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(// : // :)

T. migricus *T. eriocalyx*

Thymus daënis

Thymus. spp.

:

/ /

m

m

m

1A

m+ sm

2A

A₈

Thymus daënis

:

) (Brown, 2002; Omidbaigi, 2008)

(

-
1. *Thymus*
 2. Lamiaceae
 3. Lamiales

T. migricus Klokov & Desj.-Shost.
(*T. eriocalyx* (Ronniger) J alas

:

T. daënis

Celak.

.(Jamzad, 1994)

.(Jamzad, 1994)

T. eriocalyx .(Jamzad, 1994)

T. migricus Klokov & Desj.-. (Ronniger) J alas
Shost

(Morales, 1986)

T. eriocalyx (Ronniger) .

.(Lopez-Pujol et al., 2004)

J alas

.(Jamzad, 1994)

(n=)

n=

n= x=

n= x=

()

(Murin, 1997;

n= x=

.Morales, 2002; Fernandes & Leitao, 1984;)

(v/v)

)

(

n=

/

n=

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(

.(Mehrpur et al., 2001)

(w/v)

T. daënis Celak.

)

1. *T. praecox*

2. *T. herba-barona* Loisel

3. *T. carnosus*

4. *T. comphoratus*

5. *T. vulgaris*

6. *T. kostchyanus* Boiss & Hohen

()
 (n=)
 n= ()
 n= x= n= x=
 Murin,) n= x=
 (Fernandes & Leitao, 1984; 1997; Morales, 2002

DP12

(n= x=)

/ /
 () (A₅ A₂)
 (/) A₅
 A₇ (/) A₈
 A₈ (/) (/)
 (/) A₇ (/)

(/) A₅
 ()

/ (A₂) / (A₈)
 / (A₅) / (A₃ A₂)

-
- 2. *T. praecox*
 - 3. *T. herba-barona* Loisel
 - 4. *T. carnosus*
 - 5. *T. comphoratus*
 - 6. *T. vulgaris*

Excel
 (Stebbins, 1971)
 Levan et al. (1964)

Minitab14 SPSS14
 (n= x=)

(A₄) *T. eriocalyx* (A₃ A₁) *T. daënensis* Celak.
 (A₅) *T. Klokov & Desj.-Shost.* (Ronniger) J alas
 (A₆) *Thymus spp. migricus*
 (A₂) *T. daënensis* Celak.
 ()
 (A₈ A₇) *T.daënensis* Celak.

1. Olympus BX50

(A₁-A₆) / (A₈) / (A₇)

() (A₅) / (A₈) /

(1964) Levan et al.

(/) A₅ m (A₁, A₃-A₆) m

(A₈) m+ sm (A₇) m (A₂)

A₈ :

A₇

(/) A₇ (/) A₂

A₅ A₈ A₇

(/) / /

A₇

A₈ A₇

(1986) Romero-Zarco (A₈ A₇) :

A1	<i>T. daënenensis</i> Celak.
A2	<i>T. daënenensis</i> Celak.
A3	<i>T. daënenensis</i> Celak. ()
A4	<i>T. eriocalyx</i> (Ronniger) J alas
A5	<i>T. migricus</i> Klokov & Desj.-shost.
A6	<i>Thymus spp.</i>
A7	<i>T. daënenensis</i> Celak ()
A8	<i>T. daënenensis</i> Celak ()

*

(±SE)									
CI	TCV	F%	RL%	r-value	AR	TL	L	S	
/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	A ₁
/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	A ₂
/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	A ₃
/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	A ₄
/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	A ₅
/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	A ₆
/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	A ₇
/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	/ ± /	A ₈

SE = Standard error

CI = Centromeric index

TCV = Total chromosome volume = $2(\pi \times r^2 \times TL)$, $r =$, $\pi = 3.14$

F% = Form percentage of chromosome

RL% = Relative length of chromosome

r-value = (S/L)

AR = Arm ratio (L/S)

TL = Total length of chromosome (L+S)

L = Long arm length

S = Short arm length

:

CV%	DRL%	S%	TF%	DI	X	(Romero-Zarco, 1986)		KF (Levan <i>et al.</i> , 1964)	ST (Stebbins, 1971)	
						A2	A1			
/	/	/	/	/	/	/	/	m	A	A ₁
/	/	/	/	/	/	/	/	m	A	A ₂
/	/	/	/	/	/	/	/	m	A	A ₃
/	/	/	/	/	/	/	/	m	A	A ₄
/	/	/	/	/	/	/	/	m	A	A ₅
/	/	/	/	/	/	/	/	m	A	A ₆
/	/	/	/	/	/	/	/	m	A	A ₇
/	/	/	/	/	/	/	/	m+ sm	A	A ₈

CV% = Coefficient of variation
DRL = Difference range of relative length of chromosome
S% = Symmetry index
TF% = Total form percentage of karyotype
DI = Dispersion index
X = Total chromatin length
A2 = Interchromosomal asymmetry index
A1 = Intrachromosomal asymmetry index
KF = Karyotype formula
ST = Stebbins classification

() (A₈) 2A ()
A₈

(A1)
(/ /) A₈ A₇
) A₆ A₅
A₅ (/ /
A₃ (A2)
(/) A₅ (/) A₇

(n= x=)
(n= x=)

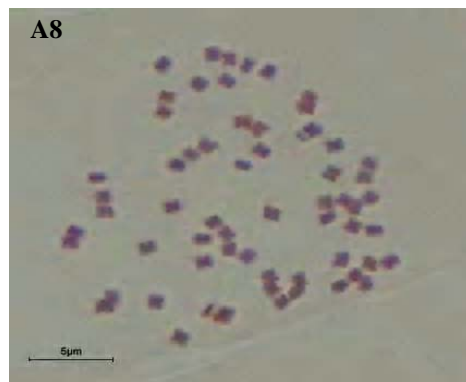
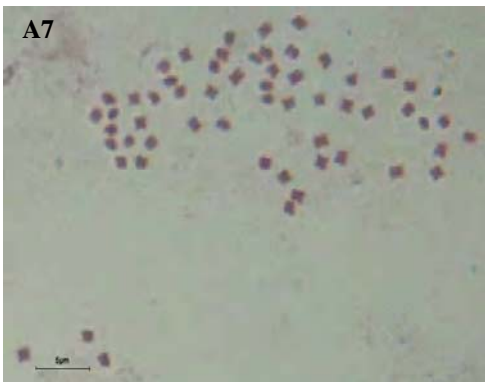
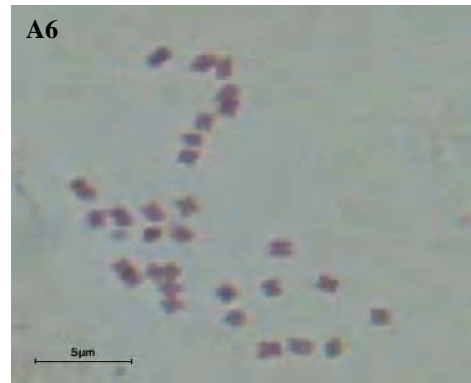
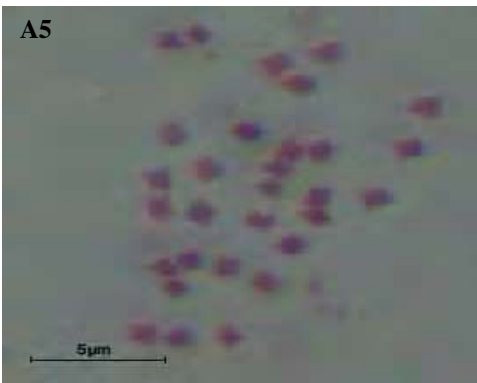
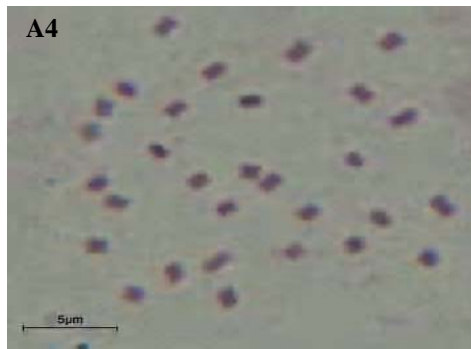
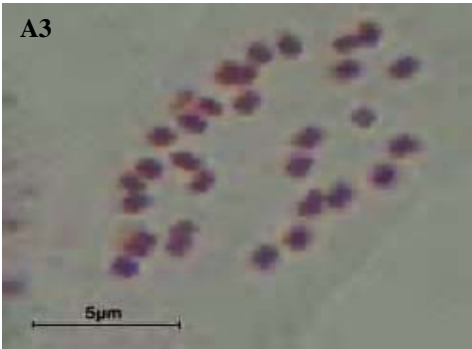
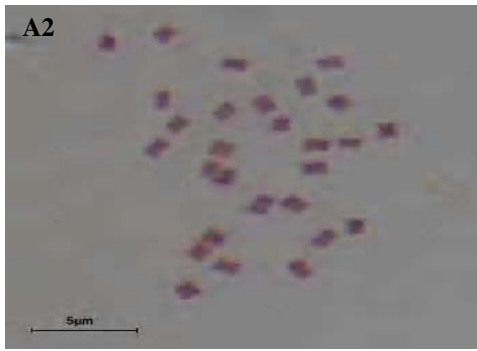
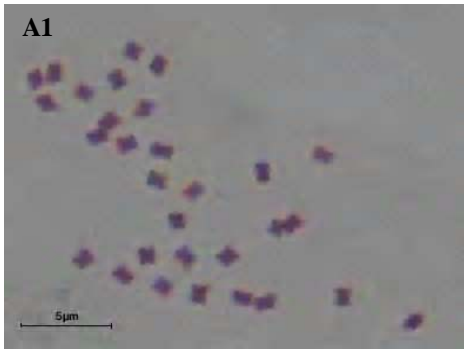
A2 A1
A2 A1
/ / / /
A2= /
(A2= / A1= /)

Thymus daënnensis (Bigazzi, & Selvi, 2001)
T. migricus *T. eriocalyx*
Thymus. spp. 1A (Stebbins, 1971)

/ /
m () m

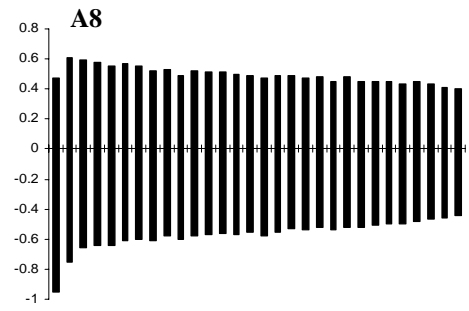
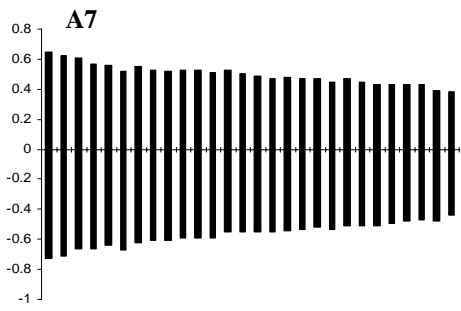
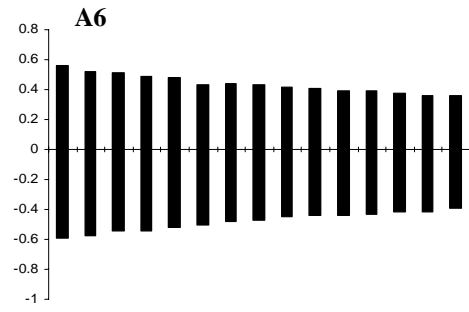
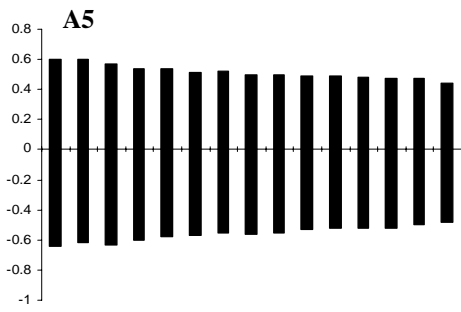
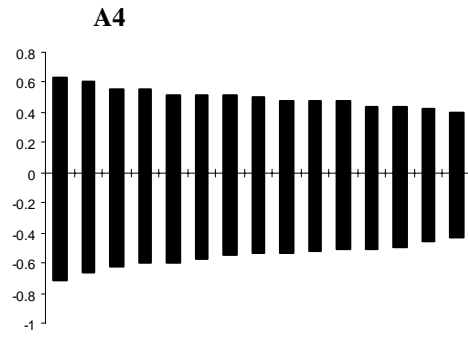
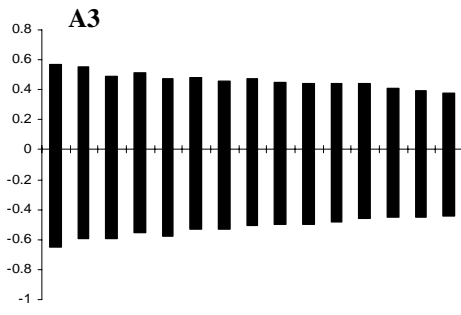
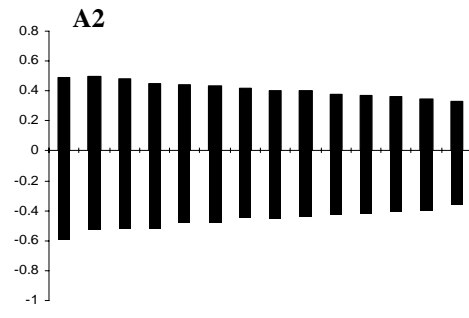
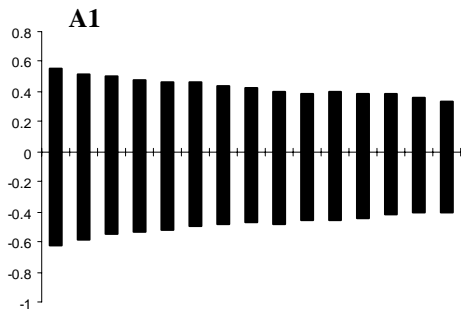
1. *Cynoglottis barrelieri*
2. *Brunnera spp.*
3. Boraginaceae
4. *B. macrophylla*
5. *B. orientalis*
6. *Cynoglottis barrelieri*

7. *T. kostchyanus*



(A1-A8)
() (µm=)

طول کروموزوم (میکرومتر)



(A1-A8)

A₅

() m+ sm m

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