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(// : // :)

(Allium cepa L.)

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:
:

$2n=2x=16$

$X=8$

(TF%)

(S%)

(DRL)

(S%)

(DRL)

$A_2 A_1$

:

(*Allium cepa*)

(Hussain et al., 2001; Agafonov, *Alliaceae*
2006)

(2007) Dehdari et al.

(Chauhan et al., 1990;

Jordan, 1983)

(Rubatzky & Yamaguchi, 1997; Brewster,
1994; English, 1990)

Okumus &

(2000) Lutful

:

(2n=24) (2n=16) (2n=8)

X=8 (2n=32)

(Renc et al., 2001; Hanelt, 1990)

(1938) Levan

Vicia faba, *Tradescantia paludosa*, *Pisum*
sativum, *Hordeum vulgare*, *Crepis capillaris*

(Dryanosvka, 1987; Amer

et al., 1999; Dimitrov, 1994)

(Mirzaie Nodoushan et al., 2003)

(Mousa Pourgorji et al., 2007)

Arab &

(1989) Kashi

(Stockert et

al., 1970)

(Masoumi &

Khosravi, 1989)

SSC-DC50 AP

()

.()

MicroMeasure

(TF%)

(Agayev,

(S%)

.1996)

(DRL)

(TF%)

TF% = _____ ×

(S%)

S% = _____ ×

(DRL)

(Mirzaie

:Nodoushan et al., 2003)

DRL =

-
- 1. Adobe Photoshop
 - 2. Total Form Percentage
 - 3. Relative Length of Shortest Chromosome
 - 4. Difference of Relative Length

()

(M: /) (L/S)
 (SM: / /)
 (T:) (ST: / /)
 .(Gill et al., 1991; Yan Li et al., 2006)

$$A_1 = 1 - \frac{\sum_{i=1}^n \frac{S_i}{L_i}}{n}$$

$$A_2 = \frac{S \bar{d}}{\bar{X}}$$

S_i n (L_i) A_1
 A_2 \bar{X} (\bar{Sd})
 .(Romero-Zarco, 1986)

2n=2x=16

/ /
 .()

(TF%))
 TF% ()
 / /

.()
 (S%) SPSS SAS

.(Gennur et al., 1988) .(SAS Institute , 1996)
 (S%)

/ /
 (P≤ /) .()
 / /

... :

(A₁)

(DRL)

(A₂) / /

(/)

A₁ / /

()

) A₂ ()

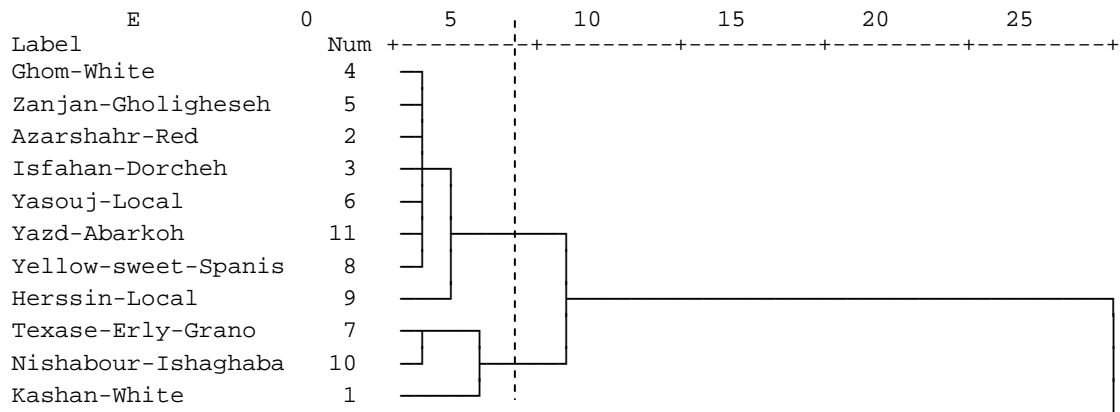
(

() (P ≤ /)

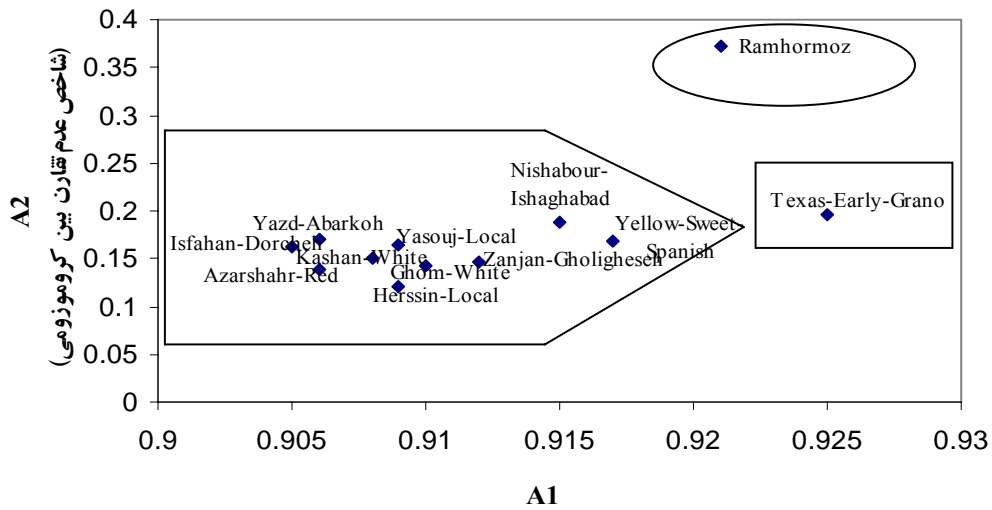
/	**	/	**	/	**	/	**	/	**	/	**
/	**	/	**	/	**	/	**	/	**	/	**
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/		/		/		/		/		/	
-		-		-		-		-		-	
/		/		/		/		/		-	CV %

**

	()	()	()
/ ab	/ ab	/ abc	/ de
/ ab	/ a	/ abc	/ e
/ a	/ a	/ cb	/ d
/ ab	/ ab	/ c	/ d
/ ab	/ ab	/ abc	/ d
/ ab	/ ab	/ abc	/ e
/ ab	/ ab	/ abc	/ c
/ ab	/ ab	/ abc	/ g
/ ab	/ a	/ c	/ c
/ b	/ b	/ a	/ a
/ ab	/ ab	/ ab	/ f
/ ab	/ ab	/ abc	/ b



()



()

A₁ A₂

:

2M+6SM	/	/	/	/	/
3M+5SM	/	/	/	/	/
3M+4SM+1ST	/	/	/	/	/
2M+6SM	/	/	/	/	/
2M+6SM	/	/	/	/	/
2M+4SM+2ST	/	/	/	/	/
1M+7SM	/	/	/	/	/
7SM+1ST	/	/	/	/	/
2M+5SM+1ST	/	/	/	/	/
1M+5SM+2ST	/	/	/	/	/
5SM+3ST	/	/	/	/	/
1M+7SM	/	/	/	/	/

:A₂

:A₁

:M

:SM

:ST -

... :

TF% (TF%) X=8 Dehdari et (2007) al.

Renc et al. *Allium cepa* (2001)

Amer (1994) Dimitrov

) A₁ TF% Chauhan et al. (1983) Ali & Amer (1999)

((1990) TF%

A₂ DRL () (Huziwara, .1962)

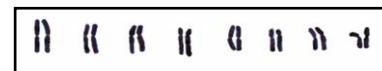
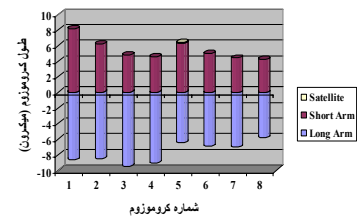
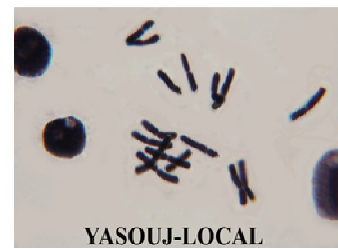
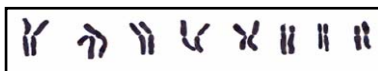
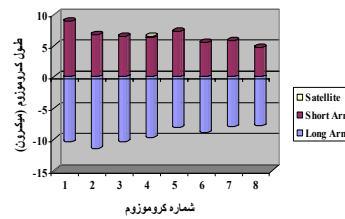
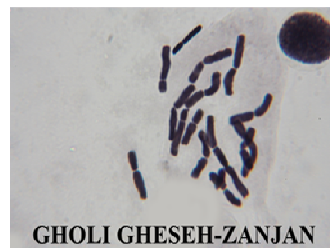
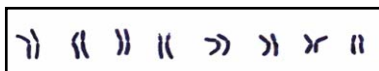
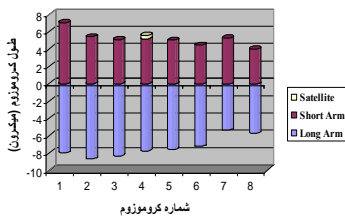
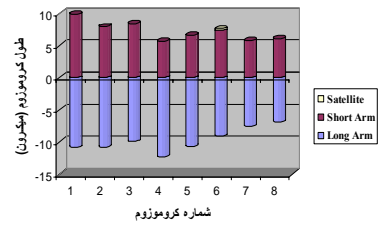
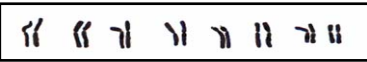
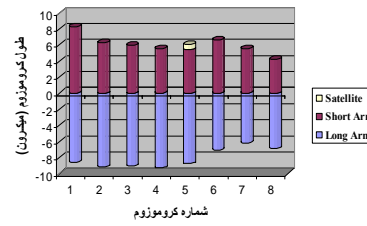
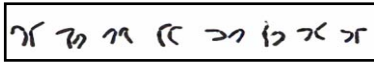
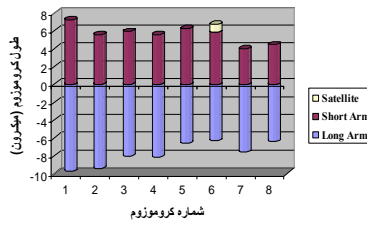
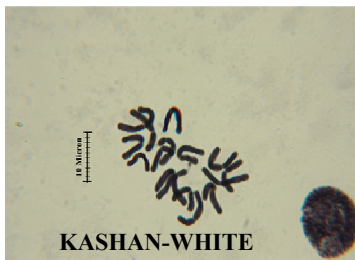
(2000) Okumus & Lutfil (S%)

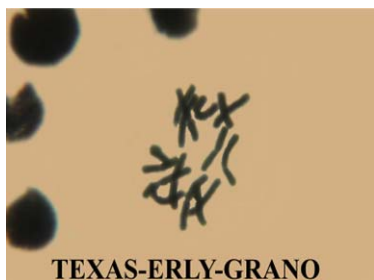
(Gennur et al., 1988a)

(2005) Aslanturk & Askin Celik . (DRL)

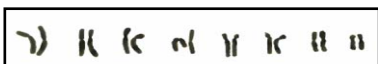
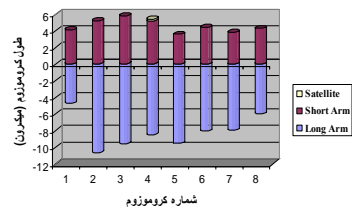
() (1989) Arab & Kashi (2007) Dehdari et al. .

Konuk (2007) Panneerselvam & Palani Kumar
(2007) et al.

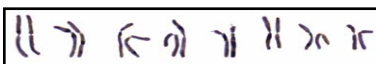
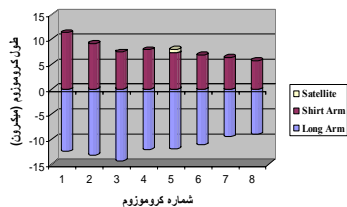




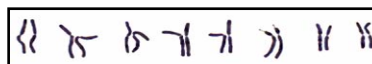
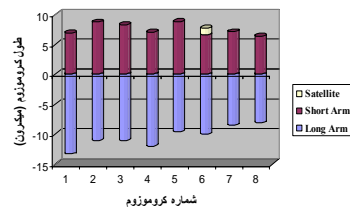
TEXAS-ERLY-GRANO



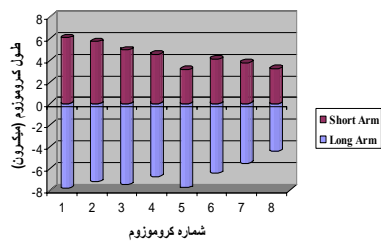
YELLOW-SWEET-SPANISH



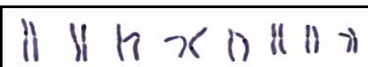
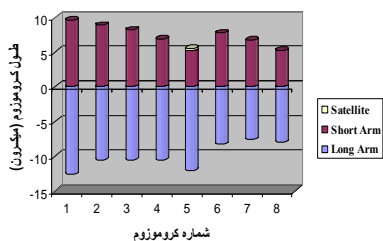
HERSIN-LOCAL



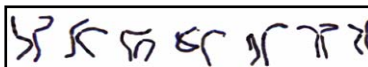
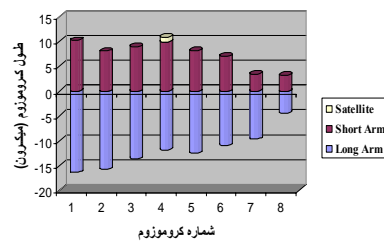
ISHAGH ABAD-NISHABOUR



ABARKOUH-YAZD



RAMHORMOZ



Hesamzadeh Hejazi

(2007) Safari et al. (2007) & Ziaei Nasab

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