|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Explant** | | **Growth regulator**  **2,4-D**  **mg L-1** | **Days to Callus induction** | **Callus texture** | **Callus Color** | **Callus weight** | | | **Callus induction %** |
| **Day 7**  **FW (g)** | **Day 14 FW (g)** | **Day 28**  **FW (g)** |
|  | Leaf | 0.5 | 5 | compact | Cream | 0.022±0.017 | 0.13±0.008 | 0.33±0.005 | 80 |
|  | Stem | 0.5 | 7 | Friable | Green | 0.021±0.001 | 0.20±0.005 | 0.84±0.005 | 60 |
|  | Hypocotyl | 0.5 | 3 | Friable | White | 0.008±0.000 | 0.10±0.008 | 0.39±0.005 | 40 |
|  | Leaf | 1 | 4 | Compact | Opaque | 0.033±0.000 | 0.17±0.005 | 0.30±0.005 | 30 |
|  | Stem | 1 | 6 | Loose | Light brown | 0.036±0.008 | 0.20±0.008 | 0.32±0.008 | 80 |
|  | Hypocotyl | 1 | 8 | Friable | White | 0.009±0.000 | 0.12±0.008 | 0.24±0.005 | 32 |
|  | Leaf | 2 | 3 | Friable | Cream | 0.015±0.000 | 0.22±0.005 | 0.48±0.012 | 75 |
|  | Stem | 2 | 4 | Compact | Green | 0.024±0.000 | 0.22±0.005 | 0.70±0.012 | 40 |
|  | Hypocotyl | 2 | 8 | Friable | Cream | 0.010±0.012 | 0.13±0.03 | 0.45±0.01 | 58 |

**Table 4.2:** Callus induction from different explants of VAR I under different levels of 2,4-D

**Table 4.3:** Callus induction from different explants of VAR 2 under different levels of 2,4-D

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Explant** | | **Growth regulator**  **2,4-D**  **mg L-1** | **Days to Callus induction** | **Callus texture** | **Callus Color** | **Callus weight** | | | **Callus induction %** |
| **Day 1**  **FW (g)** | **Day 14 FW (g)** | **Day 28**  **FW (g)** |
|  | Leaf | 0.5 | 5 | Compact | Green | 0.023±0.000 | 0.13±0.008 | 0.35±0.005 | 88 |
|  | Stem | 0.5 | 6 | Friable | Green | 0.019±0.000 | 0.26±0.008 | 0.88±0.005 | 67 |
|  | Hypocotyl | 0.5 | 4 | Friable | Creamy | 0.009±0.000 | 0.16±0.005 | 0.45±0.014 | 40 |
|  | Leaf | 1 | 7 | Compact | Green | 0.029±0.001 | 0.18±0.005 | 0.37±0.006 | 35 |
|  | Stem | 1 | 6 | Loose | Light Green | 0.034±0.000 | 0.17±0.008 | 0.40±0.008 | 85 |
|  | Hypocotyl | 1 | 10 | Friable | Green | 0.009±0.000 | 0.14±0.012 | 0.22±0.008 | 33 |
|  | Leaf | 2 | 3 | Compact | Cream | 0.014±0.000 | 0.19±0.012 | 0.52±0.008 | 83 |
|  | Stem | 2 | 5 | Friable | Green | 0.023±0.000 | 0.25±0.011 | 0.78±0.017 | 45 |
|  | Hypocotyl | 2 | 4 | Friable | Light Green | 0.012±0.000 | 0.14±0.008 | 0.63±0.012 | 56 |

**Table 4.4:** Callus induction from different explants of VAR 3 under different levels of 2,4-D

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Explant** | | **Growth regulator**  **2,4-D**  **mg L-1** | **Days to Callus induction** | **Callus texture** | **Callus Color** | **Callus weight** | | | **Callus induction %** |
| **Day 1**  **FW (g)** | **Day 14 FW (g)** | **Day 28**  **FW (g)** |
|  | Leaf | 0.5 | 5 | compact | Light Green | 0.019±0.000 | 0.11±0.005 | 0.29±0.005 | 60 |
|  | Stem | 0.5 | 7 | Friable | Green | 0.012±0.000 | 0.23±0.008 | 0.72±0.005 | 25 |
|  | Hypocotyl | 0.5 | 3 | Friable | White | 0.006±0.000 | 0.12±0.005 | 0.31±0.014 | 15 |
|  | Leaf | 1 | 4 | Compact | White | 0.021±0.000 | 0.11±0.005 | 0.26±0.006 | 20 |
|  | Stem | 1 | 6 | Loose | Light brown | 0.026±0.000 | 0.13±0.008 | 0.32±0.008 | 45 |
|  | Hypocotyl | 1 | 8 | Friable | White | 0.007±0.000 | 0.10±0.012 | 0.15±0.008 | 16 |
|  | Leaf | 2 | 3 | Friable | Opaque | 0.009±0.000 | 0.14±0.012 | 0.45±0.008 | 55 |
|  | Stem | 2 | 4 | Compact | Green | 0.023±0.000 | 0.19±0.011 | 0.63±0.017 | 32 |
|  | Hypocotyl | 2 | 8 | Friable | Cream | 0.012±0.000 | 0.11±0.008 | 0.49±0.012 | 24 |

**Table 4.5:** Callus induction from different explants of VAR 4 under different levels of 2,4-D

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Explant** | | **Growth regulator**  **2,4-D**  **mg L-1** | **Days to Callus induction** | **Callus texture** | **Callus Color** | **Callus weight** | | | **Callus induction %** |
| **Day 1**  **FW (g)** | **Day 14 FW (g)** | **Day 28**  **FW (g)** |
|  | Leaf | 0.5 | 5 | Friable | Cream | 0.017±0.000 | 0.09±0.008 | 0.27±0.005 | 55 |
|  | Stem | 0.5 | 7 | Friable | Green | 0.012±0.000 | 0.22±0.008 | 0.70±0.005 | 25 |
|  | Hypocotyl | 0.5 | 3 | Friable | Cream | 0.003±0.000 | 0.13±0.005 | 0.41±0.014 | 16 |
|  | Leaf | 1 | 4 | Compact | Opaque | 0.018±0.001 | 0.14±0.005 | 0.32±0.006 | 20 |
|  | Stem | 1 | 6 | Loose | Opaque | 0.028±0.000 | 0.11±0.008 | 0.34±0.008 | 44 |
|  | Hypocotyl | 1 | 8 | loose | Opaque | 0.002±0.000 | 0.11±0.012 | 0.18±0.008 | 12 |
|  | Leaf | 2 | 3 | Friable | Cream | 0.009±0.000 | 0.15±0.012 | 0.42±0.008 | 45 |
|  | Stem | 2 | 4 | loose | Green | 0.017±0.000 | 0.19±0.011 | 0.70±0.017 | 20 |
|  | Hypocotyl | 2 | 8 | loose | Opaque | 0.009±0.000 | 0.09±0.008 | 0.51±0.012 | 31 |

**Table 4.6:** Callus induction from different explants of VAR 5 under different levels of 2,4-D

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Explant** | | **Growth regulator**  **2,4-D**  **mg L-1** | **Days to Callus induction** | **Callus texture** | **Callus Color** | **Callus weight** | | | **Callus induction %** |
| **Day 1**  **FW (g)** | **Day 14 FW (g)** | **Day 28**  **FW (g)** |
|  | Leaf | 0.5 | 5 | loose | Green | 0.015±0.000 | 0.11±0.008 | 0.21±0.005 | 45 |
|  | Stem | 0.5 | 7 | Friable | Green | 0.011±0.000 | 0.17±0.008 | 0.69±0.005 | 40 |
|  | Hypocotyl | 0.5 | 3 | loose | White | 0.006±0.000 | 0.11±0.005 | 0.27±0.014 | 24 |
|  | Leaf | 1 | 4 | loose | Opaque | 0.013±0.001 | 0.13±0.005 | 0.19±0.006 | 12 |
|  | Stem | 1 | 6 | Loose | Green | 0.023±0.000 | 0.12±0.008 | 0.29±0.008 | 40 |
|  | Hypocotyl | 1 | 8 | Friable | White | 0.003±0.000 | 0.10±0.012 | 0.13±0.008 | 10 |
|  | Leaf | 2 | 3 | Friable | Opaque | 0.011±0.000 | 0.13±0.012 | 0.36±0.008 | 21 |
|  | Stem | 2 | 4 | Friable | Opaque | 0.015±0.000 | 0.18±0.011 | 0.59±0.017 | 14 |
|  | Hypocotyl | 2 | 8 | Friable | Cream | 0.008±0.000 | 0.11±0.008 | 0.49±0.012 | 10 |