Table 1. Effect of different BA levels alone or combined with 0.5 mg/L NAA on shoot proliferation percentage of some citrus species

* Shoot proliferation%											
Treatments		Ovule-derived plantlets						Flower-derived plantlets			
BA mg/L	NAA mg/L	Washington navel orange *C. sinensis*	Shamouti orange *C. sinensis*	Blood orange *C. sinensis*	Grapefruit *C. paradisi*	Local mandarin *C. deliciosa*	Mean	Lemon *C. limon*	Citron *C. medica*	Lime C. aurantifolia	Mean
0.5	0.0	100 a	100 a	75 b	50 c	50 c	75 A	100 a	100 a	100 a	100A
1.0	0.0	100 a	75 b	75 b	25 d	75 b	70 B	100 a	100 a	100 a	100A
2.0	0.0	75 b	100 a	100 a	25 d	25 d	65 C	100 a	100 a	100 a	100A
0.5	0.5	100 a	75 b	100 a	25 d	75 b	75 A	100 a	66.7 b	100 a	88.9B
1.0	0.5	100 a	75 b	75 b	25 d	25 d	60 D	100 a	100 a	100 a	100 A
2.0	0.5	100 a	75 b	75 b	25 d	25 d	60 D	100 a	100 a	100 a	100A
Mean		95.8 A	83.3 B	83.3 B	29.2 D	45.8 C		100 A	94.5 B	100 A	

Table 1. Cont.

* Shoot proliferation%				
Treatments		Seedling-derived plantlets		
BA mg/L	NAA mg/L	Rough lemon *C. jambhiri*	Sour orange *C.aurantium*	Mean
0.5	0.0	100 a	100 a	100 A
1.0	0.0	100 a	75 b	87.5 B
2.0	0.0	100 a	0.0 e	50 E
0.5	0.5	100 a	50 c	75 C
1.0	0.5	100 a	50 c	75 C
2.0	0.5	100 a	25 d	62.5 D
Mean		100 A	50 B	

* Recorded after 5 weeks *in vitro* cultures.

LSD (p=0.05) for treatment (ovule) = 0.6111; genotype= 0.5579; interaction (treatment × genotype) = 1.366
LSD (p=0.05) for treatment (flower) = 0.03023; genotype=0.02138; interaction (treatment × genotype) = 0.05237
LSD (p=0.05) for treatment (seedling) = 0.6876; genotype = 0.3962; interaction (treatment × genotype.) = 0.9724

Table 2. Effect of different BA levels alone or combined with 0.5 mg/L NAA on number of shoots per explant of some citrus species

Number of shoots per explant											
Treatments		Ovule-derived plantlets						Flower-derived plantlets			
BA mg/L	NAA mg/L	Washington navel orange *C. sinensis*	Shamouti orange *C. sinensis*	Blood orange *C. sinensis*	Grapefruit *C. paradisi*	Local mandarin *C. deliciosa*	Mean	Lemon *C. limon*	Citron *C.medica*	Lime C. aurantifolia	Mean
0.5	0.0	2.3 abc	2.3 abc	1.3 c	1.7 bc	1.0 c	1.7 BC	1.3 de	4.0 ab	2.0 cde	2.4 AB
1.0	0.0	2.3 abc	3.0 ab	2.0 bc	2.3 abc	1.7 bc	2.3 AB	2.3 cde	2.3 cde	3.0 bc	2.5 AB
2.0	0.0	1.7 bc	2.0 bc	1.7 bc	2.0 bc	1.0 c	1.7 BC	1.0 e	2.3 cde	2.0 cde	1.8 BC
0.5	0.5	3.7 a	3.0 ab	1.7 bc	3.7 a	1.3 c	2.7 A	2.0 cde	1.7 cde	4.3 a	2.7 A
1.0	0.5	2.0 bc	1.7 bc	1.7 bc	2.0 bc	1.3 c	1.8 BC	2.3 cde	2.3 cde	2.7 cd	2.4 AB
2.0	0.5	1.7 bc	1.3 c	1.3 c	2.3 abc	1.0 c	1.5 C	1.0 e	1.3 de	2.0 cde	1.4 C
Mean		2.3 A	2.2 A	1.6 B	2.3 A	1.2 B		1.7 B	2.3 A	2.7 A	

Table 2. Cont.

Number of shoots per explant				
Treatments		Seedling-derived plantlets		
BA mg/L	NAA mg/L	Rough lemon *C. jambhiri*	Sour orange *C.aurantium*	Mean
0.5	0.0	1.7 bc	1.3 c	1.5 BC
1.0	0.0	1.7 bc	1.7 bc	1.7 BC
2.0	0.0	2.0 bc	0.1 d	1.0 C
0.5	0.5	2.0 bc	1.5 bc	1.8 B
1.0	0.5	1.7 bc	2.5 ab	2.1 AB
2.0	0.5	2.0 bc	3.1 a	2.5 A
Mean		1.9 A	1.7 A	

Recorded after 5 weeks *in vitro* cultures.

LSD (p=0.05) for treatment (ovule) =0.5760; genotype=0.5259; interaction (treatment × genotype) = 1.288
LSD (p=0.05) for treatment (flower**)** = 0.7243; genotype=0.5122; interaction (treatment × genotype) = 1.255
LSD (p=0.05) for treatment (seedling) = 0.6146; genotype= 0.3541; interaction (treatment × genotype) = 0.8691

Table 3. Effect of different BA levels alone or combined with 0.5mg/L NAA on shoot length of some citrus species

* Average shoot length (cm)											
Treatments		Ovule-derived plantlets						Flower-derived plantlets			
BA mg/L	NAA mg/L	Washington navel orange *C. sinensis*	Shamouti orange *C. sinensis*	Blood orange *C. sinensis*	Grapefruit *C. paradisi*	Local mandarin *C. deliciosa*	Mean	Lemon *C. limon*	Citron *C.medica*	Lime C. aurantifolia	Mean
0.5	0.0	0.53 bc	0.8 bc	0.4 c	0.4 c	0.4 c	0.5 BC	0.9 a	0.6 bc	0.5 c	0.7 A
1.0	0.0	0.75 bc	1.0 ab	0.46 c	0.53 bc	0.4 c	0.6 AB	0.4 c	0.53 bc	0.4 c	0.4 BC
2.0	0.0	0.4 c	0.33 c	0.4 c	0.3 c	0.4 c	0.4 C	0.6 bc	0.6 bc	0.4 c	0.5 AB
0.5	0.5	1.0 ab	0.6 bc	0.5 bc	1.3 a	0.4 c	0.8 A	0.4 c	0.8 ab	0.5 c	0.6 AB
1.0	0.5	0.7 bc	0.5 bc	0.5 c	0.4 c	0.33 c	0.5 BC	0.6 bc	0.6 bc	0.4 c	0.5 AB
2.0	0.5	0.75 bc	0.53 bc	0.5 bc	0.4 c	0.4 c	0.5 BC	0.33 c	0.3 c	0.4 c	0.3 C
Mean		0.7 A	0.6 AB	0.5 BC	0.6 AB	0.4 C		0.6 A	0.6 A	0.4 B	

Table 3. Cont.

* Average shoot length (cm)				
Treatments		Seedling-derived plantlets		
BA mg/L	NAA mg/L	Rough lemon *C. jambhiri*	Sour orange *C.aurantium*	Mean
0.5	0.0	0.5 abc	0.5 ab	0.5 A
1.0	0.0	0.4 abc	0.4 abcd	0.4 A
2.0	0.0	0.33 cd	0.0 d	0.2 B
0.5	0.5	0.6 a	0.4 abc	0.5 A
1.0	0.5	0.53 ab	0.4 abcd	0.5 A
2.0	0.5	0.33 bcd	0.33 bcd	0.33 AB
Mean		0.4 A	0.3 B	

* Recorded after 5 weeks *in vitro* cultures.

LSD (p=0.05) for treatment (ovule) = 0.2040; genotype = 0.1862; interaction (treatment × genotype) = 0.4561
LSD (p=0.05) for treatment (flower**)** =0.1418; genotype =0.1003; interaction (treatment × genotype) = 0.2456
LSD (p=0.05) for treatment (seedling) = 0.1359; genotype = 0.0782; interaction (treatment × genotype) = 0.1921

Table 4. Effect of IBA and NAA concentrations on rooting percentage of some citrus species

* Rooting percentage								
Treatments		Ovule-derived plantlet			Flower- derived plantlet			Seedling-derived plantlet
IBA mg/L	NAA mg/L	Washington navel orange *C. sinensis*	Shamouti orange *C. sinensis*	Mean	Lemon *C. limon*	Citron *C. medica*	Mean	Rough lemon *C. jambhiri*
0.0	0.0	20 d	50 c	35 E	0.0 h	50 e	25 E	0.0 B
0.5	0.0	0.0 e	100 a	50 C	40 f	60 d	50 C	0.0 B
1.0	0.0	20 d	100 a	60 B	40 f	20 g	30 D	0.0 B
0.0	0.5	80 b	100 a	90 A	100 a	100 a	100 A	20 A
0.0	1.0	0.0 e	80 b	40 D	80 b	75 c	77.5 B	0.0 B
Mean		24 B	86 A		52 B	61 A		4

* Data recorded after 8 weeks *in vitro* culture.

LSD (p=0.05) for treatment (ovule) =0.8792; genotype = 0.5572; interaction (treatment × genotype) = 1.243
LSD (p=0.05) for treatment (flower) = 1.031; genotype = 0.6533; interaction (treatment × genotype) =1.458
LSD (p=0.05) for treatment (seedling**)** =0.8420