

AFLP
ASSESSMENT OF GENETIC RELATIONSHIP AMONG SOME OF
THE IRANIAN AND FOREIGN OLIVE CULTIVARS USING AFLP
MARKERS

AFLP ()
%
(% ,) M21 P2
(% ,) M24 P2
UPGMA
/ /
.AFLP :
Olea Oleaceae ()
() *sativa* *Olea europaea*
()
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(n=) ()

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()

AFLP

AFLP

DNA

AFLP

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AFLP

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AFLP

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SSR RAPD AFLP

()

AFLP

SSR AFLP

AFLP

SSR

AFLP

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DNA

()^y

DNA

AFLP

DNA

(Roche) *Mse* I *Pst* I ()
 () *Mse* I () *Pst* I DNA ()
) *Mse* I () *Pst* I
 . () () T4 ()

Table 1. Name and origin of the olive cultivars used.

(Origin)	† (Cultivar Name)	Number
(Iran)	(‘Rashid’) ‘	’
(Iran)	(‘Dezfol’) ‘	’
(Syria)	(‘Belidi’) ‘	’
(Iran)	(‘Zard’) ‘	’
(Iran)	(‘Shenge’) ‘	’
(Greece)	(‘Kroneiki’) ‘	’
(Spain)	(‘Manzanila’) ‘	’
(Greece)	(‘Konservolia’) ‘	’
(Spain)	(‘Sevillano’) ‘	’
(American)	(‘Mission’) ‘	’
(Spain)	(‘Spain’) ‘	’
(Iran)	(‘Rowghani’) ‘	’
(Iran)	(‘Gorgan’) ‘	’
(Greece)	(‘Valanolia’) ‘	’
(Greece)	(‘Amphissis’) ‘	’

† On the basis of references number 15.

(M000 P000) : DNA ,PCR¹ .()
 () / () / () PCR
) DNA / () M000 P000
 PCR ()
 (Mastercycler gradient)

Table 2- Sequencing of PstI and MseI adapters and primers.

Adapters/primers	Sequence
PstI -1	5'-GAC TGC GTA GGT GCA-3'
PstI-2	3'-GAG CAT CTG ACG CAT CC-5'
P000	5'-GAC TGC GTA GGT GCA-3'
P1	5'-GAC TGC GTA GGT GCA AAT-3'
P2	5'-GAC TGC GTA GGT GCA ACT-3'
P3	5'-GAC TGC GTA GGT GCA AAC-3'
P4	5'-GAC TGC GTA GGT GCA AGA-3'
P5	5'-GAC TGC GTA GGT GCA ACG-3'
P6	5'-GAC TGC GTA GGT GCA ACA-3'
MseI-1	5'-GAC GAT GAG TCC TGA G-3'
MseI-2	3'-TA CTC AGG ACT CAT-5'
M000	5'-GAC GAT GAG TCC TGA G-3'
M21	5'-GAC GAT GAG TCC TGA GCC A-3'
M24	5'-GAC GAT GAG TCC TGA GCC T-3'
M28	5'-GAC GAT GAG TCC TGA GCG T-3'

() / () () PCR
 () DNA / ()
)
 /
 DNA
 %
 PCR
 S2
 ()
 / NTSYS-pc UPGMA
 /

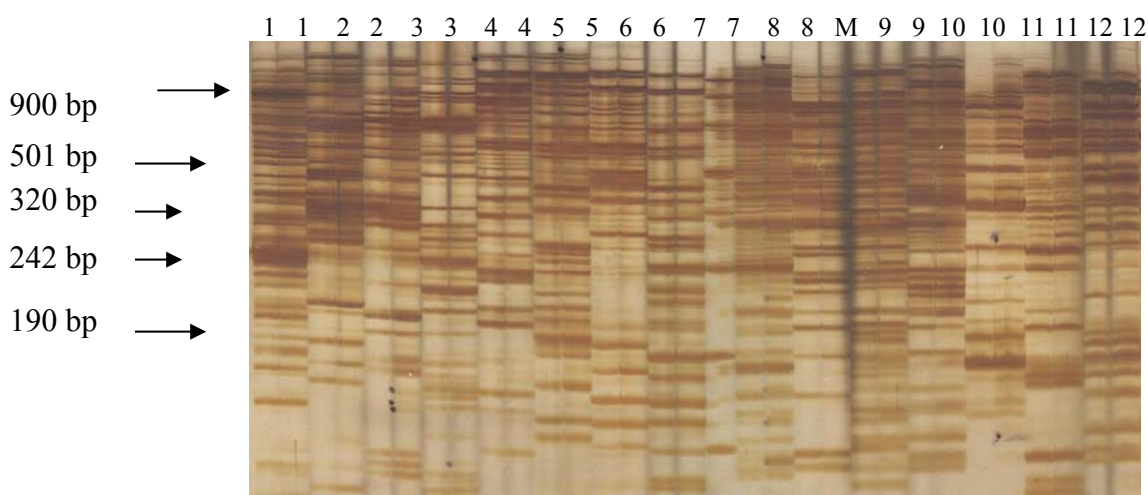
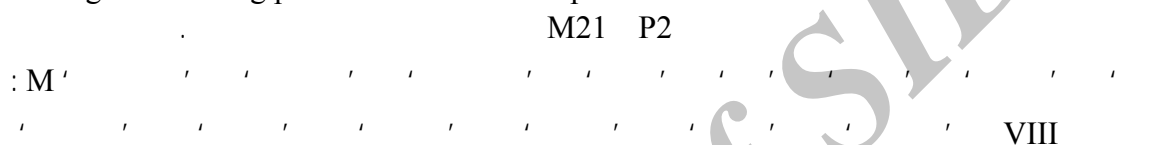


Fig. 1. Banding pattern of M21 and P2 primers in 15 studied olive cultivars



1. 'Rashid', 2. 'Dezfol', 3. 'Beleidi', 4. 'Zard', 5. 'Shenge', 6. 'Cronaik', 7. 'manzanila', 8. 'Conservalia', 'M- ladder XIII', 9. 'Sevilana', 10. 'Mishen', 11. 'Spania', 12. 'Roghani', 13. 'Gorgan', 14. 'Valanolia', 15. 'Amphisis'.

Table 3- Number of polymorphic bands, total bands and polymorphism percents in olive cultivars used.

Polymorphic %	Total bands	No. of polymorphic bands	No. of monomorphic bands	Primer name
97.1	69	67	2	P1/M24
95.5	67	64	3	P2/M24
98.6	72	71	1	P3/M24
97.3	76	74	2	P1/M21
97.1	104	101	3	P2/M21
97	67	65	2	P3/M21
96.4	84	81	3	P4/M25
98.6	75	74	1	P5/M25
96.2	81	78	3	P6/M25
	695	675	20	Sum
97	77.22	75	2.2	Mean

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ISSR ()

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