Table 1S. Statistical summary tables

Table 1SA. Embryogenic callus proliferation (experiment 1) summary table.

|  |  |
| --- | --- |
| Dependent variable | Statistical parameters |
|  | gl | SC | CM | H(N=48)  | F | P |
| Yellow callus e | 3 | 45599.8 | 15199.9 |  | 12.358 | 0.0001\* |
| Brown callus e | 3 | 46649.8 | 15549.9 |  | 13.077 | 0.0001\* |
| oSE e | 3 |  |  | 4.523 |  | 0.210 |
| scSE e  | 3 |  |  | 3.849 |  | 0.278 |
| Yellow callus m | 3 | 4941.61 | 1647.2 |  | 1.076 | 0.369 |
| Brown callus m  | 3 |  |  | 3.000 |  | 0.391 |
| oSE m  | 3 |  |  | 3.562 |  | 0.312 |
| scSE m  | 3 |  |  | 6.127 |  | 0.105 |
| Suspended cells | 3 | 36018.7 | 12006.2 |  | 6.441 | 0.001\* |
| Total average  | 3 | 8765.4 | 2921.8 |  | 1.803 | 0.145 |

e= adhered to explant, m= suspended in the culture medium, SE=somatic embryo.

p˂0.01\*\* (very significant); p˂0.05\* (significant); p˂0.1+ (marginally significant).

Table 1SB. Maturation of the four embryogenic lines (experiment 2) summary table.

|  |  |  |
| --- | --- | --- |
| Dependent variable | Source of variation | Statistical parameters |
|  |  | gl | SC | CM | H or U  | F | P |
| Yellow callus e | Light/Dark | 1 | 5279.46 | 5279.46 |  | 4.046 | 0.053\* |
|  | Embryogenic line | 3 | 31130.16 | 10376.72 |  | 7.953 | 0.000\*\* |
|  | Interaction | 3 | 1885.71 | 628.57 |  | 0.481 | 0.697 |
|  | Treatment | 7 | 39441.6 | 5634.51 |  | 4.56985 | 0.001\*\* |
| Brown callus e | Light/Dark | 1 | 242.44 | 242.44 |  | 0.187 | 0.667 |
|  | Embryogenic line | 3 | 40177.22 | 13392.41 |  | 10.379 | 0.000\*\* |
|  | Interaction | 3 | 965.04 | 321.68 |  | 0.249 | 0.861 |
|  | Treatment | 7 | 41595.45 | 5942.21 |  | 4.60521 | 0.001\*\* |
| oSE e | Light/Dark | 1 |  |  | 0.650 |  | 0.420 |
|  | Embryogenic line | 3 |  |  | 2.388 |  | 0.495 |
|  | Treatment |  |  |  | 5.497 |  | 0.599 |
| scSE e | Embryogenic line | 3 |  |  | 4.385 |  | 0.222 |
|  | Light/Dark | 1 |  |  | 3.328 |  | 0.068+ |
|  | Treatment |  |  |  | 13.495 |  | 0.069+ |
| Yellow callus m | Light/Dark | 1 | 15.15 | 15.15 |  | 0.010 | 0.919 |
|  | Embryogenic line | 3 | 26385.71 | 8795.24 |  | 5.963 | 0.002\*\* |
|  | Interaction | 3 | 6766.67 | 2255.56 |  | 1.529 | 0.226 |
|  | Treatment | 7 | 33252.14 | 4750.31 |  | 3.22074 | 0.010\*\* |
| Brown callus m | Light/Dark | 1 |  |  | 1.154 |  | 0.282 |
|  | Embryogenic line | 3 |  |  | 3.866 |  | 0.276 |
|  | Treatment |  |  |  | 10.100 |  | 0.183 |
| oSE m | Light/Dark | 1 |  |  | 1.140 |  | 0.285 |
|  | Embryogenic line | 3 |  |  | 2.245 |  | 0.523 |
|  | Treatment |  |  |  | 4.688 |  | 0.697 |
| scSE m | Light/Dark | 1 |  |  | 1.951 |  | 0.162 |
|  | Embryogenic line | 3 |  |  | 6.846 |  | 0.076+ |
|  | Treatment |  |  |  | 13.967 |  | 0.051+ |
| Suspended Cells | Light/Dark | 1 | 2181.8 | 2181.8 |  | 3.381 | 0.075+ |
|  | Embryogenic line | 3 | 61542.9 | 20514.3 |  | 31.797 | 0.000\*\* |
|  | Interaction | 3 | 2685.7 | 895.2 |  | 1.387 | 0.264 |
|  | Treatment | 7 | 66666.7 | 9523.8 |  | 14.7619 | 0.000\*\* |
| Total average   | Treatment | 7 | 29871.4 | 4267.3 |  | 2.677 | 0.010\*\* |
| Embryogenic line | 3 | 23726.6 | 7908.9 |  | 4.9640 | 0.002\*\* |
| Ambient | 1 | 336.6 | 336.6 |  | 0.2038 | 0.651 |

e= adhered to explant, m= suspended in the culture medium, SE=somatic embryo.

p˂0.01\*\* (very significant); p˂0.05\* (significant); p˂0.1+ (marginally significant).