

Table 1. Effect of 2,4-D and kinetin concentrations on induction of callus using leaf cotyledon explants of cucumber.

Cytokinin and auxin conc. mg/l		No. of initial explant	No. of Explant formed callus	% of Explants induced callus	Fresh weight after 30 day (gm)	Fresh weight after 45 day (gm)	Fresh weight After 60 day (gm)	Callus color	Callus type
2,4-D (mg/l)	Kinetin (mg/l)								
0.0	0.0	50	2	4	1.06	1.55	1.79	cr	friable
1.0	0.0	50	47	94	2.78	2.85	3.01	crw	compt
	0.5	50	45	90	1.90	2.63	2.70	cr	compt
	1.0	50	42	84	1.65	2.22	2.49	cr	friable
	2.0	50	30	60	1.43	1.90	2.22	cr	compt
2.0	0.0	50	46	92	2.34	2.78	2.97	cr	compt
	0.5	50	44	88	1.73	2.25	2.69	cr	compt
	1.0	50	44	88	1.58	1.89	2.16	cr	compt
	2.0	50	40	80	1.13	1.82	2.06	cr	friable
5.0	0.0	50	45	90	2.32	2.60	2.45	B	friable
	0.5	50	45	90	1.66	2.21	2.33	B	friable
	1.0	50	45	90	1.54	1.57	2.15	LB	friable
	2.0	50	45	90	1.44	1.57	1.88	LB	friable

Table 2. Effect of 2,4-D and kinetin concentrations on induction of callus using mature seed explants of cucumber.

Auxin and cytokinin conc. mg/l		No.of initial explant	No. of explant formed callus	% of explant induced callus	Fresh weight (gm)	Callus color	Callus type
2,4-D (mg/l)	Kinetin (mg/l)						
0.0	0.0	50	1.0	2	1.45	cr	Friable
1.0	0.0	50	46	92	2.85	crw	compt
	0.5	50	43	86	2.78	cr	compt
	1.0	50	42	84	1.99	cr	friable
	2.0	50	35	70	1.91	cr	compt
2.0	0.0	50	45	90	2.54	cr	compt
	0.5	50	43	86	2.25	cr	compt
	1.0	50	43	86	1.89	cr	compt
	2.0	50	36	72	1.82	cr	friable
5.0	0.0	50	42	84	2.38	B	friable
	0.5	50	41	82	2.21	B	friable
	1.0	50	41	82	1.57	LB	friable
	2.0	50	40	80	1.54	LB	friable

Cr = creamy Crw = creamy/white LB = Light Brown B = Brown

Table 3. Effect of 2,4-D and kinetin concentrations on induction of somatic embryogenesis using leaf cotyledons, mature seeds and shoot tip explants of cucumber.

Growth regulator		Mature seeds			cotyledon			leaf explant		
auxin and cytokinin conc. mg/l		No.of initial explant	No.of embyogenic calli	Embryo genesis %	No.of initial explant	No.of embyogenic calli	Embryogenesis%	No.of initial explant	No.of embyogenic calli	Embryogenesis %
2,4-D (mg/l)	Kinetin (mg/l)									
0.0	0.0	30	-	-	20	-	-	10	-	-
1.0	0.0	30	-	-	20	-	-	10	-	-
	0.5	30	-	-	20	-	-	10	-	-
	1.0	30	-	-	20	-	-	10	-	-
	2.0	30	-	-	20	-	-	10	-	-
2.0	0.0	30	5	17	20	2	10	10	4	40
	0.5	30	3	10	20	1	5	10	1	10
	1.0	30	1	3	20	-	-	10	-	-
	2.0	30	-	-	20	-	-	10	-	-
5.0	0.0	30	10	33	20	1	5	10	2	20
	0.5	30	4	13	20	1	5	10	-	-
	1.0	30	1	3	20	1	5	10	-	-
	2.0	30	1	3	20	1	5	10	-	-

Table 4. Effect of NAA and BA concentrations on induction of somatic embryogenesis using mature seed, cotyledon and shoot tip explants of cucumber.

Growth regulator		Mature seeds			Cotyledon			Shoot tip		
Auxin and cytokinin conc. ((mg/l)		No.of initial explant	No.of embyogenic calli	Embryo genesis %	No.of initial explant	No.of embyogenic calli	Embryo genesis %	No.of initial explant	No.of embyogenic calli	Embryo genesis %
NAA (mg/l)	BA (mg/l)									
0.0	0.0	30	-	-	20	-	-	10	-	-
0.1	0.0	30	-	-	20	-	-	10	-	-
0.2		30	2	7	20	1	5	10	1	10
0.5		30	8	27	20	5	25	10	3	30
0.0	0.5	30	-	-	20	-	-	10	-	-
0.1		30	-	-	20	-	-	10	-	-
0.2		30	-	-	20	-	-	10	-	-
0.5		30	2	7	20	-	-	10	1	10
0.0	1.0	30	-	-	20	-	-	10	-	-
0.1		30	-	-	20	-	-	10	-	-
0.2		30	-	-	20	-	-	10	-	-
0.5		30	-	-	20	-	-	10	-	-
0.0	2.0	30	-	-	20	-	-	10	-	-
0.1		30	-	-	20	-	-	10	-	-
0.2		30	-	-	20	-	-	10	-	-
0.5		30	-	-	20	-	-	10	-	-