Suppl. Material #1 - Nucleotide and deduced protein sequences polymorphism shown by the non LTR retrotransposable elements belonging to different *F. sylvatica* genotypes. The nucleotide variations responsible of the missense mutations is highlighted in italic bold and the correspondent aminoacid variation is reported in the same column (bottom part of the table). Dot represents site identity. Beech genotypes are reported with the name of the geographical provenance.

Nucleotide sequence variable site number (total sequence length 501 nucleotides) — Variable nucleotides

F. sylvatica genotypes	30	34	36	37	39	***40***	48	51	54	***58***	60	61	69	73	80	***81***	86	***87***	90	96	102
Mt. Etna	T	C	G	T	A	***T***	A	G	T	***C***	C	C	A	C	A	***T***	T	***T***	G	A	T
Madonie	C	T	A	C	C	.	G	A	.	***T***	.	.	.	T	.	***G***	A	***A***	T	T	C
Foresta Umbra	C	T	.	.	.	.	G	A	.	***T***	T	.	G	.	.	***G***	.	.	T	T	.
Irpinia	.	.	.	.	.	***G***	.	A	C	.	.	T	G	.	G	.	.	.	.	G	.
Sila	.	.	.	.	.	***G***	.	A	C	.	.	.	G	.	G	.	.	.	.	G	.

F. sylvatica genotypes	115	***118***	127	132	***133***	138	141	***149***	166	***167***	***169***	174	177	181	***183***	***185***	***187***	192	201	204	210	219
Mt. Etna	C	C	T	T	***T***	C	G	***A***	C	***G***	***A***	A	C	A	***C***	***C***	***G***	G	G	A	T	A
Madonie	G	T	.	C	***C***	A	.	.	.	***A***	***C***	G	T	.	.	***T***	.	.	.	T	C	G
Foresta Umbra	G	.	.	C	.	A	.	***C***	.	.	***C***	.	.	G	***T***	.	***A***	A	.	T	C	G
Irpinia	G	.	.	.	.	.	A	.	.	.	.	.	.	.	.	.	.	.	A	.	.	.
Sila	G	T	C	.	.	.	.	.	T	.	.	.	.	.	.	.	.	.	A	.	.	.

Protein sequence variable site number (total sequence length 167 aa) — Variable aminoacids

	14	20	27	29	40	45	50	58	59	61	62	63
Mt. Etna	S	R	N	I	R	S	N	R	I	I	P	G
Madonie	.	C	K	K	C	P	.	Q	L	.	L	.
Foresta Umbra	.	C	K	.	.	.	T	.	L	V	.	S
Irpinia	A	.	S	.	.	.	.	.	.	.	.	.
Sila	A	.	S	.	C	.	.	W	.	.	.	.

F. sylvatica genotypes	Nucleotide sequence variable site number (total sequence length 501 nucleotides)																																									
	222	225	231	239	***240***	243	249	255	261	270	277	***278***	282	***286***	288	***289***	291	303	309	***320***	321	324	354	357	366	367	368	***369***	384	***386***	387	398	***399***	405	406	408	412	414	***421***	426	***434***	***436***	437
	Variable nucleotides																																									
Mt. Etna	T	T	G	A	***C***	T	T	A	T	A	C	***A***	G	***G***	T	***C***	A	C	C	***G***	C	C	A	C	C	T	T	***T***	A	***A***	T	C	***C***	A	C	G	C	T	***C***	G	***G***	***C***	G
Madonie	.	C	T	.	***T***	C	.	.	C	C	.	.	A	***A***	.	.	.	T	T	***A***	T	T	G	.	T	A	C	.	G	***G***	G	.	***A***	T	.	.	T	A	***A***	A	.	.	.
Foresta Umbra	.	C	.	.	***T***	C	.	.	C	C	T	.	A	***A***	.	.	G	T	T	.	T	T	G	T	T	A	C	.	.	***G***	.	.	***A***	T	.	A	T	A	***A***	A	.	.	C
Irpinia	C	.	.	.	***T***	C	C	T	.	.	.	***G***	.	.	C	***T***	T	.	.	.	.	.	.	.	.	.	C	***C***	.	***G***	.	.	.	.	T	.	.	G	***A***	.	***A***	.	C
Sila	C	.	.	.	***T***	C	C	T	.	.	.	***G***	.	.	C	***T***	T	.	.	.	.	.	.	.	.	.	C	.	.	***G***	.	.	.	.	T	.	.	G	***A***	.	.	***T***	.

	Protein sequence variable site number (total sequence length 167 aa)										
	80	93	96	97	107	123	129	133	141	145	146
	Variable aminoacids										
Mt. Etna	D	Q	V	R	R	F	D	S	L	S	R
Madonie	.	.	I	.	H	T	G	.	M	.	.
Foresta Umbra	.	*	I	.	.	T	G	.	M	.	P
Irpinia	.	R	.	C	.	S	G	.	M	.	W
Sila	.	R	.	C	.	S	G	.	M	.	W

F. sylvatica genotypes	Nucleotide sequence variable site number (total sequence length 501 nucleotides)												
	4	4	4	4	***4***	4	***4***	4	4	4	***4***	4	4
	3	4	4	4	***4***	6	***6***	6	7	7	***7***	7	8
	8	2	4	5	***7***	0	***5***	8	1	2	***3***	7	0
	Variable nucleotides												
Mt. Etna	G	C	G	C	***T***	G	***T***	T	T	C	***A***	C	T
Madonie	A	.	T	G	**.**	A	***C***	C	C	.	***G***	T	.
Foresta Umbra	A	.	T	G	**.**	A	***C***	C	C	.	***G***	T	C
Irpinia	.	T	.	.	***G***	.	**.**	.	.	A	***T***	.	C
Sila	.	.	.	.	***G***	.	**.**	.	.	A	***G***	.	C

	Protein sequence variable site number (total sequence length 167 aa)		
	1	1	1
	4	5	5
	9	4	8
	Variable aminoacids		
Mt. Etna	R	G	Q
Madonie	.	.	R
Foresta Umbra	G	R	R
Irpinia	.	.	M
Sila	.	.	R