

مطالعه کاربوتیپی ۵ جمعیت رازیانه (*Foeniculum vulgare* Mill.) بومی ایران

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/// : // :

چکیده

x=

n = x =

% / %

(% /)

مقدمه

(Rechinger, 1982)

(Apiaceae)

)

.(

/ /

() Chitra () Pamela Maude .

n=

Heywood Zohary .

Deng ()

Shanmugavelu ()

Data .

()

() Rita

(*Foeniculum vulgare* Miller.)

/ ± /

Sheidaii .

/

()

n = x =

Orton Murata .

(*Apium graveolens*)

()

(*Kelussia odoratissima*)

() Anuradha .

$$= \left(\frac{\quad}{\quad} \right) \times \left(\frac{\quad}{\quad} \right) \quad .($$

(S/L)

Arm ratio = S/L = ($\frac{\quad}{\quad}$)

(r-value)

r-value = ($\frac{\quad}{\quad}$)

(DRL)

(Levan

ex al., 1964)

(r-value)

مواد و روشها

(TF%)

$$TF \% = \left(\frac{\quad}{\quad} \right) \times$$

TF%

(Agayev,

1996)

(%S)

نتایج

() n = x =

()

/ /)

()

(/)

(/)

(%S)

(% / %)

(% /)

SSC- DC 50 AP

(DRL)

/)

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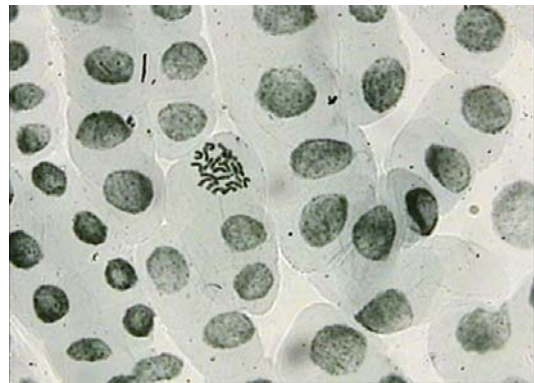
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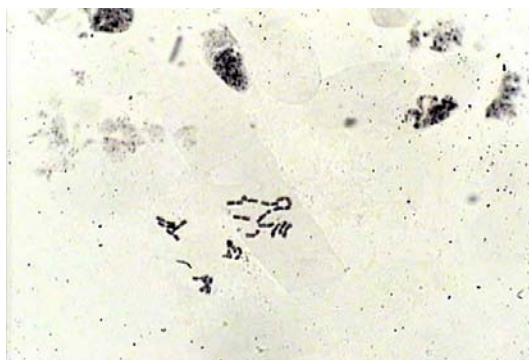
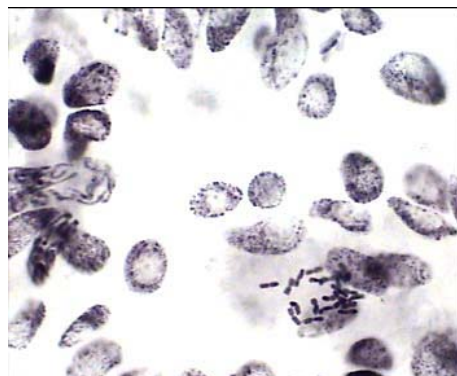
	DRL		%S	%TF
m	/	/	/	/
m + sm	/	/	/	/
m + sm	/	/	/	/
m	/	/	/	/
m + sm + st	/	/	/	/

DRL %S %TF

x x x x "

 y x ← x x x





بحث

n = x=

() Heywood Zohary () Pamela Maude

DRL %S

Deng ()

Shanmugavelu

()

()

() Orton Murata

TF%

سیاسگزاری

منابع مورد استفاده

(%S)

%S

Datta .

%

()

(TF%)

() Rita

(S%)

% / % /

Aloe littoralis

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Cytogenetic studies in 5 native fennel (*Foeniculum vulgare* Mill.) populations of Iran

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Abstract

This study was carried out in Agricultural and Natural Resource Research Center of Esfahan during 2004-2006. Karyotypes of 5 fennel populations were studied, using root tip mitotic cells. The base chromosome number was $x=11$ for the studied populations. Number of chromosomes, length of the longest chromosome, length of the shortest chromosome, longest/ shortest length ratio, average of long arm/short arm ratio, average of short arm/long arm ratio, average of chromosomes ratio were recorded. The types of chromosomes were metacentric, submetacentric and telocentric. Comparison of relative length of the shortest chromosome (S%) showed that Lorestan and Fozveh-Najafabad populations with 75% and 72.72% relative length of the shortest chromosome, respectively, had more symmetric karyotype and Esfahan population with 33.33% relative length value had less symmetric karyotype.

Key words: Cytogenetic, fennel, chromosome, mitotic and karyotype

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