

Table S1 *Populus tremula* nuclear microsatellite primers developed for this study. Four additional primer sets were taken from Davanadan et al.1998 and Rahman et al. 2000.

Locus	Repeat	Primers	Alleles	Size range (bp)
BU819241	(AAG) ₁₂	ATAATCCTTTTGTTCCTCCCATGTT ATCACAGCCTCGAAGCAGAA	11	99 - 132
BU821046	(AAG) ₉	AACACACGCATTAAGCCTCA TTAAGGATTTTCGAGCCTGGT	6	172 - 190
BU889575	(AAG) ₁₁	TCACGCAGTTCTTCTTCGTTT TTTTGAATCGTTAAATATCATTCGTC	8*	99 -129
BU891546	(AAG) ₁₀	GGTTCGATTCCTTAACATCACC CCAATTAATCAAACACGGTCAA	6	211 - 226

* including one null allele

Table S2 *Populus tremula* chloroplast microsatellite primers

Locus	Repeat	Region	Primers (5' – 3')	Sizes (bp)
Popcp186	(A) ₁₆	<i>trnH-psbA</i> intergenic	CAAATTACCAAGATTTGAATTTCTAACA GCTTTTGCCTTAGTGTGTACGA	223,224,227,228,229,230,231
Popcp51246	(A) ₁₇	<i>ndhC-trnM</i> intergenic	TTGGGTTTGTTTAGCCAAGA TGCAATTGCTTGGTTTATCG	122,126,129,130,139
Popcp76696	(A) ₁₆	<i>petB-petD</i> intergenic	GACATGTATTTAGATATTTCCCTTCAA CATATATCTGCACGGCCAAA	151,152,153,154,155,157,172
Popcp80893	(A) ₁₆	<i>rps8-rpl14</i> intergenic	CAAGAGTGTCCCTACCCATGA TTGTGTTTCACGCATATACCTTT	181,187, 188,189,192,193,194,195,203*
Popcp114331	(A) ₁₇	<i>ndhF-trnL</i> intergenic	GGGACTGGAAGTGTAACGAAA TGGATTGAAGGCATCAAAGG	283,287,288,289,290,291*

* Also one null allele

Table S3 The probability P_{GEN} of each multi-locus genotype (MLG) arising through sexual as opposed to clonal reproduction by population and region (see Table 1).

Population	Region	P_{GEN}
1	Northern Ireland	0.0063
2	Northern Ireland	0.0074
3	Northern Ireland	0.0062
4	Northern Ireland	0.0017
5	Northern Ireland	0.0028
6	Northern Ireland	0.0028
7	Northern Ireland	0.0026
8	Northern Ireland	0.0028
9	Northern Ireland	0.0028
10	Northern Ireland	0.0074
11	Northern Ireland	0.0028
12	Northern Ireland	0.0028
13	Northern Ireland	0.0206
14	Republic of Ireland	0.0028

15	Republic of Ireland	0.0022
16	Republic of Ireland	0.0028
17	Republic of Ireland	0.1406
18	Republic of Ireland	0.0074
19	Republic of Ireland	0.0077
20	Republic of Ireland	0.0010
21	Scotland	0.0198
22	Scotland	0.0074
23	Scotland	<0.00001
24	Scotland	<0.00001
25	England	0.0198
26	England	0.0028
27	England	0.0038
28	Sweden	<0.00001
29	Sweden	<0.00001
30	Sweden	<0.00001
31	Sweden	<0.00001
32	Sweden	<0.00001
33	Sweden	<0.00001

34	Italy	<0.00001
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