Table 1: Effect of various auxins (2,4-D and NAA) on embryo induction from different explants in *C. roseus*.

<table>
<thead>
<tr>
<th>2,4-D (mg l⁻¹)</th>
<th>NAA (mg l⁻¹)</th>
<th>Leaf Embryo Induction %</th>
<th>Stem Embryo Induction %</th>
<th>Root Embryo Induction %</th>
<th>Hypocotyl Embryo Induction %</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5</td>
<td>0</td>
<td>9.45±0.01c</td>
<td>16.52±0.01d</td>
<td>7.78±0.01g</td>
<td>50.46±0.01d</td>
</tr>
<tr>
<td>1.0</td>
<td>0</td>
<td>26.45±0.01a</td>
<td>33.21±0.01a</td>
<td>56.78±0.01a</td>
<td>81.69±0.01a</td>
</tr>
<tr>
<td>1.5</td>
<td>0</td>
<td>16.69±0.01b</td>
<td>30.94±0.01b</td>
<td>33.33±0.01d</td>
<td>68.57±0.02b</td>
</tr>
<tr>
<td>2.0</td>
<td>0</td>
<td>10.69±0.01c</td>
<td>32.22±0.01a</td>
<td>51.57±0.02b</td>
<td>63.71±0.01c</td>
</tr>
<tr>
<td>0</td>
<td>0.5</td>
<td>0.0±0.0d</td>
<td>0.0±0.0f</td>
<td>0.0±0.0h</td>
<td>12.44±0.01g</td>
</tr>
<tr>
<td>0</td>
<td>1.0</td>
<td>0.0±0.0d</td>
<td>0.0±0.0f</td>
<td>30.15±0.01e</td>
<td>35.58±0.01e</td>
</tr>
<tr>
<td>0</td>
<td>1.5</td>
<td>0.0±0.0d</td>
<td>10.78±0.01e</td>
<td>26.68±0.01f</td>
<td>20.97±0.01f</td>
</tr>
<tr>
<td>0</td>
<td>2.0</td>
<td>0.0±0.0d</td>
<td>20.36±0.01c</td>
<td>35.98±0.01c</td>
<td>36.65±0.01e</td>
</tr>
</tbody>
</table>

Values are means ± standard errors of at least 3 replicates. Within each column, values are followed by the same alphabet are not significantly different at $p \leq 0.05$ according to DMRT.

Table 2: Mean number of somatic embryo in *C. roseus*, MS medium amended with different concentrations of NAA and BA, initial 50mg of embryo was inoculated.

<table>
<thead>
<tr>
<th>PGRs (mg l⁻¹)</th>
<th>Globular Embryo Induction</th>
<th>Heart Embryo Induction</th>
<th>Torpedo Embryo Induction</th>
<th>Cotyledonary Embryo Induction</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAA</td>
<td>BAP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.5</td>
<td>0</td>
<td>10.55±0.01e</td>
<td>15.63±0.01a</td>
<td>11.37±0.01c</td>
</tr>
<tr>
<td>1.0</td>
<td>0</td>
<td>25.63±0.01a</td>
<td>16.00±0.02a</td>
<td>5.12±0.01e</td>
</tr>
<tr>
<td>1.5</td>
<td>0</td>
<td>20.56±0.01b</td>
<td>15.37±0.01ab</td>
<td>6.73±0.01d</td>
</tr>
<tr>
<td>2.0</td>
<td>0</td>
<td>17.77±0.02c</td>
<td>14.32±0.01b</td>
<td>4.82±0.01e</td>
</tr>
<tr>
<td>1.0</td>
<td>0.5</td>
<td>18.55±0.01c</td>
<td>10.12±0.01c</td>
<td>15.68±0.02b</td>
</tr>
<tr>
<td>1.0</td>
<td>1.0</td>
<td>13.12±0.01d</td>
<td>7.55±0.02d</td>
<td>16.73±0.02b</td>
</tr>
<tr>
<td>1.0</td>
<td>1.5</td>
<td>12.88±0.01d</td>
<td>5.11±0.01e</td>
<td>20.48±0.01a</td>
</tr>
</tbody>
</table>

Values are means ± standard errors of at least 3 replicates. Within each column, values are followed by the same alphabet are not significantly different at $p \leq 0.05$ according to DMRT.
Table 3: Growth index of embryo at induction stage grown under various levels of *Aspergillus flavus*

<table>
<thead>
<tr>
<th>No. of days</th>
<th>Parameter</th>
<th>(T_0)</th>
<th>(T_1)</th>
<th>(T_2)</th>
<th>(T_3)</th>
<th>(T_4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 d</td>
<td>FW (g)</td>
<td>0.32 ± 0.16e</td>
<td>0.49 ± 0.10b</td>
<td>0.66 ± 0.16a</td>
<td>0.41 ± 0.12c</td>
<td>0.40 ± 0.11c</td>
</tr>
<tr>
<td></td>
<td>DW (g)</td>
<td>0.03 ± 0.01e</td>
<td>0.05 ± 0.01b</td>
<td>0.07 ± 0.02a</td>
<td>0.04 ± 0.01c</td>
<td>0.04 ± 0.01c</td>
</tr>
<tr>
<td></td>
<td>ADM (%)</td>
<td>10.52 ± 0.55c</td>
<td>10.80 ± 0.39b</td>
<td>11.13 ± 0.25a</td>
<td>10.71 ± 0.30c</td>
<td>10.67 ± 0.36c</td>
</tr>
<tr>
<td>30 d</td>
<td>FW (g)</td>
<td>1.15 ± 0.11e</td>
<td>1.33 ± 0.18b</td>
<td>1.55 ± 0.24a</td>
<td>1.25 ± 0.33c</td>
<td>1.21 ± 0.23c</td>
</tr>
<tr>
<td></td>
<td>DW (g)</td>
<td>0.12 ± 0.02e</td>
<td>0.15 ± 0.02b</td>
<td>0.18 ± 0.03a</td>
<td>0.14 ± 0.04c</td>
<td>0.13 ± 0.03c</td>
</tr>
<tr>
<td></td>
<td>ADM (%)</td>
<td>10.98 ± 0.61e</td>
<td>11.60 ± 0.299b</td>
<td>11.80 ± 0.19a</td>
<td>11.22 ± 0.23c</td>
<td>11.17 ± 0.36c</td>
</tr>
<tr>
<td>45 d</td>
<td>FW (g)</td>
<td>1.23 ± 0.20e</td>
<td>1.46 ± 0.157b</td>
<td>1.98 ± 0.13a</td>
<td>1.41 ± 0.13c</td>
<td>1.45 ± 0.19c</td>
</tr>
<tr>
<td></td>
<td>DW (g)</td>
<td>0.14 ± 0.02e</td>
<td>0.17 ± 0.021b</td>
<td>0.24 ± 0.02a</td>
<td>0.16 ± 0.02c</td>
<td>0.16 ± 0.02c</td>
</tr>
<tr>
<td></td>
<td>ADM (%)</td>
<td>11.56 ± 0.48e</td>
<td>11.80 ± 0.199b</td>
<td>12.20 ± 0.30a</td>
<td>11.60 ± 0.40c</td>
<td>11.51 ± 0.29c</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Aspergillus flavus*) levels used: Control (\(T_0\)), 0.05% (\(T_1\)), 0.15% (\(T_2\)), 0.25% (\(T_3\)), 0.35% (\(T_4\)). MS medium supplemented with 0.5 mg l\(^{-1}\) 2,4-D for embryo induction. Values are means ± standard errors of at least 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.

FW = Fresh Weight, DW = Dry Weight, ADM (%) = Absolute dry mass.

ADM (%) = Dry weight / Fresh weight x 100.
Table 4: Growth index of embryo at induction stage grown under various levels of *Fusarium oxysporum*

<table>
<thead>
<tr>
<th>No. of days</th>
<th>Parameter</th>
<th>T₀</th>
<th>T₁</th>
<th>T₂</th>
<th>T₃</th>
<th>T₄</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 d</td>
<td>FW(g)</td>
<td>0.33±0.06e</td>
<td>0.45±0.22b</td>
<td>0.65±0.21a</td>
<td>0.37±0.22c</td>
<td>0.35±0.20c</td>
</tr>
<tr>
<td></td>
<td>DW(g)</td>
<td>0.03±0.01e</td>
<td>0.05±0.02b</td>
<td>0.07±0.02a</td>
<td>0.04±0.02c</td>
<td>0.03±0.02c</td>
</tr>
<tr>
<td></td>
<td>ADM (%)</td>
<td>10.55±0.42e</td>
<td>10.74±0.26b</td>
<td>11.02±0.32a</td>
<td>10.65±0.39c</td>
<td>10.63±0.29c</td>
</tr>
<tr>
<td>30 d</td>
<td>FW(g)</td>
<td>1.15±0.19e</td>
<td>1.26±0.22b</td>
<td>1.38±0.29a</td>
<td>1.20±0.31c</td>
<td>1.16±0.04c</td>
</tr>
<tr>
<td></td>
<td>DW(g)</td>
<td>0.12±0.02e</td>
<td>0.14±0.03b</td>
<td>0.16±0.04a</td>
<td>0.13±0.04c</td>
<td>0.13±0.01c</td>
</tr>
<tr>
<td></td>
<td>ADM (%)</td>
<td>11.01±0.40e</td>
<td>11.58±0.42b</td>
<td>11.78±0.31a</td>
<td>11.14±0.43c</td>
<td>11.11±0.37c</td>
</tr>
<tr>
<td>45 d</td>
<td>FW(g)</td>
<td>1.27±0.23e</td>
<td>1.38±0.20b</td>
<td>1.65±0.28a</td>
<td>1.32±0.15c</td>
<td>1.31±0.22c</td>
</tr>
<tr>
<td></td>
<td>DW(g)</td>
<td>0.14±0.03e</td>
<td>0.16±0.02b</td>
<td>0.19±0.04a</td>
<td>0.15±0.02c</td>
<td>0.15±0.03c</td>
</tr>
<tr>
<td></td>
<td>ADM (%)</td>
<td>11.44±0.36e</td>
<td>11.73±0.25b</td>
<td>12.08±0.37a</td>
<td>11.51±0.47c</td>
<td>11.48±0.35c</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Fusarium oxysporum*) levels used: Control (T₀), 0.05% (T₁), 0.15% (T₂), 0.25% (T₃), 0.35% (T₄). MS medium supplemented with 0.5 mg l⁻¹ 2,4-D for embryo induction. Values are means ± standard errors of at least 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.

FW= Fresh Weight, DW= Dry Weight, ADM (%) = Absolute dry mass.

ADM (%) = Dry weight / Fresh weight x 100.
Table 5: Sugar content (mg g\textsuperscript{-1} FW) of embryo at induction stage under various levels of *Aspergillus flavus*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>T\textsubscript{0}</td>
<td>10.14± 0.18d</td>
<td>18.49± 0.17d</td>
<td>29.66± 0.19d</td>
</tr>
<tr>
<td>T\textsubscript{1}</td>
<td>13.87± 0.17b</td>
<td>21.4± 0.20b</td>
<td>34.37± 0.17b</td>
</tr>
<tr>
<td>T\textsubscript{2}</td>
<td>17.74± 0.25a</td>
<td>26.73± 0.21a</td>
<td>38.76± 0.15a</td>
</tr>
<tr>
<td>T\textsubscript{3}</td>
<td>11.70± 0.15c</td>
<td>20.55± 0.19c</td>
<td>32.25± 0.17c</td>
</tr>
<tr>
<td>T\textsubscript{4}</td>
<td>11.73± 0.19c</td>
<td>20.52± 0.20c</td>
<td>32.22± 0.24c</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Aspergillus flavus*) levels used: Control (T\textsubscript{0}), 0.05% (T\textsubscript{1}), 0.15% (T\textsubscript{2}), 0.25% (T\textsubscript{3}), 0.35% (T\textsubscript{4}). MS medium supplemented with 0.5 mg l\textsuperscript{-1} 2,4-D for embryo induction. Values are means ± standard errors of at least 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.

Table 6: Sugar content (mg g\textsuperscript{-1} FW) of embryo at induction stage under various levels of *Fusarium oxysporum*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>T\textsubscript{0}</td>
<td>10.02± 0.15c</td>
<td>18.54± 0.17bc</td>
<td>29.24± 0.18c</td>
</tr>
<tr>
<td>T\textsubscript{1}</td>
<td>11.01± 0.19b</td>
<td>21.33± 0.22b</td>
<td>31.29± 0.19b</td>
</tr>
<tr>
<td>T\textsubscript{2}</td>
<td>12.15± 0.13a</td>
<td>25.13± 0.20a</td>
<td>34.13± 0.20a</td>
</tr>
<tr>
<td>T\textsubscript{3}</td>
<td>9.64± 0.22d</td>
<td>18.43± 0.18c</td>
<td>28.94± 0.22d</td>
</tr>
<tr>
<td>T\textsubscript{4}</td>
<td>9.68± 0.24d</td>
<td>18.41± 0.24c</td>
<td>28.86± 0.17d</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Fusarium oxysporum*) levels used: Control (T\textsubscript{0}), 0.05% (T\textsubscript{1}), 0.15% (T\textsubscript{2}), 0.25% (T\textsubscript{3}), 0.35% (T\textsubscript{4}). MS medium supplemented with 0.5 mg l\textsuperscript{-1} 2,4-D for embryo induction. Values are means ± standard errors of at least 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.
Table 7: Proline content (mg g\(^{-1}\) FW) of embryo at induction stage under various levels of Aspergillus flavus.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>(T_0)</td>
<td>3.16± 0.26d</td>
<td>7.31 ± 0.31d</td>
<td>8.76± 0.21d</td>
</tr>
<tr>
<td>(T_1)</td>
<td>5.04± 0.33b</td>
<td>8.51 ± 0.26b</td>
<td>10.25± 0.26b</td>
</tr>
<tr>
<td>(T_2)</td>
<td>5.82± 0.21a</td>
<td>9.24 ± 0.21a</td>
<td>10.89± 0.24a</td>
</tr>
<tr>
<td>(T_3)</td>
<td>4.14± 0.26c</td>
<td>7.98 ± 0.26c</td>
<td>9.42± 0.16c</td>
</tr>
<tr>
<td>(T_4)</td>
<td>4.12± 0.22c</td>
<td>7.95 ± 0.19c</td>
<td>9.39± 0.24c</td>
</tr>
</tbody>
</table>

Different fungal elicitor (Aspergillus flavus) levels used: Control (\(T_0\)), 0.05% (\(T_1\)), 0.15% (\(T_2\)), 0.25% (\(T_3\)), 0.35% (\(T_4\)). MS medium supplemented with 0.5 mg l\(^{-1}\) 2,4-D for embryo induction. Values are means ± standard errors of at least 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.

Table 8: Proline content (mg g\(^{-1}\) FW) of embryo at induction stage under various levels of Fusarium oxysporum.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>(T_0)</td>
<td>3.02± 0.19c</td>
<td>7.32± 0.26c</td>
<td>8.81± 0.26c</td>
</tr>
<tr>
<td>(T_1)</td>
<td>3.52± 0.19b</td>
<td>7.85 ± 0.21b</td>
<td>9.34± 0.21b</td>
</tr>
<tr>
<td>(T_2)</td>
<td>3.82± 0.17a</td>
<td>8.44± 0.26a</td>
<td>9.74± 0.24a</td>
</tr>
<tr>
<td>(T_3)</td>
<td>2.97± 0.17d</td>
<td>7.28± 0.19d</td>
<td>8.72± 0.16d</td>
</tr>
<tr>
<td>(T_4)</td>
<td>2.96± 0.28d</td>
<td>7.31± 0.19cd</td>
<td>8.78± 0.19bc</td>
</tr>
</tbody>
</table>

Different fungal elicitor (Fusarium oxysporum) levels used: Control (\(T_0\)), 0.05% (\(T_1\)), 0.15% (\(T_2\)), 0.25% (\(T_3\)), 0.35% (\(T_4\)). MS medium supplemented with 0.5 mg l\(^{-1}\) 2,4-D for embryo induction. Values are means ± standard errors of at least 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.
### Table 9: Protein content (mg g\(^{-1}\) FW) of embryo at induction stage under various levels of *Aspergillus flavus*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>(T_0)</td>
<td>0.55 ± 0.17d</td>
<td>2.38 ± 0.22d</td>
<td>4.16 ± 0.17d</td>
</tr>
<tr>
<td>(T_1)</td>
<td>0.96 ± 0.15b</td>
<td>3.67 ± 0.16b</td>
<td>5.60 ± 0.12b</td>
</tr>
<tr>
<td>(T_2)</td>
<td>1.14 ± 0.16a</td>
<td>3.91 ± 0.13a</td>
<td>6.25 ± 0.14a</td>
</tr>
<tr>
<td>(T_3)</td>
<td>0.62 ± 0.14c</td>
<td>3.49 ± 0.12c</td>
<td>5.32 ± 0.15c</td>
</tr>
<tr>
<td>(T_4)</td>
<td>0.58 ± 0.13cd</td>
<td>3.48 ± 0.14c</td>
<td>5.27 ± 0.15c</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Aspergillus flavus*) levels used: Control (\(T_0\)), 0.05% (\(T_1\)), 0.15% (\(T_2\)), 0.25% (\(T_3\)), 0.35% (\(T_4\)). MS medium supplemented with 0.5 mg l\(^{-1}\) 2,4-D for embryo induction. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at \(p \leq 0.05\) according to DMRT.

### Table 10: Protein content (mg g\(^{-1}\) FW) of embryo at induction stage under various levels of *Fusarium oxysporum*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>(T_0)</td>
<td>0.54± 0.14c</td>
<td>2.45± 0.18c</td>
<td>4.13± 0.16c</td>
</tr>
<tr>
<td>(T_1)</td>
<td>0.63± 0.12b</td>
<td>2.68± 0.12b</td>
<td>4.48± 0.14b</td>
</tr>
<tr>
<td>(T_2)</td>
<td>0.70± 0.07a</td>
<td>3.05± 0.14a</td>
<td>4.78± 0.15a</td>
</tr>
<tr>
<td>(T_3)</td>
<td>0.51 ± 0.18d</td>
<td>2.36 ± 0.16d</td>
<td>3.99 ± 0.10d</td>
</tr>
<tr>
<td>(T_4)</td>
<td>0.52± 0.12d</td>
<td>2.37± 0.12d</td>
<td>3.98± 0.13d</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Fusarium oxysporum*) levels used: Control (\(T_0\)), 0.05% (\(T_1\)), 0.15% (\(T_2\)), 0.25% (\(T_3\)), 0.35% (\(T_4\)). MS medium supplemented with 0.5 mg l\(^{-1}\) 2,4-D for embryo induction. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at \(p \leq 0.05\) according to DMRT.
Results (Tables)

Table 11: VB content (μg g⁻¹ DW) of embryo at induction stage under various levels of *Aspergillus flavus*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>T₀</td>
<td>0.076±0.001c</td>
<td>0.140±0.003c</td>
<td>0.207±0.000d</td>
</tr>
<tr>
<td>T₁</td>
<td>0.085±0.001b</td>
<td>0.152±0.001b</td>
<td>0.261±0.001b</td>
</tr>
<tr>
<td>T₂</td>
<td>0.101±0.001a</td>
<td>0.169±0.0005a</td>
<td>0.298±0.001a</td>
</tr>
<tr>
<td>T₃</td>
<td>0.066±0.002d</td>
<td>0.135±0.004d</td>
<td>0.219±0.002c</td>
</tr>
<tr>
<td>T₄</td>
<td>0.063±0.004d</td>
<td>0.133±0.001d</td>
<td>0.223±0.001c</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Aspergillus flavus*) levels used: Control (T₀), 0.05% (T₁), 0.15% (T₂), 0.25% (T₃), 0.35% (T₄). MS medium supplemented with 0.5 mg l⁻¹ 2,4-D for embryo induction. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.

Table 12: VB content (μg g⁻¹ DW) of embryo at induction stage under various levels of *Fusarium oxysporum*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>T₀</td>
<td>0.075±0.001c</td>
<td>0.138±0.002c</td>
<td>0.205±0.001d</td>
</tr>
<tr>
<td>T₁</td>
<td>0.083±0.001b</td>
<td>0.143±0.004b</td>
<td>0.233±0.001b</td>
</tr>
<tr>
<td>T₂</td>
<td>0.097±0.002a</td>
<td>0.155±0.001a</td>
<td>0.269±0.001a</td>
</tr>
<tr>
<td>T₃</td>
<td>0.061±0.004d</td>
<td>0.131±0.001d</td>
<td>0.215±0.003c</td>
</tr>
<tr>
<td>T₄</td>
<td>0.058±0.001d</td>
<td>0.126±0.003cd</td>
<td>0.209±0.001cd</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Fusarium oxysporum*) levels used: Control (T₀), 0.05% (T₁), 0.15% (T₂), 0.25% (T₃), 0.35% (T₄). MS medium supplemented with 0.5 mg l⁻¹ 2,4-D for embryo induction. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.
Table 13: VC content (μg g\(^{-1}\) DW) of embryo at induction stage under various levels of *Aspergillus flavus*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>T(_0)</td>
<td>0.033±0.005c</td>
<td>0.076±0.003c</td>
<td>0.127±0.0006c</td>
</tr>
<tr>
<td>T(_1)</td>
<td>0.038±0.001b</td>
<td>0.081±0.002b</td>
<td>0.139±0.0008b</td>
</tr>
<tr>
<td>T(_2)</td>
<td>0.049±0.0008a</td>
<td>0.088±0.0007a</td>
<td>0.151±0.001a</td>
</tr>
<tr>
<td>T(_3)</td>
<td>0.030±0.0006d</td>
<td>0.073±0.0009d</td>
<td>0.113±0.004d</td>
</tr>
<tr>
<td>T(_4)</td>
<td>0.031±0.002d</td>
<td>0.074±0.001d</td>
<td>0.109±0.003d</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Aspergillus flavus*) levels used: Control (T\(_0\)), 0.05% (T\(_1\)), 0.15% (T\(_2\)), 0.25% (T\(_3\)), 0.35% (T\(_4\)). MS medium supplemented with 0.5 mg l\(^{-1}\) 2,4-D for embryo induction. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.

Table 14: VC content (μg g\(^{-1}\) DW) of embryo at induction stage under various levels of *Fusarium oxysporum*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>T(_0)</td>
<td>0.031±0.003c</td>
<td>0.074±0.001c</td>
<td>0.112±0.0009c</td>
</tr>
<tr>
<td>T(_1)</td>
<td>0.034±0.001b</td>
<td>0.077±0.003b</td>
<td>0.129±0.002b</td>
</tr>
<tr>
<td>T(_2)</td>
<td>0.042±0.0008a</td>
<td>0.085±0.0007a</td>
<td>0.136±0.004a</td>
</tr>
<tr>
<td>T(_3)</td>
<td>0.029±0.001cd</td>
<td>0.071±0.0006cd</td>
<td>0.109±0.0008cd</td>
</tr>
<tr>
<td>T(_4)</td>
<td>0.027±0.0006d</td>
<td>0.068±0.004d</td>
<td>0.105±0.001d</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Fusarium oxysporum*) levels used: Control (T\(_0\)), 0.05% (T\(_1\)), 0.15% (T\(_2\)), 0.25% (T\(_3\)), 0.35% (T\(_4\)). MS medium supplemented with 0.5 mg l\(^{-1}\) 2,4-D for embryo induction. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.
Table 15: Growth index of proliferated embryos grown under various levels of *Aspergillus flavus*

<table>
<thead>
<tr>
<th>No. of days</th>
<th>Parameter</th>
<th>T₀</th>
<th>T₁</th>
<th>T₂</th>
<th>T₃</th>
<th>T₄</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 d</td>
<td>FW(g)</td>
<td>0.42 ± 0.16d</td>
<td>0.70 ± 0.16b</td>
<td>0.97 ± 0.14a</td>
<td>0.59 ± 0.10c</td>
<td>0.53 ± 0.14c</td>
</tr>
<tr>
<td></td>
<td>DW(g)</td>
<td>0.04 ± 0.02d</td>
<td>0.07 ± 0.02b</td>
<td>0.10 ± 0.01a</td>
<td>0.06 ± 0.01c</td>
<td>0.05 ± 0.01cd</td>
</tr>
<tr>
<td></td>
<td>ADM (%)</td>
<td>10.05 ± 0.47d</td>
<td>10.51 ± 0.56b</td>
<td>10.85 ± 0.33a</td>
<td>10.39 ± 0.37c</td>
<td>10.30 ± 0.49c</td>
</tr>
<tr>
<td>30 d</td>
<td>FW(g)</td>
<td>1.27 ± 0.21d</td>
<td>1.89 ± 0.14b</td>
<td>2.06 ± 0.19a</td>
<td>1.72 ± 0.21c</td>
<td>1.69 ± 0.15c</td>
</tr>
<tr>
<td></td>
<td>DW(g)</td>
<td>0.13 ± 0.03d</td>
<td>0.21 ± 0.02b</td>
<td>0.23 ± 0.03a</td>
<td>0.18 ± 0.03c</td>
<td>0.18 ± 0.02c</td>
</tr>
<tr>
<td></td>
<td>ADM (%)</td>
<td>10.52 ± 0.41d</td>
<td>11.03 ± 0.39b</td>
<td>11.42 ± 0.42a</td>
<td>10.74 ± 0.39c</td>
<td>10.74 ± 0.48c</td>
</tr>
<tr>
<td>45 d</td>
<td>FW(g)</td>
<td>1.63 ± 0.18d</td>
<td>2.02 ± 0.18b</td>
<td>2.31 ± 0.12a</td>
<td>1.97 ± 0.27c</td>
<td>1.90 ± 0.19c</td>
</tr>
<tr>
<td></td>
<td>DW(g)</td>
<td>0.18 ± 0.03d</td>
<td>0.23 ± 0.03b</td>
<td>0.27 ± 0.02a</td>
<td>0.22 ± 0.04c</td>
<td>0.21 ± 0.03c</td>
</tr>
<tr>
<td></td>
<td>ADM (%)</td>
<td>11.01 ± 0.52d</td>
<td>11.57 ± 0.46b</td>
<td>12.04 ± 0.51a</td>
<td>11.33 ± 0.52c</td>
<td>11.31 ± 0.35c</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Aspergillus flavus*) levels used: Control (T₀), 0.05% (T₁), 0.15% (T₂), 0.25% (T₃), 0.35% (T₄). MS medium supplemented with 1.5 mg l⁻¹ BA and 1.0 mg l⁻¹ NAA for embryo proliferation. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.

FW= Fresh Weight, DW= Dry Weight, ADM (%) = Absolute dry mass.

ADM(%) = Dry weight / Fresh weight x 100.
Table 16: Growth index of proliferated embryos grown under various levels of *Fusarium oxysporum*

<table>
<thead>
<tr>
<th>No. of days</th>
<th>Parameter</th>
<th>T₀</th>
<th>T₁</th>
<th>T₂</th>
<th>T₃</th>
<th>T₄</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 d</td>
<td>FW (g)</td>
<td>0.38 ± 0.18d</td>
<td>0.52 ± 0.07b</td>
<td>0.70 ± 0.14a</td>
<td>0.43 ± 0.12c</td>
<td>0.42 ± 0.09c</td>
</tr>
<tr>
<td></td>
<td>DW (g)</td>
<td>0.04 ± 0.01d</td>
<td>0.05 ± 0.01b</td>
<td>0.07 ± 0.01a</td>
<td>0.04± 0.01c</td>
<td>0.04± 0.01c</td>
</tr>
<tr>
<td></td>
<td>ADM (%)</td>
<td>9.71 ± 0.39d</td>
<td>10.20±0.29b</td>
<td>10.62±0.15a</td>
<td>9.85 ±0.53c</td>
<td>9.82 ±0.32cd</td>
</tr>
<tr>
<td>30 d</td>
<td>FW (g)</td>
<td>1.29 ± 0.14d</td>
<td>1.49 ± 0.10b</td>
<td>1.63 ± 0.25a</td>
<td>1.43 ± 0.31c</td>
<td>1.35 ± 0.16cd</td>
</tr>
<tr>
<td></td>
<td>DW (g)</td>
<td>0.13± 0.02d</td>
<td>0.16±0.02b</td>
<td>0.18 ± 0.03a</td>
<td>0.15 ± 0.03c</td>
<td>0.14± 0.02cd</td>
</tr>
<tr>
<td></td>
<td>ADM (%)</td>
<td>10.50±0.51d</td>
<td>11.04±0.51b</td>
<td>11.24±0.22a</td>
<td>10.72±0.26c</td>
<td>10.67±0.29cd</td>
</tr>
<tr>
<td>45 d</td>
<td>FW (g)</td>
<td>1.58± 0.10d</td>
<td>1.76±0.11b</td>
<td>2.10±0.16a</td>
<td>1.63 ±0.09c</td>
<td>1.56 ± 0.15cd</td>
</tr>
<tr>
<td></td>
<td>DW (g)</td>
<td>0.17± 0.01d</td>
<td>0.20±0.02b</td>
<td>0.25 ± 0.02a</td>
<td>0.18 ± 0.01c</td>
<td>0.17± 0.02d</td>
</tr>
<tr>
<td></td>
<td>ADM (%)</td>
<td>11.02±0.37d</td>
<td>11.63±0.40b</td>
<td>12.06±0.40a</td>
<td>11.30±0.50c</td>
<td>11.22 ±0.27c</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Fusarium oxysporum*) levels used: Control (T₀), 0.05% (T₁), 0.15% (T₂), 0.25% (T₃), 0.35% (T₄). MS medium supplemented with 1.5 mg l⁻¹ BA and 1.0 mg l⁻¹ NAA for embryo proliferation. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.

FW = Fresh Weight, DW = Dry Weight, ADM (%) = Absolute dry mass.

ADM (%) = Dry weight / Fresh weight x 100.
Table 17: Proliferation of somatic embryos with different levels of both fungal elicitors i.e. *Aspergillus flavus* and *Fusarium oxysporum*

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Total no. of SE</th>
<th>Aspergillus flavus</th>
<th>Fusarium oxysporum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>82.47±0.86d</td>
<td>82.53±1.07d</td>
</tr>
<tr>
<td>T0</td>
<td></td>
<td>106.53±1.13b</td>
<td>94.36±0.89b</td>
</tr>
<tr>
<td>T1</td>
<td></td>
<td>114.56±1.11a</td>
<td>102.69±0.83a</td>
</tr>
<tr>
<td>T2</td>
<td></td>
<td>87.44±0.94c</td>
<td>84.78±0.86c</td>
</tr>
<tr>
<td>T3</td>
<td></td>
<td>88.26±1.04c</td>
<td>85.14±0.94c</td>
</tr>
</tbody>
</table>

Different fungal elicitors (*Aspergillus flavus* and *Fusarium oxysporum*) levels used: Control (T0), 0.05% (T1), 0.15% (T2), 0.25% (T3), 0.35% (T4). MS medium supplemented with 1.5 mg l\(^{-1}\) BA and 1.0 mg l\(^{-1}\) NAA for embryo proliferation, data were scored after 4 weeks of culture. Values are means ± standard errors of at least 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.
Table 18: Sugar content (mg g\(^{-1}\) FW) of embryos at proliferation stage under various levels of *Aspergillus flavus*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days (mg g(^{-1}) FW)</th>
<th>After 30 days (mg g(^{-1}) FW)</th>
<th>After 45 days (mg g(^{-1}) FW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(T_0)</td>
<td>9.91±0.20d</td>
<td>20.91±0.13d</td>
<td>26.22±0.15d</td>
</tr>
<tr>
<td>(T_1)</td>
<td>11.25±0.12b</td>
<td>25.83±0.19b</td>
<td>30.75±0.19b</td>
</tr>
<tr>
<td>(T_2)</td>
<td>14.58±0.15a</td>
<td>30.3±0.22a</td>
<td>33.72±0.20a</td>
</tr>
<tr>
<td>(T_3)</td>
<td>10.41±0.17c</td>
<td>23.39±0.19c</td>
<td>29.02±0.13c</td>
</tr>
<tr>
<td>(T_4)</td>
<td>10.40±0.20c</td>
<td>23.43±0.24c</td>
<td>28.97±0.10c</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Aspergillus flavus*) levels used: Control (\(T_0\)), 0.05% (\(T_1\)), 0.15% (\(T_2\)), 0.25% (\(T_3\)), 0.35% (\(T_4\)). MS medium supplemented with 1.5 mg l\(^{-1}\) BA and 1.0 mg l\(^{-1}\) NAA for embryo proliferation. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at \(p \leq 0.05\) according to DMRT.

Table 19: Sugar content (mg g\(^{-1}\) FW) of embryos at proliferation stage under various levels of *Fusarium oxysporum*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days (mg g(^{-1}) FW)</th>
<th>After 30 days (mg g(^{-1}) FW)</th>
<th>After 45 days (mg g(^{-1}) FW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(T_0)</td>
<td>9.80±0.12c</td>
<td>21.04±0.17d</td>
<td>26.16±0.15c</td>
</tr>
<tr>
<td>(T_1)</td>
<td>10.40±0.13b</td>
<td>23.12±0.13b</td>
<td>29.56±0.12b</td>
</tr>
<tr>
<td>(T_2)</td>
<td>11.56 ± 0.15a</td>
<td>27.02±0.13a</td>
<td>30.75±0.13a</td>
</tr>
<tr>
<td>(T_3)</td>
<td>9.56 ± 0.10d</td>
<td>22.45±0.19c</td>
<td>26.14±0.10b</td>
</tr>
<tr>
<td>(T_4)</td>
<td>9.53 ± 0.15d</td>
<td>22.4±0.20c</td>
<td>26.24±0.13d</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Fusarium oxysporum*) levels used: Control (\(T_0\)), 0.05% (\(T_1\)), 0.15% (\(T_2\)), 0.25% (\(T_3\)), 0.35% (\(T_4\)). MS medium supplemented with 1.5 mg l\(^{-1}\) BA and 1.0 mg l\(^{-1}\) NAA for embryo proliferation. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at \(p \leq 0.05\) according to DMRT.
**Table 20: Proline content (mg g⁻¹ FW) of embryos at proliferation stage under various levels of *Aspergillus flavus*.**

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>T₀</td>
<td>2.89± 0.29d</td>
<td>7.26± 0.26d</td>
<td>8.49± 0.26d</td>
</tr>
<tr>
<td>T₁</td>
<td>3.92± 0.26b</td>
<td>7.90± 0.21b</td>
<td>9.68± 0.33b</td>
</tr>
<tr>
<td>T₂</td>
<td>4.62± 0.24a</td>
<td>8.75 ± 0.31a</td>
<td>10.48± 0.31a</td>
</tr>
<tr>
<td>T₃</td>
<td>3.47± 0.21c</td>
<td>7.55 ± 0.16c</td>
<td>8.89± 0.21c</td>
</tr>
<tr>
<td>T₄</td>
<td>3.44± 0.29c</td>
<td>7.50± 0.16c</td>
<td>8.84± 0.16c</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Aspergillus flavus*) levels used: Control (T₀), 0.05% (T₁), 0.15% (T₂), 0.25% (T₃), 0.35% (T₄). MS medium supplemented with 1.5 mg l⁻¹ BA and 1.0 mg l⁻¹ NAA for embryo proliferation. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.

**Table 21: Proline content (mg g⁻¹ FW) of embryos at proliferation stage under various levels of *Fusarium oxysporum*.**

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>T₀</td>
<td>2.94± 0.16c</td>
<td>7.26± 0.16c</td>
<td>8.62± 0.14d</td>
</tr>
<tr>
<td>T₁</td>
<td>3.24± 0.21b</td>
<td>7.44 ± 0.22b</td>
<td>8.99± 0.21b</td>
</tr>
<tr>
<td>T₂</td>
<td>3.63 ± 0.19a</td>
<td>8.04± 0.16a</td>
<td>9.29± 0.16a</td>
</tr>
<tr>
<td>T₃</td>
<td>3.05± 0.14bc</td>
<td>7.31± 0.33c</td>
<td>8.70± 0.31c</td>
</tr>
<tr>
<td>T₄</td>
<td>2.99± 0.26bc</td>
<td>7.40± 0.26b</td>
<td>8.72± 0.26c</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Fusarium oxysporum*) levels used: Control (T₀), 0.05% (T₁), 0.15% (T₂), 0.25% (T₃), 0.35% (T₄). MS medium supplemented with 1.5 mg l⁻¹ BA and 1.0 mg l⁻¹ NAA for embryo proliferation. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.
Table 22: Protein content (mg g⁻¹ FW) of embryos at proliferation stage under various levels of *Aspergillus flavus*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>T₀</td>
<td>1.21 ± 0.13d</td>
<td>3.50 ± 0.12d</td>
<td>4.29 ± 0.09d</td>
</tr>
<tr>
<td>T₁</td>
<td>2.05 ± 0.09b</td>
<td>3.85 ± 0.09b</td>
<td>5.50 ± 0.11b</td>
</tr>
<tr>
<td>T₂</td>
<td>2.41 ± 0.12a</td>
<td>4.39 ± 0.13a</td>
<td>6.08 ± 0.09a</td>
</tr>
<tr>
<td>T₃</td>
<td>1.74 ± 0.07c</td>
<td>3.60 ± 0.10c</td>
<td>5.44 ± 0.12c</td>
</tr>
<tr>
<td>T₄</td>
<td>1.72 ± 0.07c</td>
<td>3.59 ± 0.12c</td>
<td>5.42 ± 0.12c</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Aspergillus flavus*) levels used: Control (T₀), 0.05% (T₁), 0.15% (T₂), 0.25% (T₃), 0.35% (T₄). MS medium supplemented with 1.5 mg l⁻¹ BA and 1.0 mg l⁻¹ NAA for embryo proliferation. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.

Table 23: Protein content (mg g⁻¹ FW) of embryos at proliferation stage under various levels of *Fusarium oxysporum*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>T₀</td>
<td>1.16 ± 0.10c</td>
<td>3.52 ± 0.14c</td>
<td>4.27 ± 0.11c</td>
</tr>
<tr>
<td>T₁</td>
<td>1.23 ± 0.11b</td>
<td>3.67 ± 0.07b</td>
<td>5.07 ± 0.09b</td>
</tr>
<tr>
<td>T₂</td>
<td>1.45 ± 0.09a</td>
<td>3.91 ± 0.08a</td>
<td>5.88 ± 0.12a</td>
</tr>
<tr>
<td>T₃</td>
<td>1.12 ± 0.07d</td>
<td>3.49 ± 0.13cd</td>
<td>4.25 ± 0.13c</td>
</tr>
<tr>
<td>T₄</td>
<td>1.13 ± 0.10d</td>
<td>3.48 ± 0.11d</td>
<td>4.23 ± 0.15c</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Fusarium oxysporum*) levels used: Control (T₀), 0.05% (T₁), 0.15% (T₂), 0.25% (T₃), 0.35% (T₄). MS medium supplemented with 1.5 mg l⁻¹ BA and 1.0 mg l⁻¹ NAA for embryo proliferation. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.
Table 24: VB content (μg g⁻¹ DW) of embryos at proliferation stage under various levels of *Aspergillus flavus*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>T₀</td>
<td>0.278±0.0007c</td>
<td>0.543±0.005c</td>
<td>0.816±0.0006c</td>
</tr>
<tr>
<td>T₁</td>
<td>0.297±0.002b</td>
<td>0.579±0.0008b</td>
<td>0.857±0.001b</td>
</tr>
<tr>
<td>T₂</td>
<td>0.306±0.003a</td>
<td>0.614±0.002a</td>
<td>0.922±0.004a</td>
</tr>
<tr>
<td>T₃</td>
<td>0.275±0.0009d</td>
<td>0.535±0.004d</td>
<td>0.812±0.0009d</td>
</tr>
<tr>
<td>T₄</td>
<td>0.271±0.001d</td>
<td>0.531±0.001d</td>
<td>0.809±0.0007d</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Aspergillus flavus*) levels used: Control (T₀), 0.05% (T₁), 0.15% (T₂), 0.25% (T₃), 0.35% (T₄). MS medium supplemented with 1.5 mg l⁻¹ BA and 1.0 mg l⁻¹ NAA for embryo proliferation. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.

Table 25: VB content (μg g⁻¹ DW) of embryos at proliferation stage under various levels of *Fusarium oxysporum*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>T₀</td>
<td>0.276±0.0009c</td>
<td>0.545±0.002c</td>
<td>0.817±0.003c</td>
</tr>
<tr>
<td>T₁</td>
<td>0.288±0.001b</td>
<td>0.563±0.003b</td>
<td>0.839±0.006b</td>
</tr>
<tr>
<td>T₂</td>
<td>0.294±0.004a</td>
<td>0.591±0.0008a</td>
<td>0.866±0.004a</td>
</tr>
<tr>
<td>T₃</td>
<td>0.271±0.0008cd</td>
<td>0.532±0.0006d</td>
<td>0.803±0.004d</td>
</tr>
<tr>
<td>T₄</td>
<td>0.268±0.001d</td>
<td>0.526±0.001d</td>
<td>0.797±0.0007d</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Fusarium oxysporum*) levels used: Control (T₀), 0.05% (T₁), 0.15% (T₂), 0.25% (T₃), 0.35% (T₄). MS medium supplemented with 1.5 mg l⁻¹ BA and 1.0 mg l⁻¹ NAA for embryo proliferation. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.
### Table 26: VC content (μg g⁻¹ DW) of embryos at proliferation stage under various levels of *Aspergillus flavus*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>T₀</td>
<td>0.085±0.002c</td>
<td>0.171±0.001c</td>
<td>0.253±0.0008c</td>
</tr>
<tr>
<td>T₁</td>
<td>0.088±0.0009b</td>
<td>0.176±0.004b</td>
<td>0.264±0.001b</td>
</tr>
<tr>
<td>T₂</td>
<td>0.092±0.0008a</td>
<td>0.182±0.003a</td>
<td>0.277±0.002a</td>
</tr>
<tr>
<td>T₃</td>
<td>0.083±0.001cd</td>
<td>0.169±0.0009d</td>
<td>0.251±0.0007cd</td>
</tr>
<tr>
<td>T₄</td>
<td>0.080±0.0006d</td>
<td>0.168±0.0007d</td>
<td>0.248±0.005d</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Aspergillus flavus*) levels used: Control (T₀), 0.05% (T₁), 0.15% (T₂), 0.25% (T₃), 0.35% (T₄). MS medium supplemented with 1.5 mg l⁻¹ BA and 1.0 mg l⁻¹ NAA for embryo proliferation. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.

### Table 27: VC content (μg g⁻¹ DW) of embryos at proliferation stage under various levels of *Fusarium oxysporum*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>T₀</td>
<td>0.084±0.0008b</td>
<td>0.168±0.005c</td>
<td>0.255±0.003c</td>
</tr>
<tr>
<td>T₁</td>
<td>0.086±0.0005b</td>
<td>0.172±0.0008b</td>
<td>0.259±0.001b</td>
</tr>
<tr>
<td>T₂</td>
<td>0.089±0.002a</td>
<td>0.177±0.0006a</td>
<td>0.268±0.0008a</td>
</tr>
<tr>
<td>T₃</td>
<td>0.081±0.001c</td>
<td>0.165±0.001d</td>
<td>0.243±0.002d</td>
</tr>
<tr>
<td>T₄</td>
<td>0.078±0.0009c</td>
<td>0.167±0.004c</td>
<td>0.24±0.001d</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Fusarium oxysporum*) levels used: Control (T₀), 0.05% (T₁), 0.15% (T₂), 0.25% (T₃), 0.35% (T₄). MS medium supplemented with 1.5 mg l⁻¹ BA and 1.0 mg l⁻¹ NAA for embryo proliferation. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.
Table 28: Growth index of maturation stage of embryos under various levels of *Aspergillus flavus*

<table>
<thead>
<tr>
<th>No. of days</th>
<th>Parameter</th>
<th>Elicitor treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 d</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FW(g)</td>
<td>T&lt;sub&gt;0&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>0.86±0.04d</td>
<td>1.10±0.06b</td>
</tr>
<tr>
<td></td>
<td>DW(g)</td>
<td>0.09±0.01d</td>
</tr>
<tr>
<td></td>
<td>ADM (%)</td>
<td>10.77±0.10d</td>
</tr>
<tr>
<td>30 d</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FW(g)</td>
<td>2.53±0.05d</td>
</tr>
<tr>
<td></td>
<td>DW(g)</td>
<td>0.30±0.06d</td>
</tr>
<tr>
<td></td>
<td>ADM (%)</td>
<td>11.97±0.15d</td>
</tr>
<tr>
<td>45 d</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FW(g)</td>
<td>3.12±0.06d</td>
</tr>
<tr>
<td></td>
<td>DW(g)</td>
<td>0.39±0.04d</td>
</tr>
<tr>
<td></td>
<td>ADM (%)</td>
<td>12.51±0.10c</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Aspergillus flavus*) levels used: Control (T<sub>0</sub>), 0.05% (T<sub>1</sub>), 0.15% (T<sub>2</sub>), 0.25% (T<sub>3</sub>), 0.35% (T<sub>4</sub>). MS medium supplemented with 1.0 mg l<sup>−1</sup> GA<sub>3</sub> for embryo maturation. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.

FW= Fresh Weight, DW= Dry Weight, ADM (%) = Absolute dry mass.

ADM (%) = Dry weight / Fresh weight x 100.
Table 29: Growth index of maturation stage of embryos grown under various levels of *Fusarium oxysporum*.

<table>
<thead>
<tr>
<th>No. of days</th>
<th>Parameter</th>
<th>T₀</th>
<th>T₁</th>
<th>T₂</th>
<th>T₃</th>
<th>T₄</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 d</td>
<td>FW(g)</td>
<td>0.85±0.04d</td>
<td>0.98±0.03b</td>
<td>1.23±0.06a</td>
<td>0.91±0.03c</td>
<td>0.92±0.05c</td>
</tr>
<tr>
<td></td>
<td>DW(g)</td>
<td>0.09±0.04d</td>
<td>0.11±0.06b</td>
<td>0.16±0.01a</td>
<td>0.09±0.07c</td>
<td>0.10±0.02c</td>
</tr>
<tr>
<td></td>
<td>ADM (%)</td>
<td>10.74±0.10d</td>
<td>11.62±0.12b</td>
<td>13.56±0.24a</td>
<td>10.86±0.14d</td>
<td>11.12±0.16c</td>
</tr>
<tr>
<td>30 d</td>
<td>FW(g)</td>
<td>2.53±0.03d</td>
<td>2.65±0.04b</td>
<td>2.97±0.01a</td>
<td>2.59±0.06c</td>
<td>2.60±0.42c</td>
</tr>
<tr>
<td></td>
<td>DW(g)</td>
<td>0.30±0.01d</td>
<td>0.32±0.08b</td>
<td>0.39±0.04a</td>
<td>0.31±0.02c</td>
<td>0.31±0.09c</td>
</tr>
<tr>
<td></td>
<td>ADM (%)</td>
<td>11.87±0.11d</td>
<td>12.10±0.10b</td>
<td>13.33±0.13a</td>
<td>11.97±0.11c</td>
<td>12.05±0.20c</td>
</tr>
<tr>
<td>45 d</td>
<td>FW(g)</td>
<td>3.12±0.04d</td>
<td>3.35±0.03b</td>
<td>3.71±0.07a</td>
<td>3.30±0.10c</td>
<td>3.34±0.05c</td>
</tr>
<tr>
<td></td>
<td>DW(g)</td>
<td>0.38±0.04d</td>
<td>0.42±0.05b</td>
<td>0.50±0.01a</td>
<td>0.41±0.08c</td>
<td>0.41±0.03c</td>
</tr>
<tr>
<td></td>
<td>ADM (%)</td>
<td>12.34±0.17d</td>
<td>12.66±0.10b</td>
<td>13.56±0.14a</td>
<td>12.39±0.16c</td>
<td>12.41±0.10c</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Fusarium oxysporum*) levels used: Control (T₀), 0.05% (T₁), 0.15% (T₂), 0.25% (T₃), 0.35% (T₄). MS medium supplemented with 1.0 mg l⁻¹GA₃ for embryo maturation. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.

FW= Fresh Weight, DW= Dry Weight, ADM (%) = Absolute dry mass.

ADM (%) = Dry weight / Fresh weight x 100.
### Table 30: Sugar content (mg g\(^{-1}\) FW) of maturation stage of embryos under various levels of *Aspergillus flavus*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>T(_0)</td>
<td>8.52±0.01d</td>
<td>16.90±0.01d</td>
<td>24.92±0.01d</td>
</tr>
<tr>
<td>T(_1)</td>
<td>12.84±0.01b</td>
<td>19.24±0.01b</td>
<td>30.38±0.01b</td>
</tr>
<tr>
<td>T(_2)</td>
<td>17.43±0.05a</td>
<td>22.05±0.01a</td>
<td>32.21±0.01a</td>
</tr>
<tr>
<td>T(_3)</td>
<td>10.77±0.09c</td>
<td>17.89±0.07c</td>
<td>26.84±0.08c</td>
</tr>
<tr>
<td>T(_4)</td>
<td>10.98±0.07c</td>
<td>18.08±0.01c</td>
<td>27.12±0.01c</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Aspergillus flavus*) levels used: Control (T\(_0\)), 0.05% (T\(_1\)), 0.15% (T\(_2\)), 0.25% (T\(_3\)), 0.35% (T\(_4\)). MS medium supplemented with 1.0 mg l\(^{-1}\)Ga\(_3\) for embryo maturation. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.

### Table 31: Sugar content (mg g\(^{-1}\) FW) of maturation stage of embryos under various levels of *Fusarium oxysporum*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>T(_0)</td>
<td>7.32±0.01d</td>
<td>16.47±0.09d</td>
<td>24.76±0.01d</td>
</tr>
<tr>
<td>T(_1)</td>
<td>10.54±0.01b</td>
<td>18.95±0.01b</td>
<td>28.28±0.01b</td>
</tr>
<tr>
<td>T(_2)</td>
<td>11.45±0.01a</td>
<td>21.66±0.01a</td>
<td>31.62±0.07a</td>
</tr>
<tr>
<td>T(_3)</td>
<td>9.83±0.01c</td>
<td>17.43±0.09c</td>
<td>26.47±0.01c</td>
</tr>
<tr>
<td>T(_4)</td>
<td>9.91±0.01c</td>
<td>17.78±0.06c</td>
<td>27.08±0.01c</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Fusarium oxysporum*) levels used: Control (T\(_0\)), 0.05% (T\(_1\)), 0.15% (T\(_2\)), 0.25% (T\(_3\)), 0.35% (T\(_4\)). MS medium supplemented with 1.0 mg l\(^{-1}\)Ga\(_3\) for embryo maturation. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.
### Results (Tables)

**Table 32: Proline content (mg g\(^{-1}\) FW) of maturation stage of embryos under various levels of *Aspergillus flavus*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>T(_0)</td>
<td>2.69±0.01d</td>
<td>6.85±0.07d</td>
<td>9.49±0.02d</td>
</tr>
<tr>
<td>T(_1)</td>
<td>4.35±0.07b</td>
<td>7.98±0.01b</td>
<td>12.85±0.01b</td>
</tr>
<tr>
<td>T(_2)</td>
<td>6.72±0.05a</td>
<td>8.53±0.09a</td>
<td>17.36±0.01a</td>
</tr>
<tr>
<td>T(_3)</td>
<td>3.85±0.01c</td>
<td>7.15±0.01c</td>
<td>11.74±0.08c</td>
</tr>
<tr>
<td>T(_4)</td>
<td>3.80±0.01c</td>
<td>7.27±0.08c</td>
<td>11.71±0.09c</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Aspergillus flavus*) levels used: Control (T\(_0\)), 0.05% (T\(_1\)), 0.15% (T\(_2\)), 0.25% (T\(_3\)), 0.35% (T\(_4\)). MS medium supplemented with 1.0 mg l\(^{-1}\)GA\(_3\) for embryo maturation. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.

**Table 33: Proline content (mg g\(^{-1}\) FW) of maturation stage of embryos under various levels of *Fusarium oxysporum*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>T(_0)</td>
<td>2.66±0.01d</td>
<td>6.69±0.01d</td>
<td>9.335±0.01d</td>
</tr>
<tr>
<td>T(_1)</td>
<td>3.86±0.08b</td>
<td>7.74±0.01b</td>
<td>11.345±0.01b</td>
</tr>
<tr>
<td>T(_2)</td>
<td>5.48±0.01a</td>
<td>8.25±0.09a</td>
<td>15.367±0.01a</td>
</tr>
<tr>
<td>T(_3)</td>
<td>3.06±0.01c</td>
<td>6.94±0.01c</td>
<td>10.079±0.01c</td>
</tr>
<tr>
<td>T(_4)</td>
<td>3.11±0.05c</td>
<td>7.01±0.08c</td>
<td>10.025±0.08c</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Fusarium oxysporum*) levels used: Control (T\(_0\)), 0.05% (T\(_1\)), 0.15% (T\(_2\)), 0.25% (T\(_3\)), 0.35% (T\(_4\)). MS medium supplemented with 1.0 mg l\(^{-1}\)GA\(_3\) for embryo maturation. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.
Table 34: Protein content (mg g\(^{-1}\) FW) of maturation stage of embryos under various levels of *Aspergillus flavus*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>T(_0)</td>
<td>1.21±0.01d</td>
<td>4.78±0.01d</td>
<td>5.78±0.01d</td>
</tr>
<tr>
<td>T(_1)</td>
<td>2.25±0.08b</td>
<td>5.39±0.01b</td>
<td>7.99±0.01b</td>
</tr>
<tr>
<td>T(_2)</td>
<td>3.79±0.01a</td>
<td>5.86±0.01a</td>
<td>9.54±0.01a</td>
</tr>
<tr>
<td>T(_3)</td>
<td>1.74±0.02c</td>
<td>4.86±0.07c</td>
<td>7.11±0.01c</td>
</tr>
<tr>
<td>T(_4)</td>
<td>1.69±0.01c</td>
<td>4.88±0.01c</td>
<td>7.12±0.09c</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Aspergillus flavus*) levels used: Control (T\(_0\)), 0.05% (T\(_1\)), 0.15% (T\(_2\)), 0.25% (T\(_3\)), 0.35% (T\(_4\)). MS medium supplemented with 1.0 mg l\(^{-1}\)GA\(_3\) for embryo maturation. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.

Table 35: Protein content (mg g\(^{-1}\) FW) of maturation stage of embryos under various levels of *Fusarium oxysporum*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>T(_0)</td>
<td>1.19±0.01d</td>
<td>4.51±0.01d</td>
<td>5.74±0.01d</td>
</tr>
<tr>
<td>T(_1)</td>
<td>1.73±0.01b</td>
<td>5.08±0.01b</td>
<td>6.12±0.01b</td>
</tr>
<tr>
<td>T(_2)</td>
<td>2.99±0.01a</td>
<td>5.37±0.01a</td>
<td>8.35±0.09a</td>
</tr>
<tr>
<td>T(_3)</td>
<td>1.56±0.01c</td>
<td>4.65±0.01c</td>
<td>6.04±0.02c</td>
</tr>
<tr>
<td>T(_4)</td>
<td>1.55±0.01c</td>
<td>4.69±0.01c</td>
<td>6.10±0.01c</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Fusarium oxysporum*) levels used: Control (T\(_0\)), 0.05% (T\(_1\)), 0.15% (T\(_2\)), 0.25% (T\(_3\)), 0.35% (T\(_4\)). MS medium supplemented with 1.0 mg l\(^{-1}\)GA\(_3\) for embryo maturation. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.
Table 36: VB content (μg g⁻¹ DW) of maturation stage of embryos under various levels of *Aspergillus flavus*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>T₀</td>
<td>0.403±0.004c</td>
<td>0.787±0.001c</td>
<td>1.199±0.002c</td>
</tr>
<tr>
<td>T₁</td>
<td>0.414±0.001b</td>
<td>0.828±0.0008b</td>
<td>1.243±0.0008b</td>
</tr>
<tr>
<td>T₂</td>
<td>0.429±0.002a</td>
<td>0.851±0.0005a</td>
<td>1.281±0.003a</td>
</tr>
<tr>
<td>T₃</td>
<td>0.398±0.0007d</td>
<td>0.780±0.001d</td>
<td>1.196±0.001d</td>
</tr>
<tr>
<td>T₄</td>
<td>0.397±0.0009d</td>
<td>0.782±0.002d</td>
<td>1.193±0.0007d</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Aspergillus flavus*) levels used: Control (T₀), 0.05% (T₁), 0.15% (T₂), 0.25% (T₃), 0.35% (T₄). MS medium supplemented with 1.0 mg l⁻¹GA₃ for embryo maturation. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.

Table 37: VB content (μg g⁻¹ DW) of maturation stage of embryos under various levels of *Fusarium oxysporum*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>T₀</td>
<td>0.401±0.001b</td>
<td>0.788±0.005c</td>
<td>1.202±0.0008c</td>
</tr>
<tr>
<td>T₁</td>
<td>0.406±0.0006b</td>
<td>0.813±0.0007b</td>
<td>1.229±0.001b</td>
</tr>
<tr>
<td>T₂</td>
<td>0.417±0.0009a</td>
<td>0.839±0.002a</td>
<td>1.267±0.0008a</td>
</tr>
<tr>
<td>T₃</td>
<td>0.395±0.001c</td>
<td>0.775±0.004d</td>
<td>1.194±0.003d</td>
</tr>
<tr>
<td>T₄</td>
<td>0.392±0.003c</td>
<td>0.771±0.001d</td>
<td>1.188±0.001d</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Fusarium oxysporum*) levels used: Control (T₀), 0.05% (T₁), 0.15% (T₂), 0.25% (T₃), 0.35% (T₄). MS medium supplemented with 1.0 mg l⁻¹GA₃ for embryo maturation. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.
### Table 38: VC content (μg g⁻¹ DW) of maturation stage of embryos under various levels of *Aspergillus flavus*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>T₀</td>
<td>0.093±0.001c</td>
<td>0.182±0.0009c</td>
<td>0.273±0.001b</td>
</tr>
<tr>
<td>T₁</td>
<td>0.098±0.0008b</td>
<td>0.189±0.005</td>
<td>0.292±0.0006a</td>
</tr>
<tr>
<td>T₂</td>
<td>0.105±0.0005a</td>
<td>0.201±0.001a</td>
<td>0.299±0.0009a</td>
</tr>
<tr>
<td>T₃</td>
<td>0.081±0.003d</td>
<td>0.177±0.002d</td>
<td>0.265±0.004c</td>
</tr>
<tr>
<td>T₄</td>
<td>0.079±0.001d</td>
<td>0.174±0.0007d</td>
<td>0.270±0.0008b</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Aspergillus flavus*) levels used: Control (T₀), 0.05% (T₁), 0.15% (T₂), 0.25% (T₃), 0.35% (T₄). MS medium supplemented with 1.0 mg l⁻¹ GA₃ for embryo maturation. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.

### Table 39: VC content (μg g⁻¹ DW) of maturation stage of embryos under various levels of *Fusarium oxysporum*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>T₀</td>
<td>0.092±0.0008b</td>
<td>0.181±0.002b</td>
<td>0.275±0.004c</td>
</tr>
<tr>
<td>T₁</td>
<td>0.095±0.001ab</td>
<td>0.184±0.001b</td>
<td>0.281±0.0009b</td>
</tr>
<tr>
<td>T₂</td>
<td>0.099±0.0009a</td>
<td>0.192±0.0007a</td>
<td>0.296±0.001a</td>
</tr>
<tr>
<td>T₃</td>
<td>0.080±0.0006c</td>
<td>0.170±0.002c</td>
<td>0.261±0.002d</td>
</tr>
<tr>
<td>T₄</td>
<td>0.077±0.0004c</td>
<td>0.168±0.0006c</td>
<td>0.264±0.0007d</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Fusarium oxysporum*) levels used: Control (T₀), 0.05% (T₁), 0.15% (T₂), 0.25% (T₃), 0.35% (T₄). MS medium supplemented with 1.0 mg l⁻¹ GA₃ for embryo maturation. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.
Table 40: Effect of various PGRs and Activated charcoal (AC) (10%) on germination (rooting) of SE. The SEs were cultured on half- and full strength MS medium. Data were scored after 8th weeks of culture.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Rooting %</th>
<th>Root length (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Half MS</td>
<td>11.50 ± 2.27f</td>
<td>3.17 ± 0.11d</td>
</tr>
<tr>
<td>Full MS</td>
<td>13.63 ± 2.25f</td>
<td>3.40 ± 0.41d</td>
</tr>
<tr>
<td>MS + AC</td>
<td>46.4 ± 3.94d</td>
<td>6.27 ±0.43b</td>
</tr>
<tr>
<td>MS + IBA (1.0 mg l(^{-1}))</td>
<td>72.69 ± 1.96ab</td>
<td>8.44 ± 0.10a</td>
</tr>
<tr>
<td>MS + IBA (2.0 mg l(^{-1}))</td>
<td>43.94 ± 0.31d</td>
<td>6.35 ± 0.37b</td>
</tr>
<tr>
<td>MS + IBA (1.0 mg l(^{-1})) + AC</td>
<td>81.99 ± 1.11a</td>
<td>9.10 ± 0.90a</td>
</tr>
<tr>
<td>MS + NAA (1.0 mg l(^{-1}))</td>
<td>42.64 ± 1.26d</td>
<td>6.20 ± 0.23b</td>
</tr>
<tr>
<td>MS + NAA (2.0 mg l(^{-1}))</td>
<td>38.47 ± 0.86e</td>
<td>5.08 ± 0.12c</td>
</tr>
<tr>
<td>MS + NAA (1.0 mg l(^{-1})) + AC</td>
<td>67.53 ± 4.02b</td>
<td>7.23 ± 0.04b</td>
</tr>
<tr>
<td>MS + GA(_3) (1.0 mg l(^{-1}))</td>
<td>77.77 ± 3.86a</td>
<td>8.65 ± 1.51a</td>
</tr>
<tr>
<td>MS + GA(_3) (2.0 mg l(^{-1}))</td>
<td>68.45 ± 2.25b</td>
<td>6.58±1.15b</td>
</tr>
<tr>
<td>MS + GA(_3) (1.0 mg l(^{-1})) + AC</td>
<td>81.38± 2.95a</td>
<td>8.75 ± 1.85a</td>
</tr>
<tr>
<td>MS + ABA (1.0 mg l(^{-1}))</td>
<td>66.55 ± 3.65b</td>
<td>6.56±1.65b</td>
</tr>
<tr>
<td>MS + ABA (2.0 mg l(^{-1}))</td>
<td>43.45 ± 2.56d</td>
<td>5.95±0.95b</td>
</tr>
<tr>
<td>MS + ABA (1.0 mg l(^{-1})) + AC</td>
<td>81.58 ± 1.65a</td>
<td>9.25± 1.86a</td>
</tr>
</tbody>
</table>

Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.
Table 41: Growth index of germination stage of embryos grown under various levels of *Aspergillus flavus*.

<table>
<thead>
<tr>
<th>No. of days</th>
<th>Parameter</th>
<th>T₀</th>
<th>T₁</th>
<th>T₂</th>
<th>T₃</th>
<th>T₄</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 d</td>
<td>FW(g)</td>
<td>1.15±0.04d</td>
<td>1.38±0.03b</td>
<td>1.98±0.07a</td>
<td>1.25±0.01c</td>
<td>1.26±0.05c</td>
</tr>
<tr>
<td></td>
<td>DW(g)</td>
<td>0.13±0.04d</td>
<td>0.19±0.06b</td>
<td>0.28±0.01a</td>
<td>0.15±0.08c</td>
<td>0.15±0.07c</td>
</tr>
<tr>
<td></td>
<td>ADM (%)</td>
<td>11.07±0.10d</td>
<td>13.62±0.12b</td>
<td>14.37±0.16a</td>
<td>12.26±0.21c</td>
<td>12.35±0.15c</td>
</tr>
<tr>
<td>30 d</td>
<td>FW(g)</td>
<td>2.33±0.05d</td>
<td>2.69±0.04b</td>
<td>3.34±0.08a</td>
<td>2.65±0.10c</td>
<td>2.66±0.04c</td>
</tr>
<tr>
<td></td>
<td>DW(g)</td>
<td>0.28±0.05d</td>
<td>0.37±0.09b</td>
<td>0.48±0.02a</td>
<td>0.34±0.04c</td>
<td>0.34±0.06c</td>
</tr>
<tr>
<td></td>
<td>ADM (%)</td>
<td>12.14±0.11d</td>
<td>13.99±0.15b</td>
<td>14.52±0.11a</td>
<td>12.80±0.20c</td>
<td>12.84±0.10c</td>
</tr>
<tr>
<td>45 d</td>
<td>FW(g)</td>
<td>3.48±0.08d</td>
<td>4.22±0.05b</td>
<td>4.97±0.03a</td>
<td>3.86±0.04c</td>
<td>3.90±0.07c</td>
</tr>
<tr>
<td></td>
<td>DW(g)</td>
<td>0.44±0.01d</td>
<td>0.59±0.04b</td>
<td>0.72±0.08a</td>
<td>0.50±0.01c</td>
<td>0.50±0.05c</td>
</tr>
<tr>
<td></td>
<td>ADM (%)</td>
<td>12.56±0.12d</td>
<td>14.07±0.17b</td>
<td>14.62±0.13a</td>
<td>12.98±0.10c</td>
<td>12.98±0.20c</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Aspergillus flavus*) levels used: Control (T₀), 0.05% (T₁), 0.15% (T₂), 0.25% (T₃), 0.35% (T₄). MS medium supplemented with 0.5 mg l⁻¹BA for embryo germination. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.

FW= Fresh Weight, DW= Dry Weight, ADM (%) = Absolute dry mass.
ADM (%) = Dry weight / Fresh weight x 100.
Table 42: Growth index of germination stage of embryos, grown under various levels of *Fusarium oxysporum*.

<table>
<thead>
<tr>
<th>No. of days</th>
<th>Parameter</th>
<th>Elicitor treatment</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>15 d</td>
<td>FW (g)</td>
<td>T₀</td>
<td>T₁</td>
<td>T₂</td>
<td>T₃</td>
<td>T₄</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.15±0.04d</td>
<td>1.27±0.02b</td>
<td>1.55±0.01a</td>
<td>1.22±0.05c</td>
<td>1.21±0.10c</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DW (g)</td>
<td>T₀</td>
<td>T₁</td>
<td>T₂</td>
<td>T₃</td>
<td>T₄</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.12±0.01d</td>
<td>0.17±0.04b</td>
<td>0.22±0.01a</td>
<td>0.15±0.09c</td>
<td>0.15±0.01c</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ADM (%)</td>
<td>T₀</td>
<td>T₁</td>
<td>T₂</td>
<td>T₃</td>
<td>T₄</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10.92±0.11d</td>
<td>13.53±0.12b</td>
<td>14.10±0.18a</td>
<td>12.15±0.15c</td>
<td>12.65±0.16c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 d</td>
<td>FW (g)</td>
<td>T₀</td>
<td>T₁</td>
<td>T₂</td>
<td>T₃</td>
<td>T₄</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.32±0.02d</td>
<td>2.47±0.05b</td>
<td>3.05±0.04a</td>
<td>2.42±0.05c</td>
<td>2.42±0.10c</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DW (g)</td>
<td>T₀</td>
<td>T₁</td>
<td>T₂</td>
<td>T₃</td>
<td>T₄</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.28±0.04d</td>
<td>0.34±0.02b</td>
<td>0.43±0.07a</td>
<td>0.30±0.01c</td>
<td>0.30±0.09c</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ADM (%)</td>
<td>T₀</td>
<td>T₁</td>
<td>T₂</td>
<td>T₃</td>
<td>T₄</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12.07±0.14d</td>
<td>13.77±0.10b</td>
<td>14.28±0.21a</td>
<td>12.48±0.19c</td>
<td>12.53±0.15c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45 d</td>
<td>FW (g)</td>
<td>T₀</td>
<td>T₁</td>
<td>T₂</td>
<td>T₃</td>
<td>T₄</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.48±0.04d</td>
<td>3.75±0.08b</td>
<td>4.31±0.06a</td>
<td>3.64±0.11c</td>
<td>3.64±0.29c</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DW (g)</td>
<td>T₀</td>
<td>T₁</td>
<td>T₂</td>
<td>T₃</td>
<td>T₄</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.43±0.03d</td>
<td>0.52±0.01b</td>
<td>0.66±0.07a</td>
<td>0.47±0.01c</td>
<td>0.47±0.02c</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ADM (%)</td>
<td>T₀</td>
<td>T₁</td>
<td>T₂</td>
<td>T₃</td>
<td>T₄</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12.53±0.17d</td>
<td>13.87±0.12b</td>
<td>14.35±0.10a</td>
<td>12.98±0.21c</td>
<td>12.86±0.15c</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Fusarium oxysporum*) levels used: Control (T₀), 0.05% (T₁), 0.15% (T₂), 0.25% (T₃), 0.35% (T₄). MS medium supplemented with 0.5 mg l⁻¹BA for embryo germination. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.

FW = Fresh Weight, DW = Dry Weight, ADM (%) = Absolute dry mass.

ADM (%) = Dry weight / Fresh weight x 100.
### Table 43: Germination of somatic embryos with different levels of fungal elicitor (Aspergillus flavus)

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Mean No. of embryos germinated</th>
<th>% Germination</th>
<th>Shoot length (mm)</th>
<th>Root length (mm)</th>
<th>Root without shoot</th>
<th>Shoots without root</th>
</tr>
</thead>
<tbody>
<tr>
<td>T₀</td>
<td>2.55±0.31c</td>
<td>39.41±2.03c</td>
<td>3.44±0.22c</td>
<td>4.45±0.21c</td>
<td>0.00±0.00d</td>
<td>9.53±0.19c</td>
</tr>
<tr>
<td>T₁</td>
<td>3.05±0.41b</td>
<td>48.30±2.11b</td>
<td>10.53±0.32b</td>
<td>5.15±0.27b</td>
<td>0.00±0.00d</td>
<td>14.89±0.24b</td>
</tr>
<tr>
<td>T₂</td>
<td>4.20±0.35a</td>
<td>58.66±2.01a</td>
<td>14.63±0.31a</td>
<td>8.85±0.31a</td>
<td>8.75±0.21a</td>
<td>23.31±0.25a</td>
</tr>
<tr>
<td>T₃</td>
<td>1.64±0.33d</td>
<td>20.19±2.66d</td>
<td>3.02±0.23c</td>
<td>3.06±0.29d</td>
<td>5.45±0.27b</td>
<td>0.54±0.13d</td>
</tr>
<tr>
<td>T₄</td>
<td>1.31±0.36d</td>
<td>14.57±1.74e</td>
<td>1.85±0.29d</td>
<td>2.23±0.27e</td>
<td>2.17±0.24c</td>
<td>0.33±0.12d</td>
</tr>
</tbody>
</table>

Different fungal elicitor (Aspergillus flavus) levels used: Control (T₀), 0.05% (T₁), 0.15% (T₂), 0.25% (T₃), 0.35% (T₄). MS medium supplemented with 0.5 mg l⁻¹BA for embryo germination. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.

### Table 44: Germination of somatic embryos with different levels of fungal elicitor (Fusarium oxysporum)

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Mean No. of embryos germinated</th>
<th>% Germination</th>
<th>Shoot length (mm)</th>
<th>Root length (mm)</th>
<th>Root without shoot</th>
<th>Shoots without root</th>
</tr>
</thead>
<tbody>
<tr>
<td>T₀</td>
<td>2.54±0.11c</td>
<td>38.56±1.87c</td>
<td>3.36±0.30c</td>
<td>4.34±0.29b</td>
<td>0.00±0.00d</td>
<td>9.65±0.27c</td>
</tr>
<tr>
<td>T₁</td>
<td>2.77±0.12b</td>
<td>47.58±2.60b</td>
<td>8.96±0.39b</td>
<td>4.90±0.23b</td>
<td>0.00±0.00d</td>
<td>12.56±0.31b</td>
</tr>
<tr>
<td>T₂</td>
<td>3.64±0.08a</td>
<td>56.63±1.88a</td>
<td>11.16±0.29a</td>
<td>6.67±0.30a</td>
<td>5.34±0.38a</td>
<td>20.14±0.28a</td>
</tr>
<tr>
<td>T₃</td>
<td>1.16±0.12d</td>
<td>16.76±1.92d</td>
<td>1.94±0.22d</td>
<td>2.12±0.28c</td>
<td>3.77±0.36b</td>
<td>0.00±0.00e</td>
</tr>
<tr>
<td>T₄</td>
<td>0.96±0.09d</td>
<td>12.7±1.91e</td>
<td>1.24±0.21d</td>
<td>2.07±0.31c</td>
<td>1.68±0.42c</td>
<td>1.64±0.33d</td>
</tr>
</tbody>
</table>

Different fungal elicitor (Fusarium oxysporum) levels used: Control (T₀), 0.05% (T₁), 0.15% (T₂), 0.25% (T₃), 0.35% (T₄). MS medium supplemented with 0.5 mg l⁻¹BA for embryo germination. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.
### Results (Tables)

**Table 45: Sugar content (mg g\(^{-1}\) FW) of germination stage of embryos under various levels of *Aspergillus flavus*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>T(_0)</strong></td>
<td>5.44±0.01d</td>
<td>12.65±0.01d</td>
<td>17.98±0.01d</td>
</tr>
<tr>
<td><strong>T(_1)</strong></td>
<td>7.84±0.01b</td>
<td>13.72±0.01b</td>
<td>21.21±0.01b</td>
</tr>
<tr>
<td><strong>T(_2)</strong></td>
<td>9.56±0.06a</td>
<td>15.27±0.01a</td>
<td>26.01±0.01a</td>
</tr>
<tr>
<td><strong>T(_3)</strong></td>
<td>6.11±0.01c</td>
<td>12.97±0.09c</td>
<td>19.33±0.08c</td>
</tr>
<tr>
<td><strong>T(_4)</strong></td>
<td>6.09±0.01c</td>
<td>12.85±0.01c</td>
<td>19.30±0.01c</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Aspergillus flavus*) levels used: Control (T\(_0\)), 0.05% (T\(_1\)), 0.15% (T\(_2\)), 0.25% (T\(_3\)), 0.35% (T\(_4\)). MS medium supplemented with 0.5 mg l\(^{-1}\)BA for embryo germination. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.

**Table 46: Sugar content (mg g\(^{-1}\) FW) under of germination stage of embryos under various levels of *Fusarium oxysporum*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>T(_0)</strong></td>
<td>5.39±0.01d</td>
<td>12.35±0.01d</td>
<td>17.84±0.01d</td>
</tr>
<tr>
<td><strong>T(_1)</strong></td>
<td>6.08±0.01b</td>
<td>13.28±0.08b</td>
<td>19.51±0.01b</td>
</tr>
<tr>
<td><strong>T(_2)</strong></td>
<td>8.23±0.01a</td>
<td>14.96±0.01a</td>
<td>24.05±0.01a</td>
</tr>
<tr>
<td><strong>T(_3)</strong></td>
<td>5.62±0.01c</td>
<td>12.67±0.01c</td>
<td>18.11±0.02c</td>
</tr>
<tr>
<td><strong>T(_4)</strong></td>
<td>5.60±0.01c</td>
<td>12.74±0.09c</td>
<td>18.05±0.09c</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Fusarium oxysporum*) levels used: Control (T\(_0\)), 0.05% (T\(_1\)), 0.15% (T\(_2\)), 0.25% (T\(_3\)), 0.35% (T\(_4\)). MS medium supplemented with 0.5 mg l\(^{-1}\)BA for embryo germination. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.
Table 47: Proline content (mg g⁻¹ FW) of germination stage of embryos under various levels of *Aspergillus flavus*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>T₀</td>
<td>2.60±0.02d</td>
<td>6.09±0.01d</td>
<td>8.77±0.02d</td>
</tr>
<tr>
<td>T₁</td>
<td>3.84±0.01b</td>
<td>6.88±0.01b</td>
<td>10.04±0.07b</td>
</tr>
<tr>
<td>T₂</td>
<td>5.07±0.02a</td>
<td>7.59±0.07a</td>
<td>12.21±0.01a</td>
</tr>
<tr>
<td>T₃</td>
<td>3.07±0.05c</td>
<td>6.27±0.01c</td>
<td>9.23±0.01c</td>
</tr>
<tr>
<td>T₄</td>
<td>3.05±0.01c</td>
<td>6.34±0.01c</td>
<td>9.35±0.02c</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Aspergillus flavus*) levels used: Control (T₀), 0.05% (T₁), 0.15% (T₂), 0.25% (T₃), 0.35% (T₄). MS medium supplemented with 0.5 mg l⁻¹ BA for embryo germination. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.

Table 48: Proline content (mg g⁻¹ FW) of germination stage of embryos under various levels of *Fusarium oxysporum*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>T₀</td>
<td>2.56±0.01d</td>
<td>5.84±0.01d</td>
<td>8.73±0.01d</td>
</tr>
<tr>
<td>T₁</td>
<td>3.13±0.01b</td>
<td>6.69±0.08b</td>
<td>9.30±0.09b</td>
</tr>
<tr>
<td>T₂</td>
<td>4.40±0.01a</td>
<td>7.25±0.09a</td>
<td>11.22±0.01a</td>
</tr>
<tr>
<td>T₃</td>
<td>2.85±0.08c</td>
<td>6.06±0.08c</td>
<td>8.96±0.01c</td>
</tr>
<tr>
<td>T₄</td>
<td>2.82±0.05c</td>
<td>6.14±0.01c</td>
<td>9.01±0.07c</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Fusarium oxysporum*) levels used: Control (T₀), 0.05% (T₁), 0.15% (T₂), 0.25% (T₃), 0.35% (T₄). MS medium supplemented with 0.5 mg l⁻¹ BA for embryo germination. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.
Table 49: Protein content (mg g$^{-1}$ FW) of germination stage of embryos under various levels of *Aspergillus flavus*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>$T_0$</td>
<td>1.41±0.01d</td>
<td>5.09±0.01d</td>
<td>6.20±0.08d</td>
</tr>
<tr>
<td>$T_1$</td>
<td>2.77±0.09b</td>
<td>5.68±0.01b</td>
<td>7.67±0.01b</td>
</tr>
<tr>
<td>$T_2$</td>
<td>4.13±0.02a</td>
<td>6.01±0.01a</td>
<td>9.01±0.07a</td>
</tr>
<tr>
<td>$T_3$</td>
<td>2.04±0.02c</td>
<td>5.19±0.01c</td>
<td>6.98±0.09c</td>
</tr>
<tr>
<td>$T_4$</td>
<td>2.01±0.01c</td>
<td>5.23±0.02c</td>
<td>6.84±0.01c</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Aspergillus flavus*) levels used: Control ($T_0$), 0.05% ($T_1$), 0.15% ($T_2$), 0.25% ($T_3$), 0.35% ($T_4$). MS medium supplemented with 0.5 mg l$^{-1}$ BA for embryo germination. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.

Table 50: Protein content (mg g$^{-1}$ FW) of germination stage of embryos under various levels of *Fusarium oxysporum*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>$T_0$</td>
<td>1.36±0.02d</td>
<td>4.67±0.02d</td>
<td>6.19±0.01d</td>
</tr>
<tr>
<td>$T_1$</td>
<td>2.13±0.01b</td>
<td>5.11±0.01b</td>
<td>7.04±0.02b</td>
</tr>
<tr>
<td>$T_2$</td>
<td>3.36±0.01a</td>
<td>5.45±0.01a</td>
<td>8.38±0.01a</td>
</tr>
<tr>
<td>$T_3$</td>
<td>1.72±0.02c</td>
<td>4.81±0.01c</td>
<td>6.57±0.01c</td>
</tr>
<tr>
<td>$T_4$</td>
<td>1.76±0.01c</td>
<td>4.86±0.02c</td>
<td>6.66±0.02c</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Fusarium oxysporum*) levels used: Control ($T_0$), 0.05% ($T_1$), 0.15% ($T_2$), 0.25% ($T_3$), 0.35% ($T_4$). MS medium supplemented with 0.5 mg l$^{-1}$ BA for embryo germination. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.
Results (Tables)

Table 51: VB content (μg g\(^{-1}\) DW) of germination stage of embryos under various levels of *Aspergillus flavus*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>T(_0)</td>
<td>0.423±0.011c</td>
<td>0.837±0.009c</td>
<td>1.160±0.012c</td>
</tr>
<tr>
<td>T(_1)</td>
<td>0.442±0.008b</td>
<td>0.876±0.011b</td>
<td>1.247±0.006b</td>
</tr>
<tr>
<td>T(_2)</td>
<td>0.478±0.013a</td>
<td>0.903±0.007a</td>
<td>1.552±0.009a</td>
</tr>
<tr>
<td>T(_3)</td>
<td>0.416±0.011d</td>
<td>0.831±0.021cd</td>
<td>1.122±0.011d</td>
</tr>
<tr>
<td>T(_4)</td>
<td>0.420±0.010cd</td>
<td>0.825±0.014d</td>
<td>1.128±0.017d</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Aspergillus flavus*) levels used: Control (T\(_0\)), 0.05% (T\(_1\)), 0.15% (T\(_2\)), 0.25% (T\(_3\)), 0.35% (T\(_4\)). MS medium supplemented with 0.5 mg l\(^{-1}\)BA for embryo germination. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.

Table 52: VB content (μg g\(^{-1}\) DW) of germination stage of embryos under various levels of *Fusarium oxysporum*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>T(_0)</td>
<td>0.422±0.010c</td>
<td>0.835±0.012c</td>
<td>1.156±0.008c</td>
</tr>
<tr>
<td>T(_1)</td>
<td>0.429±0.011b</td>
<td>0.861±0.009b</td>
<td>1.197±0.011b</td>
</tr>
<tr>
<td>T(_2)</td>
<td>0.451±0.007a</td>
<td>0.886±0.011a</td>
<td>1.235±0.015a</td>
</tr>
<tr>
<td>T(_3)</td>
<td>0.408±0.013d</td>
<td>0.827±0.010d</td>
<td>1.118±0.018d</td>
</tr>
<tr>
<td>T(_4)</td>
<td>0.415±0.011d</td>
<td>0.823±0.018d</td>
<td>1.121±0.009d</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Fusarium oxysporum*) levels used: Control (T\(_0\)), 0.05% (T\(_1\)), 0.15% (T\(_2\)), 0.25% (T\(_3\)), 0.35% (T\(_4\)). MS medium supplemented with 0.5 mg l\(^{-1}\)BA for embryo germination. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at p ≤ 0.05 according to DMRT.
Table 53: VC content (μg g⁻¹ DW) of germination stage of embryos under various levels of *Aspergillus flavus*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>( T_0 )</td>
<td>0.084±0.013c</td>
<td>0.187±0.010c</td>
<td>0.255±0.010c</td>
</tr>
<tr>
<td>( T_1 )</td>
<td>0.096±0.010b</td>
<td>0.202±0.015b</td>
<td>0.281±0.011b</td>
</tr>
<tr>
<td>( T_2 )</td>
<td>0.108±0.017a</td>
<td>0.216±0.011a</td>
<td>0.312±0.007a</td>
</tr>
<tr>
<td>( T_3 )</td>
<td>0.079±0.008cd</td>
<td>0.188±0.009c</td>
<td>0.246±0.011d</td>
</tr>
<tr>
<td>( T_4 )</td>
<td>0.075±0.021d</td>
<td>0.180±0.011d</td>
<td>0.239±0.012d</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Aspergillus flavus*) levels used: Control \( (T_0) \), 0.05% \( (T_1) \), 0.15% \( (T_2) \), 0.25% \( (T_3) \), 0.35% \( (T_4) \). MS medium supplemented with 0.5 mg l⁻¹BA for embryo germination. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at \( p \leq 0.05 \) according to DMRT.

Table 54: VC content (μg g⁻¹ DW) of germination stage of embryos under various levels of *Fusarium oxysporum*.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>After 15 days</th>
<th>After 30 days</th>
<th>After 45 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>( T_0 )</td>
<td>0.083±0.014c</td>
<td>0.185±0.011c</td>
<td>0.254±0.007c</td>
</tr>
<tr>
<td>( T_1 )</td>
<td>0.088±0.011b</td>
<td>0.191±0.008b</td>
<td>0.275±0.011b</td>
</tr>
<tr>
<td>( T_2 )</td>
<td>0.095±0.010a</td>
<td>0.199±0.012a</td>
<td>0.307±0.016a</td>
</tr>
<tr>
<td>( T_3 )</td>
<td>0.076±0.011d</td>
<td>0.182±0.013c</td>
<td>0.242±0.013d</td>
</tr>
<tr>
<td>( T_4 )</td>
<td>0.074±0.009d</td>
<td>0.177±0.011d</td>
<td>0.239±0.008d</td>
</tr>
</tbody>
</table>

Different fungal elicitor (*Fusarium oxysporum*) levels used: Control \( (T_0) \), 0.05% \( (T_1) \), 0.15% \( (T_2) \), 0.25% \( (T_3) \), 0.35% \( (T_4) \). MS medium supplemented with 0.5 mg l⁻¹BA for embryo germination. Values are means ± standard errors of 3 replicates. Within each column, means followed by the same letter are not significantly different at \( p \leq 0.05 \) according to DMRT.