simdata

POPULATION SIZE, MIGRATION, DIVERGENCE, ASSIGNMENT, HISTORY
Bayesian inference using the structured coalescent
Migrate-n version 5.0.2(git:v5.0.2-1-g8ac0205-dirty) [December-1-2021]
  Compiled for PARALLEL computer architectures
  One master and 10 compute nodes are available.
Program started at   Sun Feb 13 20:34:16 2022
Program finished at   Sun Feb 13 20:51:11 2022 [Runtime:0000:00:16:55]
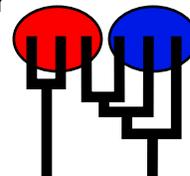
Options

Inheritance multipliers in use for Thetas:
All loci use an inheritance multiplier of 1.0
Random number seed: (with internal timer)   3022323992
Start parameters:

Theta values were generated   Using a percent value of the prior

M values were generated   Using a percent value of the prior

Connection matrix:
 m = average (average over a group of Thetas or M,
 s = symmetric migration M, S = symmetric 4Nm,
 0 = zero, and not estimated,
 * = migration free to vary, Thetas are on diagonal
 d = row population split off column population, D = split and then migration

Population	1	2	3	4	5	6	7	8	9	10
1 Romanshorn_0	*	*	0	0	0	0	0	0	0	0
2 Arbon_1	*	*	*	0	0	0	0	0	0	0
3 Kreuzlingen_2	0	*	*	*	0	0	0	0	0	0
4 Frauenfeld_3	0	0	*	*	*	0	0	0	0	0
5 Guendelhart_4	0	0	0	*	*	*	0	0	0	0
6 Homburg_5	0	0	0	0	*	*	*	0	0	0
7 Aarau_6	0	0	0	0	0	*	*	*	0	0
8 L'Abbaye_7	0	0	0	0	0	0	*	*	*	0
9 Aigle_8	0	0	0	0	0	0	0	*	*	*

10 Alpnach_9   0   0   0   0   0   0   0   0   *   *

Order of parameters:

1	Θ_1	\<displayed\>
2	Θ_2	\<displayed\>
3	Θ_3	\<displayed\>
4	Θ_4	\<displayed\>
5	Θ_5	\<displayed\>
6	Θ_6	\<displayed\>
7	Θ_7	\<displayed\>
8	Θ_8	\<displayed\>
9	Θ_9	\<displayed\>
10	Θ_{10}	\<displayed\>
11	$M_{2->1}$	\<displayed\>
12	$M_{1->2}$	\<displayed\>
13	$M_{3->2}$	\<displayed\>
14	$M_{2->3}$	\<displayed\>
15	$M_{4->3}$	\<displayed\>
16	$M_{3->4}$	\<displayed\>
17	$M_{5->4}$	\<displayed\>
18	$M_{4->5}$	\<displayed\>
19	$M_{6->5}$	\<displayed\>
20	$M_{5->6}$	\<displayed\>
21	$M_{7->6}$	\<displayed\>
22	$M_{6->7}$	\<displayed\>
23	$M_{8->7}$	\<displayed\>
24	$M_{7->8}$	\<displayed\>
25	$M_{9->8}$	\<displayed\>
26	$M_{8->9}$	\<displayed\>
27	$M_{10->9}$	\<displayed\>
28	$M_{9->10}$	\<displayed\>

Mutation rate among loci: Mutation rate is constant for all loci

Analysis strategy: Bayesian inference
 -Population size estimation: Exponential Distribution
 -Geneflow estimation: Exponential Distribution

 Proposal distributions for parameter

Parameter	Proposal
Theta	Metropolis sampling
M	Metropolis sampling
Divergence	Metropolis sampling

| Divergence Spread | Metropolis sampling |
| Genealogy | Metropolis-Hastings |

Prior distribution for parameter

Parameter			Prior	Minimum	Mean	Maximum	Delta	Bins	UpdateFreq
1	Theta	**	Uniform	0.000000	0.050	0.100	0.010	1500	0.01190
2	Theta	**	Uniform	0.000000	0.050	0.100	0.010	1500	0.01190
3	Theta	**	Uniform	0.000000	0.050	0.100	0.010	1500	0.01190
4	Theta	**	Uniform	0.000000	0.050	0.100	0.010	1500	0.01190
5	Theta	**	Uniform	0.000000	0.050	0.100	0.010	1500	0.01190
6	Theta	**	Uniform	0.000000	0.050	0.100	0.010	1500	0.01190
7	Theta	**	Uniform	0.000000	0.050	0.100	0.010	1500	0.01190
8	Theta	**	Uniform	0.000000	0.050	0.100	0.010	1500	0.01190
9	Theta	**	Uniform	0.000000	0.050	0.100	0.010	1500	0.01190
10	Theta	**	Uniform	0.000000	0.050	0.100	0.010	1500	0.01190
11	M	**	Uniform	0.000000	500.0	1000.	100.0	1500	0.01190
12	M	**	Uniform	0.000000	500.0	1000.	100.0	1500	0.01190
13	M	**	Uniform	0.000000	500.0	1000.	100.0	1500	0.01190
14	M	**	Uniform	0.000000	500.0	1000.	100.0	1500	0.01190
15	M	**	Uniform	0.000000	500.0	1000.	100.0	1500	0.01190
16	M	**	Uniform	0.000000	500.0	1000.	100.0	1500	0.01190
17	M	**	Uniform	0.000000	500.0	1000.	100.0	1500	0.01190
18	M	**	Uniform	0.000000	500.0	1000.	100.0	1500	0.01190
19	M	**	Uniform	0.000000	500.0	1000.	100.0	1500	0.01190
20	M	**	Uniform	0.000000	500.0	1000.	100.0	1500	0.01190
21	M	**	Uniform	0.000000	500.0	1000.	100.0	1500	0.01190
22	M	**	Uniform	0.000000	500.0	1000.	100.0	1500	0.01190
23	M	**	Uniform	0.000000	500.0	1000.	100.0	1500	0.01190
24	M	**	Uniform	0.000000	500.0	1000.	100.0	1500	0.01190
25	M	**	Uniform	0.000000	500.0	1000.	100.0	1500	0.01190
26	M	**	Uniform	0.000000	500.0	1000.	100.0	1500	0.01190
27	M	**	Uniform	0.000000	500.0	1000.	100.0	1500	0.01190
28	M	**	Uniform	0.000000	500.0	1000.	100.0	1500	0.01190

[* * means priors were set globally]

Markov chain settings:	Long chain
Number of chains	1
Recorded steps [a]	10000
Increment (record every x step [b]	100
Number of concurrent chains (replicates) [c]	1
Visited (sampled) parameter values [a*b*c]	1000000
Number of discard trees per chain (burn-in)	1000

Multiple Markov chains:
Static heating scheme — 4 chains with temperatures

| | 1000000.00 | 3.00 | 1.50 | 1.00 |

Swapping interval is 1

Print options:
Data file: infile.linear10
                                                                              parmfile.linear10
Haplotyping is turned on: NO
Output file: outfile.linear10
Posterior distribution raw histogram file: bayesfile
Raw data from the MCMC run: bayesallfile.gz
Print data: No
Print genealogies [only some for some data type]:   None

Data summary

Data file: infile.linear10
Datatype: Haplotype data
Number of loci: 10

Mutationmodel:

Locus	Sublocus	Mutationmodel	Mutationmodel parameters
1	1	Jukes-Cantor	[Basefreq: =0.25]
2	1	Jukes-Cantor	[Basefreq: =0.25]
3	1	Jukes-Cantor	[Basefreq: =0.25]
4	1	Jukes-Cantor	[Basefreq: =0.25]
5	1	Jukes-Cantor	[Basefreq: =0.25]
6	1	Jukes-Cantor	[Basefreq: =0.25]
7	1	Jukes-Cantor	[Basefreq: =0.25]
8	1	Jukes-Cantor	[Basefreq: =0.25]
9	1	Jukes-Cantor	[Basefreq: =0.25]
10	1	Jukes-Cantor	[Basefreq: =0.25]

Sites per locus

Locus	Sites
1	1000
2	1000
3	1000
4	1000
5	1000
6	1000
7	1000
8	1000
9	1000
10	1000

Site rate variation and probabilities:

Locus	Sublocus	Region type	Rate of change	Probability	Patch size
1	1	1	1.000	1.000	1.000
2	1	1	1.000	1.000	1.000
3	1	1	1.000	1.000	1.000
4	1	1	1.000	1.000	1.000
5	1	1	1.000	1.000	1.000
6	1	1	1.000	1.000	1.000

7	1	1	1.000	1.000	1.000
8	1	1	1.000	1.000	1.000
9	1	1	1.000	1.000	1.000
10	1	1	1.000	1.000	1.000

Population	Locus	Gene copies	
		data	(missing)
1 Romanshorn_0	1	8	
	2	8	
	3	8	
	4	8	
	5	8	
	6	8	
	7	8	
	8	8	
	9	8	
	10	8	
2 Arbon_1	1	10	
	2	10	
	3	10	
	4	10	
	5	10	
	6	10	
	7	10	
	8	10	
	9	10	
	10	10	
3 Kreuzlingen_2	1	10	
	2	10	
	3	10	
	4	10	
	5	10	
	6	10	
	7	10	
	8	10	
	9	10	
	10	10	
4 Frauenfeld_3	1	10	
	2	10	
	3	10	
	4	10	
	5	10	
	6	10	
	7	10	
	8	10	
	9	10	

	10	10
5 Guendelhart_4	1	9
	2	9
	3	9
	4	9
	5	9
	6	9
	7	9
	8	9
	9	9
	10	9
6 Homburg_5	1	11
	2	11
	3	11
	4	11
	5	11
	6	11
	7	11
	8	11
	9	11
	10	11
7 Aarau_6	1	10
	2	10
	3	10
	4	10
	5	10
	6	10
	7	10
	8	10
	9	10
	10	10
8 L'Abbaye_7	1	10
	2	10
	3	10
	4	10
	5	10
	6	10
	7	10
	8	10
	9	10
	10	10
9 Aigle_8	1	10
	2	10
	3	10
	4	10

	5	10	
	6	10	
	7	10	
	8	10	
	9	10	
	10	10	
10 Alpnach_9	1	12	
	2	12	
	3	12	
	4	12	
	5	12	
	6	12	
	7	12	
	8	12	
	9	12	
	10	12	
Total of all populations	1	100	(0)
	2	100	(0)
	3	100	(0)
	4	100	(0)
	5	100	(0)
	6	100	(0)
	7	100	(0)
	8	100	(0)
	9	100	(0)
	10	100	(0)

Bayesian Analysis: Posterior distribution table

Locus	Parameter	2.5%	25.0%	Mode	75.0%	97.5%	Median	Mean
1	Θ_1	0.00000	0.00327	0.00830	0.01767	0.06447	0.01597	0.02245
1	Θ_2	0.00000	0.00093	0.00217	0.00340	0.00707	0.00270	0.00249
1	Θ_3	0.00000	0.00167	0.00343	0.00533	0.01200	0.00437	0.00498
1	Θ_4	0.00000	0.00000	0.00330	0.01120	0.07767	0.01123	0.02143
1	Θ_5	0.00000	0.00060	0.00170	0.00260	0.00473	0.00210	0.00135
1	Θ_6	0.00000	0.00060	0.00170	0.00260	0.00487	0.00210	0.00142
1	Θ_7	0.00000	0.00013	0.00283	0.00693	0.07120	0.00683	0.01762
1	Θ_8	0.00000	0.00140	0.00323	0.00533	0.01340	0.00443	0.00516
1	Θ_9	0.00000	0.00113	0.00250	0.00413	0.01600	0.00337	0.00505
1	Θ_{10}	0.00000	0.00120	0.00283	0.00473	0.01307	0.00390	0.00453
1	$M_{2->1}$	370.667	761.333	927.667	988.000	999.333	771.667	738.422
1	$M_{1->2}$	0.000	50.667	268.333	339.333	708.667	299.000	320.070
1	$M_{3->2}$	278.000	498.000	681.000	801.333	991.333	637.000	629.639
1	$M_{2->3}$	216.667	648.667	706.333	875.333	994.667	657.667	630.990
1	$M_{4->3}$	0.000	124.667	205.000	308.000	682.667	264.333	301.164
1	$M_{3->4}$	278.667	705.333	961.667	988.667	999.333	715.667	682.585
1	$M_{5->4}$	310.667	672.000	829.000	885.333	998.000	697.000	679.294
1	$M_{4->5}$	52.667	135.333	283.667	428.000	878.667	451.667	476.540
1	$M_{6->5}$	0.000	7.333	35.000	162.000	590.000	156.333	204.330
1	$M_{5->6}$	0.000	10.667	81.667	266.667	652.667	287.000	345.126
1	$M_{7->6}$	168.000	522.667	592.333	775.333	990.667	569.000	562.066
1	$M_{6->7}$	259.333	751.333	965.667	991.333	999.333	760.333	695.128
1	$M_{8->7}$	343.333	808.000	956.333	979.333	999.333	743.000	719.165
1	$M_{7->8}$	146.000	316.000	472.333	664.000	968.000	523.000	535.702
1	$M_{9->8}$	211.333	337.333	530.333	677.333	988.667	565.000	579.546
1	$M_{8->9}$	81.333	340.000	422.333	517.333	988.000	519.667	531.085
1	$M_{10->9}$	108.000	476.000	514.333	594.000	989.333	555.000	552.904
1	$M_{9->10}$	406.667	794.000	969.667	994.000	999.333	801.000	762.463
2	Θ_1	0.00000	0.00080	0.00197	0.00307	0.00580	0.00243	0.00201
2	Θ_2	0.00000	0.00020	0.00363	0.01487	0.07300	0.01463	0.02288
2	Θ_3	0.00000	0.00080	0.00197	0.00300	0.00527	0.00237	0.00185
2	Θ_4	0.00000	0.00127	0.00397	0.00760	0.04027	0.00677	0.01764
2	Θ_5	0.00000	0.00087	0.00210	0.00327	0.00620	0.00263	0.00236
2	Θ_6	0.00000	0.00107	0.00250	0.00413	0.00967	0.00337	0.00352
2	Θ_7	0.00080	0.00333	0.00843	0.02267	0.06980	0.02123	0.02956

Locus	Parameter	2.5%	25.0%	Mode	75.0%	97.5%	Median	Mean
2	Θ_8	0.00000	0.00107	0.00223	0.00333	0.00540	0.00257	0.00223
2	Θ_9	0.00000	0.00107	0.00523	0.01867	0.08280	0.01797	0.02768
2	Θ_{10}	0.00000	0.00133	0.00263	0.00400	0.00693	0.00310	0.00294
2	$M_{2->1}$	43.333	141.333	239.000	357.333	718.667	305.667	344.236
2	$M_{1->2}$	401.333	785.333	963.000	988.667	999.333	795.667	751.721
2	$M_{3->2}$	265.333	520.667	622.333	836.667	999.333	655.667	649.010
2	$M_{2->3}$	109.333	280.667	405.000	586.000	908.667	471.000	490.760
2	$M_{4->3}$	6.000	45.333	89.667	148.000	773.333	299.667	340.671
2	$M_{3->4}$	132.667	433.333	693.000	788.667	995.333	574.333	565.092
2	$M_{5->4}$	86.667	225.333	321.667	450.000	942.667	512.333	519.157
2	$M_{4->5}$	46.000	106.000	279.667	370.000	774.000	333.000	391.600
2	$M_{6->5}$	0.000	2.000	25.000	73.333	432.000	71.667	111.129
2	$M_{5->6}$	0.000	12.000	33.667	232.667	642.000	223.000	259.007
2	$M_{7->6}$	374.667	729.333	936.333	973.333	999.333	715.667	702.722
2	$M_{6->7}$	0.000	2.667	29.667	152.667	671.333	150.333	211.978
2	$M_{8->7}$	461.333	813.333	939.667	984.000	999.333	827.000	795.776
2	$M_{7->8}$	2.000	16.000	55.667	282.000	830.000	367.000	387.193
2	$M_{9->8}$	0.000	95.333	164.333	303.333	603.333	246.333	281.644
2	$M_{8->9}$	504.000	801.333	943.667	980.667	999.333	817.000	794.969
2	$M_{10->9}$	57.333	190.000	291.000	480.667	782.667	391.667	438.261
2	$M_{9->10}$	137.333	193.333	356.333	552.000	980.667	482.333	515.437
3	Θ_1	0.00000	0.00113	0.00250	0.00407	0.00887	0.00330	0.00339
3	Θ_2	0.00000	0.00080	0.00610	0.02633	0.04060	0.02577	0.03689
3	Θ_3	0.00000	0.00120	0.00250	0.00380	0.00660	0.00297	0.00277
3	Θ_4	0.00000	0.00207	0.00397	0.00593	0.01407	0.00483	0.00567
3	Θ_5	0.00000	0.00093	0.00210	0.00327	0.00587	0.00257	0.00218
3	Θ_6	0.00000	0.00127	0.00257	0.00407	0.00733	0.00317	0.00303
3	Θ_7	0.00273	0.00387	0.00763	0.03267	0.08860	0.03777	0.04190
3	Θ_8	0.00000	0.00100	0.00230	0.00360	0.00667	0.00283	0.00252
3	Θ_9	0.00000	0.00053	0.00283	0.00560	0.02747	0.00517	0.01853
3	Θ_{10}	0.00000	0.00133	0.00270	0.00420	0.00787	0.00330	0.00334
3	$M_{2->1}$	206.000	786.667	893.667	973.333	998.667	639.667	624.813
3	$M_{1->2}$	0.000	53.333	159.667	299.333	695.333	257.667	289.110
3	$M_{3->2}$	584.667	837.333	964.333	989.333	999.333	847.667	828.106
3	$M_{2->3}$	0.000	17.333	39.000	204.667	546.667	191.667	217.739
3	$M_{4->3}$	274.667	606.000	655.667	890.667	998.667	681.000	660.933
3	$M_{3->4}$	184.000	279.333	501.000	638.000	993.333	542.333	558.328
3	$M_{5->4}$	0.000	21.333	83.000	290.667	854.667	276.333	342.894
3	$M_{4->5}$	162.000	331.333	419.667	702.667	986.000	552.333	557.208
3	$M_{6->5}$	0.000	5.333	37.667	152.667	680.000	148.333	213.453

Locus	Parameter	2.5%	25.0%	Mode	75.0%	97.5%	Median	Mean
3	$M_{5->6}$	10.667	57.333	141.667	308.667	789.333	277.667	350.016
3	$M_{7->6}$	154.000	752.667	959.000	989.333	998.000	611.000	596.411
3	$M_{6->7}$	248.000	861.333	927.667	980.000	999.333	649.000	634.872
3	$M_{8->7}$	362.000	802.667	961.667	992.000	999.333	811.000	767.764
3	$M_{7->8}$	63.333	340.667	514.333	682.667	900.667	481.000	477.275
3	$M_{9->8}$	143.333	739.333	902.333	970.667	994.000	617.000	598.023
3	$M_{8->9}$	13.333	30.000	125.000	295.333	908.667	389.000	421.725
3	$M_{10->9}$	474.000	766.667	969.667	997.333	999.333	760.333	638.350
3	$M_{9->10}$	11.333	20.667	97.667	314.667	344.667	425.667	449.415
4	Θ_1	0.00000	0.00080	0.00203	0.00320	0.00613	0.00257	0.00212
4	Θ_2	0.00160	0.00400	0.00963	0.02413	0.04873	0.02263	0.03238
4	Θ_3	0.00033	0.00380	0.00737	0.01247	0.04620	0.01110	0.01585
4	Θ_4	0.00000	0.00100	0.00223	0.00353	0.00693	0.00277	0.00261
4	Θ_5	0.00000	0.00120	0.00270	0.00440	0.01173	0.00363	0.00422
4	Θ_6	0.00000	0.00153	0.00317	0.00507	0.01180	0.00410	0.00455
4	Θ_7	0.00000	0.00087	0.00203	0.00313	0.00547	0.00243	0.00198
4	Θ_8	0.00000	0.00193	0.00403	0.00647	0.01640	0.00543	0.00639
4	Θ_9	0.00000	0.00200	0.00383	0.00593	0.01160	0.00483	0.00517
4	Θ_{10}	0.00000	0.00127	0.00270	0.00420	0.00807	0.00337	0.00327
4	$M_{2->1}$	338.000	722.000	767.000	978.000	999.333	739.667	711.631
4	$M_{1->2}$	136.000	286.000	426.333	529.333	986.667	505.667	528.382
4	$M_{3->2}$	388.000	784.000	883.000	961.333	999.333	739.000	722.175
4	$M_{2->3}$	0.000	6.667	35.667	104.667	303.333	99.000	138.964
4	$M_{4->3}$	285.333	738.667	964.333	992.667	999.333	740.333	690.793
4	$M_{3->4}$	288.667	686.667	925.667	992.667	999.333	694.333	641.685
4	$M_{5->4}$	0.000	4.000	27.667	285.333	724.000	281.667	354.017
4	$M_{4->5}$	426.667	748.000	869.667	908.667	999.333	721.667	696.044
4	$M_{6->5}$	0.000	9.333	41.000	92.667	464.667	86.333	190.612
4	$M_{5->6}$	0.000	2.000	27.000	130.667	488.667	128.333	163.910
4	$M_{7->6}$	442.667	781.333	965.000	986.667	999.333	793.000	767.257
4	$M_{6->7}$	0.000	1.333	29.000	153.333	545.333	151.667	190.765
4	$M_{8->7}$	11.333	46.000	134.333	320.000	834.667	378.333	403.616
4	$M_{7->8}$	180.000	303.333	491.667	616.000	905.333	511.667	534.360
4	$M_{9->8}$	324.000	455.333	645.000	749.333	996.000	644.333	648.175
4	$M_{8->9}$	220.000	425.333	632.333	726.000	984.000	582.333	578.861
4	$M_{10->9}$	178.667	496.000	613.000	689.333	942.000	549.667	551.567
4	$M_{9->10}$	130.667	238.667	413.667	524.667	950.667	449.667	484.262
5	Θ_1	0.00000	0.00247	0.00430	0.00627	0.01153	0.00503	0.00540
5	Θ_2	0.00000	0.00293	0.00597	0.01060	0.04067	0.00930	0.01348

Locus	Parameter	2.5%	25.0%	Mode	75.0%	97.5%	Median	Mean
5	Θ_3	0.00000	0.00107	0.00250	0.00427	0.01013	0.00350	0.00364
5	Θ_4	0.00000	0.00113	0.00370	0.00727	0.04040	0.00650	0.01084
5	Θ_5	0.00000	0.00087	0.00210	0.00320	0.00573	0.00250	0.00209
5	Θ_6	0.00000	0.00093	0.00237	0.00380	0.00853	0.00310	0.00305
5	Θ_7	0.00000	0.00113	0.00250	0.00400	0.00800	0.00323	0.00310
5	Θ_8	0.00000	0.00080	0.00197	0.00307	0.00560	0.00243	0.00192
5	Θ_9	0.00000	0.00233	0.00417	0.00607	0.01220	0.00490	0.00542
5	Θ_{10}	0.00000	0.00227	0.00477	0.00787	0.03433	0.00670	0.01030
5	$M_{2\to1}$	24.000	287.333	359.000	480.000	726.000	353.667	363.554
5	$M_{1\to2}$	96.000	272.667	453.000	542.000	912.000	458.333	480.266
5	$M_{3\to2}$	6.000	19.333	121.667	253.333	316.667	391.000	406.745
5	$M_{2\to3}$	200.667	382.667	581.667	700.667	978.000	562.333	561.525
5	$M_{4\to3}$	194.667	622.667	662.333	830.000	990.667	626.333	606.993
5	$M_{3\to4}$	180.000	312.667	467.667	644.667	996.000	515.000	531.585
5	$M_{5\to4}$	472.000	875.333	958.333	988.000	999.333	778.333	765.617
5	$M_{4\to5}$	199.333	325.333	453.667	630.000	948.667	528.333	545.353
5	$M_{6\to5}$	0.000	9.333	33.000	88.000	286.667	81.000	98.565
5	$M_{5\to6}$	0.000	22.667	64.333	208.000	670.000	193.667	260.510
5	$M_{7\to6}$	185.333	657.333	687.667	846.667	996.000	613.667	601.019
5	$M_{6\to7}$	4.000	19.333	117.667	351.333	910.667	337.000	402.484
5	$M_{8\to7}$	27.333	88.667	214.333	364.667	822.000	323.000	383.687
5	$M_{7\to8}$	0.000	7.333	52.333	241.333	758.000	297.667	334.507
5	$M_{9\to8}$	395.333	764.000	955.000	987.333	999.333	775.667	743.936
5	$M_{8\to9}$	0.000	138.000	311.667	378.000	689.333	305.000	328.006
5	$M_{10\to9}$	28.667	36.667	68.333	146.667	920.667	515.000	499.424
5	$M_{9\to10}$	277.333	648.000	714.333	813.333	999.333	655.667	626.173
6	Θ_1	0.00000	0.00113	0.00243	0.00387	0.00760	0.00310	0.00296
6	Θ_2	0.00000	0.00140	0.00270	0.00413	0.00720	0.00323	0.00311
6	Θ_3	0.00000	0.00040	0.00403	0.01493	0.05713	0.01457	0.02330
6	Θ_4	0.00000	0.00153	0.00310	0.00480	0.00927	0.00383	0.00389
6	Θ_5	0.00000	0.00140	0.00350	0.00587	0.02707	0.00497	0.00773
6	Θ_6	0.00000	0.00053	0.00303	0.00733	0.04147	0.00690	0.01206
6	Θ_7	0.00000	0.00313	0.00537	0.00800	0.02013	0.00670	0.00815
6	Θ_8	0.00000	0.00167	0.00383	0.00627	0.04260	0.00537	0.01114
6	Θ_9	0.00000	0.00067	0.00177	0.00273	0.00513	0.00223	0.00159
6	Θ_{10}	0.00000	0.00147	0.00523	0.01313	0.07113	0.01223	0.02125
6	$M_{2\to1}$	194.667	546.000	605.667	800.000	983.333	579.000	573.043
6	$M_{1\to2}$	0.000	1.333	26.333	270.000	582.000	313.667	382.319
6	$M_{3\to2}$	0.000	12.000	69.000	168.000	666.000	199.667	248.715
6	$M_{2\to3}$	611.333	862.667	969.667	990.000	999.333	872.333	850.432

Locus	Parameter	2.5%	25.0%	Mode	75.0%	97.5%	Median	Mean
6	$M_{4->3}$	150.667	327.333	457.667	650.000	977.333	498.333	506.638
6	$M_{3->4}$	264.667	628.667	725.667	936.000	989.333	649.667	631.276
6	$M_{5->4}$	0.000	30.667	203.000	272.000	752.667	249.667	302.992
6	$M_{4->5}$	388.667	762.667	961.000	988.000	999.333	773.667	736.399
6	$M_{6->5}$	0.000	17.333	107.667	224.667	648.000	212.333	255.033
6	$M_{5->6}$	0.000	39.333	120.333	252.000	634.000	229.000	273.442
6	$M_{7->6}$	460.000	792.667	961.667	990.667	999.333	801.667	775.798
6	$M_{6->7}$	0.000	14.000	111.667	215.333	742.667	205.000	265.181
6	$M_{8->7}$	250.000	342.667	387.000	450.667	999.333	612.333	618.600
6	$M_{7->8}$	416.667	700.667	967.000	985.333	996.667	590.333	570.514
6	$M_{9->8}$	256.000	360.000	457.000	562.000	926.667	562.333	578.100
6	$M_{8->9}$	180.667	331.333	455.667	675.333	880.000	475.000	471.111
6	$M_{10->9}$	194.667	330.667	419.000	622.667	994.667	548.333	562.096
6	$M_{9->10}$	525.333	836.000	965.667	989.333	999.333	845.667	817.510
7	Θ_1	0.00000	0.00087	0.00210	0.00320	0.00580	0.00257	0.00207
7	Θ_2	0.00000	0.00233	0.00430	0.00660	0.01667	0.00543	0.00753
7	Θ_3	0.00000	0.00073	0.00190	0.00293	0.00533	0.00237	0.00177
7	Θ_4	0.00000	0.00047	0.00363	0.01260	0.05993	0.01223	0.01945
7	Θ_5	0.00000	0.00073	0.00190	0.00293	0.00567	0.00237	0.00185
7	Θ_6	0.00000	0.00107	0.00303	0.00533	0.02527	0.00463	0.00786
7	Θ_7	0.00000	0.00180	0.00317	0.00453	0.00707	0.00350	0.00342
7	Θ_8	0.00053	0.00353	0.00777	0.01793	0.06380	0.01650	0.02296
7	Θ_9	0.00000	0.00293	0.00697	0.01400	0.07193	0.01270	0.02168
7	Θ_{10}	0.00000	0.00107	0.00230	0.00360	0.00653	0.00283	0.00254
7	$M_{2->1}$	213.333	672.667	765.000	842.667	999.333	623.667	613.402
7	$M_{1->2}$	367.333	838.667	933.667	985.333	999.333	726.333	715.699
7	$M_{3->2}$	16.000	130.000	221.667	328.667	689.333	282.333	328.872
7	$M_{2->3}$	128.000	275.333	334.333	486.000	758.000	413.667	446.594
7	$M_{4->3}$	0.000	46.000	137.667	253.333	752.667	222.333	293.060
7	$M_{3->4}$	408.667	847.333	965.667	984.667	999.333	746.333	730.526
7	$M_{5->4}$	0.000	2.667	28.333	117.333	590.667	114.333	177.974
7	$M_{4->5}$	114.000	413.333	513.000	784.667	986.000	562.333	552.022
7	$M_{6->5}$	0.000	0.000	32.333	241.333	576.667	241.667	334.069
7	$M_{5->6}$	0.000	8.667	33.667	90.667	332.667	83.667	108.196
7	$M_{7->6}$	302.667	833.333	964.333	983.333	999.333	713.667	689.967
7	$M_{6->7}$	0.000	68.667	166.333	222.667	414.000	173.667	212.913
7	$M_{8->7}$	80.667	261.333	375.667	517.333	816.667	407.000	437.040
7	$M_{7->8}$	309.333	797.333	943.667	981.333	999.333	729.667	703.209
7	$M_{9->8}$	47.333	304.000	425.667	526.667	875.333	413.667	431.578
7	$M_{8->9}$	105.333	166.667	300.333	438.667	927.333	474.333	494.076

Locus	Parameter	2.5%	25.0%	Mode	75.0%	97.5%	Median	Mean
7	$M_{10\to9}$	103.333	145.333	202.333	346.000	686.000	511.667	524.042
7	$M_{9\to10}$	257.333	323.333	533.000	624.667	977.333	560.333	581.575
8	Θ_1	0.00000	0.00040	0.00137	0.00213	0.00400	0.00177	0.00075
8	Θ_2	0.00000	0.00127	0.00290	0.00473	0.01500	0.00390	0.00506
8	Θ_3	0.00000	0.00200	0.00363	0.00540	0.01073	0.00437	0.00465
8	Θ_4	0.00000	0.00147	0.00330	0.00533	0.02920	0.00443	0.00828
8	Θ_5	0.00033	0.00233	0.00743	0.02340	0.07847	0.02223	0.03092
8	Θ_6	0.00000	0.00113	0.00237	0.00373	0.00687	0.00297	0.00272
8	Θ_7	0.00000	0.00080	0.00257	0.00467	0.03820	0.00410	0.00854
8	Θ_8	0.00000	0.00100	0.00223	0.00360	0.00747	0.00290	0.00284
8	Θ_9	0.00000	0.00080	0.00203	0.00333	0.00867	0.00270	0.00341
8	Θ_{10}	0.00000	0.00127	0.00303	0.00513	0.01447	0.00430	0.00504
8	$M_{2\to1}$	152.000	544.000	604.333	688.667	997.333	543.667	546.950
8	$M_{1\to2}$	0.000	23.333	57.667	146.000	589.333	287.000	329.781
8	$M_{3\to2}$	414.000	789.333	963.667	990.000	999.333	799.000	749.591
8	$M_{2\to3}$	22.000	275.333	392.333	588.667	812.000	440.333	461.636
8	$M_{4\to3}$	250.667	566.667	705.667	746.000	999.333	629.667	619.171
8	$M_{3\to4}$	298.667	760.667	873.667	980.667	999.333	687.667	631.811
8	$M_{5\to4}$	0.000	4.000	25.667	94.667	307.333	91.000	110.391
8	$M_{4\to5}$	543.333	822.000	967.000	989.333	999.333	831.667	811.101
8	$M_{6\to5}$	0.000	6.667	47.667	196.000	680.000	190.333	247.241
8	$M_{5\to6}$	0.000	0.000	24.333	89.333	558.667	89.667	147.965
8	$M_{7\to6}$	12.000	56.000	114.333	360.000	685.333	325.667	393.720
8	$M_{6\to7}$	0.000	21.333	67.667	138.667	441.333	123.667	155.479
8	$M_{8\to7}$	451.333	782.000	955.667	986.000	999.333	791.000	770.287
8	$M_{7\to8}$	318.000	728.667	949.000	984.667	999.333	741.000	684.974
8	$M_{9\to8}$	342.000	760.667	888.333	980.000	999.333	755.000	719.087
8	$M_{8\to9}$	208.667	247.333	383.000	493.333	562.000	467.667	540.687
8	$M_{10\to9}$	0.000	10.000	43.000	100.667	150.000	493.000	465.446
8	$M_{9\to10}$	318.000	761.333	956.333	985.333	999.333	708.333	666.061
9	Θ_1	0.00000	0.00207	0.00403	0.00633	0.01747	0.00523	0.00645
9	Θ_2	0.00000	0.00087	0.00203	0.00313	0.00560	0.00250	0.00202
9	Θ_3	0.00000	0.00173	0.00343	0.00533	0.01173	0.00430	0.00471
9	Θ_4	0.00000	0.00313	0.00603	0.01020	0.02927	0.00883	0.01132
9	Θ_5	0.00000	0.00140	0.00277	0.00420	0.00733	0.00330	0.00317
9	Θ_6	0.00000	0.00133	0.00303	0.00487	0.01187	0.00403	0.00445
9	Θ_7	0.00000	0.00093	0.00217	0.00340	0.00633	0.00270	0.00235
9	Θ_8	0.00000	0.00140	0.00310	0.00500	0.01380	0.00410	0.00493
9	Θ_9	0.00000	0.00067	0.00243	0.00440	0.02387	0.00390	0.01249

Locus	Parameter	2.5%	25.0%	Mode	75.0%	97.5%	Median	Mean
9	Θ_{10}	0.00000	0.00160	0.00303	0.00460	0.00827	0.00363	0.00360
9	$M_{2\to1}$	280.000	551.333	718.333	848.000	989.333	651.000	636.514
9	$M_{1\to2}$	53.333	190.667	323.000	479.333	871.333	417.000	439.556
9	$M_{3\to2}$	0.000	17.333	47.667	128.000	412.000	115.667	167.292
9	$M_{2\to3}$	226.000	576.667	679.000	797.333	990.000	613.667	606.343
9	$M_{4\to3}$	228.667	360.000	456.333	657.333	977.333	551.000	564.922
9	$M_{3\to4}$	470.000	774.000	921.667	984.667	999.333	787.000	764.126
9	$M_{5\to4}$	32.667	64.000	211.000	407.333	862.000	395.000	441.472
9	$M_{4\to5}$	235.333	606.667	677.000	867.333	994.667	637.000	621.171
9	$M_{6\to5}$	0.000	8.667	39.000	141.333	564.000	134.333	182.714
9	$M_{5\to6}$	0.000	10.667	33.667	210.000	590.000	201.667	242.425
9	$M_{7\to6}$	250.000	439.333	499.000	759.333	995.333	611.000	610.199
9	$M_{6\to7}$	0.000	8.667	43.667	136.000	496.667	129.000	168.700
9	$M_{8\to7}$	84.000	174.667	261.000	361.333	912.000	454.333	476.442
9	$M_{7\to8}$	376.000	761.333	937.667	984.667	999.333	774.333	744.727
9	$M_{9\to8}$	64.667	242.000	317.667	553.333	892.000	433.667	457.937
9	$M_{8\to9}$	0.000	24.000	98.333	208.667	708.667	219.667	280.376
9	$M_{10\to9}$	141.333	861.333	969.667	988.000	999.333	602.333	575.340
9	$M_{9\to10}$	0.000	9.333	39.667	178.000	605.333	210.333	262.986
10	Θ_{1}	0.00000	0.00247	0.00443	0.00673	0.01380	0.00550	0.00609
10	Θ_{2}	0.00000	0.00193	0.00383	0.00587	0.01440	0.00483	0.00562
10	Θ_{3}	0.00000	0.00133	0.00263	0.00413	0.00760	0.00323	0.00315
10	Θ_{4}	0.00000	0.00153	0.00290	0.00447	0.00767	0.00350	0.00337
10	Θ_{5}	0.00000	0.00033	0.00443	0.01487	0.05847	0.01457	0.02771
10	Θ_{6}	0.00000	0.00120	0.00257	0.00407	0.00793	0.00323	0.00316
10	Θ_{7}	0.00073	0.00233	0.00703	0.02873	0.06833	0.02750	0.03649
10	Θ_{8}	0.00000	0.00100	0.00223	0.00347	0.00627	0.00277	0.00242
10	Θ_{9}	0.01487	0.06073	0.07037	0.08420	0.09940	0.05857	0.05743
10	Θ_{10}	0.00000	0.00140	0.00270	0.00407	0.00700	0.00317	0.00312
10	$M_{2\to1}$	167.333	358.000	486.333	610.000	886.667	505.667	516.727
10	$M_{1\to2}$	28.000	254.000	337.667	458.000	716.667	374.333	392.368
10	$M_{3\to2}$	253.333	494.000	602.333	762.667	996.000	622.333	617.245
10	$M_{2\to3}$	242.667	372.000	461.000	584.000	982.667	505.667	530.384
10	$M_{4\to3}$	196.667	466.667	632.333	777.333	996.000	573.667	554.604
10	$M_{3\to4}$	268.667	795.333	933.667	989.333	999.333	602.333	595.065
10	$M_{5\to4}$	0.000	21.333	38.333	70.667	269.333	108.333	115.190
10	$M_{4\to5}$	491.333	821.333	959.000	990.667	999.333	830.333	797.997
10	$M_{6\to5}$	0.000	4.667	37.667	147.333	643.333	143.000	214.176
10	$M_{5\to6}$	0.000	1.333	24.333	88.000	426.000	86.333	121.856
10	$M_{7\to6}$	216.667	522.667	634.333	870.000	988.000	614.333	599.296

Locus	Parameter	2.5%	25.0%	Mode	75.0%	97.5%	Median	Mean
10	$M_{6->7}$	86.000	314.667	443.667	579.333	980.667	495.000	508.937
10	$M_{8->7}$	452.667	822.000	939.000	987.333	999.333	833.000	789.448
10	$M_{7->8}$	0.000	2.000	31.000	118.000	502.000	115.667	178.842
10	$M_{9->8}$	124.000	272.667	457.000	554.667	954.667	480.333	507.938
10	$M_{8->9}$	448.000	795.333	965.667	988.667	999.333	805.667	756.349
10	$M_{10->9}$	306.000	418.667	524.333	670.000	994.000	611.000	630.880
10	$M_{9->10}$	54.667	115.333	211.667	318.000	775.333	307.667	359.633
All	Θ_1	0.00013	0.00140	0.00237	0.00333	0.00460	0.00250	0.00239
All	Θ_2	0.00080	0.00227	0.00330	0.00427	0.00573	0.00337	0.00331
All	Θ_3	0.00047	0.00187	0.00283	0.00380	0.00520	0.00290	0.00284
All	Θ_4	0.00073	0.00227	0.00330	0.00427	0.00573	0.00337	0.00329
All	Θ_5	0.00013	0.00140	0.00243	0.00333	0.00460	0.00250	0.00240
All	Θ_6	0.00013	0.00140	0.00243	0.00333	0.00467	0.00250	0.00242
All	Θ_7	0.00087	0.00233	0.00337	0.00433	0.00580	0.00343	0.00338
All	Θ_8	0.00033	0.00173	0.00277	0.00367	0.00507	0.00283	0.00276
All	Θ_9	0.00000	0.00100	0.00210	0.00307	0.00493	0.00230	0.00212
All	Θ_{10}	0.00047	0.00193	0.00290	0.00387	0.00527	0.00303	0.00293
All	$M_{2->1}$	339.333	549.333	594.333	634.000	730.667	567.000	552.082
All	$M_{1->2}$	206.000	287.333	315.667	370.667	536.000	361.000	368.781
All	$M_{3->2}$	0.000	5.333	25.667	47.333	56.667	44.333	290.839
All	$M_{2->3}$	349.333	410.667	439.667	464.667	588.000	407.000	383.542
All	$M_{4->3}$	370.667	492.000	533.000	598.000	722.667	546.333	543.948
All	$M_{3->4}$	570.000	866.667	922.333	975.333	998.000	881.000	839.315
All	$M_{5->4}$	1.333	19.333	36.333	53.333	69.333	47.000	79.418
All	$M_{4->5}$	593.333	619.333	687.000	740.000	984.000	752.333	771.883
All	$M_{6->5}$	2.000	21.333	35.000	47.333	76.667	37.667	38.739
All	$M_{5->6}$	4.000	25.333	42.333	64.667	122.000	53.667	58.377
All	$M_{7->6}$	602.667	778.667	813.000	842.667	992.000	815.667	806.085
All	$M_{6->7}$	0.000	12.667	30.333	48.000	61.333	43.000	71.549
All	$M_{8->7}$	599.333	722.667	777.667	831.333	987.333	789.667	794.594
All	$M_{7->8}$	348.667	545.333	595.667	635.333	806.667	604.333	597.629
All	$M_{9->8}$	339.333	418.000	445.000	505.333	708.000	476.333	495.512
All	$M_{8->9}$	364.667	398.667	489.000	570.000	860.000	510.333	516.927
All	$M_{10->9}$	295.333	489.333	643.000	685.333	935.333	615.000	613.233
All	$M_{9->10}$	384.000	456.000	501.667	574.667	988.000	665.667	660.306

Citation suggestions:

Beerli P., 2006. Comparison of Bayesian and maximum-likelihood inference of population genetic parameters.
  Bioinformatics 22:341-345

Beerli P., 2009. How to use MIGRATE or why are Markov chain Monte Carlo programs difficult to use?
   In Population Genetics for Animal Conservation, G. Bertorelle, M. W. Bruford, H. C. Hauffe, A. Rizzoli,
   and C. Vernesi, eds., vol. 17 of Conservation Biology, Cambridge University Press, Cambridge UK, pp. 42-79.

Bayesian Analysis: Posterior distribution over all loci
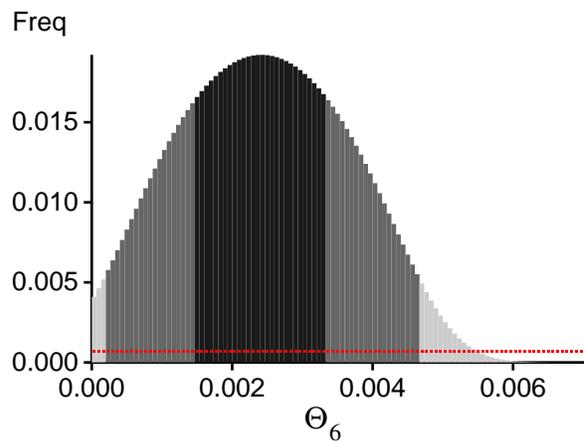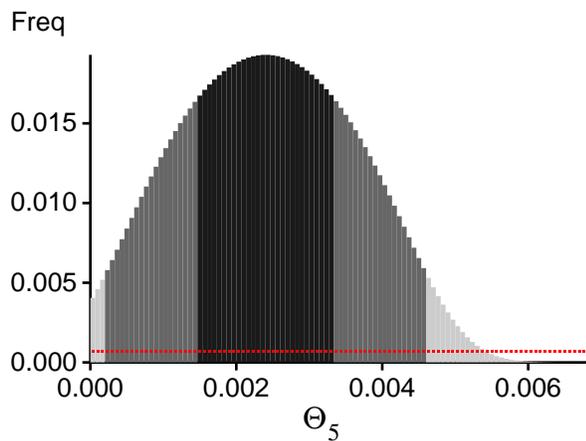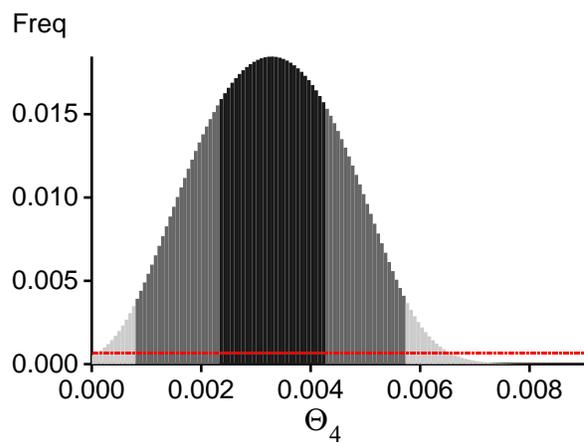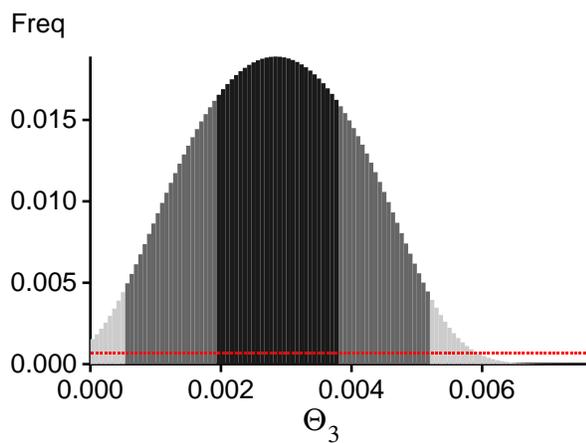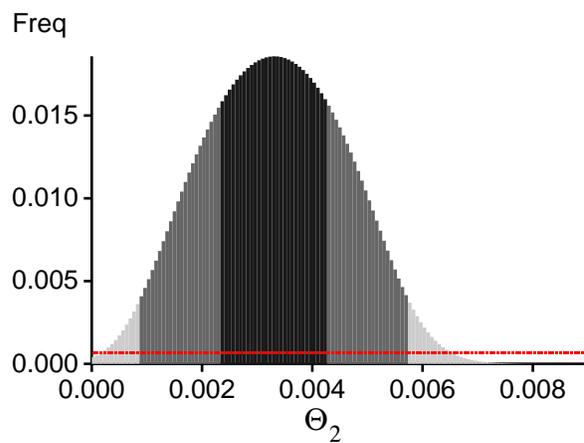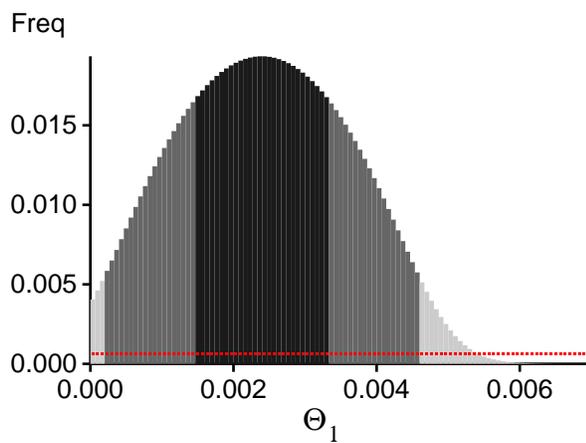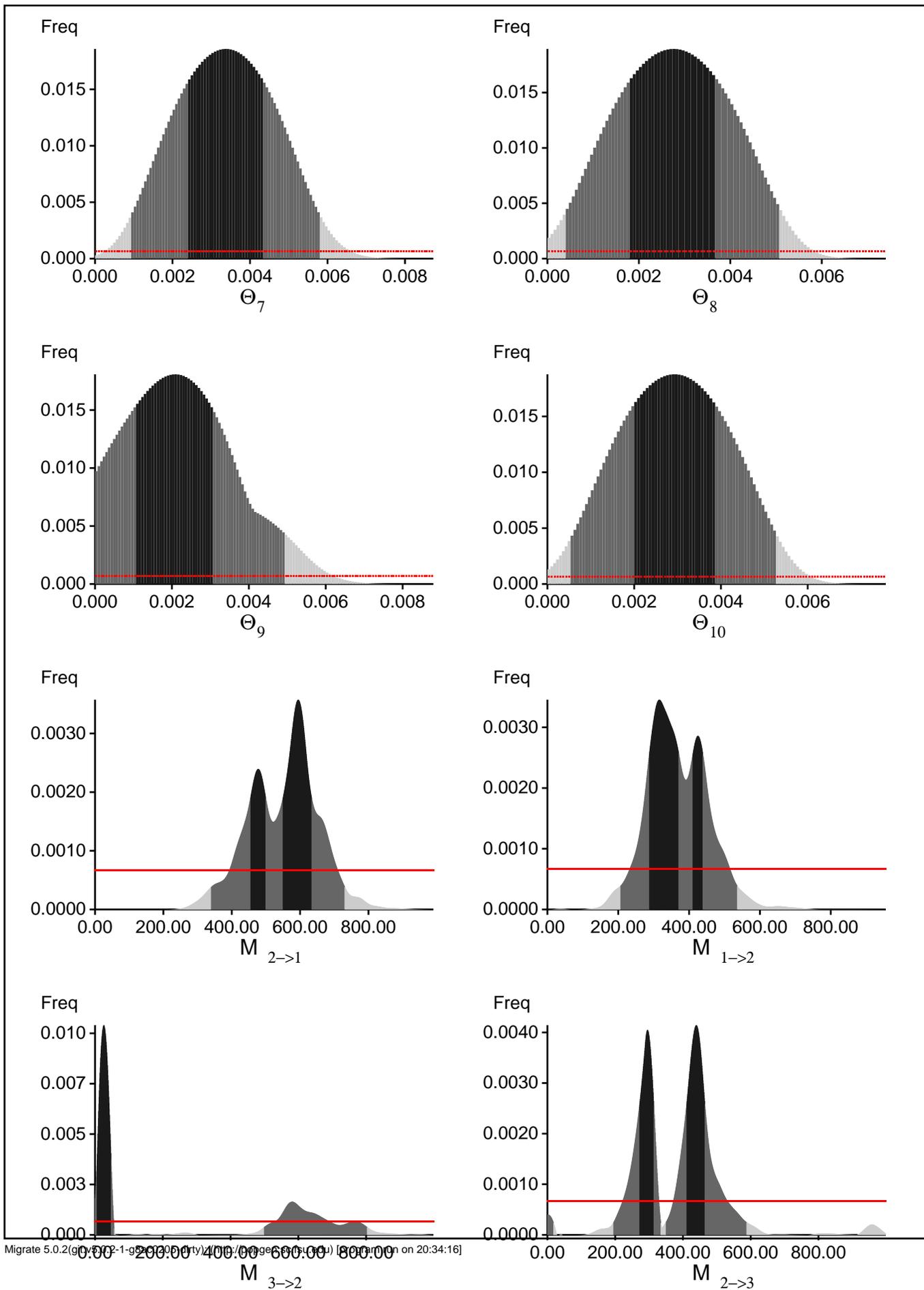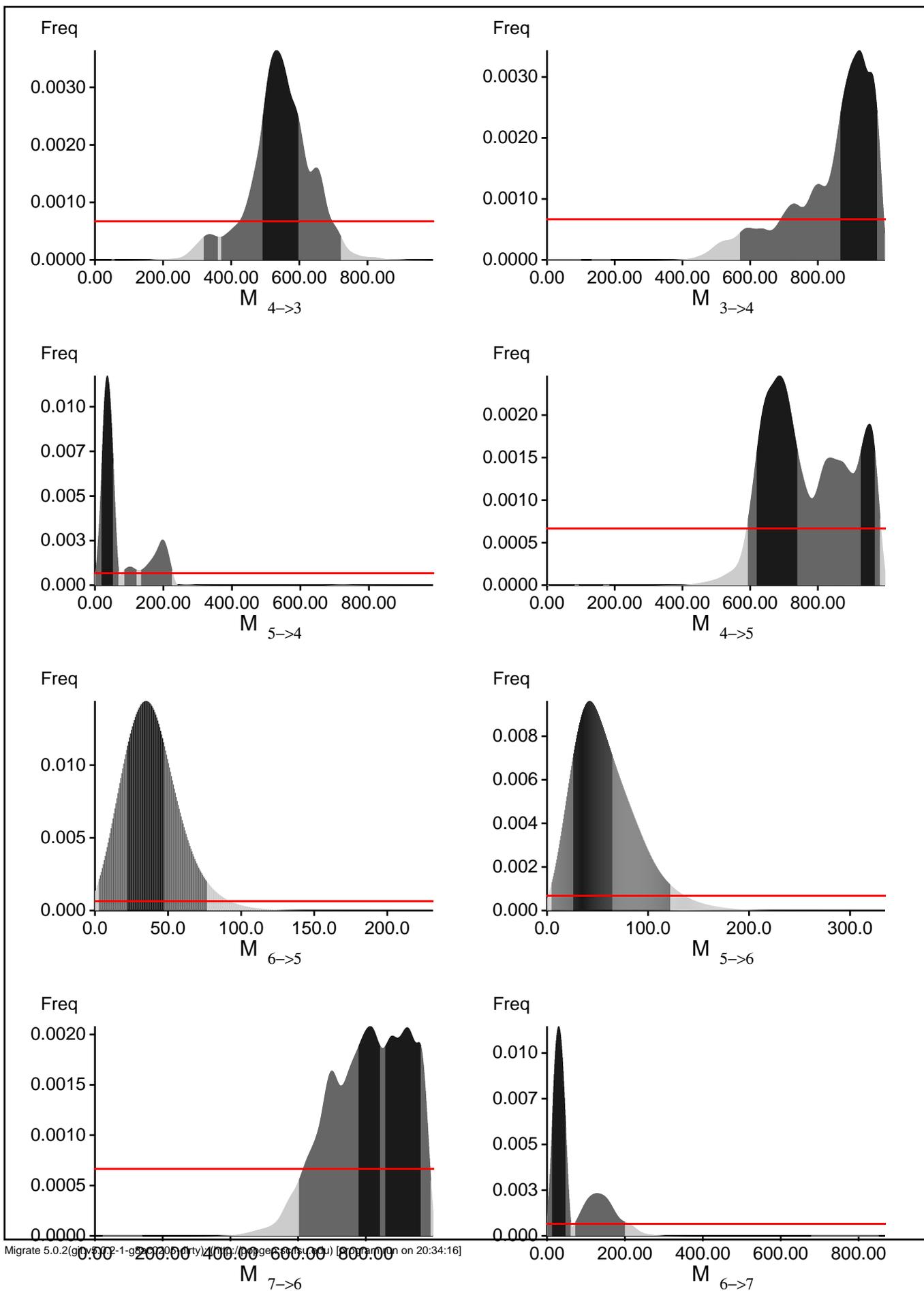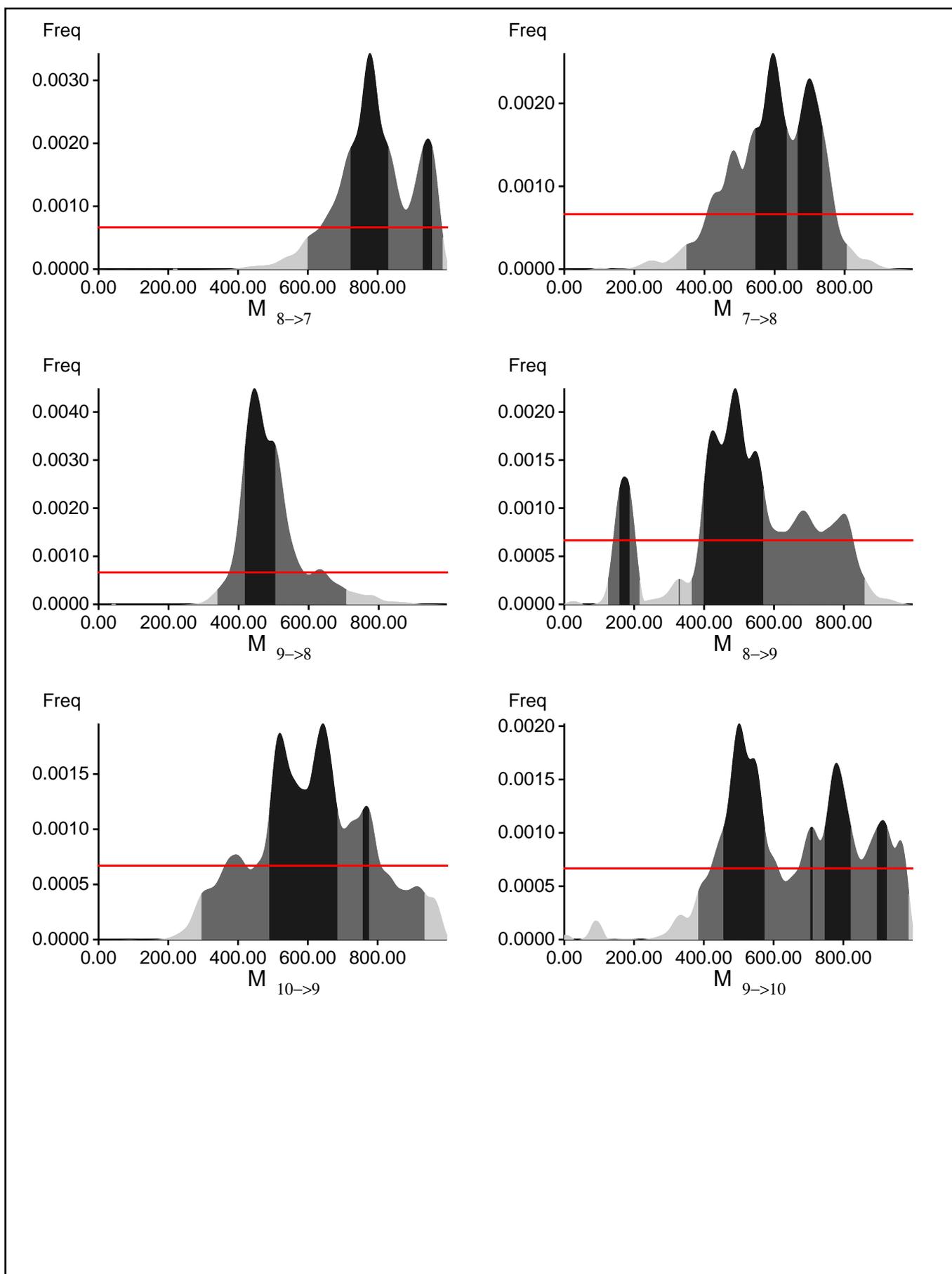
Log-Probability of the data given the model (marginal likelihood)

Use this value for Bayes factor calculations:

BF = Exp[ln(Prob(D | thisModel) - ln(Prob(D | otherModel)

or as LBF = 2 (ln(Prob(D | thisModel) - ln(Prob(D | otherModel))

shows the support for thisModel]

Locus	TI(1a)	BTI(1b)	HS(3)
1	-5561.93	-3079.07	-2589.33
2	-12626.59	-4841.79	-3351.90
3	-6935.52	-3448.51	-2760.11
4	-14409.53	-5177.13	-3394.64
5	-10970.16	-4710.49	-3500.50
6	-12349.01	-4695.42	-3226.65
7	-16176.58	-5634.01	-3621.79
8	-14789.92	-5064.55	-3180.82
9	-15048.16	-5358.02	-3496.18
10	-19291.00	-6298.52	-3818.31
All	-128027.30	-48176.40	-32809.14

(1a) TI: Thermodynamic integration: log(Prob(D|Model)): Good approximation with many temperatures

(1b) BTI: Bezier-approximated Thermodynamic integration: when using few temperatures USE THIS!

(2) SS: Steppingstone Sampling (Xie et al 2011)

(3) HS: Harmonic mean approximation: Overestimates the marginal likelihood, poor variance

[Scaling factor = 131.106439]

Citation suggestions:

Beerli P. and M. Palczewski, 2010. Unified framework to evaluate panmixia and migration direction among
   multiple sampling locations, Genetics, 185: 313-326.

Palczewski M. and P. Beerli, 2014. Population model comparison using multi-locus datasets.
   In M.-H. Chen, L. Kuo, and P. O. Lewis, editors, Bayesian Phylogenetics: Methods,
   Algorithms, and Applications, pages 187-200. CRC Press, 2014.

Xie W., P. O. Lewis, Y. Fan, L. Kuo, and M.-H. Chen. 2011. Improving marginal likelihood
   estimation for Bayesian phylogenetic model selection. Systematic Biology, 60(2):150â 160, 2011.

Acceptance ratios for all parameters and the genealogies

Parameter	Accepted changes	Ratio
Θ_1	48170/119113	0.40441
Θ_2	64589/118778	0.54378
Θ_3	50473/119494	0.42239
Θ_4	61875/119572	0.51747
Θ_5	53778/118491	0.45386
Θ_6	50522/119294	0.42351
Θ_7	64650/118937	0.54357
Θ_8	49214/118787	0.41430
Θ_9	62754/118877	0.52789
Θ_{10}	51793/119094	0.43489
$M_{2\rightarrow1}$	104358/119105	0.87618
$M_{1\rightarrow2}$	100897/118917	0.84847
$M_{3\rightarrow2}$	100312/119315	0.84073
$M_{2\rightarrow3}$	101416/119157	0.85111
$M_{4\rightarrow3}$	102467/119008	0.86101
$M_{3\rightarrow4}$	105914/119199	0.88855
$M_{5\rightarrow4}$	97729/119171	0.82007
$M_{4\rightarrow5}$	109020/119030	0.91590
$M_{6\rightarrow5}$	99060/118729	0.83434
$M_{5\rightarrow6}$	102071/118839	0.85890
$M_{7\rightarrow6}$	109759/118607	0.92540
$M_{6\rightarrow7}$	96562/119191	0.81015
$M_{8\rightarrow7}$	105026/119025	0.88239
$M_{7\rightarrow8}$	101878/119501	0.85253
$M_{9\rightarrow8}$	103327/118498	0.87197
$M_{8\rightarrow9}$	102296/119172	0.85839
$M_{10\rightarrow9}$	102254/118715	0.86134
$M_{9\rightarrow10}$	100342/118863	0.84418
Genealogies	689514/6667521	0.10341

MCMC-Autocorrelation and Effective MCMC Sample Size

Parameter	Autocorrelation	Effective Sampe Size
Θ_1	0.90195	5194.76
Θ_2	0.95746	2211.28
Θ_3	0.91509	4483.17
Θ_4	0.95263	2489.18
Θ_5	0.91450	4588.76
Θ_6	0.90488	5045.56
Θ_7	0.94916	2668.33
Θ_8	0.93118	3604.52
Θ_9	0.96622	1763.82
Θ_{10}	0.91400	4569.35
$M_{2\to1}$	0.98880	563.01
$M_{1\to2}$	0.99006	499.64
$M_{3\to2}$	0.98732	639.16
$M_{2\to3}$	0.98591	710.67
$M_{4\to3}$	0.99073	465.69
$M_{3\to4}$	0.98998	503.95
$M_{5\to4}$	0.98545	735.26
$M_{4\to5}$	0.98704	653.07
$M_{6\to5}$	0.98573	721.01
$M_{5\to6}$	0.98528	742.55
$M_{7\to6}$	0.98795	606.73
$M_{6\to7}$	0.98966	519.82
$M_{8\to7}$	0.98742	633.24
$M_{7\to8}$	0.99094	455.40
$M_{9\to8}$	0.98914	546.08
$M_{8\to9}$	0.98968	519.16
$M_{10\to9}$	0.99235	384.07
$M_{9\to10}$	0.98952	527.32
Genealogies	0.90195	5194.76

Average temperatures during the run

Chain   Temperatures

1	0.00000
2	0.00000
3	0.00000
4	0.00000

Adaptive heating often fails, if the average temperatures are very close together
try to rerun using static heating! If you want to compare models using marginal
likelihoods then you MUST use static heating

Potential Problems

This section reports potential problems with your run, but such reporting is often not very accurate. Whith many parameters in a multilocus analysi   s, it is very common that some parameters for some loci will not be very informative, triggering suggestions (for example to increase the prior ran   ge) that are not sensible. This suggestion tool will improve with time, therefore do not blindly follow its suggestions. If some parameters are fla gged, inspect the tables carefully and judge wether an action is required. For example, if you run a Bayesian inference with sequence data, for mac   roscopic species there is rarely the need to increase the prior for Theta beyond 0.1; but if you use microsatellites it is rather common that your   prior distribution for Theta should have a range from 0.0 to 100 or more. With many populations (>3) it is also very common that some migration rou tes are estimated poorly because the data contains little or no information for that route. Increasing the range will not help in such situations,   reducing number of parameters may help in such situations.

Param 11 (Locus 1): Upper prior boundary seems too low!
Param 40 (Locus 1): Upper prior boundary seems too low!
Param 70 (Locus 1): Upper prior boundary seems too low!
Param 71 (Locus 1): Upper prior boundary seems too low!
Param 100 (Locus 1): Upper prior boundary seems too low!
Param 20 (Locus 2): Upper prior boundary seems too low!
Param 61 (Locus 2): Upper prior boundary seems too low!
Param 71 (Locus 2): Upper prior boundary seems too low!
Param 90 (Locus 2): Upper prior boundary seems too low!
Param 11 (Locus 3): Upper prior boundary seems too low!
Param 21 (Locus 3): Upper prior boundary seems too low!
Param 61 (Locus 3): Upper prior boundary seems too low!
Param 70 (Locus 3): Upper prior boundary seems too low!
Param 71 (Locus 3): Upper prior boundary seems too low!
Param 81 (Locus 3): Upper prior boundary seems too low!
Param 91 (Locus 3): Upper prior boundary seems too low!
Param 11 (Locus 4): Upper prior boundary seems too low!
Param 21 (Locus 4): Upper prior boundary seems too low!
Param 31 (Locus 4): Upper prior boundary seems too low!
Param 40 (Locus 4): Upper prior boundary seems too low!
Param 50 (Locus 4): Upper prior boundary seems too low!
Param 61 (Locus 4): Upper prior boundary seems too low!
Param 41 (Locus 5): Upper prior boundary seems too low!
Param 81 (Locus 5): Upper prior boundary seems too low!
Param 30 (Locus 6): Upper prior boundary seems too low!
Param 40 (Locus 6): Upper prior boundary seems too low!
Param 50 (Locus 6): Upper prior boundary seems too low!

Param 61 (Locus 6): Upper prior boundary seems too low!
Param 80 (Locus 6): Upper prior boundary seems too low!
Param 100 (Locus 6): Upper prior boundary seems too low!
Param 20 (Locus 7): Upper prior boundary seems too low!
Param 40 (Locus 7): Upper prior boundary seems too low!
Param 61 (Locus 7): Upper prior boundary seems too low!
Param 80 (Locus 7): Upper prior boundary seems too low!
Param 21 (Locus 8): Upper prior boundary seems too low!
Param 40 (Locus 8): Upper prior boundary seems too low!
Param 50 (Locus 8): Upper prior boundary seems too low!
Param 71 (Locus 8): Upper prior boundary seems too low!
Param 80 (Locus 8): Upper prior boundary seems too low!
Param 81 (Locus 8): Upper prior boundary seems too low!
Param 100 (Locus 8): Upper prior boundary seems too low!
Param 40 (Locus 9): Upper prior boundary seems too low!
Param 80 (Locus 9): Upper prior boundary seems too low!
Param 91 (Locus 9): Upper prior boundary seems too low!
Param 40 (Locus 10): Upper prior boundary seems too low!
Param 50 (Locus 10): Upper prior boundary seems too low!
Param 71 (Locus 10): Upper prior boundary seems too low!
Param 90 (Locus 10): Upper prior boundary seems too low!
Param 40 (all loci): Upper prior boundary seems too low!

Summary Assignment of Individuals to Populations

Individual	Population									
	1	2	3	4	5	6	7	8	9	10
?0BAG	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
?1BAB	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
?1BAG	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
?1BAI	0.000	0.868	0.000	0.132	0.000	0.000	0.000	0.000	0.000	0.000
?2BAA	0.000	0.062	0.938	0.000	0.000	0.000	0.000	0.000	0.000	0.000
?2BAG	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
?8BAC	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.696	0.304	0.000
?3BAA	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000
?3BAB	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000
?3BAH	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000
?4BAG	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000
?4BAD	0.000	0.000	0.000	0.001	0.999	0.000	0.000	0.000	0.000	0.000
?5BAD	0.000	0.000	0.000	0.000	0.000	0.993	0.006	0.001	0.000	0.000
?5BAI	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000
?0BAC	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
?9BAG	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.533	0.467
?6BAH	0.000	0.000	0.000	0.000	0.000	0.000	0.027	0.973	0.000	0.000
?6BAJ	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
?6BAF	0.000	0.000	0.000	0.000	0.000	0.015	0.985	0.000	0.000	0.000
?7BAB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000
?7BAJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000
?7BAG	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000
?8BAH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.027	0.973	0.000
?8BAF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000
?4BAJ	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000
?2BAH	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
?9BAA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000
?9BAJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000
?0BAH	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
?5BAG	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000

Detailed Assignment of Individuals to Populations

Individual	Locus	Population 1	2	3	4	5	6	7	8	9	10
?0BAG	1	0.412	0.227	0.145	0.216	0.001	0.000	0.000	0.000	0.000	0.000
?0BAG	2	0.887	0.101	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000
?0BAG	3	0.903	0.097	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
?0BAG	4	0.809	0.173	0.006	0.000	0.012	0.000	0.000	0.000	0.000	0.000
?0BAG	5	0.894	0.092	0.014	0.001	0.000	0.000	0.000	0.000	0.000	0.000
?0BAG	6	0.810	0.096	0.094	0.000	0.000	0.000	0.000	0.000	0.000	0.000
?0BAG	7	0.912	0.079	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000
?0BAG	8	0.939	0.056	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000
?0BAG	9	0.172	0.773	0.055	0.000	0.000	0.000	0.000	0.000	0.000	0.000
?0BAG	10	0.905	0.087	0.003	0.001	0.003	0.000	0.000	0.000	0.001	0.000
?0BAG	All	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
?1BAB	1	0.089	0.844	0.066	0.000	0.000	0.000	0.000	0.000	0.000	0.000
?1BAB	2	0.007	0.223	0.652	0.114	0.004	0.000	0.000	0.000	0.000	0.000
?1BAB	3	0.012	0.781	0.148	0.050	0.007	0.000	0.001	0.000	0.000	0.000
?1BAB	4	0.512	0.346	0.098	0.006	0.020	0.017	0.000	0.000	0.000	0.000
?1BAB	5	0.168	0.777	0.055	0.000	0.000	0.000	0.000	0.000	0.000	0.000
?1BAB	6	0.918	0.076	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000
?1BAB	7	0.119	0.858	0.018	0.004	0.001	0.000	0.000	0.000	0.000	0.000
?1BAB	8	0.031	0.862	0.098	0.008	0.000	0.000	0.000	0.000	0.000	0.000
?1BAB	9	0.862	0.104	0.025	0.009	0.000	0.000	0.000	0.000	0.000	0.000
?1BAB	10	0.107	0.682	0.150	0.035	0.025	0.001	0.000	0.000	0.000	0.000
?1BAB	All	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
?1BAG	1	0.112	0.218	0.537	0.127	0.007	0.000	0.000	0.000	0.000	0.000
?1BAG	2	0.301	0.681	0.016	0.001	0.002	0.000	0.000	0.000	0.000	0.000
?1BAG	3	0.143	0.498	0.127	0.176	0.051	0.000	0.006	0.000	0.000	0.000
?1BAG	4	0.012	0.098	0.464	0.350	0.073	0.004	0.000	0.000	0.000	0.000
?1BAG	5	0.091	0.697	0.169	0.040	0.003	0.000	0.000	0.000	0.000	0.000
?1BAG	6	0.317	0.418	0.236	0.027	0.002	0.000	0.000	0.000	0.000	0.000
?1BAG	7	0.046	0.894	0.059	0.000	0.000	0.000	0.000	0.000	0.000	0.000
?1BAG	8	0.013	0.499	0.155	0.110	0.220	0.003	0.000	0.000	0.000	0.000
?1BAG	9	0.688	0.194	0.078	0.036	0.004	0.000	0.000	0.000	0.000	0.000
?1BAG	10	0.042	0.931	0.027	0.000	0.000	0.000	0.000	0.000	0.000	0.000
?1BAG	All	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
?1BAI	1	0.416	0.120	0.182	0.241	0.031	0.003	0.006	0.003	0.000	0.000
?1BAI	2	0.014	0.264	0.551	0.164	0.007	0.000	0.000	0.000	0.000	0.000
?1BAI	3	0.893	0.098	0.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000

Individual	Locus	Population 1	2	3	4	5	6	7	8	9	10
?1BAI	4	0.053	0.456	0.349	0.068	0.074	0.000	0.000	0.000	0.000	0.000
?1BAI	5	0.015	0.170	0.509	0.274	0.029	0.004	0.000	0.000	0.000	0.000
?1BAI	6	0.240	0.359	0.333	0.048	0.019	0.000	0.000	0.000	0.000	0.000
?1BAI	7	0.004	0.062	0.645	0.243	0.045	0.001	0.000	0.000	0.000	0.000
?1BAI	8	0.012	0.263	0.176	0.472	0.077	0.001	0.000	0.000	0.000	0.000
?1BAI	9	0.001	0.037	0.220	0.556	0.186	0.000	0.000	0.000	0.000	0.000
?1BAI	10	0.043	0.328	0.152	0.123	0.347	0.007	0.000	0.000	0.000	0.000
?1BAI	All	0.000	0.868	0.000	0.132	0.000	0.000	0.000	0.000	0.000	0.000
?2BAA	1	0.003	0.027	0.904	0.067	0.000	0.000	0.000	0.000	0.000	0.000
?2BAA	2	0.000	0.004	0.010	0.345	0.608	0.033	0.000	0.000	0.000	0.000
?2BAA	3	0.016	0.238	0.198	0.429	0.113	0.000	0.006	0.000	0.000	0.000
?2BAA	4	0.187	0.233	0.339	0.115	0.119	0.007	0.000	0.000	0.000	0.000
?2BAA	5	0.021	0.057	0.896	0.025	0.000	0.002	0.000	0.000	0.000	0.000
?2BAA	6	0.125	0.403	0.433	0.036	0.001	0.002	0.000	0.000	0.000	0.000
?2BAA	7	0.660	0.282	0.041	0.016	0.000	0.000	0.000	0.000	0.000	0.000
?2BAA	8	0.029	0.836	0.101	0.034	0.000	0.000	0.000	0.000	0.000	0.000
?2BAA	9	0.045	0.885	0.062	0.008	0.000	0.000	0.000	0.000	0.000	0.000
?2BAA	10	0.000	0.109	0.840	0.038	0.012	0.000	0.000	0.000	0.000	0.000
?2BAA	All	0.000	0.062	0.938	0.000	0.000	0.000	0.000	0.000	0.000	0.000
?2BAG	1	0.109	0.237	0.522	0.127	0.004	0.000	0.000	0.000	0.000	0.000
?2BAG	2	0.004	0.188	0.718	0.086	0.005	0.000	0.000	0.000	0.000	0.000
?2BAG	3	0.028	0.308	0.545	0.105	0.015	0.000	0.000	0.000	0.000	0.000
?2BAG	4	0.000	0.060	0.724	0.120	0.091	0.005	0.000	0.000	0.000	0.000
?2BAG	5	0.004	0.091	0.886	0.015	0.004	0.000	0.000	0.000	0.000	0.000
?2BAG	6	0.286	0.407	0.266	0.037	0.003	0.001	0.000	0.000	0.000	0.000
?2BAG	7	0.003	0.062	0.639	0.263	0.033	0.000	0.000	0.000	0.000	0.000
?2BAG	8	0.003	0.033	0.565	0.355	0.043	0.000	0.000	0.000	0.000	0.000
?2BAG	9	0.002	0.029	0.619	0.297	0.053	0.000	0.000	0.000	0.000	0.000
?2BAG	10	0.130	0.621	0.161	0.050	0.034	0.005	0.000	0.000	0.000	0.000
?2BAG	All	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
?8BAC	1	0.000	0.000	0.001	0.000	0.003	0.019	0.704	0.256	0.016	0.000
?8BAC	2	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.003	0.206	0.791
?8BAC	3	0.000	0.010	0.000	0.000	0.000	0.000	0.001	0.007	0.091	0.891
?8BAC	4	0.000	0.000	0.004	0.000	0.000	0.021	0.026	0.594	0.260	0.096
?8BAC	5	0.000	0.000	0.001	0.000	0.002	0.231	0.700	0.048	0.009	0.010
?8BAC	6	0.000	0.000	0.001	0.000	0.003	0.085	0.388	0.494	0.022	0.008
?8BAC	7	0.000	0.000	0.003	0.000	0.001	0.112	0.721	0.134	0.029	0.000
?8BAC	8	0.000	0.000	0.001	0.000	0.000	0.008	0.008	0.267	0.585	0.132
?8BAC	9	0.000	0.002	0.000	0.000	0.000	0.000	0.006	0.052	0.196	0.743
?8BAC	10	0.000	0.000	0.001	0.000	0.002	0.021	0.128	0.366	0.409	0.072
?8BAC	All	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.696	0.304	0.000
?3BAA	1	0.419	0.270	0.176	0.135	0.000	0.000	0.000	0.000	0.000	0.000

Individual	Locus	Population 1	2	3	4	5	6	7	8	9	10
?3BAA	2	0.001	0.061	0.028	0.513	0.229	0.116	0.052	0.000	0.000	0.000
?3BAA	3	0.000	0.002	0.009	0.064	0.860	0.062	0.003	0.000	0.000	0.000
?3BAA	4	0.219	0.177	0.361	0.134	0.107	0.002	0.000	0.000	0.000	0.000
?3BAA	5	0.011	0.042	0.286	0.623	0.036	0.002	0.000	0.000	0.000	0.000
?3BAA	6	0.000	0.011	0.231	0.186	0.390	0.168	0.015	0.000	0.000	0.000
?3BAA	7	0.029	0.929	0.027	0.013	0.000	0.001	0.000	0.000	0.000	0.000
?3BAA	8	0.006	0.004	0.059	0.382	0.548	0.000	0.000	0.000	0.000	0.000
?3BAA	9	0.002	0.007	0.199	0.678	0.083	0.030	0.000	0.000	0.000	0.000
?3BAA	10	0.012	0.082	0.180	0.628	0.096	0.001	0.000	0.000	0.000	0.000
?3BAA	All	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000
?3BAB	1	0.000	0.000	0.004	0.158	0.819	0.019	0.000	0.000	0.000	0.000
?3BAB	2	0.000	0.051	0.032	0.879	0.037	0.001	0.000	0.000	0.000	0.000
?3BAB	3	0.171	0.353	0.163	0.154	0.052	0.050	0.051	0.005	0.000	0.000
?3BAB	4	0.000	0.017	0.097	0.840	0.045	0.000	0.000	0.000	0.000	0.000
?3BAB	5	0.000	0.019	0.077	0.305	0.576	0.024	0.000	0.000	0.000	0.000
?3BAB	6	0.000	0.000	0.012	0.883	0.101	0.004	0.000	0.000	0.000	0.000
?3BAB	7	0.003	0.067	0.638	0.259	0.030	0.001	0.001	0.000	0.000	0.000
?3BAB	8	0.012	0.206	0.198	0.373	0.209	0.002	0.000	0.000	0.000	0.000
?3BAB	9	0.010	0.012	0.139	0.425	0.320	0.076	0.016	0.003	0.000	0.000
?3BAB	10	0.001	0.011	0.077	0.529	0.374	0.008	0.000	0.000	0.000	0.000
?3BAB	All	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000
?3BAH	1	0.290	0.038	0.134	0.387	0.044	0.002	0.058	0.002	0.002	0.043
?3BAH	2	0.008	0.030	0.105	0.788	0.055	0.013	0.000	0.000	0.000	0.000
?3BAH	3	0.005	0.027	0.060	0.857	0.052	0.000	0.000	0.000	0.000	0.000
?3BAH	4	0.000	0.002	0.054	0.907	0.033	0.004	0.000	0.000	0.000	0.000
?3BAH	5	0.054	0.094	0.107	0.225	0.193	0.141	0.174	0.001	0.013	0.000
?3BAH	6	0.254	0.017	0.149	0.358	0.106	0.115	0.000	0.000	0.000	0.000
?3BAH	7	0.008	0.024	0.093	0.811	0.060	0.004	0.000	0.000	0.000	0.000
?3BAH	8	0.000	0.233	0.161	0.512	0.093	0.000	0.000	0.000	0.000	0.000
?3BAH	9	0.000	0.000	0.002	0.060	0.905	0.033	0.000	0.000	0.000	0.000
?3BAH	10	0.007	0.051	0.440	0.456	0.046	0.000	0.000	0.000	0.000	0.000
?3BAH	All	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000
?4BAG	1	0.165	0.054	0.303	0.437	0.041	0.000	0.000	0.000	0.000	0.000
?4BAG	2	0.000	0.000	0.004	0.078	0.909	0.009	0.000	0.000	0.000	0.000
?4BAG	3	0.000	0.000	0.001	0.036	0.933	0.016	0.013	0.000	0.000	0.000
?4BAG	4	0.000	0.011	0.007	0.041	0.806	0.132	0.004	0.000	0.000	0.000
?4BAG	5	0.000	0.005	0.029	0.489	0.453	0.022	0.002	0.000	0.000	0.000
?4BAG	6	0.000	0.007	0.274	0.132	0.409	0.178	0.000	0.000	0.000	0.000
?4BAG	7	0.005	0.000	0.000	0.057	0.903	0.036	0.000	0.000	0.000	0.000
?4BAG	8	0.002	0.033	0.031	0.176	0.739	0.017	0.002	0.000	0.000	0.000
?4BAG	9	0.000	0.006	0.017	0.068	0.852	0.058	0.000	0.000	0.000	0.000
?4BAG	10	0.041	0.136	0.171	0.561	0.088	0.003	0.000	0.000	0.000	0.000

| Individual | Locus | Population | | | | | | | | | |
		1	2	3	4	5	6	7	8	9	10
?4BAG	All	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000
?4BAD	1	0.000	0.003	0.025	0.471	0.455	0.031	0.011	0.004	0.000	0.000
?4BAD	2	0.001	0.037	0.083	0.816	0.055	0.006	0.001	0.000	0.000	0.000
?4BAD	3	0.000	0.007	0.009	0.062	0.880	0.036	0.005	0.000	0.000	0.000
?4BAD	4	0.019	0.390	0.261	0.110	0.187	0.033	0.000	0.000	0.000	0.000
?4BAD	5	0.001	0.033	0.079	0.304	0.550	0.032	0.000	0.000	0.000	0.000
?4BAD	6	0.001	0.008	0.133	0.608	0.242	0.009	0.000	0.000	0.000	0.000
?4BAD	7	0.000	0.000	0.000	0.069	0.922	0.009	0.000	0.000	0.000	0.000
?4BAD	8	0.000	0.000	0.000	0.008	0.125	0.197	0.172	0.179	0.113	0.206
?4BAD	9	0.000	0.000	0.021	0.096	0.861	0.019	0.003	0.000	0.000	0.000
?4BAD	10	0.002	0.012	0.108	0.504	0.373	0.001	0.000	0.000	0.000	0.000
?4BAD	All	0.000	0.000	0.000	0.001	0.999	0.000	0.000	0.000	0.000	0.000
?5BAD	1	0.000	0.000	0.000	0.000	0.007	0.310	0.054	0.032	0.279	0.317
?5BAD	2	0.000	0.000	0.000	0.000	0.000	0.036	0.199	0.377	0.361	0.027
?5BAD	3	0.000	0.000	0.000	0.000	0.005	0.871	0.060	0.062	0.002	0.000
?5BAD	4	0.000	0.000	0.000	0.000	0.020	0.575	0.303	0.078	0.025	0.000
?5BAD	5	0.000	0.000	0.000	0.000	0.000	0.001	0.088	0.729	0.137	0.046
?5BAD	6	0.000	0.000	0.002	0.000	0.039	0.127	0.359	0.364	0.008	0.101
?5BAD	7	0.000	0.000	0.000	0.000	0.026	0.572	0.088	0.266	0.047	0.001
?5BAD	8	0.000	0.000	0.000	0.009	0.167	0.689	0.081	0.048	0.005	0.000
?5BAD	9	0.000	0.000	0.000	0.000	0.100	0.878	0.020	0.001	0.000	0.000
?5BAD	10	0.000	0.000	0.000	0.006	0.023	0.209	0.336	0.101	0.287	0.038
?5BAD	All	0.000	0.000	0.000	0.000	0.000	0.993	0.006	0.001	0.000	0.000
?5BAI	1	0.000	0.000	0.000	0.006	0.033	0.345	0.518	0.090	0.008	0.000
?5BAI	2	0.000	0.000	0.000	0.001	0.017	0.910	0.040	0.014	0.016	0.003
?5BAI	3	0.000	0.000	0.000	0.000	0.019	0.749	0.226	0.005	0.000	0.000
?5BAI	4	0.000	0.000	0.004	0.023	0.161	0.696	0.072	0.032	0.009	0.005
?5BAI	5	0.000	0.000	0.007	0.033	0.030	0.876	0.054	0.001	0.000	0.000
?5BAI	6	0.000	0.000	0.000	0.000	0.022	0.453	0.336	0.188	0.000	0.001
?5BAI	7	0.000	0.000	0.000	0.000	0.021	0.668	0.209	0.088	0.012	0.002
?5BAI	8	0.000	0.000	0.000	0.001	0.000	0.996	0.003	0.000	0.000	0.000
?5BAI	9	0.000	0.000	0.000	0.000	0.012	0.348	0.328	0.301	0.011	0.000
?5BAI	10	0.000	0.000	0.000	0.014	0.165	0.348	0.417	0.010	0.024	0.024
?5BAI	All	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000
?0BAC	1	0.897	0.094	0.000	0.001	0.006	0.002	0.000	0.000	0.000	0.000
?0BAC	2	0.102	0.354	0.088	0.372	0.056	0.006	0.024	0.000	0.000	0.000
?0BAC	3	0.772	0.192	0.001	0.017	0.013	0.004	0.000	0.002	0.000	0.000
?0BAC	4	0.790	0.175	0.009	0.009	0.003	0.009	0.000	0.005	0.000	0.000
?0BAC	5	0.019	0.130	0.439	0.338	0.070	0.001	0.003	0.000	0.000	0.000
?0BAC	6	0.212	0.290	0.376	0.091	0.019	0.009	0.000	0.003	0.000	0.000
?0BAC	7	0.875	0.108	0.012	0.000	0.005	0.001	0.000	0.000	0.000	0.000
?0BAC	8	0.945	0.046	0.005	0.000	0.002	0.002	0.000	0.000	0.000	0.000

Individual	Locus	Population 1	2	3	4	5	6	7	8	9	10
?0BAC	9	0.231	0.306	0.271	0.158	0.032	0.002	0.000	0.000	0.000	0.000
?0BAC	10	0.894	0.083	0.011	0.006	0.000	0.004	0.000	0.002	0.000	0.000
?0BAC	All	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
?9BAG	1	0.000	0.000	0.000	0.001	0.005	0.333	0.051	0.048	0.269	0.294
?9BAG	2	0.000	0.000	0.000	0.000	0.000	0.007	0.003	0.020	0.879	0.091
?9BAG	3	0.000	0.000	0.000	0.000	0.003	0.070	0.426	0.196	0.262	0.044
?9BAG	4	0.000	0.000	0.000	0.000	0.022	0.262	0.166	0.269	0.165	0.117
?9BAG	5	0.000	0.000	0.000	0.000	0.000	0.002	0.018	0.142	0.540	0.298
?9BAG	6	0.000	0.000	0.000	0.000	0.000	0.012	0.024	0.133	0.233	0.598
?9BAG	7	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.029	0.403	0.565
?9BAG	8	0.000	0.000	0.000	0.000	0.003	0.010	0.008	0.014	0.067	0.897
?9BAG	9	0.000	0.000	0.000	0.000	0.011	0.159	0.258	0.502	0.049	0.021
?9BAG	10	0.000	0.000	0.000	0.000	0.002	0.005	0.002	0.002	0.148	0.842
?9BAG	All	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.533	0.467
?6BAH	1	0.000	0.000	0.000	0.000	0.012	0.314	0.043	0.045	0.300	0.286
?6BAH	2	0.000	0.000	0.000	0.000	0.000	0.011	0.181	0.652	0.143	0.011
?6BAH	3	0.000	0.007	0.000	0.000	0.000	0.846	0.078	0.039	0.030	0.000
?6BAH	4	0.000	0.000	0.000	0.000	0.005	0.037	0.887	0.053	0.000	0.019
?6BAH	5	0.000	0.000	0.000	0.000	0.000	0.015	0.094	0.690	0.162	0.039
?6BAH	6	0.000	0.000	0.000	0.002	0.000	0.031	0.655	0.280	0.018	0.014
?6BAH	7	0.000	0.000	0.000	0.000	0.013	0.010	0.054	0.811	0.093	0.019
?6BAH	8	0.000	0.000	0.000	0.000	0.005	0.008	0.234	0.397	0.304	0.052
?6BAH	9	0.000	0.000	0.000	0.014	0.064	0.841	0.054	0.027	0.000	0.000
?6BAH	10	0.000	0.000	0.000	0.000	0.008	0.017	0.099	0.787	0.088	0.000
?6BAH	All	0.000	0.000	0.000	0.000	0.000	0.000	0.027	0.973	0.000	0.000
?6BAJ	1	0.000	0.000	0.000	0.001	0.017	0.663	0.285	0.034	0.000	0.000
?6BAJ	2	0.000	0.000	0.000	0.000	0.000	0.072	0.334	0.242	0.281	0.070
?6BAJ	3	0.000	0.006	0.000	0.000	0.032	0.390	0.462	0.107	0.000	0.002
?6BAJ	4	0.000	0.000	0.000	0.000	0.001	0.096	0.832	0.066	0.002	0.003
?6BAJ	5	0.000	0.000	0.000	0.001	0.013	0.183	0.723	0.070	0.001	0.010
?6BAJ	6	0.000	0.000	0.000	0.000	0.007	0.121	0.298	0.513	0.044	0.017
?6BAJ	7	0.000	0.000	0.000	0.000	0.003	0.044	0.721	0.222	0.010	0.000
?6BAJ	8	0.000	0.000	0.003	0.000	0.000	0.019	0.447	0.479	0.041	0.011
?6BAJ	9	0.000	0.000	0.000	0.004	0.008	0.343	0.355	0.275	0.015	0.001
?6BAJ	10	0.000	0.000	0.000	0.000	0.011	0.508	0.204	0.088	0.147	0.044
?6BAJ	All	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
?6BAF	1	0.000	0.000	0.000	0.000	0.017	0.651	0.302	0.027	0.002	0.000
?6BAF	2	0.000	0.000	0.000	0.000	0.000	0.034	0.129	0.586	0.234	0.018
?6BAF	3	0.000	0.010	0.000	0.000	0.022	0.084	0.541	0.214	0.118	0.011
?6BAF	4	0.000	0.000	0.000	0.000	0.000	0.005	0.025	0.289	0.467	0.214
?6BAF	5	0.000	0.000	0.015	0.028	0.040	0.830	0.088	0.000	0.000	0.000
?6BAF	6	0.000	0.000	0.000	0.000	0.000	0.176	0.710	0.066	0.046	0.002

Individual	Locus	Population									
		1	2	3	4	5	6	7	8	9	10
?6BAF	7	0.000	0.000	0.000	0.000	0.000	0.056	0.678	0.236	0.031	0.000
?6BAF	8	0.000	0.000	0.000	0.000	0.075	0.888	0.030	0.003	0.003	0.001
?6BAF	9	0.000	0.000	0.000	0.000	0.000	0.019	0.439	0.470	0.072	0.000
?6BAF	10	0.000	0.000	0.000	0.000	0.025	0.747	0.208	0.007	0.013	0.000
?6BAF	All	0.000	0.000	0.000	0.000	0.000	0.015	0.985	0.000	0.000	0.000
?7BAB	1	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.013	0.904	0.078
?7BAB	2	0.000	0.000	0.000	0.000	0.000	0.014	0.170	0.652	0.152	0.013
?7BAB	3	0.000	0.006	0.000	0.006	0.020	0.369	0.205	0.372	0.020	0.002
?7BAB	4	0.000	0.000	0.000	0.000	0.005	0.104	0.094	0.399	0.195	0.202
?7BAB	5	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.101	0.666	0.226
?7BAB	6	0.000	0.000	0.000	0.000	0.000	0.002	0.024	0.108	0.569	0.297
?7BAB	7	0.000	0.000	0.000	0.000	0.003	0.050	0.127	0.585	0.187	0.048
?7BAB	8	0.000	0.000	0.000	0.000	0.000	0.000	0.012	0.942	0.041	0.005
?7BAB	9	0.000	0.000	0.000	0.003	0.012	0.369	0.310	0.293	0.009	0.004
?7BAB	10	0.000	0.000	0.000	0.000	0.000	0.000	0.045	0.917	0.038	0.000
?7BAB	All	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000
?7BAJ	1	0.000	0.000	0.000	0.002	0.021	0.641	0.298	0.038	0.001	0.000
?7BAJ	2	0.000	0.000	0.000	0.000	0.000	0.027	0.213	0.622	0.120	0.018
?7BAJ	3	0.000	0.000	0.000	0.000	0.000	0.000	0.055	0.925	0.020	0.000
?7BAJ	4	0.000	0.000	0.004	0.000	0.002	0.007	0.007	0.249	0.630	0.101
?7BAJ	5	0.000	0.000	0.000	0.000	0.000	0.001	0.061	0.864	0.069	0.005
?7BAJ	6	0.000	0.000	0.000	0.006	0.009	0.047	0.291	0.619	0.016	0.011
?7BAJ	7	0.000	0.000	0.000	0.000	0.000	0.015	0.021	0.245	0.650	0.069
?7BAJ	8	0.000	0.000	0.000	0.000	0.000	0.008	0.275	0.679	0.028	0.011
?7BAJ	9	0.000	0.000	0.000	0.000	0.003	0.010	0.073	0.873	0.040	0.001
?7BAJ	10	0.000	0.000	0.000	0.000	0.018	0.516	0.221	0.075	0.117	0.054
?7BAJ	All	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000
?7BAG	1	0.000	0.000	0.000	0.000	0.000	0.008	0.180	0.767	0.039	0.006
?7BAG	2	0.000	0.000	0.000	0.000	0.000	0.028	0.136	0.617	0.202	0.017
?7BAG	3	0.000	0.000	0.000	0.000	0.000	0.092	0.425	0.229	0.211	0.044
?7BAG	4	0.000	0.000	0.000	0.000	0.000	0.001	0.044	0.656	0.197	0.103
?7BAG	5	0.000	0.000	0.000	0.000	0.000	0.012	0.012	0.847	0.114	0.015
?7BAG	6	0.000	0.000	0.000	0.000	0.004	0.076	0.353	0.550	0.012	0.005
?7BAG	7	0.000	0.000	0.000	0.044	0.003	0.318	0.067	0.254	0.295	0.018
?7BAG	8	0.000	0.000	0.000	0.000	0.000	0.035	0.583	0.302	0.039	0.041
?7BAG	9	0.000	0.000	0.000	0.000	0.000	0.009	0.005	0.044	0.615	0.327
?7BAG	10	0.000	0.000	0.000	0.000	0.004	0.028	0.164	0.124	0.583	0.097
?7BAG	All	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000
?8BAH	1	0.000	0.000	0.000	0.001	0.010	0.301	0.062	0.060	0.290	0.276
?8BAH	2	0.000	0.000	0.000	0.000	0.000	0.036	0.316	0.392	0.217	0.039
?8BAH	3	0.000	0.000	0.000	0.000	0.009	0.107	0.245	0.601	0.025	0.011
?8BAH	4	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.112	0.867	0.018

Individual	Locus	Population									
		1	2	3	4	5	6	7	8	9	10
?8BAH	5	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.107	0.706	0.183
?8BAH	6	0.000	0.000	0.000	0.002	0.000	0.010	0.033	0.109	0.301	0.546
?8BAH	7	0.000	0.000	0.000	0.000	0.003	0.042	0.158	0.540	0.245	0.012
?8BAH	8	0.000	0.000	0.000	0.000	0.010	0.004	0.002	0.002	0.083	0.899
?8BAH	9	0.000	0.000	0.000	0.000	0.002	0.122	0.258	0.525	0.077	0.016
?8BAH	10	0.000	0.000	0.000	0.000	0.004	0.058	0.441	0.253	0.225	0.020
?8BAH	All	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.027	0.973	0.000
?8BAF	1	0.000	0.000	0.000	0.000	0.000	0.000	0.008	0.036	0.556	0.399
?8BAF	2	0.000	0.000	0.000	0.000	0.000	0.026	0.117	0.601	0.243	0.013
?8BAF	3	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.037	0.755	0.202
?8BAF	4	0.000	0.000	0.000	0.000	0.000	0.002	0.004	0.124	0.768	0.103
?8BAF	5	0.000	0.000	0.000	0.000	0.000	0.000	0.018	0.093	0.724	0.164
?8BAF	6	0.000	0.000	0.000	0.000	0.003	0.003	0.023	0.139	0.530	0.302
?8BAF	7	0.000	0.000	0.000	0.000	0.000	0.009	0.012	0.158	0.485	0.336
?8BAF	8	0.000	0.000	0.000	0.000	0.005	0.013	0.254	0.670	0.053	0.006
?8BAF	9	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.069	0.581	0.348
?8BAF	10	0.000	0.000	0.000	0.000	0.000	0.000	0.096	0.795	0.109	0.000
?8BAF	All	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000
?4BAJ	1	0.000	0.003	0.006	0.148	0.804	0.038	0.000	0.000	0.000	0.000
?4BAJ	2	0.000	0.001	0.008	0.294	0.674	0.020	0.001	0.000	0.002	0.000
?4BAJ	3	0.000	0.004	0.001	0.034	0.933	0.015	0.012	0.000	0.001	0.000
?4BAJ	4	0.000	0.004	0.009	0.048	0.911	0.025	0.000	0.000	0.003	0.000
?4BAJ	5	0.000	0.011	0.084	0.318	0.551	0.027	0.003	0.000	0.002	0.004
?4BAJ	6	0.001	0.000	0.019	0.048	0.775	0.150	0.004	0.000	0.002	0.000
?4BAJ	7	0.403	0.538	0.018	0.038	0.000	0.000	0.000	0.000	0.002	0.000
?4BAJ	8	0.035	0.526	0.130	0.101	0.199	0.003	0.000	0.000	0.005	0.000
?4BAJ	9	0.003	0.000	0.005	0.048	0.894	0.049	0.000	0.000	0.001	0.000
?4BAJ	10	0.034	0.369	0.176	0.113	0.296	0.007	0.000	0.001	0.005	0.000
?4BAJ	All	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000
?2BAH	1	0.448	0.316	0.135	0.077	0.007	0.001	0.012	0.000	0.004	0.000
?2BAH	2	0.002	0.069	0.890	0.038	0.000	0.000	0.000	0.000	0.000	0.001
?2BAH	3	0.274	0.412	0.102	0.190	0.020	0.000	0.001	0.000	0.000	0.000
?2BAH	4	0.024	0.047	0.547	0.284	0.091	0.006	0.000	0.000	0.000	0.001
?2BAH	5	0.068	0.081	0.170	0.248	0.106	0.138	0.174	0.010	0.000	0.005
?2BAH	6	0.258	0.001	0.112	0.472	0.042	0.113	0.001	0.000	0.000	0.002
?2BAH	7	0.003	0.060	0.625	0.275	0.035	0.001	0.001	0.000	0.000	0.000
?2BAH	8	0.930	0.048	0.014	0.001	0.001	0.000	0.005	0.000	0.000	0.002
?2BAH	9	0.000	0.019	0.877	0.103	0.000	0.000	0.000	0.001	0.000	0.000
?2BAH	10	0.009	0.077	0.832	0.051	0.028	0.000	0.000	0.000	0.000	0.003
?2BAH	All	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
?9BAA	1	0.000	0.000	0.000	0.001	0.002	0.308	0.044	0.033	0.315	0.296
?9BAA	2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.066	0.932

Individual	Locus	Population 1	2	3	4	5	6	7	8	9	10
?9BAA	3	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.002	0.113	0.882
?9BAA	4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008	0.137	0.855
?9BAA	5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.039	0.253	0.708
?9BAA	6	0.000	0.000	0.000	0.000	0.002	0.001	0.001	0.065	0.664	0.266
?9BAA	7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.105	0.891
?9BAA	8	0.000	0.000	0.000	0.000	0.000	0.011	0.009	0.014	0.044	0.922
?9BAA	9	0.000	0.000	0.000	0.000	0.000	0.002	0.004	0.027	0.328	0.640
?9BAA	10	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.002	0.091	0.904
?9BAA	All	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000
?9BAJ	1	0.000	0.000	0.000	0.000	0.000	0.000	0.009	0.012	0.092	0.887
?9BAJ	2	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.055	0.943
?9BAJ	3	0.000	0.000	0.000	0.000	0.000	0.001	0.007	0.014	0.094	0.884
?9BAJ	4	0.000	0.000	0.000	0.000	0.000	0.000	0.039	0.678	0.173	0.110
?9BAJ	5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008	0.296	0.696
?9BAJ	6	0.000	0.000	0.000	0.000	0.000	0.001	0.019	0.113	0.558	0.308
?9BAJ	7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.030	0.193	0.778
?9BAJ	8	0.000	0.000	0.000	0.000	0.000	0.008	0.170	0.063	0.440	0.318
?9BAJ	9	0.000	0.000	0.000	0.000	0.000	0.000	0.012	0.036	0.242	0.711
?9BAJ	10	0.000	0.000	0.000	0.000	0.000	0.000	0.016	0.004	0.361	0.620
?9BAJ	All	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000
?0BAH	1	0.930	0.058	0.002	0.009	0.000	0.000	0.000	0.000	0.000	0.000
?0BAH	2	0.118	0.237	0.043	0.499	0.042	0.055	0.000	0.000	0.000	0.006
?0BAH	3	0.119	0.371	0.217	0.152	0.033	0.022	0.071	0.011	0.000	0.004
?0BAH	4	0.685	0.262	0.018	0.014	0.009	0.000	0.011	0.000	0.000	0.001
?0BAH	5	0.718	0.248	0.030	0.001	0.000	0.000	0.000	0.000	0.000	0.002
?0BAH	6	0.943	0.048	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000
?0BAH	7	0.627	0.305	0.048	0.018	0.000	0.000	0.000	0.000	0.000	0.001
?0BAH	8	0.008	0.197	0.736	0.047	0.009	0.000	0.000	0.001	0.000	0.003
?0BAH	9	0.896	0.089	0.013	0.001	0.000	0.000	0.000	0.000	0.000	0.002
?0BAH	10	0.958	0.033	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.007
?0BAH	All	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
?5BAG	1	0.000	0.000	0.000	0.004	0.020	0.659	0.290	0.023	0.004	0.001
?5BAG	2	0.000	0.000	0.000	0.000	0.000	0.029	0.144	0.618	0.197	0.011
?5BAG	3	0.000	0.000	0.000	0.000	0.011	0.131	0.206	0.584	0.049	0.019
?5BAG	4	0.000	0.000	0.000	0.000	0.009	0.907	0.052	0.023	0.004	0.006
?5BAG	5	0.000	0.000	0.000	0.000	0.005	0.957	0.028	0.000	0.000	0.010
?5BAG	6	0.000	0.000	0.000	0.000	0.047	0.451	0.397	0.090	0.005	0.009
?5BAG	7	0.000	0.000	0.000	0.000	0.019	0.689	0.193	0.085	0.010	0.005
?5BAG	8	0.000	0.000	0.000	0.000	0.144	0.764	0.074	0.011	0.000	0.007
?5BAG	9	0.000	0.000	0.000	0.002	0.017	0.354	0.371	0.246	0.007	0.005
?5BAG	10	0.000	0.000	0.000	0.000	0.023	0.886	0.073	0.009	0.004	0.006
?5BAG	All	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000

Individual	Locus	Population									
		1	2	3	4	5	6	7	8	9	10