

Current and Historical Genetic Variability of Native Brown Trout Populations in a Southern Alpine Ecosystem: Implications for Future Management

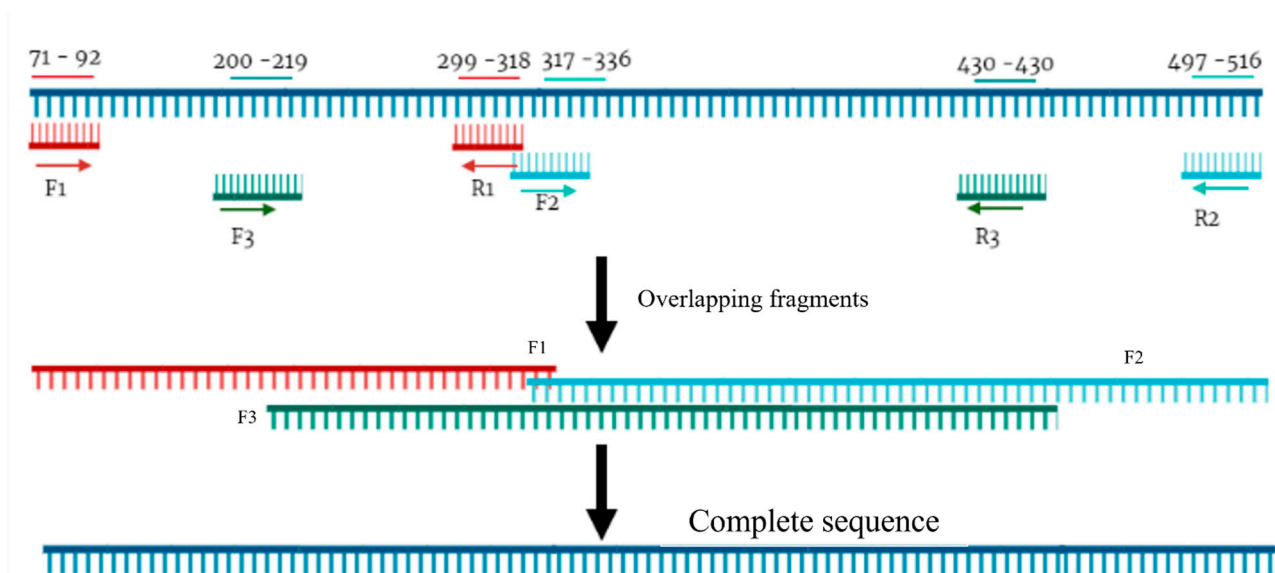


Figure S1. schematic representation of the new designed primer pairs to amplify three smaller overlapping fragments. Nucleotide positions refer to the fragment of CR mtDNA 450 bp length amplified with the primer pairs L15998-PRO and HDL-C1 [30].

Table S2. Details of new primers designed to amplify three smaller overlapping fragments (F1, F2, F3), methods three pieces" (cf Figure S1). Nucleotide positions refer to the fragment of CR mtDNA 450 bp length amplified with the primer pairs L15998-PRO and HDL-C1 [30].

Name	Sequence (5'→3')	Length	Start	End	T _m	Pairs with
TruttaCR_F1	ARTGTTGTACCTTGCTAACDCA	22	71	92	59.56	TruttaCR_R1
TruttaCR_R1	GCCCGTGTTAYNTGGAGTTT	20	318	299	60.25	TruttaCR_F1
Product (bp)	248					
TruttaCR_F2	GCTCCGTCTTTACCCACCAA	20	317	336	59.96	TruttaCR_R2
TruttaCR_R2	TACATTCGGCTTTCAGGGGG	20	516	497	59.75	TruttaCR_F2
Product (bp)	200					
TruttaCR_F3	ACCCCTCATACATCAGCACT	20	200	219	58.11	TruttaCR_R3
TruttaCR_R3	AYTTCACGAGATGCYYCCTA	20	449	430	58.54	TruttaCR_F3
Product (bp)	250					

Table S3. Genbank references of *Salmo trutta* complex sequences used in this study for the phylogenetic analysis and parsimony network reconstruction. For each sequence evolutionary lineage based on the mitochondrial control region (D-Loop), name of the haplotype deposited in Genbank (GenBank), accession number at GenBank database (Acc. Num.) and source are indicated.

Lineage	GenBank	Acc. Num.	Source
Atlantic	ATcs1	AF273086	[46,53,54]
Atlantic	ATcs2	AF273087	[46]
Atlantic	ATcs3	AF274574	[46]
Atlantic	ATcs4	AF274575	[46]
Atlantic	ATSic	JF297974	[7]
Atlantic	AT-Tyrrh1	KX450263	[54]
Atlantic	ATcs14	EF530476	[53]
Atlantic	ATcs37	EF530499	[53]
Atlantic	ATcs38	EF530500	[53]
Atlantic	ATcs50	EF530510	[53]
Atlantic	ATcs51	EF530511	[53]
Atlantic	ATcs52	EF530512	[53]
Adriatic	ADcs1	AY836330	[31]
Adriatic	ADporh1	MK448034	[34]
Adriatic	ADcs15	AY836344	[31]
Adriatic	AdcsTi1	KU667314	[55]
Adriatic	AD-Z1	DQ381565	[56]
Adriatic	AD-Tyrrh1	KX450257	[54]
Adriatic	AD-Tyrrh2	KX450258	[54]
Adriatic	AD-Tyrrh3	KX450259	[54]
Adriatic	AD-Tyrrh4	KX450260	[54]
Adriatic	AD-Tyrrh5	KX450261	[54]
Adriatic	AD-Tyrrh6	KX450262	[54]
Adriatic	ADcr2	MK184916	[57]
Adriatic	ADcr3	MK184921	[57]
Adriatic	ADcr4	MK184826	[57]
Adriatic	ADcr5	MK184935	[57]
Adriatic	ADcr6	MK184943	[57]
Adriatic	ADrh-1	MK948035	[34]
Adriatic	ADK1	JX846932	[58]
Mediterranean	Mecs1	AY836350	[31]
Mediterranean	MEcs4	AY836353	[31]
Mediterranean	MEcs6	AY836355	[31]
Mediterranean	MEcs7	AY836356	[31]
Mediterranean	MEcs8	AY836357	[31,34]
Mediterranean	Mecs15	AY836364	[31]
Mediterranean	Mecs25	MG970274	[59]
Mediterranean	MEcr1	MK184945	[57]
Mediterranean	T19866	MK184949	[57]
<i>marmoratus</i>	Ma2a	DQ841189	[60]
<i>marmoratus</i>	Ma2b	DQ841190	[60]
<i>marmoratus</i>	Ma2C	JQ582461	[60]
<i>marmoratus</i>	Ma	MW251444	[61]
Danubian	Da1f	MK675073	[47]
Danubian	Da1g	MK675074	[47]
Danubian	DA3	AY185571	[62]
Danubian	DA9	AY185572	[62]
Danubian	DA22	AF321993	[63]
<i>Salmo salar</i>	Leguer2	GQ376149	[64]

* Sequence used only for phylogenetic analysis.

Table S4. Sampled populations: genetic population identification (ID), stream, basin, sub-basin, geographic coordinates and number of samples (N) are indicated. (cf Figure 1).

ID	Stream	Basin	Sub-basin	Geographic coordinates (N-E)	N
A	Marianna	Ticino	Boesio	45°91'83"; 8°71'36"	20
C	Ripa	Dora Riparia	-	44°53'10"; 6°57'15"	10
D	Valle di Rezzago	Lambro	-	45°86'36"; 9°24'55"	20
E	Senagra	Adda	-	46°02'26"; 9°12'27"	20
F	Caldone	Adda	-	45°87'52"; 9°49'52"	20
G	Valle Merla	Adda	-	46°11'79"; 9°36'29"	20
H	Acqualina	Adda	Serio	45°94'94"; 9°85'82"	20
I	Vò	Oglio	Dezzo	46°03'70"; 10°13'56"	10
L	Valle della Pietra	Adda	Bitto	46°05'18"; 9°54'92"	20
M	Lella	Staffora	-	44°78'57"; 9°19'19"	20
N	Avagnone	Trebbia	-	44°68'86"; 9°30'25"	10
O	Rio Freddo	Tanaro	Stura di Demonte	44°14'37"; 7°10'29"	10
Q	Grigna	Oglio	-	45°85'08"; 10°37'74"	7
R	Allione	Oglio	-	46°01'10"; 10°14'21"	12
S	Valle di Vesta	Mincio	Toscolano	45°72'48"; 10°60'81"	5