

+ * \ (* - r^{B9}Kays, 1997) * '
 A I ** & ** # ' 6 ' ** 78 \$ ** 8 ** p + " **
 # ' 6 ' 78 \$ * 8 S ' * P + * 0 ')
 ' ** AS * 8 # \$ * S & * P * (* # \$ *
 & * P * E * & # \$ * (* (" ** + * 0
 A + * d * ^ + 9 (Maarten *et al.*, 2001)
 * 0 * & 0 + * 2t (Rocha *et al.*, 2004)
 \$ * 8 S ' * P + * P (* # \$ * (*) *
 U * & / * * 0 A * # ' 6 ' 78
 (* " * / , \$ & + " U # # P (# 2
 A " \$ * 4 9 * & 0 1 * * # 2 " + P + , &
 * & 0 / p (Geeson *et al.*, 1994) A + d
 * P (+ * 2F & Cox (*) * # * * 0
 (* * + + := G * * " ** v * 7 +
 b 8 ' * & := * b 8 ' * & ; j 4 # + j `
 (* " ** + * 0 \ * + / * ! ' - * 0
 * * * a ` CO₂ v * * 7 + * * * P (+ * * * 2F &
 9 / * ! ' - * 0 b 8 ' * & ; _ * a j _ * 8 ; w O₂
 * 0 * & 0 A * (Salunhke and Wu, 1973)
 * C (" # + x 8 # ' 6 ' 78 \$ 8
 . * ' 9 * & * U q * 8 * + / * ! U * &
 0 # ' + . & (Wills *et al.*, 1981) A + d
 \$ * & # (+ # ' 6 ' 78 \$ 8 + (# \$
 9 / * \$! A A / * - 0 (
 (Nakhasi *et al.*, 1991) A + * d * U &
 L " ** + # * * + * H * 0 * & 0 A * *
 - * 0 b ' * ' * - * 0 (+ + , & G
 8 * * 0 * * P (* * " * * * \$ * * ! H +
 A + * * d (* * * 4 * * G + " * * * W

مقدمه

* S + " " I (& 4)
 5 + * B / I * 0 / * C S / B +
 * 9 * + * T ' + * 8 6 * , C (* L AS
 * U * 0 * & " & + (7 # E G +
 * . * & (+ \$ * # P & * 2 5 # \$ * 4 AS
 - X 9 & P / I 0 (H V G + " W
 * (+ I * 0 G Y " Z * 2 " * 8 6 C
 [* W * * 0 * 8 * P D * * +
 6 * Y * & * P * * \ ' 8] * # X (* * 2 &
 + * ^ [Z * * 8 * \ ' 8 * U ^ +] * # X
 % * B G 7 ' * + * H 9 & * P * G 7 ' *
 * * 8 (* (. , * " * + / * P
 * F # \$ * 0 / P b X 8 a : ` > ? _
 % * B G (c " \ d 8 e V L " Z f " &
 g * 7 (Wills *et al.*, 1981) + / * P
 (* M " 7 ") & 4 ! ("
 # * P (# * * (+ * * 2F & / * * C * 0 b * *
 & * P * / * P A + 6 , C P
 9 Liu and Samelson 1986 k j ; @ * ! i
 1 * + + * 2 - * H & . * &) * (# \$
 G Y " Z * / P % B (+ 4 & / 0
 * 0 * * * ' m * * ' 8 * * n & L " * * + * 8
 O₂ / o D - 0 9 (Samogyi *et al.*, 1990)
 (* # \$ * \$ * 8 + CO₂ / * o D - ' . * !
 / * * * \ 7 ! \$ * * * \ # L " Z * * * (* * *
 + * C p 8 / 8 \$! 6 (\$ & 4 + d
 * * (+ * 2F & / * * C) * 8 8 b ' * * * # 4
 - ' . * ! L " Z * / * P % * B (+ 4 * &

** - r*Bb* + 9 P E n & A 28 F I &
 *HV Z! ""H8 "8 .20 3 4 G+
 + D* j;?; L nBT'+8+
 + ""^ (** **,7 + /**P **&
 + *,& 4 报 + ~ \ (+ &U
 • H 8E*n& [* *0 b** "8 9 P
 (+ *0 # * (* ,
 € * * " /P A K\ " . &Z' 报
 *7 + ?` h' H8 0A+ D b L" 7 A
 * * "" P 3 X报 / 64 E 8
 ** # 4+ **C+ ** 8 + "" A ** . + ""
 + 9 & *P (*4 * & *o& + "" (* + " #D!
 • *^ "0 + \$* (*) * (* # \$ * E * F
 *0 8 /!S * + &# D
 (+ \ h 0 () P • d 8
] * #X (+ 8L (4 "S &'4
 "" - Pi P 3 X报 (" 9 & P 3 X报
 6*U + I / *U " d' h' , H8 *t * & *
 b B *B *B b *8 *B d# B(- P"B
 * + * " A + C %B9 & P + C
 (* # \$ * F# # # \$ - P"B
 /0 ***P /U *** : _ A L *** i E" *** 0
] #X (4) 0 8 I Henkelman
 , a; O₂ , a = N₂ L (**4) ** 0 86 **P
 , aj O₂ , a = N₂ E (4) 0 8 a: CO₂
 (* - *P"B * %f** *P *B a- CO₂
 • *8 "8+" F# "U S "8 d# B
 (* # \$ * E * n & %B9 *P (Sealed) # \$ *
 * + : _ ~ ji ' * + * 8 * + * # \$ *

2 I* z' *报 * . * & (Jeffery *et al.*, 1984)
 * (+ *,& *0 / * *P / * p9 * # ' / *
 \$* 8 + (* # \$ * *PL * # 0 \$* 8
 / *P %B (+ 4 & &'8 # ' 6' 78
 * (. , * " P 7VC 7VC (" (+ \$
 "" * & (O'Bieme, 1990)) * & +
 (Agar *et al.*, 1999) (" 0 (Qi *et al.*, 1999)
 * 4 (Gorny *et al.*, 1999) 6 *P ""
 (Gil *et al.*, 1996) + & (Gorny *et al.*, 2000)
 A (Jobling, 2001) U 9 - ' . ! +
 L"Z* / \$* CO₂ ' ' H 0 0
 - *0 { * . * & - *0 b *8 +
 . , * U * & L " | \$ * 0 6 ! 0 b # ! + / *
 b** [* 9 ""P * / (. , " 3 * 4) * * G + / 0 1 - rB
 G * * AS * U (+ + .20
 + (* # \$ * 5 + # * *8 & ""
 b** ""P } XI* *8 "" * # ' 6' 78 \$ 8
 L"Z** A"" B \$** 8 6' **78 ** 5 +
 "" # * / , \$ * & (# * / * +
 + A . & "" (* - *8 * & 2F& ' *P
 9 + L"Z G 7' - 0
 مواد و روشها
 \$* 8 + (* # \$ * 报 * + (*
 + L"" +] * #X (* + 8 # ' 6' 78
 (+ *,& - ' . ! / 0 1 (+ 2F&
 L * + I' S .20 3 4) & ' G+
 * 2 *4 & , D E" 4 + j ; ? ;
 (+ I * 0 d l "" & ' K * D m' * W E ""

(*#\ j_(Venoject)%oU / 8(IP
6*U *4 *#\ • '+ H P IO
* (*4 * & &U & * S * "8 * / *d "&
L ** (GC) (**4 [4"8** 0 F#*
4 A" Ac #& 4 9 P •'+.8 .8 P
A"# •'+.8- X (9 P # 6
** + j:_ j_ jj_) **88 ** + "##d#
*\ d € * \ "8+ H 9" 4 #
9 PA / + E 4" 0 +
+ " * " * • '+ 0 b' (سفتى ميوه:
/* "B 3 X# I' S ! Z8
/*2 + *2^ * + AS "'# / \$C+ "
*P * m* # # * * , ' H8 &
z * \$" & F# # " # %f
/0 **P / U ** FT L ** Penetrometer i
) \$** (**4 **&I **d' Wagner
9 ' 4 / P 'm # # E 4" 0
(** : اسيديته قابل تيراسيون (TA):
+ " * " * # * + *H (*4 &
+ Z* 3 X# I' S ! Z8
j_ %f** 9 ** 4 [**W **P **28E Y
(* • *Gt (#P + + Z #\
(* 9 *P ! * AS * *VH 3S =_
* 3S+ *P • Gt + Z 60 # b 78
*F 9 *P #8L &_wj ' \$0 +
6** ** + ?wj>?w: ** L"*** pH **0
/*,p ! Z* " * + *H] *C'# A" #8
, * L" * ! # # 9 P
9 ' 4 A W+) \$

*0 b** *U * 9 & *P + Cl 4 #
... *8 \ " 7 (* + *# 4 + *C (* " *
- ' * S \ 6 + l 4 # + :_i
* 6* 8 * .n8+ K\ * #+ b
* . * & *P • * + 9 I & # AS
6 *P *P9 *P *# 4 *o&+ + *d8+ *2^
) * 0 8A - P"BA 0 " ')
* + &U * , \$* & / * " + 9 * & " (* 4
) * 0 8+ *2^ * * + 9 *P 1* a? ^>=_
eV** - *P"BeV** 6 *P (+ * 8
+ *2^ * • * * *P • * (4) 0 8
/ \$* * * +) 8 8 b' 9 / P + C + d8
. * & I * S * * + I * S *
G+ " * W * t * 9 *P + *C # \$* / *
) * 0 8 * 6 * + " # 0 ! / f - ' * S
h * 0 * B t * * *P + * 8 * (+ 8
(*) * 9 *P * + *d8+ *2^ * ! Z8
** ** + # \$ ** 6 ** U + " ** "
• * + + *2^ * W ! 0 (+ & ' &
d# B (- P " B 6 U P E n & +
* 0 G W o & F I ' S + P † + U
9 # 4 + C ' + + " ' 0
b 8 \ " 8 + H (4 & (اتيلن:
* # \$ * * 6 * U + " " ("
(* 4 & %B P 3 X# ! Z8 + "
d# B (* [* t 6 * U + * n A
% B 9 & P + C E " # . 2 n ^ " Z X
[* t (Y * * 4 * & ' & • * / : ~
(* "\ * (A " s " 8 d # B

$$\# \quad W+ \quad \left[\frac{'' \quad \# \setminus \{ < \} \setminus D \quad AY \quad 0 < ! Z \quad '' + H}{'' \quad 3S \quad n < j _} \right] < j _$$

Δ (*4) * 0 8 < G1 b B * B * B - P''B
 Δ (**4) ** 0 8 G2 a; O₂ , a: CO₂
 9aj O₂ , a~ CO₂

6*0 L'' * '' (*4 * & (
 RF40 L ** #''''#0 !+ F#'' (TSS)
 ** '''' + Z'' pH EC 9 **P #''
 Sartoriusi *# pH F# # * . * &
 \$'''''' '' z'''''' EC IPP-20 L ''''''
 + *C (*4 * & +'' IMetrohm 644 L i
 9/! 4

نتایج و بحث

اتیلن

+ b *8 (4 & 6W z' # +
 A I * &] * # X (A + - ' S L''
 [# * U (** 4 ** & (** A ** b ** ** 0
 + ~ : 8 0 (+'' / P '' (+ 7
 * \ ' 8 + * H + (* x 8 * * (+ + * , & % B
 + ` Z h * * 0 \ + I & I b 8
 - ' . ! b * 8 * \ ' 8 + * H (+ + * , & % B
 6 * W z' # 9 j L i / ! ' - 0 +
 \ ' 8 (Peak) ‡ 0 A I & - r B b'
 % * B + ` Z h * . 20 3 4) + b 8
 (* ' ! \$ * * # * ... 8 (+ + , &
 * '' / * 0 - 0 n 0 d \ ' #
 % * B + ` Z h ' H 8 '' P AS (+ 5 +
 * \ ' 8 + U q * 8 b * 9 '' P DS (+ + , &
 9 '' P '' (+ 4 & - ' . ! n b 8
 * 0 '' P * I * . * & 6 * H # p + +
 L (4) 0 8 + P (# \$ (''
 . * & I : L * i * 4 # * * + ~ (*
 b * 8 * B - * P'' B + P (# \$ (''
 (# * b * 8 I ; L * i L (* 4) * 0 8
 % 8 n # + M # b' 0 & 0 \ ' 8

* 7 } U * P : (TSS/TA) شاخص طعم میوه
 # * * 6 * 0 L'' * '' / , \$ & ''
 % * BAS , * (* 9 / * A'' # 86 C
 # * 6 * 0 L'' * '' (4 &
 A '' * TSS/TA \$ * 0 6 W A'' # 86 C
 9 / ! 4 + C ' + +'' '' 7 } U P
 * * P) * 8 (+ S m * % B
 % f * & P - ' S # \ & A'' S #
 6' * , 86 * L * & D (* (+ *
 (* (* * 0 G + '' W b' * 9 * P E * n &
 6' * , 8 \ d' + ' I' + 6' , 8 (
 (W + (((Log x) # + F \
 9 P # | arcsin √ x , _ w i ' 6' , 8
 # * & P L & 0 b' % B
 '' . n 8 +'' MSTATC SAS (+ . ! E &
 # b F & \$' H # 4 + C 6 8
 9 P E n & b d & (^ A'' S

توضیح تیمارهای مختلف

~ (< T2 4 # + j (< T1
 < P2 b * 8 * B - * P'' B < P1 4 # +

+ (# 0 b 8 \ '8+ H 4 # + ~ \$* H 9/* *P *0\$ S' *P+ " #
 9~ L * i #P *P (* + 8 * \$' H 6' *78 \$* 8+ (* # \$] #X (+ 8
 (*4 (*) *0 8 p 0 + o& b ^ - *P"B+ 8 0 A I& P (MAP) #'
 G * # d# B(- P"B] #X + * 8 L (*4) *0 8 * * b *8 B
 +"" A #P V+ (&'4 E (*4) *0 8 b B B B - P"B
 - *0+ 6* " b' *p ""P * I* 0 - *P"B+ * 8 *4 #* * + j (+
 *p *8 *2 b *8 * \ '8 (4"" * - *P"B L (*4) *0 8 b B *B *B
 9/ (+ E (4) 0 8 b B B B

. 20 3 4) " # TSS/TA TSS TA pH b 8 \ '8 (+ + ,&A p > j L

Table 1. The effect of storage time on ethylene production, pH, TA, TSS, TSS/TA and fruit firmness of Golab Kohanz apple

A • Time (days)	L" TSS/TA	" TSS (° Brix)	A" TA (%)	#6 C # pH	# b 8 \ '8 Ethylene production ($\mu\text{L}^{-1}\text{Kg}^{-1}\text{h}^{-1}$)	" •# Fruit firmness (kgcm^{-2})
14	60.0 b	11.50 a	0.191 a	4.69 b	0.100 b	2.57 a
28	59.9 b	11.45 ab	0.194 a	4.60 c	1.090 b	2.50 ab
42	61.8 ab	11.38 ab	0.186 b	4.42 d	0.085 b	2.10 c
56	63.5 a	11.15 bc	0.175 c	4.59 c	0.115 a	1.90 c
70	63.7 a	11.00 c	0.176 c	4.99 a	0.110 ab	1.80 c

9bd& (^ A" Si & &(+ 7 [#J (+ S o& A"# + I [(bF&

Means followed by similar letters in each column are not significantly different (Duncan's Multiple Range Test).
 TSS: Total Soluble Solids TA: Tetrable Acidily

" •# b 8 \ '8+ H] #X ' 4 () ' 8 6 # p b F& \$' H > : L

Table 2. Mean comparison of interactions between temperature and different gas mixtures on ethylene production and fruit firmness

+ 8 Treatments	b 8 \ '8+ H Ethylene production ($\mu\text{L}^{-1}\text{Kg}^{-1}\text{h}^{-1}$)	" # Fruit firmness (Kgcm^{-2})
T1G1	0.092 b	2.00 bc
T1G2	0.093 b	2.20 b
T2C1	0.121 a	1.75 c
T2G2	0.094 b	2.75 a

9bd& (^ A" Si & &(+ 7 [#J (+ S o& A"# + I [(bF&

Means followed by similar letters in each column are not significantly different (Duncan's Multiple Range Test).

T1: 1° C T2: 4° C

G1: 2% CO₂ + 3% O₂ G2: 4% CO₂ + 1% O₂

G # (+ P #'6' 78 \$ 8+ (# \$] #X (+ 8b F& \$' H >~ L
 .2' 3 4) " •# TA -pH b 8 \\'8+ H o& (+ + ,&

Table 4. Mean comparison between different modified atmosphere packaging storage temperatures for fruit firmness, TA, pH and ethylene production of Golab Kohanz apple

+ 8 Treatments	" •# Fruit firmness (Kgcm ⁻¹)		A" #86 C # TA (%)		# pH		b 8 \\'8 Ethylene production (μL ⁻¹ Kg ⁻¹ h ⁻¹)	
	T2	T1	T2	T1	T2	T1	T2	T1
P1G1	2.5 ab	2.2 abc	0.183 bc	0.182 bc	4.63 ab	4.66 a	0.110 abc	0.07 c
P1G2	1.5 c	2.0 bc	0.186 abc	0.183 bc	4.61 abc	4.58 abc	0.115 abc	0.09 bc
P2G1	1.9 bc	2.0 bc	0.177 c	0.190 abc	4.63 ab	4.55 bc	0.08 bc	0.11 abc
P2G2	2.9 a	2.5 ab	0.190 abc	0.193 ab	4.50 c	4.47 d	0.067 c	0.07 c
Control	1.6 c	1.5 c	0.178 c	0.170 d	4.67 a	4.65 ab	0.140 a	0.12 ab

Means followed by similar letters in each column are not significantly different (Duncan's Multiple Range Test).

T1: 1° C T2: 4° C P1: Polyethylene P2: Polypropylene
 G1: 2% CO₂ + 3% O₂ G2: 4% CO₂ + 1% O

اسیدیتہ قابل تیتراسیون (TA)

مواد جامد محلول (TSS)

* b F& \$' H 6'W z' *# +
 (* 4 * &] #X (A b 0 A I&
 G * 8A" * #86* C # * + *H *o&
 AS+ H 0 (+ " /P " (+ 7
 (* 2# + _vj@ * - ' * S f * P + _vj =
 6* C # * + *H qj L i + - ' S
 pH * * F# \$, " 8 . & A" # 8
 G * * + + - * 0 * & + • * ' + Z *
 * z' * # * z' * # b * ' 9 * A I * & (+ + * , &
 A + * d U & (- ' S S /
 + * H & 0 A ' (Nakhasi *et al.*, 1991)
 * ' - 0 (+ + , & G L" + #
 + * P (* # \$ (* " * + - 0 b'
 * P (* " \$' H + #' 6' 78 \$ 8
 (* 9 + /H V 4 G + " W 8 0
 z' * # * . * & (Jeffery *et al.*, 1984) A + d

' * A * b * * 0 A I * & z' * # • * +
 * " * + * H * o & (* 4 * &] #X
 * 9 / * P " * (+ * 7 [# U L " *
 f * * P + j j w = AS + * * H * * 0 (+ " * * *
 (+ * * 2 F & + (* * 2 # + j j * * - ' * * S
 z' * * # * * z' * * # b * * ' 9 j L * * i * * +
 d & * * - ' * * S * * S / * * *
 * & ' A * * ' (Salunhke and Wu, 1973)
 * C (" # + x 8 #' 6' 78 \$ 8
 / * H V * & * U q * 8 * + / * ! U &
 +) * % * 8 G * P * 0 b * ' " * 9 +
 (* + 8 L * * ^ " Z U b ' B (
 - * 0 + \$ * d # B (* - * P " B (4
 G * + L " * * " * - * 0 * '
 * ' S ! + AS [Z p +) (+ 2 F &
 9 / % 8 d \ ' #

* 1* + *4 # + j (+
 + * 8 *4 #* * + ~ (* 8 p*
 * z' *#* z' *#b* 9~ L * i &" P
 A+ **d ** U&- r**B ** S / **
 + *H & 0A ' (Nakhasi *et al.*, 1991)
 * ' - 0 (+ + , & G L" + #
 + *P (* # \$ (* " * + - 0 b'
 (* " * * \$ * H + * # ' 6' * 78 \$ * 8
 9+ / * H V * 4 * G + * W 8 0 P
 * + j (* * 0 * + * * o & * b * ^
 G * P - * 0 + (* 8 * 2 - * H & * 4 # *
 " * * 0 ^ " * U x 8 (4 " % 8
 9 / # P

(0 + o & 9 # ' / 2 I
 * ^ " Z * U *) + Z + " " S
 G L" + / ") \ D 0 • \
 \$ * 8 / * \ 7 ! * p + + * , & +) * (+ 2 F &
 I * b " 9 ' - 0 P [Z
 - * P " B + * 8 + " * # * + * H * 0 * P
 # * 4 # + j (b B B B
 * P & * b * 0 / * " * + 8 '
 \$ * 8 b ' * B (* + " % 8 0 G P
 b B * B * B - * P " B * p + P n ' 3 " V
] * # X (* + 8 \$ * H 9 ` L * i / *
 - * P " B * * 0 A I * & * P * MAP
 * P + 0 (4 () 0 8 d # B

A" #86 C # + H (+] #X d# B(- P"B 6 H# p >` L

Table 5. Interaction between temperature and different plastic films on titrable acidity

+ 8	T1P1	T1P2	T2P1	T2P2
Treatments				
TA (%)	0.182 b	0.191 a	0.185 b	0.184 b

Means followed by similar letters in each column are not significantly different (Duncan's Multiple Range Test).
 T1: 1° C T2: 4° C
 P1: Polyethylene P2: Polypropylene

AS+ H 0 (+ " 9 & P 8b' P "
 + A * B + Z ; W - * - ' * S f * P + Z _
 9 j L i + (+ + , &
 سفنی میوه
 # * (* 4 * & 6 * W z' # +
 A I * & (+ + * , &] * # X (* A + "
 (+ + * , & + L " * + " # + H 0

(TSS/TA) شاخص طعم میوه
 6 * C # * * L " * * " * / , \$ &
 A " * * / " 7 F & 0 A " # 8
 # 8 / * 8 " P # 4 o & + 7 } UP
 + * 0 (+ " * * / * ! 4 + * C (+ + , & +
 + * H & U * +) (+ 2 F & G L "
 \ / * ! ' - * 0 L " " #
 * n # + " * # # - 0 + H A " ^

/* p *0 (Geeson *et al.*, 1994) A+ *d
 (+ *2F&Cox (*) * " * # * & 0
 (* + + := G * * " * √ 7 + P
 b8' * & := * b8' * & ; j 4 # + j`
 (** " ** + *0 \ ** + / * ! ' - *0
 *** a` CO₂ √ *** 7 + *** P (+ *** 2F &
 / * ! ' - *** 0 b8' * * & ; _ *** aj _ > ; w` O₂
 A + **** d **** U & - r **** B . **** &
 + H & 0 A 0 (Nakhasi *et al.*, 1991)
 - *0 (+ + * , & G * L " * + " * # *
 P (# \$ (" + - 0 b ' '
 (* " * \$ * H + * # ' 6 ' 78 \$ 8 +
 9 + / * H V * 4 * G + " * W 8 0 P
 (Rogiers and Knowles, 2000). \ & +
 \$ * H 9 * # ' / * 2 I * z ' * # * . * &
 *0 A I * & * P MAP] # X (+ 8
 (* 4) * 0 8 b B * B * B - * P " B + 8 +
 + * * 4 # + j (+ E
 - * P " B + * 8 . * & * 4 # * + ~ (
 * + ~ (+ L (4) 0 8 b 8 B
 * P (* " * & / " 4 #
 * o & * b * ^ 9 ~ L * i * & " * + 8 '
 H \$ V + (4) 0 8 f " & 0 +
 + * 0 (+ " * + d # B - * P " B f " &
 + L (* 4) * 0 8 b * 8 * B - * P " B
 E * & E (* 4) 0 8 b B B B - P " B
 (* - r * B 9 * 0 * (4 " " A P
 S * " 8 # ' 6 ' 78 \$ * 8 * p + " * + \
 . * & (Maarten *et al.*, 2001) A + d b &

m * # # E 4 " 0 _ w @ & z ' + 8
 j L * * * " 8 * * / * * # ' - * 0
 3 * 4) * + # * - * 0 + * H b ' #
 * 7 ' " * (+ + , & % B + ` Z h ' H 8 . 20
 + b * 8 * \ ' 8 + * H * 0 & • V h ' H 8
 H \$ V + / V b ' 9 / ! ' - ' . ! A S
 # * - * 0 b 8 \ ' 8 - ' . ! b " "
 (* " * + (+ + * , & + L " * + "
 / , \$ & ' b 8 \ ' 8 6 \ I & (# \$
 b ' 9 & P E & 8 m ' P (# \$ ("
 (* - r * B * S / * * z ' * # z ' #
 * 0 (Rocha *et al.*, 2004) A + * d * ^ +
 s ' P + P (# \$ () & 0 + 2 t
 / * * 0 A * # ' 6 ' 78 \$ 8
 * / , \$ * & + " U # * # P (* # U &
 * & 0 1 * * # " * + * P + , & ("
 * . n 8 6 * W z ' * # * + 9 + / * H V
] * # X (*) * 0 8 * 6 * H # * p (+ S
 * * + ~ (** + ** 8 * 0 A I * * & (** 4
 b ' # * (+ E (4) 0 8 4 #
 * + * * o & * / * " " # + H
 E * & (4 " + (4) 0 8 f " & p # 0
 0 I : L i / " # " A P
 " # 0 % 8 G P n # + N # b '
 * * CO₂ p # 8 . * & CO₂ * ' H +
 * 0 / b 8 (# G + & • ' A "
 P d # \ # d B (' . \$ / \ 7 ! - 0 {
 z ' * # b ' 9 0 (4 " " A P E &
 A " \$ 4 - r * B * S / * * z ' * # *

(+ (# 0 3 " V * & * p * 4 # * + \$ * 8 S ' * P + * 0) 0 A I &
 { * # P " (t / 0 . 7 * 8 # \$ S & * P * (* # \$ * # ' 6 ' 7 8
 / ' 2 & + " # 0 G W " Z U 1 E * & # \$ * (* (" * + * 0 ' * * AS
 9 " P " (+ , & - ' . ! 9 & P

سیاسگزاری

† * b * E * n & (* \ * ! G & d \$ * 8 6 ' 7 8 * * 2 8 * 0 * # ' 6 ' 7 8 \$ 8
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