

Supplementary tables

Supplementary Table 1. Effect of different concentrations of 2,4-D on Callus Induction Frequency (CIF), Callus Fresh Weight (CFW), texture, colour and embryogenic potential

2,4-D concentration (mg/L)	CIF (%)	CFW (g)	Mean	SEM	Texture	Color	Embryogenic potential
0 (control)	0	0.0000	0	0	N/A	N/A	N/A
		0.0000			N/A	N/A	N/A
		0.0000			N/A	N/A	N/A
1	33.33	0.1987	0.203	0.0152	compact	Pale yellow	Low potential
		0.2312			compact	black	N/A
		0.1789			compact	Pale yellow	Low potential
2	66.67	0.2265	0.281	0.0609	semi-friable	creamy	potential
		0.3921			friable	black	N/A
		0.2132			compact	Pale yellow	Low potential
3	83.33	0.3982	0.554	0.057	friable	creamy-white	High potential
		0.4411			friable	white	potential
		0.5231			friable	creamy-white	High potential
4	83.33	0.3321	0.383	0.0263	friable	brownish	Low potential
		0.5192			compact	white	potential
		0.2989			friable	creamy-white	High potential

Data are presented as mean \pm SEM from three replicates. N/A: Not available.

Supplementary Table 2. Callus Induction Frequency (CIF), Callus Fresh Weight (CFW) and total CFW from different 2,4-D concentrations (3 and 4 mg/L) used as callus sources

Callus source	CIF (%)	CFW (g)	CFW total	subculture	For regeneration treatments (experiment 2)
					callus source
					biomass (g)
2,4-D 3 mg/L	83.33333	0.3982 0.4411 0.5231	1.3624	9.892	2,4-D 3 m/L
2,4-D 4 mg/L	83.33333	0.3321 0.5192 0.2989	1.3624	8.915	2,4-D 4 mg/L

Subculture was carried out at ± 3 weeks. The selected callus biomass from each treatment was subsequently used for regeneration treatments (NAA and BAP combinations) in experiment 2. ± 3 weeks.