5.4 | 24.6 | 20.0 | 25.5 | 22.0 |
| 5.6 | 24.1 | 22.4 | 26.6 | 11.4 |
| 5.8 | 24.8 | 26.5 | n/a | 27.3 |
| 6.0 | 30.0 | 22.9 | 26.8 | 25.9 |
| 6.2 | 36.0 | 25.6 | 30.0 | 25.6 |
| 6.4 | 32.6 | 27.6 | 22.1 | 19.4 |
| 6.6 | 33.9 | 29.9 | 29.6 | 32.1 |
| 6.8 | 23.2 | 29.7 | 11.6 | 19.4 |
| 7.0 | 30.4 | 31.5 | 14.8 | 34.2 |
| 7.2 | 38.0 | 35.0 | 28.4 | 24.4 |
| 7.4 | 31.0 | 34.5 | 13.7 | 29.2 |
| 7.6 | 29.9 | 31.0 | 29.3 | 16.0 |
| 7.8 | n/a | 35.0 | 22.3 | 19.9 |
| 8.0 | 29.5 | 35.9 | 29.5 | 30.7 |