

Results from GENEPOP
 Sun Dec 30 17:04:09 AWST 2018

Genepop version 4.2, Genotypic linkage disequilibrium

File: 170409 (Title line:"10.pop.3D.GenPop")

Number of populations detected : 10

Number of loci detected : 8

Markov chain parameters

Dememorisation : 1000

Batches : 100

Iterations per batch : 1000

Orig.line no. S.E.	Pop	Locus#1	Locus#2	P-Value
191	Mog.08	SSaD170 STR73INR	0.00736 0.002697	5904 1
177	Mog.08	SSaD190 SSaD85	0.00956 0.005462	2580 2
188	Mog.08	SSaD85 SSa85	0.00973 0.003342	6704 3
195	Mog.08	Brun13 STR73INR	0.0125 0.004749	5706 4
196	Mog.08	SSa85 STR73INR	0.05573 0.006066	16533
174	Mog.08	SSaD190 SSaD71	0.05791 0.019258	1484 6
185	Mog.08	SSaD170 SSa85	0.07031 0.015362	4234 7
171	Mog.08	SSaD170 SSaD190	0.08667 0.022405	1418 8
193	Mog.08	SSaD71 STR73INR	0.18885 0.020208	6106
194	Mog.08	SSaD85 STR73INR	0.31614 0.020226	9414
184	Mog.08	SSa197 SSa85	0.36296 0.019728	7662 11
178	Mog.08	SSaD71 SSaD85	0.38348 0.039284	1801 12
172	Mog.08	SSa197 SSaD71	0.38521 0.037419	2049 13
189	Mog.08	Brun13 SSa85	0.39554 0.02809	4003 14
182	Mog.08	SSaD71 Brun13	0.42634 0.043318	796 15
173	Mog.08	SSaD170 SSaD71	0.43288 0.043488	889 16
176	Mog.08	SSaD170 SSaD85	0.43406 0.040573	1726 17
170	Mog.08	SSa197 SSaD190	0.47872 0.035138	2923 18
181	Mog.08	SSaD190 Brun13	0.52211 0.039695	1272 19
169	Mog.08	SSa197 SSaD170	0.52464 0.036953	2055 20
190	Mog.08	SSa197 STR73INR	0.56781 0.016522	10644
186	Mog.08	SSaD190 SSa85	0.58105 0.025618	5520 22
175	Mog.08	SSa197 SSaD85	0.59875 0.030016	3612 23
180	Mog.08	SSaD170 Brun13	0.61267 0.043821	788 24
183	Mog.08	SSaD85 Brun13	0.70902 0.035522	1614 25
187	Mog.08	SSaD71 SSa85	0.77424 0.022436	4379 26
192	Mog.08	SSaD190 STR73INR	0.91961 0.010407	7659
179	Mog.08	SSa197 Brun13	0.93347 0.018296	1905 28

nr	Pop	Locus#1	Locus#2	P-Value	S.E.	Switches	LD	
146	Sag.08	SSaD190	SSaD71	0	0	1770 1	1	
153	Sag.08	SSaD190	Brun13	0	0	1673 2	2	
143	Sag.08	SSaD170	SSaD190	0.00049	0.00049	1394 3	3	
168	Sag.08	SSa85	STR73INR		0.00214	0.001122	10533	4
4								
155	Sag.08	SSaD85	Brun13	0.00721	0.003844	1805	5	5
150	Sag.08	SSaD71	SSaD85	0.0156	0.005208	1875	6	6
152	Sag.08	SSaD170	Brun13	0.02071	0.009687	1360	7	7
161	Sag.08	Brun13	SSa85	0.02236	0.011202	2585	8	8
149	Sag.08	SSaD190	SSaD85	0.03907	0.015438	1888	9	9
154	Sag.08	SSaD71	Brun13	0.06185	0.019635	1692		10
144	Sag.08	SSa197	SSaD71	0.08858	0.020455	1741		11
156	Sag.08	SSa197	SSa85	0.10689	0.021609	2675		12
151	Sag.08	SSa197	Brun13	0.14733	0.028803	1644		13
145	Sag.08	SSaD170	SSaD71	0.20146	0.032661	1414		14
147	Sag.08	SSa197	SSaD85	0.2314	0.03297	1797	15	
164	Sag.08	SSaD190	STR73INR		0.32198	0.022699	7774	
16								
162	Sag.08	SSa197	STR73INR		0.33922	0.023251	7679	
17								
158	Sag.08	SSaD190	SSa85	0.36931	0.034138	2574		18
167	Sag.08	Brun13	STR73INR		0.38149	0.022631	7788	
19								
165	Sag.08	SSaD71	STR73INR		0.42373	0.02477	7511	20
157	Sag.08	SSaD170	SSa85	0.43673	0.038277	2215		21
142	Sag.08	SSa197	SSaD190	0.45225	0.039276	1636		22
163	Sag.08	SSaD170	STR73INR		0.48756	0.024797	6827	
23								
166	Sag.08	SSaD85	STR73INR		0.52743	0.022116	8311	
24								
141	Sag.08	SSa197	SSaD170	0.58021	0.039465	1382		25
148	Sag.08	SSaD170	SSaD85	0.70979	0.037881	1492		26
159	Sag.08	SSaD71	SSa85	0.81764	0.024882	2716		27
160	Sag.08	SSaD85	SSa85	0.87168	0.021429	2913		28
199	Sag.11	SSaD170	SSaD190	0.0005	0.0005	1732 1	1	
209	Sag.11	SSaD190	Brun13	0.00575	0.00376	4142 2	2	
213	Sag.11	SSaD170	SSa85	0.00588	0.003342	3149 3	3	3
224	Sag.11	SSa85	STR73INR		0.01014	0.002131	16078	4
4								
221	Sag.11	SSaD71	STR73INR		0.01214	0.00349	15081	5
206	Sag.11	SSaD71	SSaD85	0.01843	0.008644	3917	6	6
202	Sag.11	SSaD190	SSaD71	0.02116	0.00608	5668 7	7	
212	Sag.11	SSa197	SSa85	0.0683	0.013815	5755		8
214	Sag.11	SSaD190	SSa85	0.07147	0.012082	6459		9
210	Sag.11	SSaD71	Brun13	0.07708	0.013472	5541		10
208	Sag.11	SSaD170	Brun13	0.08076	0.019658	1855		11
203	Sag.11	SSa197	SSaD85	0.09119	0.017061	2830		12
215	Sag.11	SSaD71	SSa85	0.09267	0.015236	8752		13
216	Sag.11	SSaD85	SSa85	0.17811	0.021952	4605		14
198	Sag.11	SSa197	SSaD190	0.19112	0.025126	3883		15
217	Sag.11	Brun13	SSa85	0.19667	0.019172	6631		16
207	Sag.11	SSa197	Brun13	0.31529	0.025432	3963		17
197	Sag.11	SSa197	SSaD170	0.33191	0.034299	1881		18

211	Sag.11	SSaD85	Brun13	0.34152	0.032571	2857		19
220	Sag.11	SSaD190	STR73INR		0.3565	0.019717	11865	
20								
223	Sag.11	Brun13	STR73INR		0.37973	0.017965	11782	
21								
204	Sag.11	SSaD170	SSaD85	0.40187	0.041081	1240		22
219	Sag.11	SSaD170	STR73INR		0.4535	0.028582	6421	
23								
218	Sag.11	SSa197	STR73INR		0.58284	0.018998	10094	
24								
200	Sag.11	SSa197	SSaD71	0.62958	0.026142	5075		25
205	Sag.11	SSaD190	SSaD85	0.64497	0.033916	2834		26
201	Sag.11	SSaD170	SSaD71	0.75345	0.030268	2504		27
222	Sag.11	SSaD85	STR73INR		0.85045	0.014389	9069	
28								
245	Sag.12	Brun13	SSa85	0.00846	0.003773	3643	1	1
237	Sag.12	SSaD190	Brun13	0.01403	0.006161	1890	2	2
228	Sag.12	SSa197	SSaD71	0.01419	0.004747	4284	3	3
248	Sag.12	SSaD190	STR73INR		0.023	0.005312	8152	4
4								
241	Sag.12	SSaD170	SSa85	0.03001	0.009582	3031	5	5
227	Sag.12	SSaD170	SSaD190	0.04432	0.01421	1470	6	
229	Sag.12	SSaD170	SSaD71	0.05385	0.018231	2007		7
242	Sag.12	SSaD190	SSa85	0.0761	0.015176	4619		8
235	Sag.12	SSa197	Brun13	0.12097	0.023001	2837		9
238	Sag.12	SSaD71	Brun13	0.12615	0.023689	2453		10
244	Sag.12	SSaD85	SSa85	0.13234	0.018788	3714		11
232	Sag.12	SSaD170	SSaD85	0.13341	0.028696	1076		12
226	Sag.12	SSa197	SSaD190	0.15944	0.022575	3798		13
234	Sag.12	SSaD71	SSaD85	0.16245	0.025764	2350		14
225	Sag.12	SSa197	SSaD170	0.18816	0.028158	2391		15
230	Sag.12	SSaD190	SSaD71	0.19764	0.027065	3073		16
236	Sag.12	SSaD170	Brun13	0.2183	0.032929	1183		17
233	Sag.12	SSaD190	SSaD85	0.23583	0.034313	1777		18
251	Sag.12	Brun13	STR73INR		0.35344	0.026149	6178	
19								
249	Sag.12	SSaD71	STR73INR		0.44972	0.022292	8961	
20								
247	Sag.12	SSaD170	STR73INR		0.4558	0.02548	5519	21
240	Sag.12	SSa197	SSa85	0.53413	0.024831	6163		22
243	Sag.12	SSaD71	SSa85	0.5628	0.026808	5224		23
252	Sag.12	SSa85	STR73INR		0.60493	0.016133	12569	
24								
231	Sag.12	SSa197	SSaD85	0.75365	0.028574	2787		25
246	Sag.12	SSa197	STR73INR		0.81665	0.014539	10113	
26								
239	Sag.12	SSaD85	Brun13	0.89592	0.022426	1362		27
250	Sag.12	SSaD85	STR73INR		0.93099	0.012051	6524	
28								
3	Sav.Rec.10		SSaD170	SSaD190	0	0	3886	1
4	Sav.Rec.10		SSa197	SSaD71	0	0	3949	2
5	Sav.Rec.10		SSaD170	SSaD71	0	0	2432	3
10	Sav.Rec.10		SSaD71	SSaD85	0	0	5218	4
17	Sav.Rec.10		SSaD170	SSa85	0	0	5065	5

23 6	Sav.Rec.10	SSaD170	STR73INR	0	0	5958	6
25 7	Sav.Rec.10	SSaD71	STR73INR	0	0	5440	7
7 9	Sav.Rec.10	SSa197	SSaD85	0.00146	0.000612	8625	9
28 10	Sav.Rec.10	SSa85	STR73INR	0.00153	0.000643		10223
8 11	Sav.Rec.10	SSaD170	SSaD85	0.00204	0.001179	5409	11
24 14	Sav.Rec.10	SSaD190	STR73INR	0.00507	0.00192	8310	14
19 16	Sav.Rec.10	SSaD71	SSa85	0.01268	0.004962	4996	16
12 17	Sav.Rec.10	SSaD170	Brun13	0.01473	0.007496	2186	17
14 19	Sav.Rec.10	SSaD71	Brun13	0.01901	0.007805	2250	19
13 21	Sav.Rec.10	SSaD190	Brun13	0.0212	0.007202	3495	21
6 23	Sav.Rec.10	SSaD190	SSaD71	0.02528	0.010769	3742	23
9 27	Sav.Rec.10	SSaD190	SSaD85	0.03474	0.006814	8131	27
22 32	Sav.Rec.10	SSa197	STR73INR	0.04166	0.006967		8524
16 33	Sav.Rec.10	SSa197	SSa85	0.04393	0.007525	7541	33
1 34	Sav.Rec.10	SSa197	SSaD170	0.05691	0.013793	3934	
2 36	Sav.Rec.10	SSa197	SSaD190	0.07118	0.009936	6058	
21 37	Sav.Rec.10	Brun13	SSa85	0.07892	0.012342	4867	
26 39	Sav.Rec.10	SSaD85	STR73INR	0.09476	0.007999		11533
18 41	Sav.Rec.10	SSaD190	SSa85	0.14909	0.013721	7444	
27 44	Sav.Rec.10	Brun13	STR73INR	0.22697	0.023052		5291
11 46	Sav.Rec.10	SSa197	Brun13	0.24738	0.023314	3675	
15 54	Sav.Rec.10	SSaD85	Brun13	0.54147	0.024159	5077	
20 55	Sav.Rec.10	SSaD85	SSa85	0.54572	0.014923	10392	
110 1	Hatch.09	SSaD85	STR73INR	0.0078	0.001923		14624
86 2	Hatch.09	SSa197	SSaD190	0.01176	0.003011	8246	2
103 3	Hatch.09	SSaD71	SSa85	0.01226	0.001731	18655	3
87 4	Hatch.09	SSaD170	SSaD190	0.01294	0.005996	4088	4

96 5	Hatch.09	SSaD170 Brun13	0.01687 0.009072	1775	5
93 6	Hatch.09	SSaD190 SSaD85	0.04277 0.009316	7386	6
92 7	Hatch.09	SSaD170 SSaD85	0.05287 0.008537	5903	
104 8	Hatch.09	SSaD85 SSa85	0.05656 0.004747	20713	
85 9	Hatch.09	SSa197 SSaD170	0.07202 0.011986	5316	
95 10	Hatch.09	SSa197 Brun13	0.07709 0.013474	3605	
112 11	Hatch.09	SSa85 STR73INR	0.07828 0.004481	22893	
97 12	Hatch.09	SSaD190 Brun13	0.08846 0.019743	2907	
109 13	Hatch.09	SSaD71 STR73INR	0.10961 0.009666	10837	
89 91	Hatch.09	SSaD170 SSaD71	0.11185 0.01613 4176	14	
15	Hatch.09	SSa197 SSaD85	0.1193 0.011882	10081	
106 16	Hatch.09	SSa197 STR73INR	0.1758 0.01053	14155	
100 17	Hatch.09	SSa197 SSa85	0.18262 0.006663	22254	
108 18	Hatch.09	SSaD190 STR73INR	0.22392 0.01329	10123	
107 19	Hatch.09	SSaD170 STR73INR	0.22721 0.015868	8949	
99 20	Hatch.09	SSaD85 Brun13	0.25066 0.025096	4424	
94 21	Hatch.09	SSaD71 SSaD85	0.3426 0.014797	8078	
88 22	Hatch.09	SSa197 SSaD71	0.37414 0.020299	7427	
102 23	Hatch.09	SSaD190 SSa85	0.47907 0.015728	14227	
101 24	Hatch.09	SSaD170 SSa85	0.52725 0.014706	12478	
90 25	Hatch.09	SSaD190 SSaD71	0.62999 0.023859	5193	
111 26	Hatch.09	Brun13 STR73INR	0.71942 0.020433	6592	
98 27	Hatch.09	SSaD71 Brun13	0.85044 0.020827	2906	
105 28	Hatch.09	Brun13 SSa85	0.8628 0.010408	11129	
57	Hatch.10	SSa197 SSaD170	0 0 3121	8	8
58 12	Hatch.10	SSa197 SSaD190	0.00205 0.001016	6419	12
79 13	Hatch.10	SSaD170 STR73INR	0.00458 0.001759	8278	
73 15	Hatch.10	SSaD170 SSa85	0.00716 0.002954	4621	15

64	Hatch.10	SSaD170	SSaD85	0.01645	0.009831	2045	18
18							
83	Hatch.10	Brun13	STR73INR		0.02045	0.003679	12338
20	20						
60	Hatch.10	SSa197	SSaD71	0.02146	0.004572	6223	22
22							
68	Hatch.10	SSaD170	Brun13	0.0321	0.013164	2441	24
24							
75	Hatch.10	SSaD71	SSa85	0.03223	0.005218	8000	25
25							
69	Hatch.10	SSaD190	Brun13	0.03427	0.007338	5583	26
26							
67	Hatch.10	SSa197	Brun13	0.03556	0.009556	4914	28
28							
72	Hatch.10	SSa197	SSa85	0.03627	0.007846	7802	29
29							
84	Hatch.10	SSa85	STR73INR		0.03791	0.004039	16785
30	30						
76	Hatch.10	SSaD85	SSa85	0.0395	0.006397	6021	31
31							
61	Hatch.10	SSaD170	SSaD71	0.07018	0.015379	3595	
35							
66	Hatch.10	SSaD71	SSaD85	0.08877	0.013124	4670	
38							
63	Hatch.10	SSa197	SSaD85	0.13347	0.016734	4212	
40							
77	Hatch.10	Brun13	SSa85	0.21167	0.018047	7130	
42							
65	Hatch.10	SSaD190	SSaD85	0.21307	0.020607	4587	
43							
82	Hatch.10	SSaD85	STR73INR		0.2293	0.016987	10272
	45						
62	Hatch.10	SSaD190	SSaD71	0.26486	0.018008	6630	
47							
70	Hatch.10	SSaD71	Brun13	0.27287	0.019618	5475	
48							
59	Hatch.10	SSaD170	SSaD190	0.33606	0.031973	3335	
49							
74	Hatch.10	SSaD190	SSa85	0.37293	0.017582	8491	
50							
71	Hatch.10	SSaD85	Brun13	0.44286	0.029981	3548	
51							
78	Hatch.10	SSa197	STR73INR		0.46158	0.01608	13496
52							
80	Hatch.10	SSaD190	STR73INR		0.52159	0.013382	14768
	53						
81	Hatch.10	SSaD71	STR73INR		0.88922	0.00719	13485
56							
260	Hatch.11	SSaD170	SSaD85	0	0	2446	1
262	Hatch.11	SSaD71	SSaD85	0	0	2688	2
263	Hatch.11	SSa197	Brun13	0	0	7042	3
264	Hatch.11	SSaD170	Brun13	0	0	2561	4
266	Hatch.11	SSaD71	Brun13	0	0	2676	5
267	Hatch.11	SSaD85	Brun13	0	0	3603	6

265 7	Hatch.11	SSaD190	Brun13	0.00207	0.000942		4609	7
271 8	Hatch.11	SSaD71	SSa85	0.00326	0.002282		8468	8
256 9	Hatch.11	SSa197	SSaD71	0.00428	0.002439		5601	9
253 10	Hatch.11	SSa197	SSaD170	0.00511	0.003039		5306	10
257 11	Hatch.11	SSaD170	SSaD71	0.02222	0.007915		1776	11
258 12	Hatch.11	SSaD190	SSaD71	0.02726	0.009207		3585	12
277 13	Hatch.11	SSaD71	STR73INR		0.04515	0.00732	10095	13
259	Hatch.11	SSa197	SSaD85	0.04742	0.00947	7250	14	14
273 15	Hatch.11	Brun13	SSa85	0.05667	0.009842		9306	
254 16	Hatch.11	SSa197	SSaD190	0.07138	0.010766		8536	
255 17	Hatch.11	SSaD170	SSaD190	0.11241	0.019166		3321	
272 18	Hatch.11	SSaD85	SSa85	0.16153	0.016632		9079	
274 19	Hatch.11	SSa197	STR73INR		0.18216	0.010636		18035
279 20	Hatch.11	Brun13	STR73INR		0.20299	0.014808		11058
269	Hatch.11	SSaD170	SSa85	0.27547	0.02578	7175		21
275 22	Hatch.11	SSaD170	STR73INR		0.37168	0.018262		9313
268 23	Hatch.11	SSa197	SSa85	0.38339	0.016703		16606	
261 24	Hatch.11	SSaD190	SSaD85	0.55826	0.031192		4524	
280 25	Hatch.11	SSa85	STR73INR		0.69958	0.00997	18187	
276 26	Hatch.11	SSaD190	STR73INR		0.70869	0.013719		14349
270 27	Hatch.11	SSaD190	SSa85	0.72036	0.016509		11091	
278 28	Hatch.11	SSaD85	STR73INR		0.79162	0.012421		11726
37	SavV.10	SSaD190	SSaD85	0	0	1001	1	1
52	SavV.10	SSaD190	STR73INR		0.00441	0.00227	6106	2
40	SavV.10	SSaD170	Brun13	0.05274	0.016672		664	3
48	SavV.10	SSaD85	SSa85	0.05769	0.014106		1932	4
32	SavV.10	SSa197	SSaD71	0.20561	0.033013		1376	5
41	SavV.10	SSaD190	Brun13	0.20612	0.034657		891	6
30	SavV.10	SSa197	SSaD190	0.23835	0.032739		1311	7
33	SavV.10	SSaD170	SSaD71	0.24305	0.039157		888	8
35	SavV.10	SSa197	SSaD85	0.27514	0.036721		1146	9
44	SavV.10	SSa197	SSa85	0.31708	0.030329		2300	10
45	SavV.10	SSaD170	SSa85	0.38258	0.035486		1529	11
29	SavV.10	SSa197	SSaD170	0.48736	0.041995		933	12

50	SavV.10	SSa197	STR73INR	0.48745	0.024648	6492	
13							
31	SavV.10	SSaD170	SSaD190	0.52005	0.045721	792	14
46	SavV.10	SSaD190	SSa85	0.52506	0.035042	2088	15
38	SavV.10	SSaD71	SSaD85	0.53337	0.042177	1161	16
39	SavV.10	SSa197	Brun13	0.54638	0.044076	1048	17
54	SavV.10	SSaD85	STR73INR	0.594	0.024113	5413	
18							
42	SavV.10	SSaD71	Brun13	0.65868	0.041243	1054	19
56	SavV.10	SSa85	STR73INR	0.70329	0.017022	9242	
20							
53	SavV.10	SSaD71	STR73INR	0.74612	0.019048	6768	
21							
36	SavV.10	SSaD170	SSaD85	0.78181	0.035539	742	22
51	SavV.10	SSaD170	STR73INR	0.81833	0.021009	4531	
23							
34	SavV.10	SSaD190	SSaD71	0.85566	0.028552	1201	24
55	SavV.10	Brun13	STR73INR	0.89894	0.012807	5498	
25							
49	SavV.10	Brun13	SSa85	0.93708	0.015403	1884	26
47	SavV.10	SSaD71	SSa85	0.94424	0.013394	2339	27
43	SavV.10	SSaD85	Brun13	1	0	795	28
137	SavV.91	SSaD71	STR73INR	0.01031	0.003885	6874	1
1							
121	SavV.91	SSaD190	SSaD85	0.05631	0.017845	1189	2
135	SavV.91	SSaD170	STR73INR	0.12198	0.016511	4738	
3							
128	SavV.91	SSa197	SSa85	0.13405	0.020907	3769	4
132	SavV.91	SSaD85	SSa85	0.25125	0.027241	2759	5
115	SavV.91	SSaD170	SSaD190	0.38203	0.040145	931	6
136	SavV.91	SSaD190	STR73INR	0.39349	0.023642	6777	
7							
123	SavV.91	SSa197	Brun13	0.4013	0.044542	946	8
140	SavV.91	SSa85	STR73INR	0.44531	0.015654	12169	
9							
119	SavV.91	SSa197	SSaD85	0.45301	0.043358	1247	10
129	SavV.91	SSaD170	SSa85	0.46027	0.034206	2463	11
118	SavV.91	SSaD190	SSaD71	0.47224	0.038455	1795	12
131	SavV.91	SSaD71	SSa85	0.48812	0.031715	4002	13
139	SavV.91	Brun13	STR73INR	0.54954	0.024441	4541	
14							
122	SavV.91	SSaD71	SSaD85	0.60593	0.035792	1347	15
127	SavV.91	SSaD85	Brun13	0.68607	0.041935	663	16
125	SavV.91	SSaD190	Brun13	0.71164	0.036468	977	17
113	SavV.91	SSa197	SSaD170	0.74038	0.035894	1122	18
124	SavV.91	SSaD170	Brun13	0.74105	0.040861	545	19
133	SavV.91	Brun13	SSa85	0.75076	0.032551	2346	20
134	SavV.91	SSa197	STR73INR	0.78554	0.016725	6818	
21							
126	SavV.91	SSaD71	Brun13	0.81166	0.034302	1077	22
117	SavV.91	SSaD170	SSaD71	0.92084	0.018208	1143	23
114	SavV.91	SSa197	SSaD190	0.92794	0.017434	1639	24
116	SavV.91	SSa197	SSaD71	0.95827	0.013803	1891	25
138	SavV.91	SSaD85	STR73INR	0.98489	0.003985	5052	

130	SavV.91	SSaD190	SSa85	0.99713	0.001699	3732	27
120	SavV.91	SSaD170	SSaD85	1	0	712	28

(Fisher's method)

Locus	pair	Chi2	df	P-Value		
SSa197 & SSa197 &	SSaD170 SSaD190	Infinity 44.890304	20 20	Highly sign. 0.001142		
SSaD170 & SSa197 & SSaD170 & SSaD190 & SSa197 &	SSaD190 SSaD71 SSaD71 SSaD71 SSaD85	Infinity Infinity Infinity Infinity 40.908989	20 20 20 20 20	Highly sign. Highly sign. Highly sign. Highly sign. 0.003827		
SSaD170 & SSaD190 & SSaD71 & SSa197 & SSaD170 & SSaD190 & SSaD71 & SSaD85 & SSa197 &	SSaD85 SSaD85 SSaD85 Brun13 Brun13 Brun13 Brun13 Brun13 SSa85	Infinity Infinity Infinity Infinity Infinity Infinity Infinity Infinity 37.63899	20 20 20 20 20 20 20 20 20	Highly sign. Highly sign. Highly sign. Highly sign. Highly sign. Highly sign. Highly sign. Highly sign. 0.009799		
SSaD170 & SSaD190 &	SSa85 SSa85	Infinity 22.707642	20 20	Highly sign. 0.303377		
SSaD71 &	SSa85	44.23069	20	0.001401		
SSaD85 & Brun13 &	SSa85 SSa85	42.568418 37.17681	20 20	0.00233 0.011144		
SSa197 &	STR73INRA		21.484011	20	0.369153	
SSaD170 &	STR73INRA		Infinity	20	Highly sign.	
SSaD190 &	STR73INRA		40.30685	20	0.004568	
SSaD71 &	STR73INRA		Infinity	20	Highly sign.	
SSaD85 &	STR73INRA		22.954689	20	0.291025	
Brun13 &	STR73INRA		30.711729	20	0.059113	
SSa85 &	STR73INRA		55.897665	20	0.00003	