

()

***Pyrus serotina* Rehd**

*
(// : // :)

KS13, KS11, KS9,

KS14 KS8, KS6

FAA

KS13 KS11

				/	KS9				
/	/	/	/		KS11	KS14	KS8	KS6	KS13
KS11				/	/	/			/
/	KS8	KS13		/					KS8

Pyrus serotina Rehd (syn: *Pyrus*

pyrifolia)

(S)

S .()

()

.()

P. bretschneider Rhed , *P.*

ussuriensis, *Pyrus serotina* Rehd

(,)

Pyrus serotina

.()

.()

Rehd

.()

.()

()

.()

.()

()

.()

1. Maloideae

2. Rosaceae

...

()

() FAA

KS₁₃, KS₁₁, KS₉, KS₈, KS₁₄ KS₆

()

%

FAA (RCBD)

/ NaOH

/ pH /

()

KS₁₃*KS₈) (KS₁₃*KS₁₁, KS₈*KS₁₃,
KS₈*KS₁₁, KS₁₁*KS₈, KS₁₁*KS₁₃

SPSS

ab b KS₆ KS₁₃ KS₉
 KS₁₄ KS₈
 a KS₁₁
 .()

 / / KS₁₁ KS₆
 KS₉ KS₁₃
 / /
 .()

 KS₁₃ KS₁₁
 . KS₈ KS₁₃

 / / /
 KS₈ KS₁₁
 KS₈ KS₁₃ /
 .() /

b KS₆ KS₉ KS₁₃
 a KS₈ KS₁₁ KS₁₄

()
 / /

/ KS₈
 /

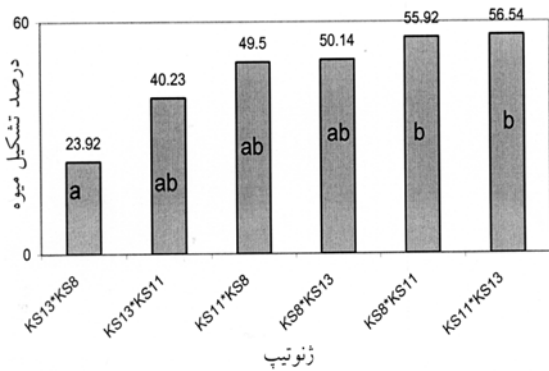
.() KS₉
 KS₁₁ KS₈

 / KS₉
 KS₁₃
 / / / KS₁₁ KS₁₄ KS₈ KS₆
 / /

KS₁₃

KS₁₁

-
1. Initial fruit set
 2. Final fruit set



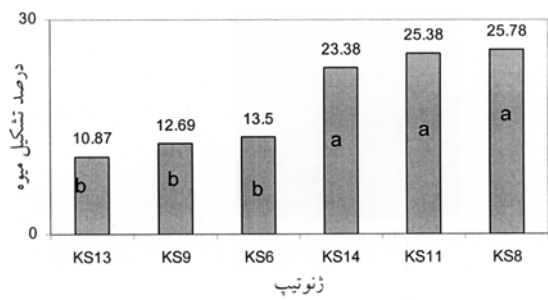
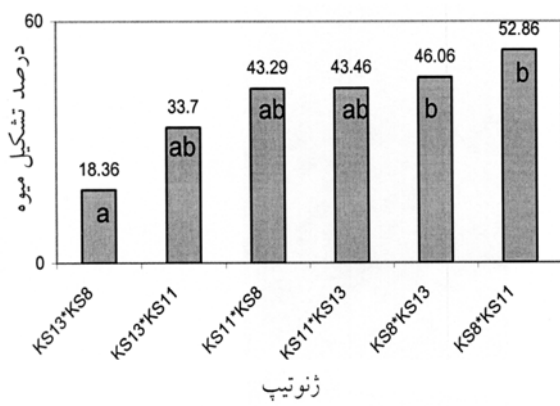
KS₁₁

KS₁₃

(♂)

(♀)

(P < 0.05)

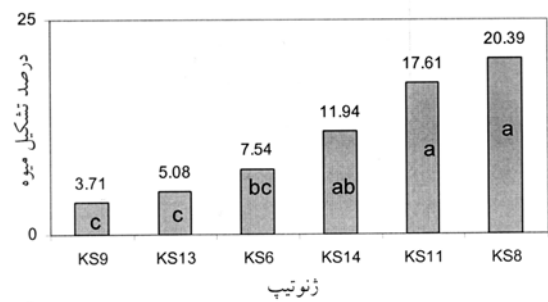
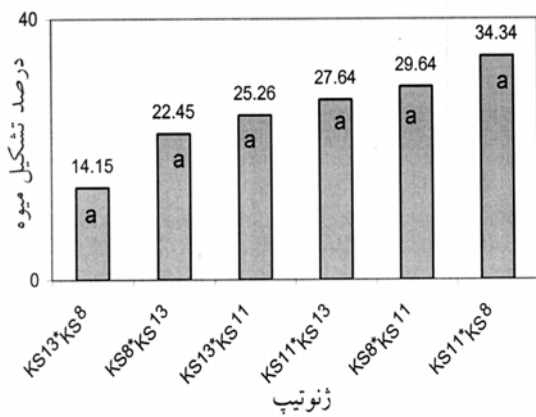


(P < 0.01)

(♂)

(♀)

(P < 0.05)

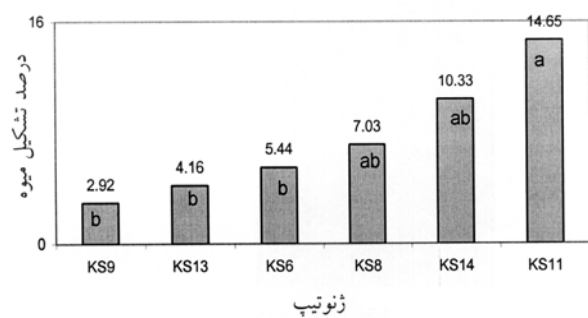


(P < 0.01)

(♂)

(♀)

(P < 0.05)



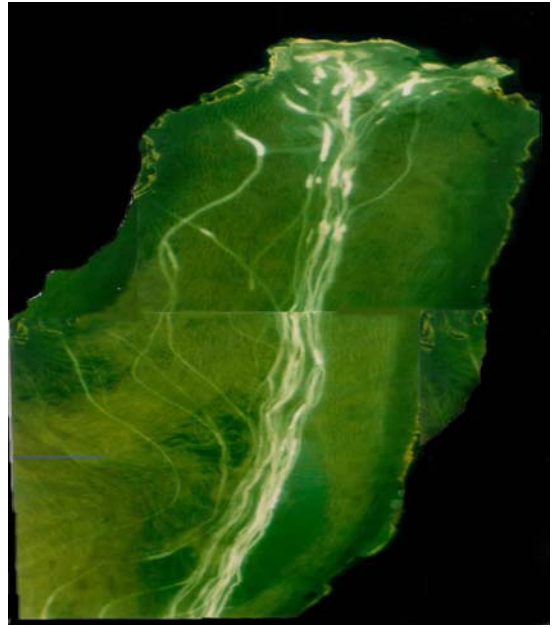
(P < 0.05)

.()

.()

/ /

/ / KS₈



KS₁₃ (♂)

KS₈ (♀)

.()

/ KS₁₁ / KS₉

() () ()
() () .()

.()

/ /

.()

()

KS₁₁ KS₁₄ (b)
/ / KS₆ KS₈

()

/ / KS₉ KS₁₃

.()

... :

KS₉

KS₆ KS₁₃
KS₁₄ KS₈ (b)
KS₁₁

()

/

KS₁₁

KS₈

/ /

/ /

KS₁₃

()

KS₈

/

/

KS₁₃

KS₁₁

KS₈

KS₁₃

()

/

KS₁₁

()

()

)

(

(

)

REFERENCES

(*Pyrus serotina* Rehd.)

(*Pyrus serotina* Rehd.)

4. Arzani, K. 2002 a. The position of pear breeding and culture in Iran: Introduction of some Asian pear (*Pyrus serotina* Rehd.) cultivars. *Acta Hort*, 587,167-173.
5. Arzani, K. 2002 b. Introduction of some Asian pear cultivars (*Pyrus serotina* Rehd.) to Iran. *Acta Hort*, 596(1): 287-290.
6. Asami, Y. 1935. Review on basic problem in pomology. *Agr. Hort.* 10: 229-236.
7. Castillo, C., T. Takasaki, T. Saito, T. Ishimizu, S. Norioka & T. Nakanishi. 2001. S-RNase based PCR-RFLP system for identifying S-genotypes in Japanese pear (*Pyrus pyrifolia* Nakai). *International Symposium on Asian Pears*, Kurayoshi, Tottori, Japan,125-126.
8. Church, R.M. & R.R. Williams. 1983. Comparison the compatibility and metaxenia effect of several desert apple and ornamental *Malus* cultivars with Cox's orange pippin. *J. of Hort. Sci.* 58(3): 343-347.
9. De Nettancourt, D. 1977. Incompatibility in Angiosperms. In: Springer-Verlag (Ed.), Berlin, Alemania. pp. 250.
10. Egea, J. & L. Burgos, 1996. Detecting cross-incompatibility of three North American apricot cultivars and establishing the first incompatibility group in apricot. *J. Amer. Soc. Hort. Sci.* 121: 1002-1005.
11. Hiratsuka, S. & S. L. Zhang, 2002. Cultivar differences in the expression of self incompatibility in Japanese pears. *Acta Hort*, 587:437-448.
12. Ishimizu T., K. Inoue, m. Shimonaka, T. Saito, O. Terai, & S. Norioka. 1999. PCR-based method for identifying the S-genotypes of Japanese pear cultivars. *Theor Appl Genet*, 98: 961-967.
13. Jun, W. & G. Hongsheng, 2002. The production of Asian pear in China. *Acta Hort*, 587:71-80
14. Kester, D.E., T.M. Gradziel & W.C. Micke, 1994. Identifying pollen incompatibility groups in California almond cultivar. *J. Amer. Soc. Hort. Sci.* 119: 106-109.
15. Kim, H.T., H.J. Kim, I.S. Nou, Y. Hirata & K.K. Kang, 2002. Identification of self incompatibility alleles by S-RNase sequencing and PCR-RFLP analysis in Korean-bred pear (*Pyrus pyrifolia*) Strains. *Acta Hort*, 587:467-476.
16. Lee, J.C. & Y.S. Hwang, 2002. Asian pear production and future trend on industrial development in Thailand. *Acta Horticulturae*, 587:89-96.
17. Modlibowska, I. 1945. Pollen tube growth and embryo sac development in apple and pear. *J. Pomol*, 21: 57-89.
18. Nee, C.C., C.H. Tsai & D.D. Anstine, 2002. Asian pear cultivars-Future trend and current research in the industry. *Acta Horticulturae*, 587:61-69.
19. Nyeki, J. 1996a. Pollination and fertilization 153-184 in: Nyeki, J. and Soltesz, M. *Floral biology of temperate zone fruits trees and small fruit*. Akademiai Kiado Pub. PP. 377.
20. Nyeki, J. 1996b. Fertilization conditions 185-265 in: Nyeki, J. and Soltesz, M. *Floral biology of temperate zone fruits trees and small fruit*. Akademiai Kiado Pub. PP. 377.

...

:

21. Nyeki, J., M. Soltesz & J. Ivanesies, 2000. Self-fertility of pear varieties conditioned by natural self-pollination (autogamy). *Int. J. Hort. Sci*, 6:110-113.
22. Paprstein, F. & J. Blazek. 1996. Pollination relation of new apple cultivars. *Acta Hort*, 423: 135-144.
23. Subhadrabandhu, S. 2001. Asian pear production and future trend of industry and reserch trend in Korea. International Symposium on Asian Pears, Kurayoshi, Tottori, Japan, 8-9.
24. Sanzol, J. & M. Herrero, 2002. Identification of self-incompatibility alleles in pear cultivars (*Pyrus communis* L.), *Euphytica*, 128: 325–331.
25. Tehrani, G. & S.K. Brown, 1992. Pollen-incompatibility and self fertility in sweet cherry. *Plant Breed. Rev*, 9: 367–388.
26. Terami, H., H. Torikata & Y. Shimazu, 1946. Analysis of the sterility factors existing in varieties of Japanese pear (*Pyrus serotina* Rehd.). *Studies Hortic. Inst. Kyoto Imp Univ*, 3: 267–271.
27. Westwood, M.N. 1978. Temperate zone pomology. Sanfrancisco. Freeman. Pp. 570.