

()

AFLP

*

(/ / : / / :)

AFLP

Salvia

PstI

Nepeta

(% /)

MseI

EcoRI

/

/

/

PIC

/

/

Salvia AFLP

:

Salvia

(Zargari, 1968; Nikavaran

& Mojab, 2004; Gonzalez, 1987)

(Bruna et al., 2006)

Sage

(Hedge, 1982a)

Salvare

Salvia

(Nikavaran & Mojab,

2004)

(Hedge, 1982b)

(Hedge, 1990)

Salvia

AFLP

Salvia (Baikova, 1996)
S. splendens

Salvia (Torke, 2000)

(Clasen-Bockhoff & Speck, 2000; Dufresne, 2000)

Salvia (Hedge, 1982)

Hedge

(Hedge, 1982a)

Salvia (Hedge, 1982)

DNA

AFLP (Bruna et al., 2006)

AFLP *Salvia* DNA
trnL-F rbcL (Walker et al., 2004)

Salvia *Perovskia* *Rosmarinus*

Audibertia

PCR (Emboden, 1971)

Salvia AFLP RAPD
(Nep.) *Nepeta* *Salvia*

() (Cantino, 1992) *Mentha*

Salvia RAPD

(Bruna et al., 2006)

S. hispanic (Josef, 2004)

S. miltiorrhiza

... :

AFLP **DNA**

DNA

DNA

(*EcoRI PstI MseI*) +

°C °C °C

°C °C °C

°C

DNA

(*EcoRI PstI MseI*) +

AFLP

DNA

(1995) Vos et al.

EcoRI PstI MseI

% DMSO

EcoRI PstI MseI

°C °C

<i>S. hydrangea</i>	hy.	<i>S. reuterana</i>	re.
<i>S. syriaca</i>	sy.	<i>S. sharifii</i>	sh.
<i>S. syriaca</i>	sy.	<i>S. sharifii</i>	sh.
<i>S. syriaca</i>	sy.	<i>S. sharifii</i>	sh.
<i>S. syriaca</i>	sy.	<i>S. macrociphon</i>	ma.
<i>S. syriaca</i>	sy.	<i>S. macrociphon</i>	ma.
<i>S. syriaca</i>	sy.	<i>S. macrociphon</i>	ma.
<i>S. syriaca</i>	sy.	<i>S. reuterana</i>	re.
<i>S. syriaca</i>	sy.	<i>S. reuterana</i>	re.
<i>S. limbata</i>	Li.	<i>S. reuterana</i>	re.
<i>S. limbata</i>	Li.	<i>S. reuterana</i>	re.
<i>S. macrociphon</i>	ma.	<i>S. reuterana</i>	re.
<i>S. moorcraftiana</i>	mo.	<i>S. ceratophylla</i>	ce.
<i>S. atropatana</i>	at.	<i>S. ceratophylla</i>	ce.
<i>S. moorcraftiana</i>	mo.	<i>S. ceratophylla</i>	ce.
<i>S. multicaulis</i>	mu.	<i>S. ceratophylla</i>	ce.
<i>S. multicaulis</i>	mu.	<i>S. nemarosa</i>	ne.
<i>S. multicaulis</i>	mu.	<i>S. nemarosa</i>	ne.
<i>S. multicaulis</i>	mu.	km <i>S. nemarosa</i>	ne.
<i>S. multicaulis</i>	mu.	<i>S. virgata</i>	vi.
<i>S. multicaulis</i>	mu.	<i>S. virgata</i>	vi.
<i>S. multicaulis</i>	mu.	<i>S. sclerea</i>	sc.
<i>S. multicaulis</i>	mu.	<i>S. sclerea</i>	sc.
<i>S. multicaulis</i>	mu.	<i>S. sclerea</i>	sc.
<i>S. multicaulis</i>	mu.	<i>S. sclerea</i>	sc.
<i>S. multicaulis</i>	mu.	<i>S. hydrangea</i>	hy.

Salvia °C °C / °C
 AFLP °C °C °C °C
 .() °C °C
 % / / Xylene cyanol %)
 E(ACA)/M(GAC) °C (/ Bromophenol blue
 P(ACC)/M(GCA) °C °C
 / DNA °C %
 DNA /
*Pst*I *Eco*RI
*Pst*I *Eco*RI () ()
*Eco*RI
*Pst*I
 / / PIC
 / / () ()
 / P(ACC)/M(GCA) UPGMA
 / PIC
 .() t (/)
 / / (/)
S. reuterana NTSYS 2.02
S. ceratophylla *S. hydrangea*
 t= / TREECON ver. 1.3
 (PIC)
 / F Powel et al. AFLP
 (I) .() p_i^2 $PIC_i = 1 - \sum p_i^2$ (1996)
 / *Nepeta* i
 NTSYS
Salvia 2.02
 AMOVA
 (II) *Salvia* ARLEQUIN
S. ceratophylla

...

S. nemarosa *S. virgata*

(Hedge, 1982)

(Hedge, 1982)

(1981) Mizianti et al.

n = n= *S. nemarosa*

Dobes et al., (1996)

Cecilia et al.

(2003)

S. nemarosa

S. hydrangea *S. multicaulis*

B

(Hedge, 1982)

AI

AII

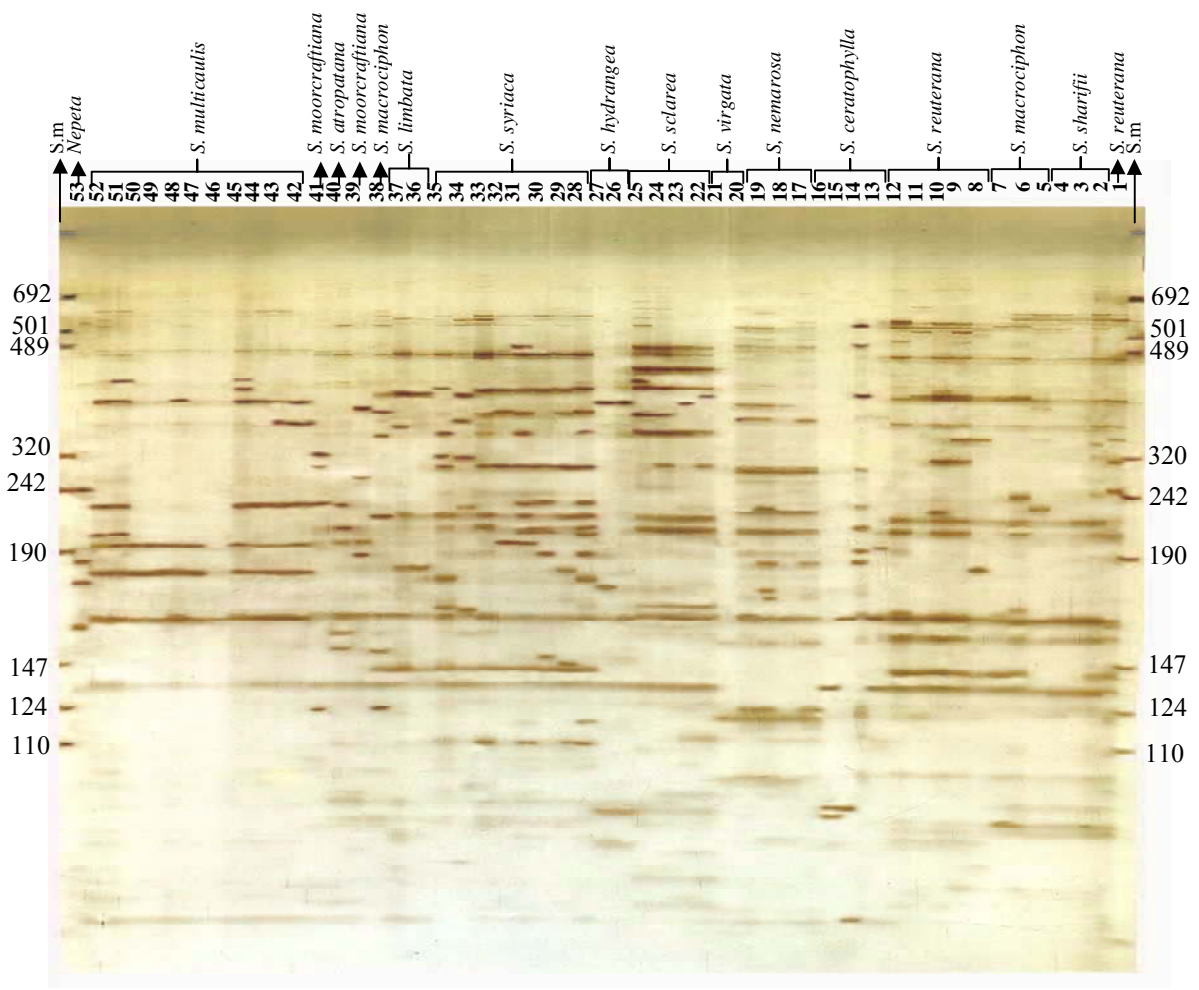
AFLP

S. hydrangea *S. multicaulis*

B A (IV)

S. nemarosa A

S. nemarosa *S. ceratophylla* *S. virgata*



E-ACAM/GAC

	N ¹	N _{np} ²	NP ³	POL% ⁴	PIC ⁵	MI ⁶
P-ACC+M-GCA					/	/
P-ACC+M-GCT					/	/
P-ACG+M-GCA					/	/
P-ACG+M-GAC					/	/
P-ACG+M-GCT					/	/
E-ACC+M-GAC					/	/
E-ACC+M-GCA					/	/
E-ACC+M-GGG					/	/
E-ACC+M-GCT					/	/
E-ACC+M-GTC				/	/	/
E-ACA+M-GAC					/	/
E-ACA+M-GCT					/	/
P-ACG+M-GTC					/	/
P-ACC+M-GTC					/	/
	/	/	/	/	/	/

() Number of monomorphic band () Total number of band
() % polymorphism () Number of polymorphic band
(MI = POL×PIC)() Marker index () Polymorphic information content

(Hedge, 1982) () n= (1982) Astanova
AFLP (1982) Markova & Ivanova n= *S. virgata*
n= n=
S. reuterana n= n=
S. reuterana var. *gellaberima* / B
S. sclarea C D, C
S. syriaca *S. ceratophylla* *S. sclarea*
(Hedge, 1982) (Hedge, 1982) / *S. ceratophylla*
S. reuterana D
S. limbata *S. syriaca* *S. macrosiphon* *S. sharifii*
S. atropatana *S. limbata* *S. atropatana* *S. moorcraftiana*
(Hedge, 1982) *S. macrosiphon* *S. sharifii* *S. reuterana*
S. sharifii /
S. moorcraftiana *S. reuterana* *S. macrosiphon*
S. macrosiphon

S. moorcraftiana

S.

DNA

ceratophylla

AFLP

S. ceratophylla

Salvia

Salvia

(Hedge, 1982)

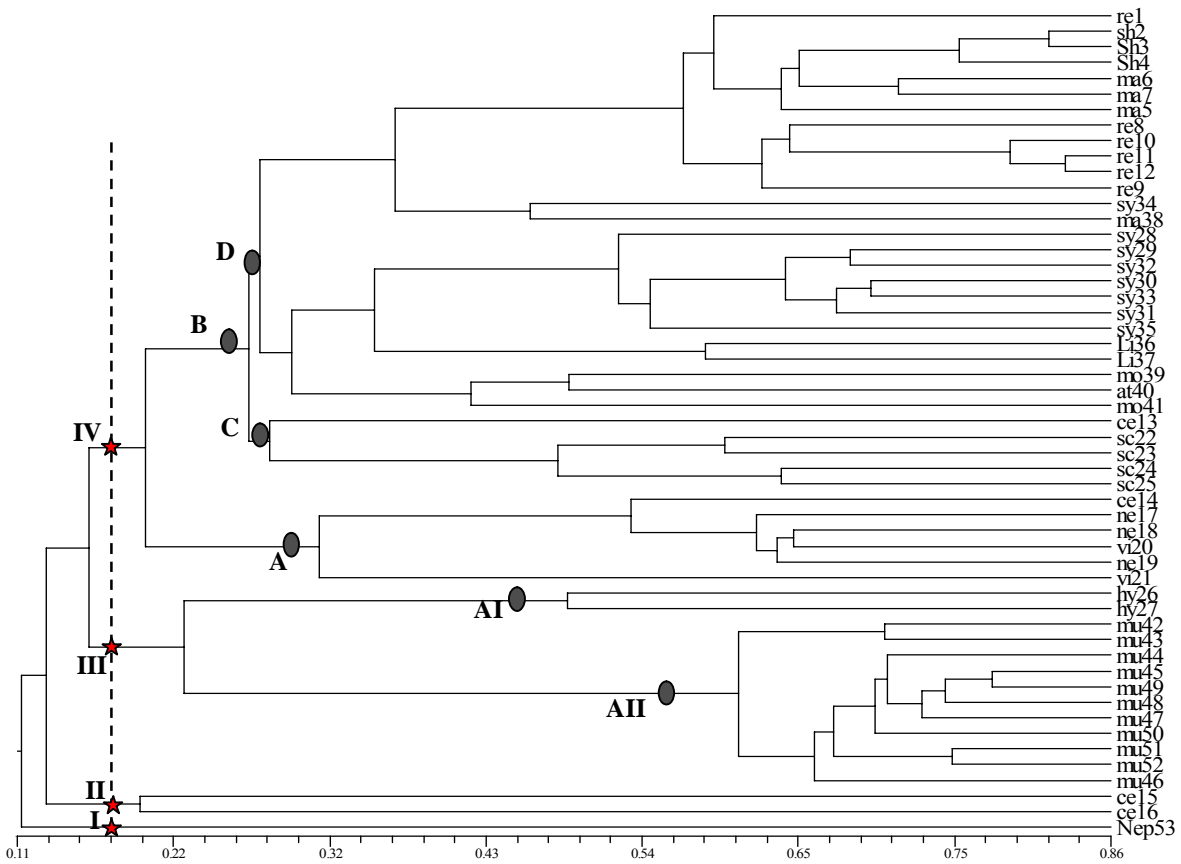
Hedge

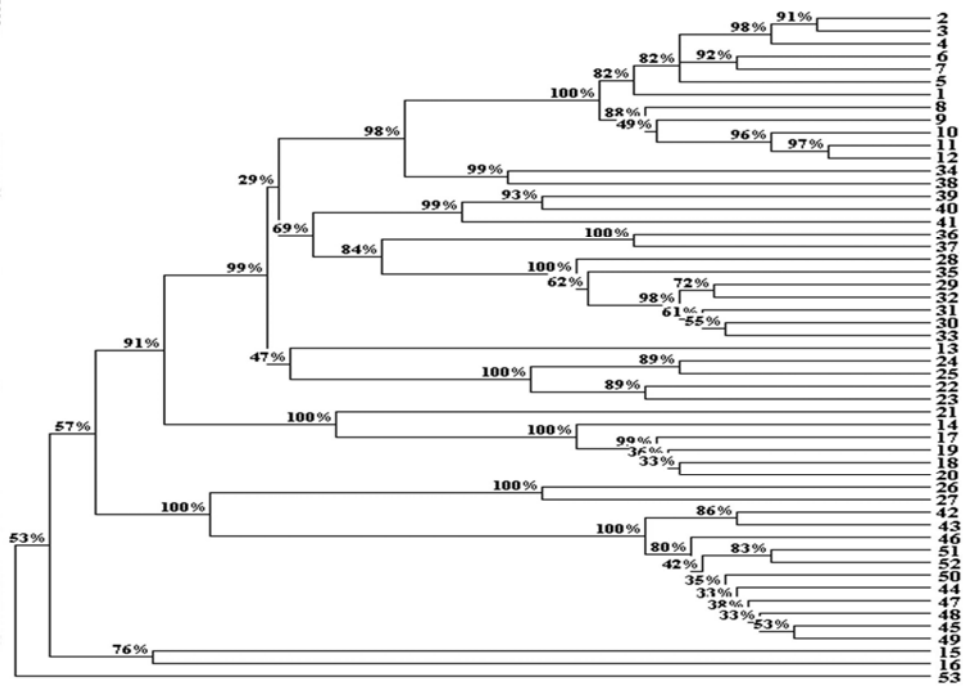
Hillis & Bull

(1993)

S. ceratophylla

1. Boot Strap





Salvia

Mohamadi & Prasana, ()
 () .(2003

S. multicaulis

DNA

PCoA

/

/

(% /)

()

Arlequin

Salvia L.
(Excoffier et al., 1992) ver 8.0

(1982) Hedge .

(Benjamin et al., 2003)

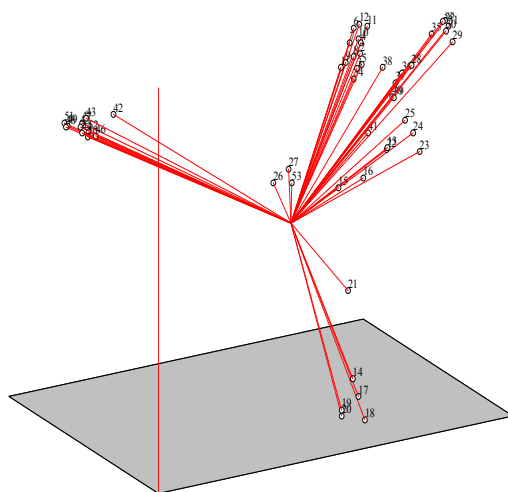
Salvia

()

Salvia

()

(% /)



Salvia

(AMOVA)

P value	Φ value*	%		
< /	/	/	/	/
< /		/	/	/
			/	/

F

Φ value *

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