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**EFFECT OF ROOT ZONE TEMPERATURE ON CALCIUM  
ABSORPTION AND LEAF NECROSIS OF CUT LILY 'NAVONA'**

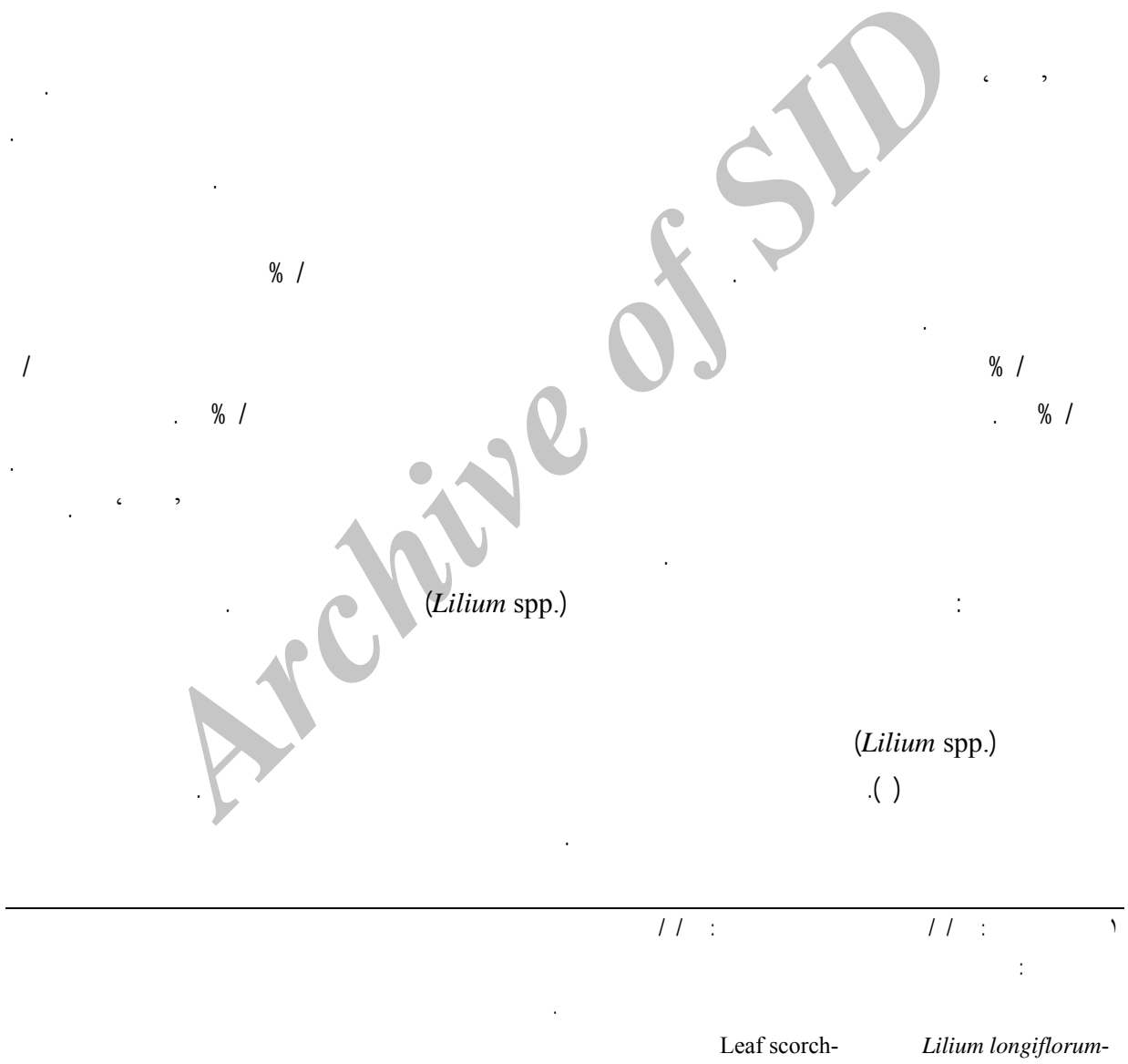




Table 1. Chemical characteristics of used media.

Na (meq l <sup>-1</sup> )	K (meq l <sup>-1</sup> )	Mg (meq l <sup>-1</sup> )	Ca (meq l <sup>-1</sup> )	pH	EC (dS m <sup>-1</sup> )	
2.6	2.56	0.4	0.9	6.0	1.14	Fresh medium
1.6	0.96	0.3	1.1	5.5	0.65	Used medium †

† Analysis was done after preharvest heavy irrigation.

Mist system

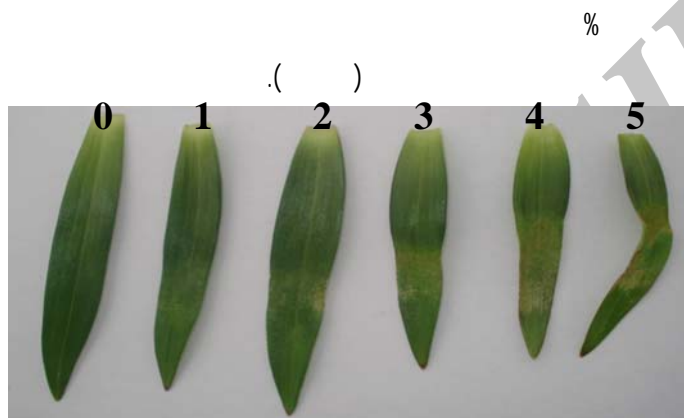


Fig. 1. An index of 0-5 for describe the single leaf severity of leaf necrosis in *Lilium* 'Navona'.

SPSS

Atomic absorption

Gas analyzer (LCA4)

Photosynthesis rate

Severity

Incidence

Shoot emergence

Archive of SID

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Table 2. Effect of light intensity reduction and increasing relative humidity on Ca concentration, leaf photosynthesis rate and transpiration.

(cm)	(%d w)						صفت
Plant height	Leaf transpiration	photosynthesis rate	Ca concentration	Air temperature	Relative humidity	Light intensity	Trait
75.0 <sup>†</sup>	1.01 <sup>††</sup>	6.35 <sup>††</sup>	0.55 <sup>ns</sup>	27	30	260	Unit 1
81.3	0.86	5.7	0.52	23	62	170	Unit 2

††, †, and ns significant at 1 and 5% level and non significant of means respectively by t test.

t % ns † ††

Table 3. Mean comparisons of Ca concentration, leaf necrosis incidence and severity at different experiments (n=60).

Necrosis				
Severity	( ) Incidence (%)	Ca concentration	Root zone temperature	
98.1 a	95.5 a	0.21 b <sup>†</sup>	8 °C	First Exp.
0.0 c	0.0 c	0.55 a	20 °C	Second Exp.
81.0 b	92.6 b	0.23 b	10 °C	Third Exp.

† Mean with different letters in same column showed significant difference using Duncan's multiple range test.

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Table 4. Ca, K, Mg concentration and K/Ca ratio of leaves at different plant parts.

K/Ca			Mg concentration (%)			K concentration (%)			Ca concentration (%)			
K/Ca ratio			Leaf Mg concentration (%)			Leaf K concentration (%)			Leaf Ca concentration (%)			
Third Exp.	Second Exp.	First Exp.	Third Exp.	Second Exp.	First Exp.	Third Exp.	Second Exp.	First Exp.	Third Exp.	Second Exp.	First Exp.	
2.80	6.30	2.87	0.12b	0.22a	0.10b	0.70b	1.89a	0.66c	0.25b	0.30a	0.23b <sup>†</sup>	Lower Leaf
5.54	5.92	6.27	0.16b	0.59a	0.13b	0.72b	2.19a	0.69b	0.13b	0.37a	0.11b	Middle Leaf
2.83	2.39	2.79	0.25b	0.58a	0.22b	0.85b	2.25a	0.81c	0.30b	0.94a	0.29b	Upper Leaf
3.72	4.87	3.94	0.18b	0.46a	0.15b	0.76b	2.11a	0.72c	0.23b	0.55a	0.21b	Means of Leaf

<sup>†</sup> Mean with different letters in same column showed significant difference by Duncan's Multiple range test.



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