

Appendix (2):Emergence percentage for different seed potato tuber types season (2009/2010)

| Treatment | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean |             | Minimum | Maximum |
|-----------|------|----------------|------------|----------------------------------|-------------|---------|---------|
|           |      |                |            | Lower Bound                      | Upper Bound |         |         |
| B0        | 68.7 | 38.7           | 6.4        | 55.7                             | 81.8        | 0       | 100     |
| M0        | 62.8 | 36.8           | 6.1        | 50.3                             | 75.2        | 0       | 100     |
| B1        | 84.6 | 30.2           | 5.0        | 74.4                             | 94.8        | 0       | 100     |
| M1        | 86.1 | 25.4           | 4.2        | 77.5                             | 94.7        | 0       | 100     |
| B2        | 88.5 | 24.1           | 4.0        | 80.4                             | 96.7        | 0       | 100     |
| M2        | 69.7 | 38.0           | 6.3        | 56.9                             | 82.6        | 0       | 100     |
| Total     | 76.7 | 33.9           | 2.3        | 72.2                             | 81.3        | 0       | 100     |

|      |                          |
|------|--------------------------|
| B0 = | Bellini imported seed    |
| M0 = | Mondial imported seed    |
| B1 = | Bellini first generation |
| M1 = | Mondial first generation |
| B2 = | Bellini farmer seed      |
| M2 = | Mondial farmer seed      |

Appendix(3):Emergence percentage for different seed potato tuber types season (2010/2011)

| Treatment | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean |             | Minimum | Maximum |
|-----------|------|----------------|------------|----------------------------------|-------------|---------|---------|
|           |      |                |            | Lower Bound                      | Upper Bound |         |         |
| B0        | 58.5 | 42.5           | 6.4        | 45.6                             | 71.4        | 0       | 100     |
| M0        | 60.5 | 39.1           | 5.9        | 48.7                             | 72.4        | 0       | 100     |
| B1        | 89.4 | 21.3           | 3.2        | 82.9                             | 95.9        | 3.6     | 100     |
| M1        | 86.2 | 23.8           | 3.6        | 79.0                             | 93.5        | 10.7    | 100     |
| B2        | 83.6 | 29.5           | 4.4        | 74.6                             | 92.5        | 0       | 100     |
| M2        | 83.2 | 29.4           | 4.4        | 74.3                             | 92.1        | 1.8     | 100     |
| Total     | 76.9 | 33.9           | 2.1        | 72.8                             | 81.0        | 0       | 100     |

|      |                          |
|------|--------------------------|
| B0 = | Bellini imported seed    |
| M0 = | Mondial imported seed    |
| B1 = | Bellini first generation |
| M1 = | Mondial first generation |
| B2 = | Bellini farmer seed      |
| M2 = | Mondial farmer seed      |

Appendix (4):Plant cover percentage for different seed tuber potato types season ( 2009/2010)

| Treatme<br>nt | Mea<br>n | Std.<br>Deviation | Std. Error | 95% Confidence<br>Interval for Mean |                | Minimu<br>m | Maximu<br>m |
|---------------|----------|-------------------|------------|-------------------------------------|----------------|-------------|-------------|
|               |          |                   |            | Lower Bound                         | Upper<br>Bound |             |             |
| B0            | 54.0     | 32.4              | 4.9        | 44.2                                | 63.9           | 0           | 94.4        |
| M0            | 44.5     | 37.3              | 5.6        | 33.1                                | 55.8           | 0           | 100         |
| B1            | 55.2     | 25.4              | 3.8        | 47.5                                | 63.0           | 0           | 94.4        |
| M1            | 59.0     | 29.6              | 4.5        | 50.0                                | 68.0           | 1.1         | 100         |
| B2            | 49.7     | 24.4              | 3.7        | 42.3                                | 57.1           | 0           | 91.1        |
| M2            | 51.7     | 31.7              | 4.8        | 42.1                                | 61.3           | 0           | 93.3        |
| Total         | 52.4     | 30.5              | 1.9        | 48.7                                | 56.1           | 0           | 100         |

|         |                             |
|---------|-----------------------------|
| B0<br>= | Bellini imported seed       |
| M0<br>= | Mondial imported seed       |
| B1<br>= | Bellini first generation    |
| M1<br>= | Mondial first<br>generation |
| B2      | Bellini farmer seed         |

|         |                     |
|---------|---------------------|
| =       |                     |
| M2<br>= | Mondial farmer seed |

Appendix (5) :Plant cover percentage for different seed tuber potato types season(2010/2011)

| Treatment | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean |             | Minimum | Maximum |
|-----------|------|----------------|------------|----------------------------------|-------------|---------|---------|
|           |      |                |            | Lower Bound                      | Upper Bound |         |         |
| B0        | 58.6 | 28.8           | 3.7        | 51.1                             | 66.0        | 4.4     | 97.8    |
| M0        | 46.1 | 24.6           | 3.2        | 39.7                             | 52.4        | 5.6     | 91.1    |
| B1        | 75.1 | 23.1           | 3.0        | 69.2                             | 81.1        | 8.2     | 98.9    |
| M1        | 75.8 | 21.0           | 2.7        | 70.4                             | 81.2        | 20      | 100     |
| B2        | 79.4 | 19.9           | 2.6        | 74.3                             | 84.6        | 31.1    | 100     |
| M2        | 77.8 | 19.6           | 2.5        | 72.8                             | 82.9        | 26.7    | 100     |
| Total     | 68.8 | 26.0           | 1.4        | 66.1                             | 71.5        | 4.4     | 100     |

|         |                       |
|---------|-----------------------|
| B0<br>= | Bellini imported seed |
| M0<br>= | Mondial imported seed |

|         |                          |
|---------|--------------------------|
| B1<br>= | Bellini first generation |
| M1<br>= | Mondial first generation |
| B2<br>= | Bellini farmer seed      |
| M2<br>= | Mondial farmer seed      |

Appendix(6): Number of stems for different seed potato types season (2009/2010)

| Treatme<br>nt | Mean | Std.<br>Deviation | Std.<br>Error | 95% Confidence Interval<br>for Mean |                | Minimu<br>m | Maximu<br>m |
|---------------|------|-------------------|---------------|-------------------------------------|----------------|-------------|-------------|
|               |      |                   |               | Lower Bound                         | Upper<br>Bound |             |             |
| B0            | 3.4  | 0.6               | 0.2           | 2.8                                 | 3.9            | 2.6         | 4.2         |
| M0            | 2.5  | 0.5               | 0.2           | 2.0                                 | 2.9            | 1.6         | 3.2         |
| B1            | 3.4  | 1.0               | 0.3           | 2.6                                 | 4.2            | 2.2         | 5           |
| M1            | 3.9  | 1.2               | 0.4           | 2.9                                 | 4.9            | 2           | 5.3         |
| B2            | 3.3  | 0.7               | 0.2           | 2.7                                 | 3.8            | 2.2         | 4           |
| M2            | 3.2  | 0.8               | 0.3           | 2.5                                 | 3.8            | 2           | 4.2         |
| Total         | 3.3  | 0.9               | 0.1           | 3.0                                 | 3.5            | 1.6         | 5.3         |

|      |                       |
|------|-----------------------|
| B0 = | Bellini imported seed |
|------|-----------------------|

|      |                          |
|------|--------------------------|
| M0 = | Mondial imported seed    |
| B1 = | Bellini first generation |
| M1 = | Mondial first generation |
| B2 = | Bellini farmer seed      |
| M2 = | Mondial farmer seed      |

ANOVA table of number of stems for different seed potato types season(2010/2011)

| SoV            | Sum of Squares | df | Mean Square | F   | Sig. |
|----------------|----------------|----|-------------|-----|------|
| Between Groups | 9.3            | 5  | 1.9         | 2.8 | 0.0  |
| Within Groups  | 28.1           | 42 | 0.7         |     |      |
| Total          | 37.4           | 47 |             |     |      |

Appendix(7): Number of stems for different seed potato types season(2010/2011)

| Treatment | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean |             | Minimum | Maximum |
|-----------|------|----------------|------------|----------------------------------|-------------|---------|---------|
|           |      |                |            | Lower Bound                      | Upper Bound |         |         |
| B0        | 2.5  | 0.5            | 0.2        | 2.1                              | 2.9         | 2       | 3       |
| M0        | 2.3  | 0.5            | 0.2        | 1.9                              | 2.7         | 2       | 3       |
| B1        | 3.9  | 0.6            | 0.2        | 3.3                              | 4.4         | 3       | 5       |
| M1        | 4.0  | 0.9            | 0.3        | 3.2                              | 4.7         | 2       | 5       |
| B2        | 4.7  | 1.2            | 0.4        | 3.6                              | 5.7         | 3       | 6.4     |
| M2        | 5.0  | 0.9            | 0.3        | 4.2                              | 5.8         | 3.4     | 6       |
| Total     | 3.7  | 1.3            | 0.2        | 3.4                              | 4.1         | 2       | 6.4     |

|      |                       |
|------|-----------------------|
| B0 = | Bellini imported seed |
|------|-----------------------|

|      |                          |
|------|--------------------------|
| M0 = | Mondial imported seed    |
| B1 = | Bellini first generation |
| M1 = | Mondial first generation |
| B2 = | Bellini farmer seed      |
| M2 = | Mondial farmer seed      |

ANOVA table of number of stems for different seed potato types season(2010/2011)

| SoV            | Sum of Squares | df | Mean Square | F    | Sig. |
|----------------|----------------|----|-------------|------|------|
| Between Groups | 48.6           | 5  | 9.7         | 14.4 | 0.0  |
| Within Groups  | 28.3           | 42 | 0.7         |      |      |
| Total          | 76.9           | 47 |             |      |      |

Appendix (8): weight grade of different seed potato tuber types season (2010/2011)

| Treatment | Mean  | Std. Deviation | Std. Error | 95% Confidence Interval for Mean |             | Minimum | Maximum |
|-----------|-------|----------------|------------|----------------------------------|-------------|---------|---------|
|           |       |                |            | Lower Bound                      | Upper Bound |         |         |
| B0        | 19.96 | 18.19          | 8.13       | -2.62                            | 42.55       | 3.51    | 50.8    |
| M0        | 20    | 15.85          | 7.09       | 0.32                             | 39.68       | 2.9     | 41.4    |
| B1        | 20    | 15.17          | 6.78       | 1.17                             | 38.83       | 1.6     | 38.7    |
| M1        | 20    | 11.47          | 5.13       | 5.76                             | 34.24       | 2.8     | 33.8    |
| B2        | 20    | 14.3           | 6.39       | 2.25                             | 37.75       | 2.6     | 40.8    |

|       |           |       |      |        |        |     |      |
|-------|-----------|-------|------|--------|--------|-----|------|
| M2    | 20        | 14.1  | 6.3  | 2.49   | 37.51  | 1.5 | 40.6 |
| Total | 19.9<br>9 | 13.63 | 2.49 | 14.904 | 25.083 | 1.5 | 50.8 |

|         |                          |
|---------|--------------------------|
| B0<br>= | Bellini imported seed    |
| M0<br>= | Mondial imported seed    |
| B1<br>= | Bellini first generation |
| M1<br>= | Mondial first generation |
| B2<br>= | Bellini farmer seed      |
| M2<br>= | Mondial farmer seed      |

ANOVA table of weight grade of different seed potato tuber types season (2010/2011)

| sov            | Sum of Squares | df | Mean Square | F           | Sig . |
|----------------|----------------|----|-------------|-------------|-------|
| Between Groups | 0.006016667    | 5  | 0.001203333 | 5.36095E-06 | 1     |
| Within Groups  | 5387.10288     | 24 | 224.46262   |             |       |
| Total          | 5387.108897    | 29 |             |             |       |

Appendix (9):Incidences of potato leaf roll virus( PLRV) in different potato stocks, season (2010/2011)

|  | Treatmen | Mea | Std. Deviation | Std. | 95% Confidence Interval for | Minimum | Maximum |
|--|----------|-----|----------------|------|-----------------------------|---------|---------|
|--|----------|-----|----------------|------|-----------------------------|---------|---------|

|          | t     | n    |      | Error | Mean        |             |   |   |
|----------|-------|------|------|-------|-------------|-------------|---|---|
|          |       |      |      |       | Lower Bound | Upper Bound |   |   |
| PLR<br>V | B0    | 0.14 | 0.38 | 0.14  | -0.21       | 0.49        | 0 | 1 |
|          | M0    | 0.14 | 0.38 | 0.14  | -0.21       | 0.49        | 0 | 1 |
|          | B1    | 0.14 | 0.38 | 0.14  | -0.21       | 0.49        | 0 | 1 |
|          | M1    | 0.29 | 0.49 | 0.18  | -0.17       | 0.74        | 0 | 1 |
|          | B2    | 0.29 | 0.49 | 0.18  | -0.17       | 0.74        | 0 | 1 |
|          | M2    | 0.57 | 0.53 | 0.2   | 0.08        | 1.07        | 0 | 1 |
|          | Total | 0.26 | 0.45 | 0.07  | 0.12        | 0.4         | 0 | 1 |

|      |                          |
|------|--------------------------|
| B0 = | Bellini imported seed    |
| M0 = | Mondial imported seed    |
| B1 = | Bellini first generation |
| M1 = | Mondial first generation |
| B2 = | Bellini farmer seed      |
| M2 = | Mondial farmer seed      |

Appendix(10):Incidences of potato virus Y( PVY) in different potato stocks, season (2010/2011)

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|         | traetme<br>nt | Mea<br>n | Std.<br>Deviation | Std.<br>Error | 95% Confidence Interval for<br>Mean |                | Minimu<br>m | Maximu<br>m |
|---------|---------------|----------|-------------------|---------------|-------------------------------------|----------------|-------------|-------------|
|         |               |          |                   |               | Lower Bound                         | Upper<br>Bound |             |             |
| PV<br>Y | B0            | 0        | 0                 | 0             | 0                                   | 0              | 0           | 0           |
|         | M0            | 0        | 0                 | 0             | 0                                   | 0              | 0           | 0           |
|         | B1            | 0.14     | 0.38              | 0.14          | -0.21                               | 0.49           | 0           | 1           |
|         | M1            | 0.14     | 0.38              | 0.14          | -0.21                               | 0.49           | 0           | 1           |
|         | B2            | 0.43     | 0.53              | 0.2           | -0.07                               | 0.92           | 0           | 1           |
|         | M2            | 0.71     | 0.49              | 0.18          | 0.26                                | 1.17           | 0           | 1           |
|         | Total         | 0.24     | 0.43              | 0.07          | 0.11                                | 0.381          | 0           | 1           |

|      |                          |
|------|--------------------------|
| B0 = | Bellini imported seed    |
| M0 = | Mondial imported seed    |
| B1 = | Bellini first generation |
| M1 = | Mondial first generation |
| B2 = | Bellini farmer seed      |
| M2 = | Mondial farmer seed      |