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W

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w-

36

W-36

(p< /)

(p< /)

(Bar et al., 2003; Bell et al., 2003)

(Buhr et al., 1994; Biggs et al., ()

.2003; Koelkebeck et al., 1992)

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(Anderson et al., 2002; Bell et al., 1997;
.Koelkebeck et al., 1993)

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(Alodan et al 1999; Anderson et
.al., 2002; Bar et al., 1998)

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) w
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() ()

(AOAC, 1990)

(A.O.A.C, 1990)

(NRC, 1994)

(UFFDA)

()

SAS

(GLM)

SAS

(P < /)

$$y_{ij} = \mu + t_i + e_{ij}$$

: Y_{ij}

: μ

: t_i

: e_{ij}

(Alodan, 1999; Bar et al., 2003; Bell et al., 1992)

(p < /)

(1999) Koelkebeck et al.

(p < /)

-
1. Egg Multi Tester (EMT- 5200)
 2. Ultrasonic Thickness Gauge (echo meter 1062)

... :

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()

/ a	/ ab	/ a	/ a	/ ab
/ a	/ ab	/ a	/ a	/ ab
/ a	/ ab	/ a	/ a	/ b
/ a	/ a	/ a	/ a	/ b
/ a	/ ab	/ a	/ a	/ b
/ a	/ ab	/ a	/ a	/ a
/ a	/ b	/ a	/ a	/ a
/	/	/	/	/

SE

.(P<0.05)

()

/ a	/ a	/ a	/ ab	/ a	/ a
/ a	/ a	/ a	/ ab	/ a	/ a
/ a	/ a	/ a	/ ab	/ a	/ a
/ a	/ a	/ a	/ ab	/ a	/ a
/ a	/ a	/ a	/ a	/ a	/ a
/ a	/ a	/ a	/ ab	/ a	/ a
/ a	/ a	/ a	/ b	/ a	/ a
/	/	/	/	/	/

SE

.(P<0.05)

(1999) Alodan et al.

(p< /)

(Zn)

()

()

/ a	/ ab	/ b	/ b
/ a	ab	/ c	/ b
/ a	/ a	/ a	/ b
/ a	ab	a	/ b
/ a	/ ab	b	/ b
/ a	/ ab	c	a
/ a	/ b	/ c	/ b
/	/	/	/

SE

.(P<0.05)

.(p< /)

.(p< /)

)
 ((p < /)
 ()
 (p < /) (p < /)
 (2003) Biggs et al.

(p < /)

()

()

/ ab	/ b	/ ab	/ ab	/ a	/ a
/ b	/ b	/ abc	/ ab	/ a	/ a
/ a	/ b	/ ab	/ ab	/ a	/ a
/ a	/ b	/ ab	/ a	/ a	/ a
/ ab	/ b	/ c	/ b	/ a	/ a
/ ab	/ b	/ bc	/ ab	/ a	/ a
/ ab	/ a	/ a	/ a	/ a	/ a
/	/	/	/	/	/

SE

(P<0.05).

/ a	/ ab	/ a	/ ab	/ abc
/ a	/ b	/ a	/ b	/ bc
/ a	/ ab	/ a	/ a	/ ab
/ a	/ b	/ a	/ a	/ a
/ a	/ ab	/ a	/ ab	/ abc
/ a	/ ab	/ a	/ a	/ c
/ a	/ a	/ a	/ b	/ c
/	/	/	/	/

SE

(P<0.05)

/ /

.(p< /)

/ /

/

/

.(p< /)

()

/ a	/ ab	/ a	/ a	/ ab
/ a	/ ab	/ a	/ a	/ ab
/ a	/ ab	/ a	/ a	/ b
/ a	/ a	/ a	/ a	/ b
/ a	/ ab	/ a	/ a	/ ab
/ a	/ ab	/ a	/ a	/ a
/ a	/ b	/ a	/ a	/ a
/	/	/	/	/

SE

(P<0.05).

()

/ a	/ a	/ a
/ a	/ a	/ a
/ a	/ a	/ a
/ a	/ a	/ a
/ a	/ a	/ a
/ a	/ a	/ a
/ a	/ a	/ a
/	/	/

SE

(P<0.05)

(p < /)

(1999) Alodan et al.

/ a	/ a	/ a	
/ a	/ ab	/ a	
/ a	/ abc	/ a	
/ a	/ a	/ a	
/ a	/ abc	/ a	
/ a	/ c	/ a	
/ a	/ c	/ a	
/	/	/	SE

(P<0.05)

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