

() , ()

*

(/ / : // :)

()

($P < /$)

(Pessarakli, 1999)

(Pessarakli, 1999)

(Pessarakli, 1999)

() Brooks .

(Pessarakli, 1999)

(Jorenush and Sepaskhah, 2003)

, ()

.(Rietz and Haynes, 2003)

(Bowen and Rovira, 1976)

EC

(Tripathi et al., 2006)

(Ghollarata and Raiesi, 2007)

(

Pathak and Rao, 1998; Rietz and)

.(Haynes, 2003

(EC 3.1.2.1 EC 3.1.2.2

/

pH= /) MUB

pH=

Tabatabai, 1994;)

(

.(Tabatabai, 1982

pH

Dick and)

.(Tabatabai, 1992

(Tabatabai, 1982)

/)

(/) CaCl₂

(

(UV 7500)

Tabatabai and Eivazi and Tabatabai, 1977)

.(Tabatabai, 1982)

.(Bremner, 1969

(EC 3.1.6.1 :

)

Tabatabai and

() Bremner

/

(pH= / / M)

(mM)

Cookson and Lepiece, 1996; Pathak and Rao, 1998;)

(Rietz and Haynes, 2003; Noorbakhsh et al, 2001

(/) CaCl₂

(/)

(UV 7500)

.(Ghollarata and Raiesi, 2007)

(EC 3.1.5.1 :

)

() Tabatabai and Bremner

(Ghrayston et al., 1997)

/

(UV 7500)

(pH= mM)
(mM)

(EC 3.2.1.21 :)

(/ M)

/

(mg L⁻¹)

MUB

() PNG

/

CaCl₂

(pH=) (/)

(UV 7500)

(UV 7500)

(Tabatabai, 1982 Eivazi and Tabatabai, 1988)

:)

/

(EC 3.2.1.26

Schinner and

() Von Mersi

(/ %)

(%)

(pH= / M)

(EC 3.5.1.2 :)

() Frankenberger and Tabatabai

/

(pH= / M)

B

A

(/)

()

C

(mg L⁻¹) (/ M)

(UV 7500)

A

/

/

/

B

()

/

/ C

/

/

(

(ANOVA)

Statistica

()

6.0

%

Fisher's LSD

(df=)

(df=)

(df=)

(F)

***	***	***	***	***	***	***	
***	/ ***	/ ***	/ ***	/ ***	***	***	
/ ***	/ ***	/ **	/ ***	***	/ ***	/ ***	×
/	/	/	/	/	/	/	CV
/	/	/	/	/	/	/	RMSE

(%)

(dS m⁻¹)

A	A	A	A	A	A	A	/
/ A	/ A	/ B	/ B	/ B	/ B	/ B	/
/ B	/ B	/ C	/ C	/ C	/ C	/ C	
/ C	/ C	/ D	/ D	/ D	/ D	/ D	/
/ D	/ D	/ E	/ E	/ E	/ E	/ E	
/ ***	***	***	***	***	/ ***	/ ***	F
/	/	/	/	/	/	/	LSD _{0.05}
A	A	A	A	A	A	A	/
B /	A /	B /	/ B	/ B	/ AB	/ B	/
C /	B /	C /	/ B	/ B	/ B	/ B	
C /	C /	D /	/ C	/ C	/ C	/ C	/ ()
D /	D /	E /	/ D	/ D	/ D	/ D	
*** /	***	***	***	***	***	***	F
/	/	/	/	/	/	/	LSD _{0.05}
A	A	A	A	A	A	A	/
B /	A /	B /	/ B	/ B	/ A	/ A	/
C /	B /	C /	/ C	/ B	/ B	/ B	
D /	C /	D /	/ D	/ C	/ C	/ C	/ ()
E /	D /	E /	/ E	/ D	/ D	/ D	
***	***	***	***	***	***	***	F
/	/	/	/	/	/	/	LSD _{0.05}

LSD (P < /)

P < / : ***

2

(n=)

EC (dS m ⁻¹)					
/	/	/	/	/	
(mg NH ₄ -N g ⁻¹ 2h ⁻¹)					
/ (/)A	/ (/)B	/ (/)B	/ (/)C	/ (/)C	
/ (/)A	/ (/)AB	/ (/)A	/ (/)B	/ (/)B	
/ (/)A	/ (/)A	/ (/)A	/ (/)A	/ (/)A	
/ Ns	/ *	/ ***	/ ***	***	F
/	/	/	/	/	LSD _{0.05}
(mg NH ₄ -N g ⁻¹ 2h ⁻¹)					
/ (/)A	/ (/)B	/ (/)C	/ (/)C	/ (/)C	
/ (/)A	/ (/)A	/ (/)A	/ (/)A	/ (/)A	
/ (/)A	/ (/)B	/ (/)B	/ (/)B	/ (/)B	
/ NS	/ ***	/ ***	/ ***	***	F
/	/	/	/	/	LSD _{0.05}
(mg PNP g ⁻¹ h ⁻¹)					
/ (/)A	/ (/)B	/ (/)B	/ (/)B	/ (/)C	
/ (/)A	/ (/)A	/ (/)A	/ (/)A	/ (/)B	
/ (/)A	/ (/)A	/ (/)A	/ (/)A	/ (/)A	
/ Ns	/ *	/ ***	/ **	***	F
/	/	/	/	/	LSD _{0.05}
(mg glucose g ⁻¹ 24h ⁻¹)					
/ (/)A	/ (/)B	/ (/)C	/ (/)B	/ (/)C	
/ (/)A	/ (/)A	/ (/)A	/ (/)A	/ (/)B	
/ (/)A	/ (/)A	/ (/)B	/ (/)A	/ (/)A	
/ Ns	/ **	/ ***	/ **	/ **	F
/	/	/	/	/	LSD _{0.05}
(mg PNP g ⁻¹ h ⁻¹)					
/ (/)A	/ (/)C	/ (/)B	/ (/)B	/ (/)B	
/ (/)A	/ (/)A	/ (/)A	/ (/)A	/ (/)A	
/ (/)A	/ (/)B	/ (/)A	/ (/)A	/ (/)A	
/ Ns	/ ***	/ ***	/ **	/ ***	F
/	/	/	/	/	LSD _{0.05}
(mg PNP g ⁻¹ h ⁻¹)					
/ (/)A	/ (/)B	/ (/)B	/ (/)C	/ (/)B	
/ (/)A	/ (/)A	/ (/)A	/ (/)B	/ (/)B	
/ (/)A	/ (/)A	/ (/)A	/ (/)A	/ (/)A	
/ Ns	/ **	/ **	/ **	/ ***	F
•/99	•/86	1/42	1/56	1/33	LSD _{0.05}
(mg PNS g ⁻¹ h ⁻¹)					
/ (/)B	/ (/)B	/ (/)C	/ (/)B	/ (/)C	
/ (/)A	/ (/)A	/ (/)A	/ (/)A	/ (/)A	
/ (/)B	/ (/)B	/ (/)B	/ (/)A	/ (/)B	
/ **	/ ***	/ ***	/ **	***	F
/	/	/	/	/	LSD _{0.05}

LSD (P< /)

:Ns P< / :* P< / **: P< / ***

()

($r = / **$) ($r = / **$)
/ dS m⁻¹

()

			(dS m ⁻¹)
A	A	/	
B	B	/	
C	B	/	
D	C	/	
E	D		
***	***	F	
/	/	LSD _{0.05}	

Noorbakhsh et al. () Cookson and Lepiece ()
() al.

($P < /$)

() ($P < /$)
dS m⁻¹

/ %

/ %

dS m⁻¹

%

/ %

/ %

dS m⁻¹

()

%

/ dS m⁻¹

/

dS m⁻¹

($r = / **$)

()

($r = / **$)

($r = / **$)

($r = / ***$)

Rietz and Haynes () Pathak and Rao ()
()

()

() ($P < /$)

() ($P < /$)

dS m⁻¹

dS m⁻¹

/ %

%

/ %

%

/ %

/ dS m⁻¹ /

/ %

() ($P < /$)

($r = / *$)

($r = / ***$)

dS m⁻¹

pH

($P > /$)

Frankenberger and) (/)

... :

(Tabatabai, 1994) / pH (Johnson, 1983)

() Ghollarata and Raiesi

($P < /$) dS m⁻¹

() ($P < /$)

dS m⁻¹ %

() ($P < /$) %

dS m⁻¹ %

($r = /$ **) %

($r = /$ **) %

dS m⁻¹ ($r = /$ **) ($r = /$ **) (Jorenush and Sepaskhah, 2003)

($r = /$ **) () Rietz and Haynes . ($r = /$ **) Ghollarata and Raiesi ()

($P < /$) ($P < /$)

dS m⁻¹

dS m⁻¹ / % / %

dS m⁻¹ %

($r = /$ **) ($r = /$ **)

() pH (Juma and Tabatabai, 1988)

(

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