

Additional file 2. Characterisation of seven polymorphic microsatellite loci (Primer set_A) for *Hydrobia ulvae*

Locus	Clone name	Primer set	EMBL accession number	Repeat motif	Exp. allele size (bp) [†]	Primer sequence 5'–3' with 5' label or pigtail* (underlined) [‡]	<i>Pv3</i> Ψ (°C)	<i>T_m</i> (°C)	<i>T_a</i> (°C)	MgCl ₂ (mM)	<i>N</i>	AS % (N/48* 100)	<i>A</i>	Allele range (bp)	<i>H_O</i>	<i>H_E</i>	HWE <i>p</i> -value
<i>Hulv-01</i>	66C08	A	AM409397	GA(CA) ₃ (GACA) ₄ (GA) ₂ (CA) ₂ (GA) ₂₂ CA(GA) ₇ CA(GA) ₄ CA (GA) ₄ CA(GA) ₇	210	F: HEX-CACACAAATCACATGTCAGTTCAATAC R: (GTTTCTT)-GAGAAGGATTGTCTACAGAAGG	61.8 61.6		55.0	2.0	40	83	25	194 – 318	0.65	0.84	**
<i>Hulv-02</i>	67G01	A	AM409398	GTTAGTTG (GTTA) ₃ (GTCA) ₁₄ (GTTA) ₈ GTTGGTTA (GATA) ₂ GTTGGTTA	217	F: HEX-GCGATAAACCACCTTGTAGGG R: (GTTTCTT)-TCTATCTAACCACTATCTATCT AACCAAC	57.3 57.4		58.0	2.0	47	98	18	170 – 250	0.68	0.87	**
<i>Hulv-03</i>	67H10	A	AM409399	(A) ₂₃ & CTTACTA(CTTA) ₇	203	F: HEX-CGTCCCACTCTCGATGAAGC R: (GTTTCTT)-TCAATAGGGAAGGGGTGAGTCC	63.3 63.6		64.0	2.0	46	96	16	186 – 208	0.59	0.89	**
<i>Hulv-04</i>	68D02	A	AM409400	(CA) ₃₀ AACA	256	F: 6-FAM-TCAATAAAATGAAGTTGAGTTGAG R: (GTTTCTT)-GATCTGCAAGAGAGATGTAAGAA	55.5 55.5		51.0	2.0	47	98	27	218 – 288	0.92	0.91	NS
<i>Hulv-05</i>	69C07	A	AM409401	(GTTA) ₂₁	249	F: 6-FAM-GATCGTAGGCTACTTACTACCACTG R: (GTTTCTT)-TTCGTTGTTCCCGTCTG	65.3 65.1		64.0	1.5	44	92	21	188 – 320	0.57	0.93	**
<i>Hulv-06</i>	60F03	A	AM409402	(CTAA) ₄ (CTCA) ₁₂	185	F: HEX-GATCCACAAAGCAACAGCTATAACTAA R: (GTTTCTT)-AACACGGACATGAACACTGGA	61.1 61.4		58.0	2.0	40	83	17	135 – 215	0.20	0.93	**
<i>Hulv-07</i>	69A07	A	AM409403	(GTTA) ₉	124	F: HEX-AGCTTTGACTATTCTTTGTGAGC R: (GTTTCTT)-GATCAATAATCGGGCTTAAAC	57.2 56.9		51.0	2.0	34	71	19	106 – 202	0.38	0.94	**

[†] Allele size in sequenced library source individual; [‡]Pigtail: GTTTCTT added to 5' end of reverse primer to reduce stutter bands [33].

Note that in all cases the 7 base pair pigtails have been incorporated in the allele sizes stated.

Ψ, Primers designed and melting temperature (*T_m*) calculated using PRIMER3 (*Pv3*) [32].

T_a, annealing temperature; *N*, number of individuals successfully genotyped from the Dyfi estuary, Wales; AS, percentage amplification success; *A*, number of alleles observed;

H_O, observed heterozygosity; *H_E*, expected heterozygosity.

**Locus deviates significantly from Hardy-Weinberg equilibrium (*p*<0.01), estimated using GENEPOP v3.4 [25].

NS, no significant deviation from Hardy-Weinberg equilibrium.