

( )

**(*Asparagus officinalis* L.)**

\*

( // : // : )

**(*Asparagus officinalis* L.)**

/ / / / /  
/ /  
(% / ) (% / ) (% / )

/

*Liliaceae*

(Prohens et al., 2008)

(*Asparagus*)

*Protasparagus Myrsiphyllum Asparagus*  
(Prohens et al., 2008)

(*A. maritimus*) *Asparagus*

(*A. acutifolius*)

(*A. tenuifolius*)

(Stajerner et al., 2002)

(Prohens et al., 2008)

x=

( )

(Kay et al., 2001)

*A. densiflorus A. plumosus*)

*A. retrofractus A. verticillatus A. racemosus*

(*A. virgatus A. myriocladus*

(*A. adscendens A. curillus*)

*A. maritimus*)

(*A. acutifolius*

(Stajerner et al., 2002)

*Asparagus*

(Kay et al., 2001)

(*A. officinalis* L.)

(Stajerner et al., 2002)

( )

*A. prostratus*

( )

*officinalis*

(Kay et al., 2001)

)

(Kay et al., 2001)

(Rubatzky & Yamaguchi, 1997)

(Huang

( )

& Kong, 2006)

(Huang & Kong, 2006)

(Rubatzky & Yamaguchi, 1997)

... :  
 (Prohens et al., 2008)  
 (Ghahreman, 2002)

(Osati, 2008)

( )

( )

(mm)	(°C)	(°C)	(°C)	(mm)	( )
/	/	+ /	/	/	/

(°C)	(°C)	(°C)	( )	(mm)	( )
/	+ /	/	/	/	/

( )



( )



( )

Excel

SPSS

( )

(Mytotyo,

(Asadi & Hassandokht, 2007; Mousavizadeh

Japan)

.et al., 2006)

- 
1. Factor rotation
  2. Varimax
  3. Ward method



( ) ( ) ( cm ) ( *Asparagus* ) ( ) ( )

( )

(% / ) (% / ) (% / ) *A. officinalis* *A. verticillatus*  
 (% / ) (% / ) (% / ) *A. persicus*

... :

( ) / ( % )

.( )

.( ) ( ) ( )

)

.(

) :

( / ) ( ( % )

( ) ( / ) ( % ) ( % )

. ( ) ( % ) ( % )

)

.( ) (

.( )

(Kay et al., 2001)

---

(%)			
		/	cm
		/	cm
		/	
	/	/	
	/	/	cm
	/	/	cm
	/	/	mm
	/	/	mm
	/	/	mm
	/	/	cm
	/	/	cm

---

)  
( / / / / /  
/

)  
( / / / /  
/ / / / /  
/ / / / /  
/ / / / /

( )

/

.( ) SPSS

---

	(g)	(mm)	(cm)
/	/	/	/
/	/	/	/

---

Pearson

(r= / )

(r= / )

%

%

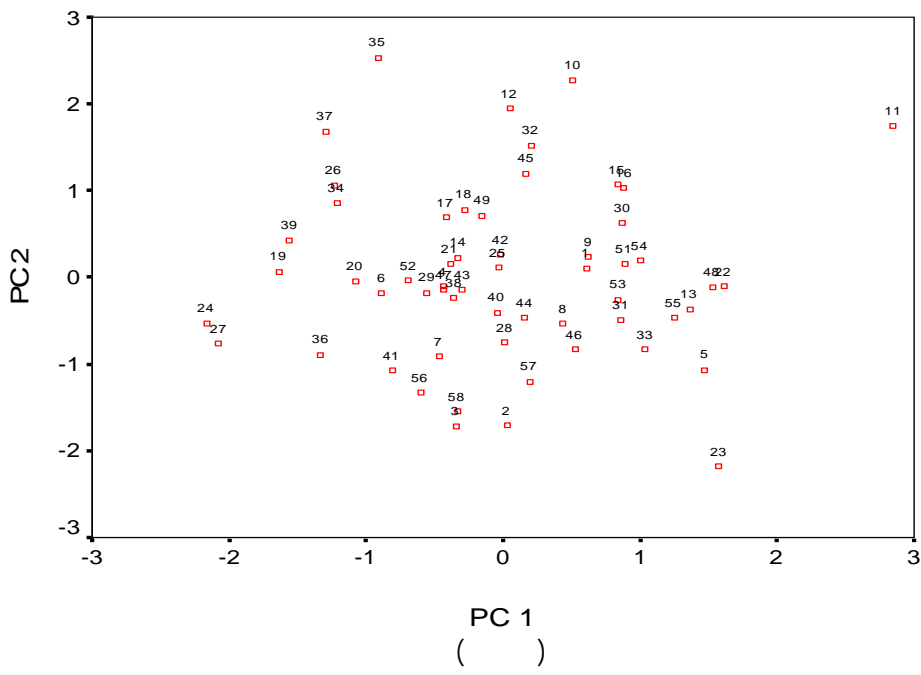
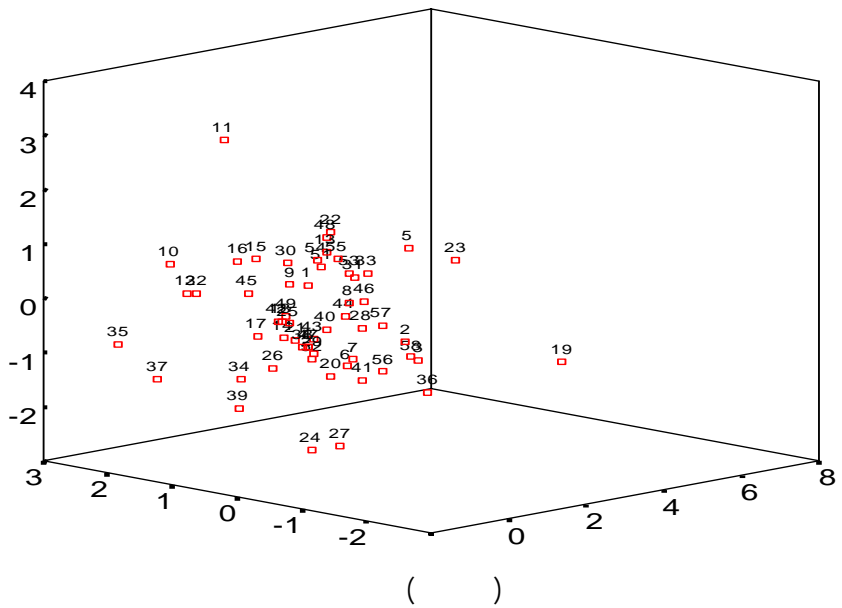
/

/

---

/	/	/
/	/	/
/	/	/
/	/	/

---



C

( / )

( )

(M2 M1 )

D

( )

A

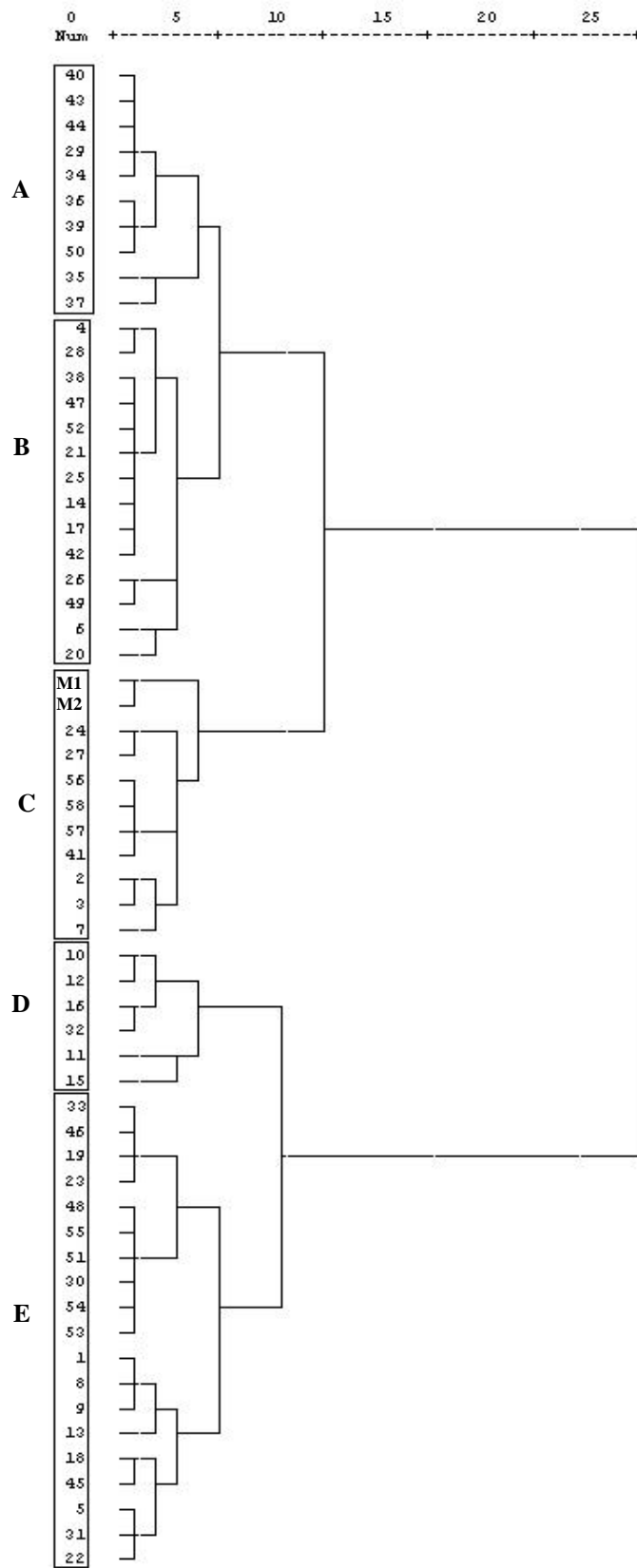
E

B

(Huang & Kong, 2006)

*h	h <sub>1</sub>	f	f <sub>1</sub>	no	no <sub>1</sub>	d	d <sub>1</sub>	d <sub>2</sub>	L <sub>1</sub>	L <sub>2</sub>	s	
/	/	/	/	/	/	/	/	/	/	/	/	
/	- /	- /	/	/	/	/	/	/	/	/	- /	A
/	/	/	/	/	/	/	/	/	/	/	/	
/	/	/	/	/	/	/	/	/	/	/	/	B
/	/	/	/	/	/	/	/	/	/	/	/	
/	/	/	/	/	/	/	/	/	/	/	/	C
/	/	/	/	/	/	/	/	/	/	/	/	
/	/	/	/	/	/	/	/	/	/	/	/	D
/	/	/	/	/	/	/	/	/	/	/	/	
/	/	/	/	/	/	/	/	/	/	/	/	E
:no <sub>1</sub> (cm)				:no		:f <sub>1</sub>			:f (cm)		:h <sub>1</sub> (cm)	:h)*
:L <sub>1</sub> (mm)				:d <sub>2</sub> (mm)			:d <sub>1</sub> (mm)				:d (cm)	
						(				:s (cm)	:L <sub>2</sub> (cm)	





(M2 M1)

## REFERENCES

1. Asadi, H. & Hassandokht, M. R. (2007). An evaluation of genetic diversity of Iranian spinach landraces. *Agronomy & Crop Biotechnology*, 38, 257-266. (In Farsi).
2. Ghahreman, A. (2002). *Flora of Iran*. Institute of Forestries and Grasslands Publishing, No. 2389, Code: 148. (In Farsi).
3. Huang, X. & Kong, L. (2006). Steroidal saponins from root of *Asparagus officinalis*. *Steroids*, 71, 171-176.
4. Kay, Q. O. N., Davies, E. W. & Rich, T. C. G. (2001). Taxonomy of the western European endemic *Asparagus prostratus* (*A. officinalis* subsp. *prostratus*) (*Asparagaceae*). *Botanical Journal of the Linnean Society*, 137, 127-137.
5. Mousavizadeh, S., Moghaddam, A., Toorchi, M., Mohammadi, S. A. & Masiha, S. (2006). Morphological and agronomic diversity in Iranian onion landraces. *Agronomy & Crop Biotechnology*, 37(1), 193-202. (In Farsi).
6. Osati, K. (2008). *Derivation of the unit hydrograph from complex storms (A case study: central Alborz)*. M. Sc. thesis in Watershed Management, University of Tehran, 108 pp. (In Farsi).
7. Prohens, J., Nuez, F. & Carena, M. J. (2008). *Handbook of Plant Breeding*. Springer Publishing, 364 pp.
8. Stajerner, N., Bohanec, B. & Javornik, B. (2002). Genetic variability of economically important

...

:

Asparagus species as revealed by genome size analysis and rDNA ITS polymorphisms. *Plant Science*, 162, 931-937.

9. Rubatzky, V. E. & Yamaguchi, M. (1997). *World Vegetables*. International Thomson Publishing, New York, USA, 843 pp.