SUMMARY

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This investigation was carried out during two seasons 1990/1991 - 1991/1992 at the experimental research station of Faculty of Agriculture at Moshtohor, Zagazig University, Benha Branch, where three experiments were can ducted .

The first experiment aimed to study the effect of different constituents of growth media on the growth of the seedlings of *Aralia longifolium L. and Cupressus sempervirens L.* . Five type of different media were investigated to reveal their effects on the growth.

The second experiment aimed at studying the effect of light intensities on the plant growth, in outdoors locations.

The third part was to study the growing of *Cupressus sempervirens L.* indoors under 4 different light intensities combined with soil dressing and orfoliar nutrition.

The most important results were as following :

A. Media treatment :

1. Medium (4) consisted of (Sand : Clay : Foam 3:1:1) by volume was the best for growing both *Aralia longifolium L and Cupressus sempervirens L.* . The plants were more healthy *Aralia longifolium L.* plants reached 57.9 cms in length and gave 77.7 gms in vegetative fresh weight , also *Cupressus*

sempervirens L. seedlings reached 28.4 cms in length and 35.5 g vegetative fresh weight.

2. The medium (3) consisted of - Sand : peatmoss : leaf mould (3:1:1) - by volume, respectively negatively, affected the fresh and dry weights of the plant gave the least growth parameters.

3. Medium (4) decreased the leaf number of Aralia plants, while medium (5) resulted in a decrease in the branch number of *Cupressus* plants.

4. Regarding the nitrogen contents of plants grown on medium (4) was obtained the highest value of N content in plants comparing with any other medium.

5. The highest value of (P and K contents) were detected in Aralia plants grew in medium (1) , where as medium (5) gave the least value. Generally media 2, 3 and 4 nearly did not differ in P and K contents.

6. A positive correlation between phenolic compounds and the effect of media on plants growth was found. Medium (5) contained the highest value, whereas, medium (4) showed the lowest value.

Generally, the media differed in their effect on the availability of major elements absorbed by plants, the most promising effect was for the nitrogen uptake with medium (4) and with K up-take with medium (1) which consisted of (Sand : Clay : Peat moss 1 : 1 : 1) by volume .

B. Light intensity :

1. The plants grown under lathhouse conditions under 8500 lux gave the best growth than the plants grown in the open under full sun or under network conditions.

2. The tallest plants were found under low light intensty as - 25% full sunlight - .

3. Fresh and dry weight were increased in both Aralia and Cupressus plants grown under lathhouse conditions - 25% full sunlight.

4. Significant correlation was found among the plants grown under lathhouse conditions rather than full sunlight plants or those grown under network conditions.

5. The highly effect of lathhouse condition increased NPK absorbition comparing with the plants grown in out-door conditions.

6. Increasing light intensities resulted more of phenols content in treated plants under full sunlight.

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a- The weather monthly during growing season (1990)

Month	Mean temperature				Sun Shine	Mean Relative	Rain Fall	Dew	Wind	Vapor
	Maximum	Minimum	Day Temp.	Night Temp.	in hours	humidity %	in mm	Point	Velocity	Pressure
	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990
January	17.7	8	14.3	11.3	10.4	70.7	4.4	7.2	1.8	10.2
Febraury	20	8.2	16.4	11.7	11.1	62.3	1.9	6.4	1.9	9.6
March	23	10.9	19.3	14.2	12	61	0.4	8.5	2.1	11.3
Abril	29.3	15	23.9	18.7	16.4	50.7	0.1	9.9	2.5	12.6
May	31.6	17.7	25.4	20.9	13.1	49	0.2	11.7	3.1	14
June	34.1	20.7	28.1	23.9	12.8	52.3	0.0	10.1	2.7	17.5
July	35.2	22.8	30.7	25.6	12.4	60	0.0	19.1	3	22.2
August	34.7	22.1	29.9	24.4	13.2	61.3	0.0	17.8	2	21.8
September	32.8	23.9	28.8	23.3	12.3	61	0.0	-	1.6	19.9
October	30.9	17.7	26.8	21.3	11.4	61.7	0.0	-	1.6	17.7
November	25.7	13.5	21.6	17.4	10.5	65	0.0	-	1.3	11
December	22.5	8.4	18.7	4.5	10.2	63.7	0.0	-	1.4	7.6

Obtaind from Meteorological Station , Giza, Ministry of Agriculture , A.R.E

a- The weather monthly during growing season (1991)

Month	Mean temperature				Sun Shine in hours	Mean Relative humidity %	Rain Fall in mm	Dew Point	Wind Velocity	Vapor Pressure
	Maximum	Minimum	Day Temp.	Night Temp.						
	1991	1991	1991	1991	1991	1991	1991	1991	1991	1991
January	19.3	8	15.3	11.2	10.4	70	4.8	-	1	10.6
Febraury	21.4	8.9	17.5	12.6	11.1	60	2	-	2	10
March	25.2	13	21.3	16.4	12	58.1	6.1	-	2	12.5
Abril	29.6	16	24.5	20	13	48	1	-	2.3	12.5
May	32.2	18.8	26.2	21.9	13.7	46.3	0.0	-	2.6	13
June	34.4	20.9	28.6	24.3	14	51.3	0.0	-	2.1	17.9
July	33.9	22.3	29.8	25.1	13.9	60.3	0.0	-	1.9	81.6
August	34.3	22.8	30.1	25.6	13.2	59.5	0.0	-	1.8	22.1
September	32.5	20.6	28.7	23.5	12.6	60	0.0	-	1.9	19.7
October	31.2	18.9	27.2	22.1	12.6	61	0.0	-	1.6	18
November	24.6	14.1	21.1	17	10.7	66.7	0.4	-	1.1	14.5
December	17.8	8.6	13.8	11.3	10.2	63.7	2.1	-	1.6	9.4

Obtaind from Meteorological Station , Giza, Ministry of Agriculture , A.R.E

a- The weather monthly during growing season (1992)

Month	Mean temperature				Sun Shine	Mean Relative	Rain Fall	Dew	Wind	Vapor
	Maximum	Minimum	Day Temp.	Night Temp.	in hours	humidity %	in mm	Point	Velocity	Pressure
	1992	1992	1992	1992	1992	1992	1992	1992	1992	1992
January	17.5	7.3	14.2	10.5	10.5	68.3	1.7	6.3	1.3	9.4
Febraury	18	7.1	14.9	10	11.3	62	1.6	5.1	2.6	8.9
March	22.3	10.1	18.8	13.7	12	54.7	0.1	5.3	2.2	9.7
Abril	27.1	14	22	17.2	12.8	51.3	0.1	8.7	3.6	11.5
May	31.2	17.4	25.2	24	13.7	48.3	0.0	11.4	2.6	13.7
June	32.1	21.1	29.2	20.8	14.1	49.7	0.0	15	1.7	17.6
July	34.4	22.3	28.5	24.7	13.9	59	0.0	17.6	2.2	21.1
August	31.9	22.8	30.7	25.7	13.2	62.3	0.0	19.5	1.6	22.2
September	32.3	20.4	28.5	23.1	12.3	62.3	0.0	17.8	1.7	19.5
October	34.3	20.5	28.6	23	12.3	62	0.0	17.3	2.1	20
November	-	-	-	-	-	-	-	-	-	-
December	-	-	-	-	-	-	-	-	-	-

Obtaind from Meteorological Station , Giza, Ministry of Agriculture , A.R.E

b.

FOAM :

Producted by MISR FOAM Polystyrene that's economical, efficient, delivered on time. Misr Foaming is also, due to its low density (16 kg./cu.m) and high water resistance.

Nutrition :

1) Kristalon : N : P_2O_5 : K_2O + MgO

19 + 19 + 19 + 2

Producted by Phayzon Company - Holand

2) Foliar :

STIMUFOL

N	:	P	:	K	:	V (B1)	:	(EDTA)
25%	:	16%	:	12%	:	0.0004%	:	3%

Amino Acids	:	B	:	Mg	:	Cu	:	Mn	:	Mo	:
1%	:	0.04%	:	0.020%	:	0.0585%	:	0.085%	:	0.085%	

Co	:	Fe	:	Zn
0.001%	:	0.170%	:	0.085%

Producted by ICI Agrochemicals plant protection division.