

()

(Vicia)

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(// : // :)

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

B Stebbins A A

Vicia faba

B ()

Stebbins A₂ A₁

CRD %

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Ward

V. villosa

V. faba

Vervilia

() ()

.(Vicia)

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(*Vicia sp*)

(Vicia)

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(DRL)

(A₂)

(A₁)

() (%TF)

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Levan

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(Section)

(CRD)

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Ward

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EXCEL JMP SAS

(/)

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Micromesure

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(: %

()

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(X=)

Digital Color

) x

(SSC, DC18P

Video Camera, Olympus BH-2

Bisht

V. faba ()

Micromesure

()

Stebbins

(TL)

, *V. sativa*,

B

(LA)

(%of set)

V. villosa (7241), *V. persica*, *V. michauxii*, *V. variabilis*,

(SA)

(%LA)

A *V. narbonensis*, *V. cracca* *V. seraiocarpa*

(Arm ratio:L/S)

(%SA)

A

(CI)

V. villosa() *V. faba*

V.

(VRC)

DRL

A₂

faba

()

Stebbins

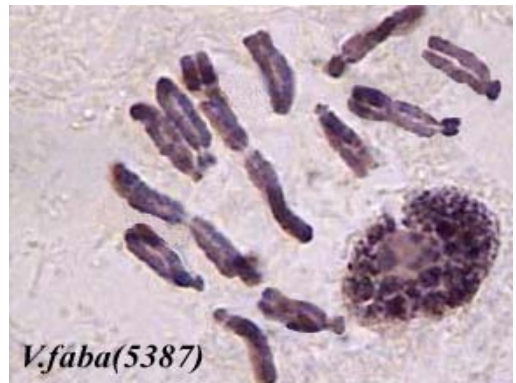
(

B

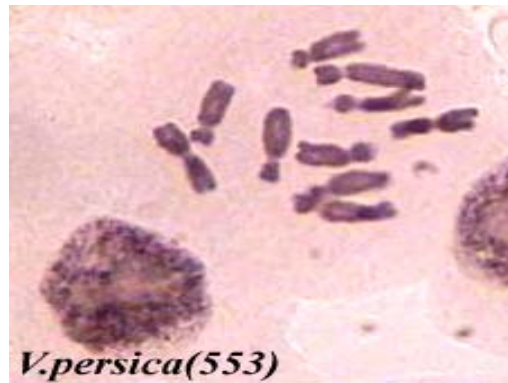
1. Levitsky fluids



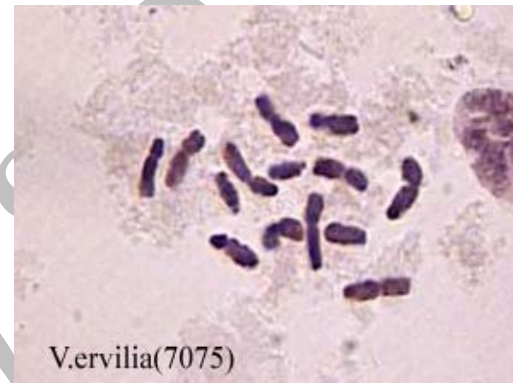
V.narborensis(2042)



V.faba(5387)



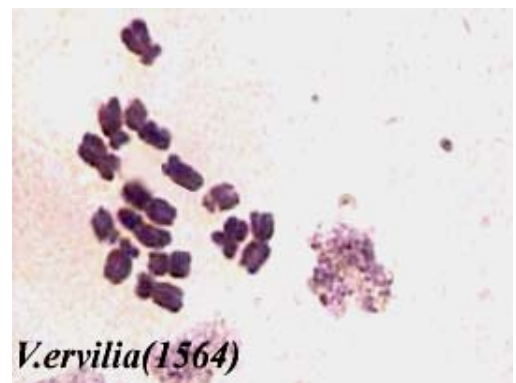
V.persica(553)



V.ervilia(7075)



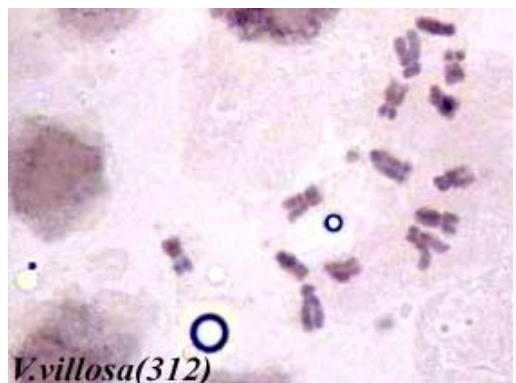
V.cracca(1238)



V.ervilia(1564)



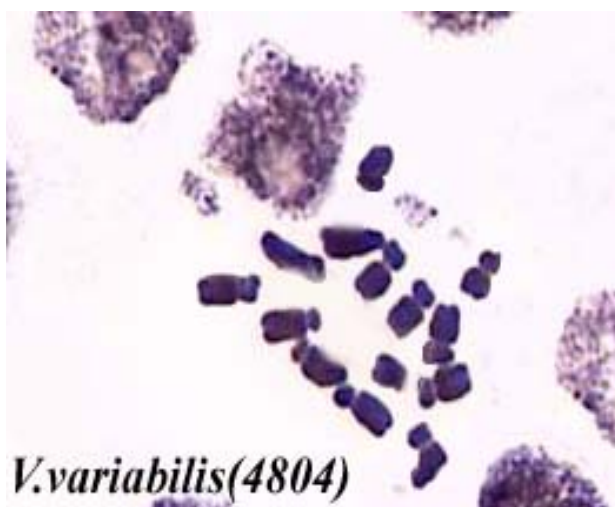
V.michauxii(4810)



V.villosa(312)

(*Vicia*)

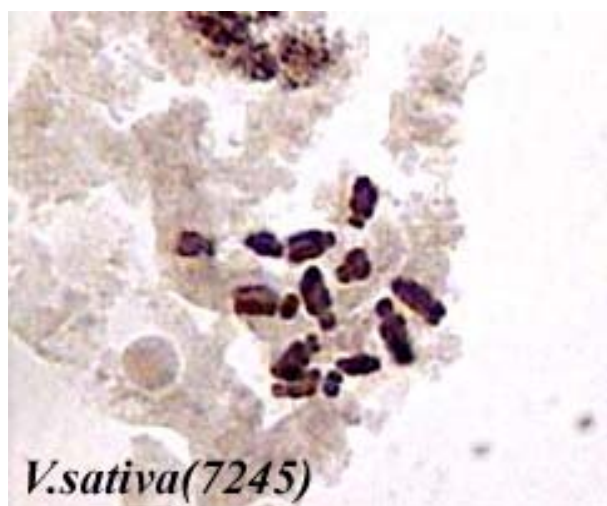
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V.variabilis(4804)



V.michauxii(4998)



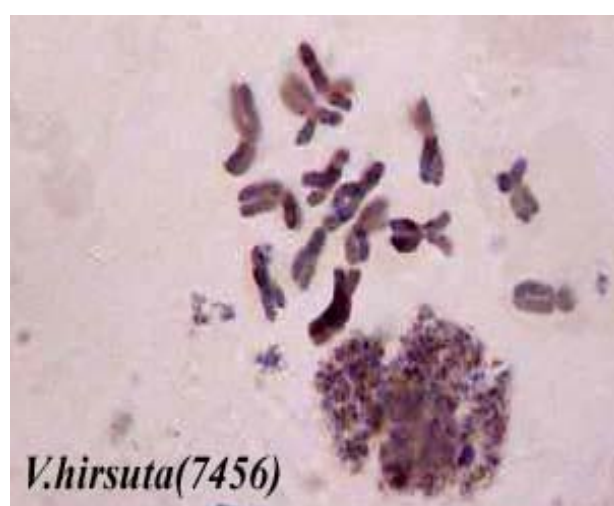
V.sativa(7245)



V.villosa(7241)



V.seriocarpa(7459)



V.hirsuta(7456)

V.ervilia(1564)



V.cracca (1238)



V.narborensis (2042)



V.villosa(312)



V.variabilis(4804)



V.michauxii(4810)



V.michauxii(4998)



V.faba(5387)



V.persica(553)



V.ervilia(7075)



(x)

(*Vicia*)

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V.vilLosa(7241)



V.satIva(7245)



V.hirsuta(7456)



V.serIocarpa(7459)

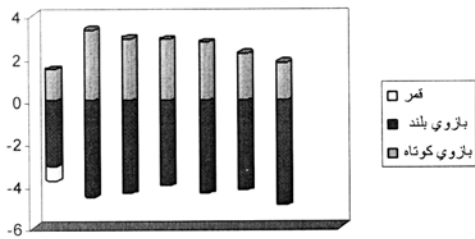


(x

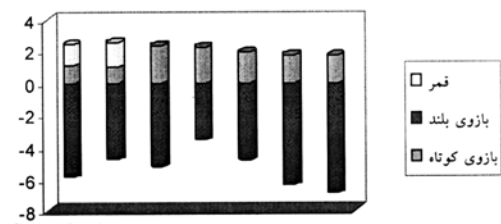
)



V. ervIIia(1564)



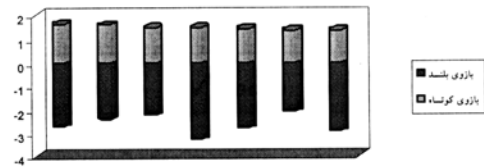
V.cracca



V.narborensis



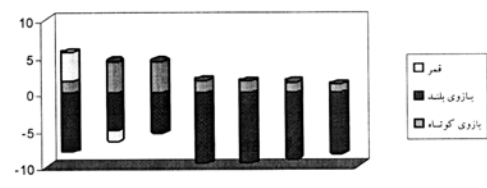
V.villosa(312)



V.varIabilis



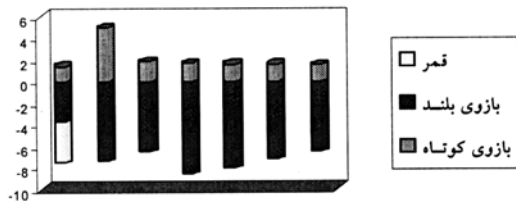
V.mIchauxii(4810)



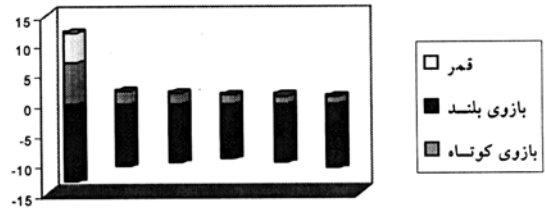
)

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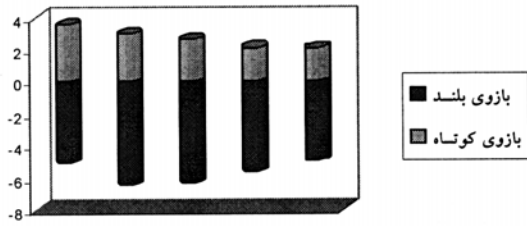
V. michauxii(4998)



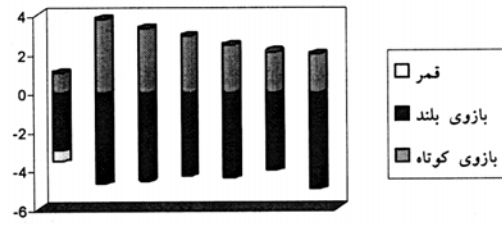
V. faba



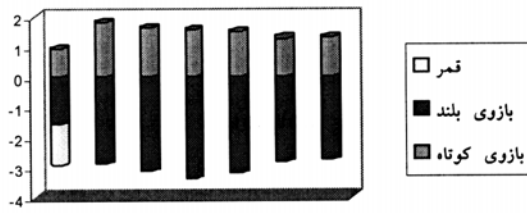
V. persica



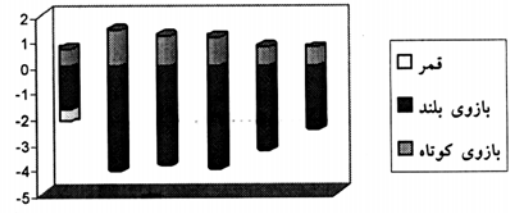
V. ervilia(7075)



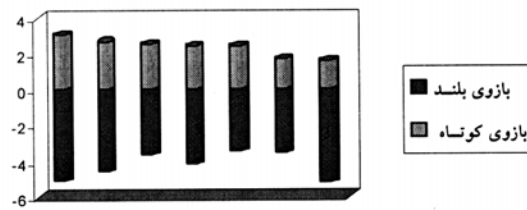
V. villosa(7241)



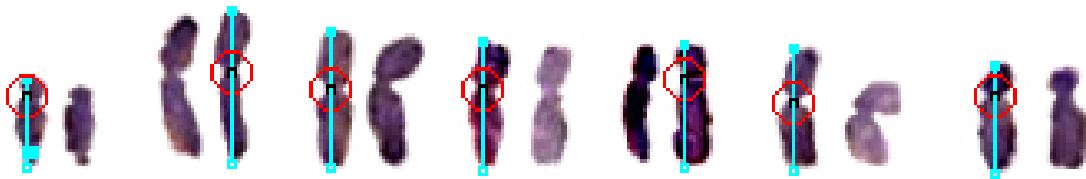
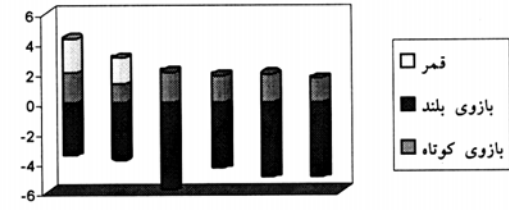
V. sativa



V. hirsuta



V. seriocarpa

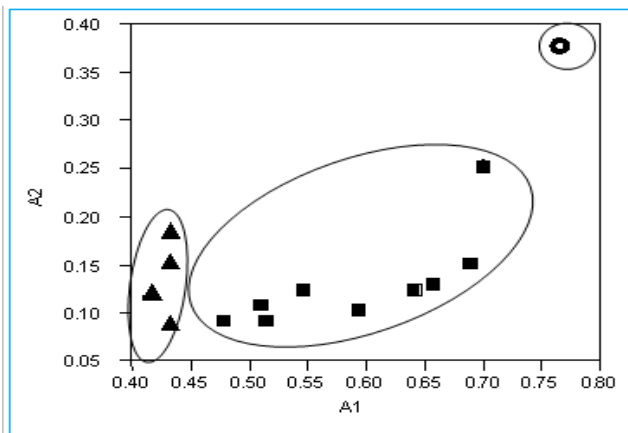


Micro measure

V.faba A₂ A₁
V.ervilia () Stebbins
V.narborensis V.villosa()
V.seriocapa
V.michauxii () B A A

(Arm ratio) A₂ A₁
V.hirsuta *V.ervilia* *V.villosa* Stebbins
V.narborensis *V.persica*) A₂ DRL
V.variabilis () (

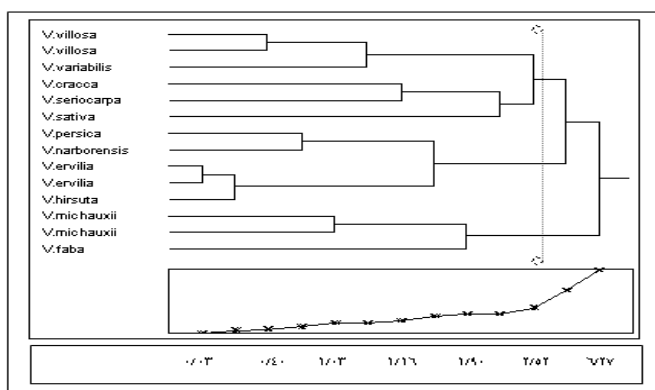
V.faba
V.villosa()
) A₁ %TF
(
V.hirsuta *V.ervilia* *V.villosa*



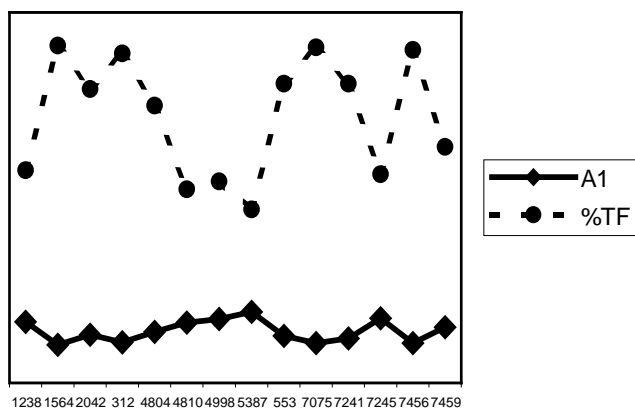
Stebbins
 ■ ; A
 B
 ● ; A
 ▲

V.faba
V.villosa
V.sativa *V.narborensis*
V.villosa *V.variabilis*
V.ervilia

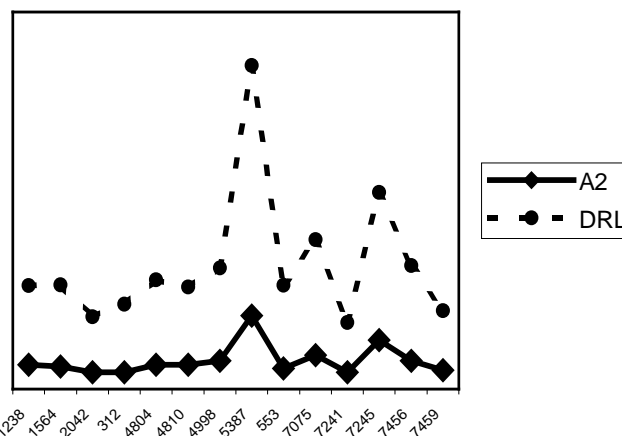
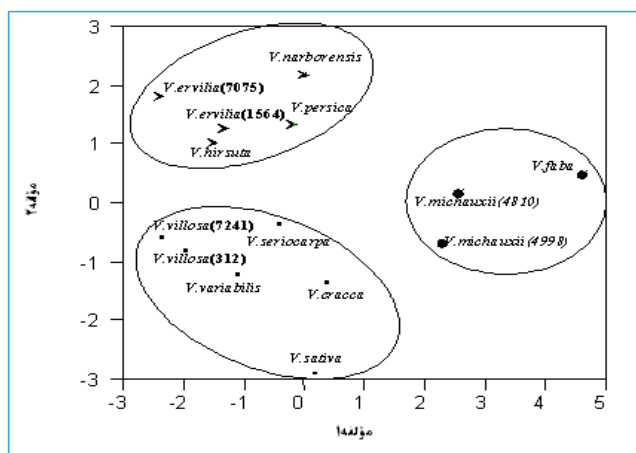
(Vicia)



(WARD)



%TF A₁



A₂ DRL

V. persica و *V. narborensis*

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

V.faba و *V .michauxii*() *V .michauxii*()

(/)

() Ward

/

V . villosa()

و *V. variabilis* *V. cracca* *V. sativa* *V. villosa* ()

(%TF)

V .seriocarpa

V.faba .

V .hirsuta *V .ervilia*() *V.ervilia*()

CRD

(MS)					
TF%	CI	TL	AR	SA	LA
/ **	/ **	/ **	/ **	/ **	/ **
/	/	/	/	/	/
/	/	/	/	/	/
					(%cv)
					%
					**

	LA	SA	TL	AR	CI	%TF
<i>V.villosa</i> ()	/ j	/ h	/ j	/ e	/ a	/ a
<i>V.persica</i>	/ e	/ b	/ d	/ ed	/ bc	/ b
<i>V.cracca</i>	/ f	/ g	/ e	/ cb	/ d	/ ef
<i>V.ervilia</i> ()	/ h	/ cd	/ f	/ e	/ a	/ a
<i>V.narborensis</i>	/ d	/ a	/ c	/ ed	/ a	/ cb
<i>V.variabilis</i>	/ i	/ h	/ h	/ ed	/ dc	/ c
<i>V.michauxii</i> ()	/ b	/ e	/ b	/ a	/ e	/ ed
<i>V.michauxii</i> ()	/ c	/ f	/ c	/ b	/ f	/ f
<i>V.faba</i>	/ a	/ cb	/ a	/ a	/ f	/ g
<i>V.ervilia</i> ()	/ h	/ cd	/ f	/ e	/ a	/ a
<i>V.villosa</i> ()	/ j	/ h	/ i	/ e	/ a	/ b
<i>V.sativa</i>	/ i	/ i	/ ji	/ c	/ f	/ ef
<i>V.hirsuta</i>	/ h	/ ed	/ g	/ e	/ a	/ a
<i>V.seriocarpa</i>	/ g	/ g	/ f	/ d	/ ba	/ d
%						

%TF	(A)	(A)
<i>V. faba</i>		
	<i>V. villosa</i>	
	<i>V. ervilia</i>	() ()
	()	

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