

Interspecific Hybridization of Sturgeon Species Affects Differently Their Gonadal Development

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Supplementary Online Material (SOM)

Table S1. Characteristics of broodfish including body mass (MB), total length (L_T), age, and code of the group, in which given individual was a parent

Species	Dams				Species	Sires			
	M _B (kg)	L _T (cm)	age (years)	group code		M _B (kg)	L _T (cm)	age (years)	group code
<i>Acipenser ruthenus</i>	1.25	60	11	SSt ₁ ; StS ₁ ; StSt ₁	<i>Acipenser ruthenus</i>	0.91	57	6	SSt ₁ ; StS ₁ ; StSt ₁
<i>Acipenser ruthenus</i>	1.42	62	11	SSt ₁ ; StS ₁ ; StSt ₁	<i>Acipenser ruthenus</i>	1.08	59	6	SSt ₁ ; StS ₁ ; StSt ₁
<i>Acipenser ruthenus</i>	2.04	72	11	SSt ₁ ; StS ₁ ; StSt ₁	<i>Acipenser ruthenus</i>	1.30	60	11	SSt ₁ ; StS ₁ ; StSt ₁
<i>Acipenser ruthenus</i>	1.15	60	7	StB ₅	<i>Acipenser ruthenus</i>	0.85	60	8	SSt ₄
<i>Acipenser ruthenus</i>	1.34	65	7	StB ₅	<i>Acipenser ruthenus</i>	1.10	64	8	RSt ₆
<i>Acipenser ruthenus</i>	1.83	70	7	StB ₅	<i>Acipenser ruthenus</i>	1.70	72	7	RSt ₆
<i>Acipenser baerii</i>	7.80	112	19	SSt ₁ ; StS ₁ ; SS ₁	<i>Acipenser ruthenus</i>	0.90	59	6	RSt ₆
<i>Acipenser baerii</i>	5.50	105	9	SSt ₁ ; StS ₁ ; SS ₁	<i>Acipenser baerii</i>	5.50	103	11	SS ₅ ; SSt ₁ ; StS ₁ ; SS ₁
<i>Acipenser baerii</i>	6.00	106	9	SSt ₁ ; StS ₁ ; SS ₁	<i>Acipenser baerii</i>	4.80	98	9	SS ₅ ; SSt ₁ ; StS ₁ ; SS ₁
<i>Acipenser baerii</i>	9.50	115	14	SS ₅ ; SR ₅	<i>Acipenser baerii</i>	5.50	99	11	SSt ₁ ; StS ₁ ; SS ₁
<i>Acipenser baerii</i>	16.40	142	16	SSt ₄	<i>Acipenser baerii</i>	8.25	105	15	SS ₅
<i>Acipenser gueldenstaedtii</i>	13.60	140	14	RSt ₆	<i>Acipenser gueldenstaedtii</i>	7.00	90	15	SR ₅
					<i>Huso huso</i>	48.20	n/a	19	StB ₅
					<i>Huso huso</i>	56.40	n/a	19	StB ₅
					<i>Huso huso</i>	49.20	n/a	19	StB ₅
					<i>Huso huso</i>	51.60	n/a	19	StB ₅
					<i>Huso huso</i>	50.70	n/a	19	StB ₅

SR₅ = Siberian sturgeon × Russian sturgeon (5-year-old), SSt₄ = Siberian sturgeon × sterlet (4 years), RSt₆ = Russian sturgeon × sterlet (6 years), StB₅ = sterlet × beluga (5 years), SSt₁ = Siberian sturgeon × sterlet (1 year), StS₁ = sterlet × Siberian sturgeon (1 year), SS₅ = Siberian sturgeon (5 years), SS₁ = Siberian sturgeon (1 year), StSt₁ = sterlet (1 year), n/a = data of *Huso huso* males length were not available

Table S2. Representative nucleotide sequences of parental fish individuals

	5	15	25	35	45	55
A.baerii_H1	AAGGACAGTA	ATTGTAGAGT	TTCATAACTG	AACATTACT	GGCATCTGGT	TCCTATTTC
A.baerii_H2	AAGGACAGTA	ATTGTAGAGT	TTCATAACTG	AACATTACT	GGCATCTGGT	TCCTATTTC
A.baerii_H3	AAGGACAGTA	ATTGTAGAGT	TTCATAACTG	AACATTACT	GGCATCTGGT	TCCTATTTC
A.baerii_H4	AAGGACAGTA	ATTGTAGAGT	TTCATAACTG	AACATTACT	GGCATCTGGT	TCCTATTTC
A.gueldenstaedtii_H1	AAGGACAATA	ACTGCAAAAGT	TTCATAACTG	AATTATTACT	GGCATCTGGT	TCCTATTTC
A.gueldenstaedtii_H2	AAGGACAATA	ACTGCAAAAT	TTCATAACTG	AATTATTACT	GGCATCTGGT	TCCTATTTC
A.ruthenus_H1	AAGGACAATA	CCTGTAGAGT	TTCATAACTG	AATTATTACT	GGCATCTGGT	TCCTATTTC
A.ruthenus_H2	AAGGACAATA	CCTGTAAAGT	TTCATAACTG	AATTATTACT	GGCATCTGGT	TCCTATTTC
A.ruthenus_H3	AAGGACAATA	CCTGTAGAGT	TTCATAACTG	AACATTACT	GGCATCTGGT	TCCTATTTC
A.ruthenus_H4	AAGGACAATA	CCTGTAGAGT	TTCATAACTG	AATTATTACT	GGCATCTGGT	TCCTATTTC
A.ruthenus_H5	AAGGACAATA	CCTGTAGAGT	TTCATAACTG	AATTATTACT	GGCATCTGGT	TCCTATTTC
H.huso_H1	AAGGACAATA	ACCGTGAGAT	TTCATAACTG	AATTATTACT	GGCATCTGGC	TCCTATTTC
H.huso_H2	AAGGACAATA	ACCGTGAGAT	TTCATAACTG	AATTATTACT	GGCATCTGGT	TCCTATTTC
H.huso_H3	AAGGACAATA	ACCGTGAGAT	TTCATAACTG	AATTATTACT	GGCATCTGGC	TCCTATTTC
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A.baerii_H1	GGTCC--ATT	AACAGTTGTA	TCCCCATAAT	CAGCTTGTTA	CTGGCATCTG	ATTAATGTTA
A.baerii_H2	GGTCC--ATT	AACAGTTGTA	TCCCCATAAT	CAGCTTGTTA	CTGGCATCTG	ATTAATGTTA
A.baerii_H3	GGTCC--ATT	AACAGTTGTA	TCCCCATAAT	CAGCTTGTTA	CTGGCATCTG	ATTAATGTTA
A.baerii_H4	GGTCC--ATT	AACAGTTGTA	TCCCCATAAT	CAGCTTGTTA	CTGGCATCTG	ATTAATGTTA
A.gueldenstaedtii_H1	GGTCC--ATT	AACAGTTGTA	TCCCCATAAC	TAGCTTGTTA	CTGGCATCTG	ATTAATGTTA
A.gueldenstaedtii_H2	GGTCC--ATT	AACAGTTGTA	TCCCCATAAC	TAGCTTGTTA	CTGGCATCTG	ATTAATGTTA
A.ruthenus_H1	GGTCCAAATT	AACGATTGTT	TCCCCATAAC	TAGCTCGCCA	CTGGCATCTG	ATTAATGTTA
A.ruthenus_H2	GGTCCAAATT	AACGATTGTT	TCCCCATAAC	TAGCTCGCCA	CTGGCATCTG	ATTAATGTTA
A.ruthenus_H3	GGTCCAAATT	AACGATTGTT	TCCCCATAAC	TAGCTCGCCA	CTGGCATCTG	ATTAATGTTA
A.ruthenus_H4	GGTCCAAATT	AACGATTGTT	TCCCCATAAC	TAGCTCGCCA	CTGGCATCTG	ATTAATGTTA
A.ruthenus_H5	GGTCCAAATT	AACGATTGTT	TCCCCATAAC	TAGCTCGCCA	CTGGCATCTG	ATTAATGTTA
H.huso_H1	AGTCC--ATC	AACAGTTATT	TCCCCATAA-	TAAGTTACTA	CTGGCATCTG	ATTAATGTTA
H.huso_H2	AGTCC--ATC	AACAGTTATT	TCCCCATAA-	TAAGTTACTA	CTGGCATCTG	ATTAATGTTA
H.huso_H3	AGTCC--ATC	AACAGTTATT	TCCCCATAA-	TAAGTTACTA	CTGGCATCTG	ATTAATGTTA
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A.baerii_H1	GAGTACCAT	GGGTCCATGA	CCCCACATGC	CGAGAACCCC	ATCAACATT	GGTATTTT
A.baerii_H2	GAGTACCAT	GGGTCCATGA	CCCCACATGC	CGAGAACCCC	ATCAACATT	GGTATTTT
A.baerii_H3	GAGTACCAT	GGGTCCATGA	CCCCACATGC	CGAGAACCCC	ATCAACATT	GGTATTTT
A.baerii_H4	GAGTACCAT	GGGTCCATGA	CCCCACATGC	CGAGAACCCC	ATCAACATT	GGTATTTT
A.gueldenstaedtii_H1	GAGTACCAT	AAGTCCATGA	CCCCACATGC	CAAGAACCCC	ACCAACATT	GGTATTTT
A.gueldenstaedtii_H2	GAGTACCAT	AAATCCATGA	CCCCACATGC	CAAGAACCCC	ATCAACATT	GGTATTTT
A.ruthenus_H1	GAAATACCAT	ACACTCATGA	CCCCACATGC	CGAGAACCAT	GTCAACATT	GGT-TATTTT
A.ruthenus_H2	GAAATACCAT	ACACTCATGA	CCCCACATGC	CGAGAACCAT	GTCAACATT	GGT-TATTTT
A.ruthenus_H3	GAGTACCAT	ACACCCATGA	CCCCACATGC	CGAGAACCAT	ATCAACATT	GGT-TATTTT
A.ruthenus_H4	GAGTACCAT	ACACCCATGA	CCCCACATGC	CGAGAACCAT	ATCAACATT	GGT-TATTTT
A.ruthenus_H5	GAGTACCAT	ACACCCATGA	CCCCACATGC	CGAGAACCAT	GTCAACATT	GGT-TATTTT
H.huso_H1	GAGTACCAT	AAACTCATGA	CCCCACATGC	CGAGAACCCC	ACCAACATT	GGT-TACTCT
H.huso_H2	GAGTACCAT	AAACTCATGA	CCCCACATGC	CGAGAACCCC	ACCAACATT	GGT-TACTCT
H.huso_H3	GAGTACCAT	AAACTCATGA	CCCCACATGC	CGAGAACCCC	ACCAACATT	GGT-TACTCT
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A.baerii_H1	TTTTTAGG-T	CTCCATTAC	TGACATGCGA	AA-GCTCCTT	CAGAAAAGAT	AGACAGGGTG
A.baerii_H2	TTTTTAGG-T	CTCCATTAC	TGACATGCGA	AA-GCTCCTT	CAGAAAAGAT	AGACAGGGTG
A.baerii_H3	TTTTTAGG-T	CTCCATTAC	TGACATGCGA	AA-GCTCCTT	CAGAAAAGAT	AGACAGGGTG
A.baerii_H4	TTTTTAGG-T	CTCCATTAC	TGACATGCGA	AA-GCTCCTT	CAGAAAAGAT	AGACAGGGTG
A.gueldenstaedtii_H1	TTTTTAGG-T	CTCCATTAC	TGACATGCGA	AA-GCTCCTT	CAGAAAAGAT	AGACAGGGTG
A.gueldenstaedtii_H2	TTTTTAGG-T	CTCCATTAC	TGACATGCGA	AA-GCTCCTT	CAGAAAAGAT	AGACAGGGTG
A.ruthenus_H1	TATTTGGGTT	-TCCATTAC	TGACATGCGA	AACGCTCCTT	CAGAGAGGAC	GGATAAGGTT
A.ruthenus_H2	TATTTGGGTT	-TCCATTAC	TGACATGCGA	AACGCTCCTT	CAGAGAGGAC	GGATAAGGTT
A.ruthenus_H3	TATTTGGGTT	-TCCATTAC	TGACATGCGA	AACGCTCCTT	CAGAGAGGAC	GGATAAGGTT
A.ruthenus_H4	TATTTGGGTT	-TCCATTAC	TGACATGCGA	AACGCTCCTT	CAGAGAGGAC	GGATAAGGTT
A.ruthenus_H5	TATTTGGGTT	-TCCATTAC	TGACATGCGA	AACGCTCCTT	CAGAGAGGAC	GGATAAGGTT
H.huso_H1	TATTTGGGTT	C-CCATTAC	TGACATGCGA	A--GCTCCTT	CAGAAAAGAT	TAATAAGGTT
H.huso_H2	TATTTGGGTT	C-CCATTAC	TGACATGCGA	A--GCTCCTT	CAGAAAAGAT	TAATAAGGTT
H.huso_H3	TATTTGGGTT	C-CCATTAC	TGACATGCGA	A--GCTCCTT	CAGAAAAGAT	TAATAAGGTT
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A.baerii_H1	GAACATTAC	GA--CTGCTC	AGAGATAATG	AATAGTGAAT	GATATAATGA	CATATCTCGG
A.baerii_H2	GAACATTAC	GA--CTGCTC	AGAGATAATG	AATAGTGAAT	GATATAATGA	CATATCTCGG
A.baerii_H3	GAACATTAC	GA--CTGCTC	AGAGATAATG	AATAGTGAAT	GATATAATGA	CATATCTCGG
A.baerii_H4	GAACATTAC	GA--CTGCTC	AGAGATAATG	AATAGTGAAT	GATATAATGA	CATATCTCGG
A.gueldenstaedtii_H1	GAACATCCGT	GA-T-TGCTC	AAAGATAATG	GATAGTGAAT	GATATAATGA	CATATCTCGG
A.gueldenstaedtii_H2	GAACATCCGT	GA-T-TGCTC	AAAGATAATG	GATAGTGAAT	GATATAATGA	CATATCTCGG
A.ruthenus_H1	GAACATTACA	CGGTCTGCTC	GGAGACGATG	GATAATGAAT	GGTACAATGA	CATATCCAAG
A.ruthenus_H2	GAACATTACA	CGGTCTGCTC	GGAGACGATG	GATAATGAAT	GGTACAATGA	CATATCCAAG
A.ruthenus_H3	GAACATTACA	CGGTCTGCTC	GGAGACGATG	GATAATGAAT	GGTACAATGA	CATATCCAAG
A.ruthenus_H4	GAACATTACA	CGGTCTGCTC	GGAGACGATG	GATAATGAAT	GGTACAATGA	CATATCCAAG
A.ruthenus_H5	GAACATTACA	CGGTCTGCTC	GGAGACGATG	GATAATGAAT	GGTACAATGA	CATATCCAAG
H.huso_H1	GAACATTCAA	CAGCCTGCTC	GCAGGTAATA	GATAGTGAAT	GATATAATGA	CATATCTCGG
H.huso_H2	GAACATTCAA	CAGCCTGCTC	GCAGGTAATA	GATAGTGAAT	GATATAATGA	CATATCTCGG
H.huso_H3	GAACATTCAA	CAGCCTGCTC	GCAGGTAATA	GATAGTGAAT	GATATAATGA	CATATCTCGG
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A.baerii_H1	-TATCTACA	TAG-TCTGTG	CCACGTACAT	AAGG-AGTGT	TATCACGAG-	ACCTAGTCTT
A.baerii_H2	-TATCTACA	TAG-TCCGTG	CCACGTACAT	AAGG-AGTGT	TATCACGAG-	ACCTAGTCTT
A.baerii_H3	-TATCTACA	GGG-TCTGTG	CCACGTACAT	AAGG-AGTGT	TATCACGAG-	ACCTAGTCTT
A.baerii_H4	-TATCTACA	TGG-TCTGTG	CCACGTACAT	AAGG-AGTGT	TATCACGAG-	ACCTAGTCTT
A.gueldenstaedtii_H1	--ATACCACA	TAG-TCTGTG	CCACGCACAT	AAGG-ACTAT	TATCACGAGA	ACTTAGTCTT
A.gueldenstaedtii_H2	--ATACCACA	TAG-TCTGTG	CCACGCACAT	AAGG-ACTAT	TATCACGAGA	ACTTAGTCTT
A.ruthenus_H1	ATACAGTACA	CGA-TCTGTA	TTACGCACAT	AAGGTAGTGT	T-TCACAGG-	ACCTAATCTT
A.ruthenus_H2	ATACAGTACA	CGA-TCTGTA	TTACGCACAT	AAGGTAGTGT	T-TCACAGG-	ACCTAATCTT
A.ruthenus_H3	ATACAGTACA	CGA-TCTGTA	TTACGCACAT	AAGGTAGTGT	T-TCACAGG-	ACCTAATCTT
A.ruthenus_H4	ATACAGTACA	CGA-TCTGTA	TTACGCACAT	AAGGTAGTGT	T-TCACAGG-	ACCTAATCTT
A.ruthenus_H5	ATACAGTACA	CGA-TCTGTA	TTACGCACAT	AAGGTAGTGT	T-TCACAGG-	ACCTAATCTT
H.huso_H1	ACGCCATACA	TGACCCGTGTG	CCACGCACAT	AAGG-AGTGT	T-TCACGTAG	GCCCACTCTT
H.huso_H2	ACGCCATACA	TGACCCGTGTG	CCACGCACAT	AAGG-AGTGT	T-TCACGTAG	ACCCAGTCTT
H.huso_H3	ACGCCATACA	TGACCCGTGTG	CCACGCACAT	AAGG-AGTGT	T-TCACGTAG	ACCCAGTCTT

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Table S2 to be continued

						
	365	375	385	395	405	415
A.baerii_H1	GCCCTCCACC	CACA-TAACA	ATCAA-GATG	CCACAAACGT	TTGTTATCGA	CAAACCCCT
A.baerii_H2	GCCCTCCACC	CACA-TAACA	ATCAA-GATG	CCACAAACGT	TTGTTATCGA	CAAACCCCT
A.baerii_H3	GCCCTCCACC	CACA-TAACA	ATCAA-GATG	CCACAAACGT	TTGTTATCGA	CAAACCCCT
A.baerii_H4	GCCCTCCACC	CACA-TAACA	ATCAA-GATG	CCACAAACGT	TTGTTATCGA	CAAACCCCT
A.gueldenstaedtii_H1	GCCCTCCACC	CACA-TAACA	ATCAA-GATG	CCACAAACGT	TTGTTATCGA	CAAACCCCT
A.gueldenstaedtii_H2	GCCCTCCACC	CACA-TAACA	ATCAA-GATG	CCACAAACGT	TTGTTATCGA	CAAACCCCT
A.ruthenus_H1	GTT-----CC	CACA-CAATA	ACCAATGACA	CATTAAACGT	TTATTATCGA	CAAACCCCT
A.ruthenus_H2	GTT-----CC	CACA-CAATA	ACCAATGACA	CATTAAACGT	TTATTATCGA	CAAACCCCT
A.ruthenus_H3	GTT-----CC	CACA-CAATA	ACCAATGACA	CATTAAACGT	TTATTATCGA	CAAACCCCT
A.ruthenus_H4	GTT-----CC	CACA-CAATA	ACCAATGACA	CATTAAACGT	TTATTATCGA	CAAACCCCT
A.ruthenus_H5	GTT-----CC	CACA-CAATA	ACCAATGACA	CATTAAACGT	TTATTATCGA	CAAACCCCT
H.huso_H1	TCCC-CC--C	CACAATAATA	ACCAA-GATA	CTATAAACGT	TTATTATCGA	CAAACCCCT
H.huso_H2	TCCC-CC--C	CACAATAATA	ACCAA-GATA	CTATAAACGT	TTATTATCGA	CAAACCCCT
H.huso_H3	TCCC-CC--C	CACAATAATA	ACCAA-GATA	CTATAAACGT	TTATTATCGA	CAAACCCCT
						
	425	435	445	455	465	475
A.baerii_H1	ACCCCTTAC	GCTG-GACAA	GCCTTATATT	TCTTGTCAAA	CCCCAAAAGC	AGGACTGACT
A.baerii_H2	ACCCCTTAC	GCTG-GACAA	GCCTTATATT	TCTTGTCAAA	CCCCAAAAGC	AGGACTGACT
A.baerii_H3	ACCCCTTAC	GCTG-GACAA	GCCTTATATT	TCTTGTCAAA	CCCCAAAAGC	AGGACTGACT
A.baerii_H4	ACCCCTTAC	GCTG-GACAA	GCCTTATATT	TCTTGTCAAA	CCCCAAAAGC	AGGACTGACT
A.gueldenstaedtii_H1	ACCCCTTAC	GCTG-GACAA	GCCTTATATT	TCTTGTCAAA	CCCCAAAAGC	AGGACTGACT
A.gueldenstaedtii_H2	ACCCCTTAC	GCTG-GACAA	GCCTTATATT	TCTTGTCAAA	CCCCAAAAGC	AGGACTGACT
A.ruthenus_H1	ACCCCTTAC	GCTG-GACAA	GCCTTATATT	TCTTGTCAAA	CCCCAAAAGC	AGGACTGACT
A.ruthenus_H2	ACCCCTTAC	GCTG-GACAA	GCCTTATATT	TCTTGTCAAA	CCCCAAAAGC	AGGACTGACT
A.ruthenus_H3	ACCCCTTAC	GCTG-GACAA	GCCTTATATT	TCTTGTCAAA	CCCCAAAAGC	AGGACTGACT
A.ruthenus_H4	ACCCCTTAC	GCTG-GACAA	GCCTTATATT	TCTTGTCAAA	CCCCAAAAGC	AGGACTGACT
A.ruthenus_H5	ACCCCTTAC	GCTG-GACAA	GCCTTATATT	TCTTGTCAAA	CCCCAAAAGC	AGGACTGACT
H.huso_H1	ACCCCTTAC	GCTG-GACAA	GCCTTATATT	TCTTGTCAAA	CCCCAAAAGC	AGGACTGACT
H.huso_H2	ACCCCTTAC	GCTG-GACAA	GCCTTATATT	TCTTGTCAAA	CCCCAAAAGC	AGGACTGACT
H.huso_H3	ACCCCTTAC	GCTG-GACAA	GCCTTATATT	TCTTGTCAAA	CCCCAAAAGC	AGGACTGACT
						
	485	495	505	515	525	535
A.baerii_H1	TGTCATCAAC	GTACTCCAAT	TACCCCCACA	TGCCTAGCTG	TGCAAAATATT	TATTCACTAT
A.baerii_H2	TGTCATCAAC	GTACTCCAAT	TACCCCCACA	TGCCTAGCTG	TGCAAAATATT	TATTCACTAT
A.baerii_H3	TGTCATCAAC	GTACTCCAAT	TACCCCCACA	TGCCTAGCTG	TGCAAAATATT	TATTCACTAT
A.baerii_H4	TGTCATCAAC	GTACTCCAAT	TACCCCCACA	TGCCTAGCTG	TGCAAAATATT	TATTCACTAT
A.gueldenstaedtii_H1	TGTCATCAAC	GTACTCCAAT	TACCCCCACA	TGCCTAGCTG	TGCAAAATATT	TATTCACTAT
A.gueldenstaedtii_H2	TGTCATCAAC	GTACTCCAAT	TACCCCCACA	TGCCTAGCTG	TGCAAAATATT	TATTCACTAT
A.ruthenus_H1	CGCCATCAAC	GTACTCCAAT	TACCCACATG	CGCCTAGATA	TACAAATATT	TATTCACTAT
A.ruthenus_H2	CGCCATCAAC	GTACTCCAAT	TACCCACATG	CGCCTAGATA	TACAAATATT	TATTCACTAT
A.ruthenus_H3	CGCCATCAAC	GTACTCCAAT	TACCCACATG	CGCCTAGATA	TACAAATATT	TATTCACTAT
A.ruthenus_H4	CGCCATCAAC	GTACTCCAAT	TACCCACATG	CGCCTAGATA	TACAAATATT	TATTCACTAT
A.ruthenus_H5	CGCCATCAAC	GTACTCCAAT	TACCCACATG	CGCCTAGATA	TACAAATATT	TATTCACTAT
H.huso_H1	TGTCATCAAC	GTACTCTAAT	TACCCACATG	TGCCTAGTTG	CGCAATGTT	TACTCACTGT
H.huso_H2	TGTCATCAAC	GTACTCTAAT	TACCCACATG	TGCCTAGTTG	CGCAATGTT	TACTCACTGT
H.huso_H3	TGTCATCAAC	GTACTCTAAT	TACCCACATG	TGCCTAGTTG	CGCAATGTT	TACTCACTGT
						
	545					
A.baerii_H1	ATTTTATGT					
A.baerii_H2	ATTTTATGT					
A.baerii_H3	ATTTTATGT					
A.baerii_H4	ATTTTATGT					
A.gueldenstaedtii_H1	ATTTTATGT					
A.gueldenstaedtii_H2	ATTTTATGT					
A.ruthenus_H1	ATTTTATGT					
A.ruthenus_H2	ATTTTATGT					
A.ruthenus_H3	ATTTTATGT					
A.ruthenus_H4	ATTTTATGT					
A.ruthenus_H5	ATTTTATGT					
H.huso_H1	ATTTTATGT					
H.huso_H2	ATTTTATGT					
H.huso_H3	ATTTTATGT					