

( )

**E**

//

) pH ( ) **E** ( ) **E** ( )

**E**

(**E**)

**E**

**E**

**E**

**E** :

(.)

pH

ATP

( )

(.)

(.)

( )

( )

( )

( )

( )

( )

E

( )

( )

( )

E

pH

( )

E

( )

(µg/ml)

( )

E<sub>0</sub>SL

( )

(.)

E<sub>0</sub>SR

E<sub>0</sub>LL

E<sub>0</sub>LR

E<sub>4</sub>SL

E<sub>4</sub>SR

(.)

E<sub>4</sub>LL

E<sub>4</sub>LR

E<sub>8</sub>SL

( )

E<sub>8</sub>SR

E<sub>8</sub>LL

E<sub>8</sub>LR

E<sub>12</sub>SL

( ) E

E<sub>12</sub>SR

E<sub>12</sub>LL

E<sub>12</sub>LR

(R)

(L)

(L)

(S)

1. α-Tocopherol

... E :

$$\text{Arcsin } \sqrt{x}$$

( ) /

( )

( ) E

E

( )

pH

( )

( )

E

(

pH)

( / ) E0LL

( / ) E8SR

( )

/

E

( )

pH

:

pH

pH

E

( ) ( )

( ) (

E

( )

( )

( )

( / ) E<sub>8</sub>SR

"

( / ) E<sub>8</sub>LL

SAS

Proc Mixed

"

(P=0.05)

( )

( )

1. Repeated measure ANOVA

E

		( ± )					
(%)	(%)	(%)	pH	(%)	(%)	(%)	(%)
/ ± / abcd	/ ± / bc	/ ± / bcde	/ ± / ab	/ ± / a	/ ± / ab		E0SL
/ ± / a	/ ± / ab	/ ± / bc	/ ± / a	/ ± / a	/ ± / ab		E0SR
/ ± / cd	/ ± / f	/ ± / f	/ ± / ab	/ ± / a	/ ± / b		E0LL
/ ± / d	/ ± / ef	/ ± / f	/ ± / a	/ ± / a	/ ± / ab		E0LR
/ ± / abcd	/ ± / bcd	/ ± / bcd	/ ± / ab	/ ± / a	/ ± / ab		E4SL
/ ± / abc	/ ± / ab	/ ± / abc	/ ± / ab	/ ± / a	/ ± / ab		E4SR
/ ± / d	/ ± / de	/ ± / de	/ ± / b	/ ± / a	/ ± / b		E4LL
/ ± / cd	/ ± / cd	/ ± / cde	/ ± / ab	/ ± / a	/ ± / b		E4LR
/ ± / abcd	/ ± / ab	/ ± / ab	/ ± / ab	/ ± / a	/ ± / ab		E8SL
/ ± / ab	/ ± / a	/ ± / a	/ ± / a	/ ± / a	/ ± / a		E8SR
/ ± / abcd	/ ± / bc	/ ± / cde	/ ± / ab	/ ± / a	/ ± / b		E8LL
/ ± / abcd	/ ± / bc	/ ± / bcd	/ ± / ab	/ ± / a	/ ± / ab		E8LR
/ ± / abcd	/ ± / bc	/ ± / bcd	/ ± / ab	/ ± / a	/ ± / ab		E12SL
/ ± / abcd	/ ± / ab	/ ± / abc	/ ± / a	/ ± / a	/ ± / ab		E12SR
/ ± / abcd	/ ± / de	/ ± / e	/ ± / ab	/ ± / a	/ ± / ab		E12LL
/ ± / bcd	/ ± / de	/ ± / e	/ ± / ab	/ ± / a	/ ± / ab		E12LR

(P> / ) f e d c b a

\*

		E		(E <sub>12</sub> )	(E <sub>8</sub> )	(E <sub>4</sub> )	(E <sub>0</sub> )
		( )		( )			
(L)		(S)					
(L)	(R)	(L)	(R)				
B / b	C / b	A / a	B / a	E <sub>0</sub>			
A / c	A / bc	A / bc	AB / ab	E <sub>4</sub>			
A / c	A / bc	A / ab	A / a	E <sub>8</sub>			
A / b	B / b	A / a	AB / a	E <sub>12</sub>			

(P>0.05) ( ) ( ) \*

( / ) E<sub>12</sub>SR E  
 ( / ) E<sub>12</sub>LL ( ) E<sub>12</sub>LR :  
 .( ) .

... E :

E

( ) pH E (E<sub>12</sub>LL E<sub>8</sub>LL E<sub>4</sub>LL) E<sub>0</sub>LL

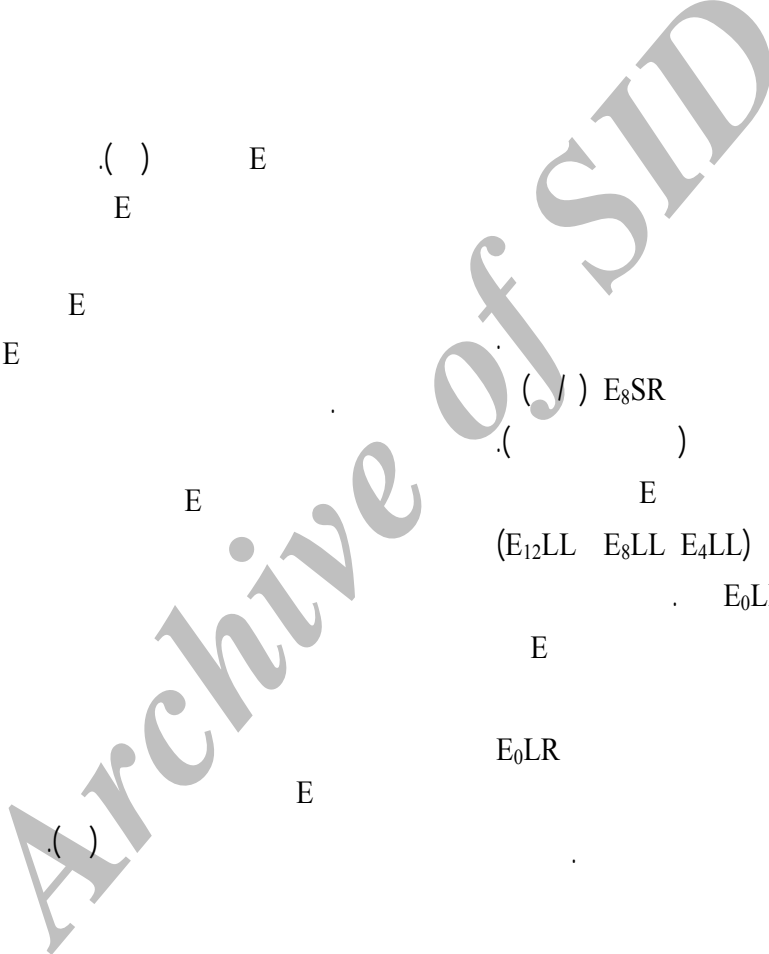
( ) E (E<sub>12</sub>LR E<sub>8</sub>LR E<sub>4</sub>LR) E<sub>0</sub>LR

( ) E E<sub>8</sub>SR E<sub>0</sub>SR

( ) E ( / ) E<sub>8</sub>SR ( / ) E<sub>0</sub>LL

( ) E (E<sub>12</sub>LL E<sub>8</sub>LL E<sub>4</sub>LL) E<sub>0</sub>LL

( ) E E<sub>0</sub>LR (E<sub>8</sub>LR E<sub>4</sub>LR)



(L)		(S)		*	
(L)	(R)	(L)	(R)	(E <sub>12</sub> )	(E <sub>8</sub> ) (E <sub>4</sub> ) (E <sub>0</sub> )
C / b	CD / b	A / a	A / a		E <sub>0</sub>
B / cd	AB / cd	A / bc	A / ab		E <sub>4</sub>
A / bc	A / bc	A / ab	A / a		E <sub>8</sub>
B / b	BC / b	A / a	A / a		E <sub>12</sub>

(P>0.05)

\*



E

E

PGF<sub>2</sub>α

E

( )

E

( )

E

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