

Summary statistics for Singlestep

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Analysis for singlestep claw in three chapters:

Chapter 1: SS stability between two runs (page 1-76)

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Chapter 3: Mendelian sampling (page 148-233)

Claw

SS stability between two runs

Comparison of singlestep GEBV for May23 evaluation and Feb23 evaluation. Standardized to base, which is 3-5 years old cows.

Column description:

BYR = birth year

Name = trait name

No = number of animals behind the statistics

Mean_noff = average number of offspring with phenotype

Std_noff = standard deviation of number of offspring with phenotype

Mean_ss = mean singlestep GEBV for May23

Mean_oss = mean singlestep GEBV for Feb23

Std_ss = standard deviation for singlestep GEBV for May23

Std_oss = standard deviation for singlestep GEBV for Feb23

Mean_dif = mean difference between GEBVs (diff = May23 – Feb23)

Std_dif = standard deviation for difference between GEBVs (diff = May23 – Feb23)

Corr_SS = correlation between GEBVs (May23 and Feb23)

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HOL summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2010	Dermatitis1	192	464	1478	97.5	97.6	11.1	11.1	-0.1	0.6	1.00
2	2011	Dermatitis1	155	292	614	99.5	99.6	13.2	13.3	-0.1	0.6	1.00
3	2012	Dermatitis1	170	433	783	99.8	99.9	11.7	11.7	-0.1	0.5	1.00
4	2013	Dermatitis1	151	463	863	100.3	100.4	11.7	11.7	-0.1	0.6	1.00
5	2014	Dermatitis1	113	713	859	100.2	100.3	14.0	14.0	-0.1	0.6	1.00
6	2015	Dermatitis1	82	1093	1340	104.6	104.6	12.6	12.6	0.0	0.6	1.00
7	2016	Dermatitis1	66	1077	1362	103.2	103.4	12.9	12.9	-0.2	1.0	1.00
8	2017	Dermatitis1	66	1026	1206	104.1	103.6	12.5	12.7	0.5	1.4	0.99
9	2018	Dermatitis1	51	572	791	106.3	106.5	13.7	12.7	-0.2	3.0	0.98
10	2010	Heel_horn_eros	189	298	937	96.9	97.0	10.6	10.5	-0.1	0.6	1.00
11	2011	Heel_horn_eros	154	189	387	97.7	97.8	11.3	11.4	-0.1	0.7	1.00
12	2012	Heel_horn_eros	169	264	476	99.5	99.5	10.7	10.7	0.0	0.6	1.00
13	2013	Heel_horn_eros	151	277	506	100.2	100.1	10.1	10.0	0.1	0.7	1.00
14	2014	Heel_horn_eros	111	404	486	101.0	101.0	11.5	11.6	0.0	0.8	1.00
15	2015	Heel_horn_eros	82	569	700	104.4	104.4	10.2	10.1	0.0	1.0	1.00
16	2016	Heel_horn_eros	65	570	722	103.0	103.0	9.0	8.9	0.0	1.5	0.99
17	2017	Heel_horn_eros	66	488	577	103.9	103.2	9.5	9.5	0.7	1.6	0.99
18	2018	Heel_horn_eros	39	277	348	105.2	105.2	10.3	9.2	0.0	2.5	0.97
19	2010	Sole_heamorrha	192	439	1398	96.5	96.6	10.4	10.3	-0.1	0.7	1.00
20	2011	Sole_heamorrha	155	276	567	98.2	98.3	10.1	10.2	-0.1	0.7	1.00
21	2012	Sole_heamorrha	169	404	726	99.9	99.8	10.4	10.3	0.0	0.7	1.00
22	2013	Sole_heamorrha	151	434	798	101.2	101.3	10.3	10.2	-0.1	0.7	1.00
23	2014	Sole_heamorrha	113	645	780	101.5	101.7	10.4	10.4	-0.2	0.8	1.00
24	2015	Sole_heamorrha	82	959	1170	103.4	103.5	9.5	9.4	-0.1	0.7	1.00
25	2016	Sole_heamorrha	66	924	1162	104.4	104.5	10.2	10.4	-0.1	1.2	0.99
26	2017	Sole_heamorrha	66	857	995	105.2	105.6	10.1	10.2	-0.3	2.1	0.98
27	2018	Sole_heamorrha	46	487	648	104.3	105.8	10.1	9.9	-1.4	3.6	0.94
28	2010	Sole_ulcer1	193	450	1439	97.3	97.3	10.1	10.1	0.0	0.6	1.00
29	2011	Sole_ulcer1	155	286	596	99.1	99.1	9.3	9.3	0.1	0.6	1.00
30	2012	Sole_ulcer1	170	421	760	101.9	101.9	9.3	9.2	0.0	0.5	1.00
31	2013	Sole_ulcer1	151	452	834	102.6	102.7	8.4	8.3	-0.1	0.6	1.00
32	2014	Sole_ulcer1	113	678	812	102.2	102.2	9.2	9.2	0.0	0.6	1.00
33	2015	Sole_ulcer1	82	1045	1277	103.9	103.8	10.3	10.1	0.0	0.8	1.00
34	2016	Sole_ulcer1	66	1034	1305	103.4	103.6	8.8	8.8	-0.2	1.1	0.99
35	2017	Sole_ulcer1	66	989	1161	105.3	105.2	9.0	8.9	0.1	1.8	0.98
36	2018	Sole_ulcer1	50	515	718	104.4	105.2	8.0	8.1	-0.8	3.1	0.93

HOL summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
37	2010	Cork_screw_cla	191	371	1186	98.7	98.6	12.8	12.9	0.1	0.7	1.00
38	2011	Cork_screw_cla	155	235	484	98.2	98.1	10.4	10.4	0.1	0.7	1.00
39	2012	Cork_screw_cla	169	351	641	100.2	100.1	12.8	12.7	0.1	0.8	1.00
40	2013	Cork_screw_cla	151	384	730	100.9	100.8	11.6	11.6	0.2	0.8	1.00
41	2014	Cork_screw_cla	112	580	694	100.4	100.3	11.5	11.5	0.1	0.7	1.00
42	2015	Cork_screw_cla	82	942	1148	103.7	103.6	11.8	11.7	0.1	1.0	1.00
43	2016	Cork_screw_cla	66	973	1226	99.3	99.3	13.1	13.0	0.0	1.4	0.99
44	2017	Cork_screw_cla	66	920	1077	103.5	103.4	10.8	10.8	0.1	2.1	0.98
45	2018	Cork_screw_cla	48	484	663	102.3	102.5	10.5	11.0	-0.2	3.1	0.96
46	2010	Skin_proferati	190	447	1416	96.8	96.9	10.7	10.7	-0.1	0.5	1.00
47	2011	Skin_proferati	155	280	583	96.3	96.6	12.5	12.5	-0.3	0.5	1.00
48	2012	Skin_proferati	169	412	743	98.1	98.3	11.0	10.9	-0.2	0.5	1.00
49	2013	Skin_proferati	151	440	816	98.7	98.8	10.2	10.3	-0.1	0.5	1.00
50	2014	Skin_proferati	113	661	795	99.7	99.8	12.6	12.6	-0.1	0.6	1.00
51	2015	Skin_proferati	82	1018	1246	103.7	103.8	10.6	10.6	-0.1	0.7	1.00
52	2016	Skin_proferati	66	1014	1277	103.9	104.1	9.0	9.1	-0.2	1.2	0.99
53	2017	Skin_proferati	66	967	1137	103.2	103.0	11.4	11.8	0.2	1.6	0.99
54	2018	Skin_proferati	47	538	716	104.7	105.5	10.0	9.8	-0.8	2.1	0.98
55	2010	White_line_dou	192	455	1449	93.4	93.6	11.2	11.2	-0.2	0.7	1.00
56	2011	White_line_dou	155	287	599	94.7	94.8	11.3	11.3	-0.1	0.7	1.00
57	2012	White_line_dou	170	424	764	98.6	98.7	11.6	11.5	0.0	0.8	1.00
58	2013	White_line_dou	151	456	841	102.3	102.4	9.8	9.7	-0.1	0.8	1.00
59	2014	White_line_dou	113	682	817	101.9	102.0	12.0	11.9	-0.1	0.9	1.00
60	2015	White_line_dou	82	1051	1284	106.8	106.6	11.5	11.4	0.2	1.2	0.99
61	2016	White_line_dou	66	1039	1312	102.9	102.9	13.8	13.6	0.0	1.4	0.99
62	2017	White_line_dou	66	997	1171	106.7	106.1	12.4	12.8	0.6	2.3	0.98
63	2018	White_line_dou	49	531	730	105.0	105.6	11.7	11.5	-0.6	3.0	0.97
64	2010	Dermatitis2	192	368	1177	98.8	98.8	11.2	11.2	0.0	0.6	1.00
65	2011	Dermatitis2	155	231	498	100.1	100.1	13.1	13.1	-0.1	0.6	1.00
66	2012	Dermatitis2	169	355	640	100.4	100.4	11.7	11.7	0.0	0.7	1.00
67	2013	Dermatitis2	151	375	672	100.0	100.1	11.9	11.9	-0.1	0.7	1.00
68	2014	Dermatitis2	113	591	715	99.8	99.8	14.1	14.1	0.0	0.6	1.00
69	2015	Dermatitis2	82	903	1118	104.0	104.0	12.2	12.2	0.0	0.7	1.00
70	2016	Dermatitis2	65	789	994	101.7	102.0	13.7	13.6	-0.2	1.3	1.00
71	2017	Dermatitis2	52	383	465	103.1	102.6	12.7	12.6	0.5	1.8	0.99
72	2010	Heel_horn_eros	181	235	726	97.6	97.6	10.6	10.6	0.0	0.7	1.00

HOL summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
73	2011	Heel_horn_eros	153	143	302	98.1	98.2	11.2	11.2	-0.1	0.7	1.00
74	2012	Heel_horn_eros	168	209	376	99.5	99.4	10.6	10.7	0.1	0.7	1.00
75	2013	Heel_horn_eros	150	213	367	100.0	99.8	9.8	9.7	0.2	0.7	1.00
76	2014	Heel_horn_eros	109	313	375	100.7	100.7	11.4	11.5	0.0	0.7	1.00
77	2015	Heel_horn_eros	82	460	566	103.6	103.6	9.5	9.6	0.0	0.9	1.00
78	2016	Heel_horn_eros	65	369	471	102.7	102.8	9.1	8.9	-0.2	1.6	0.99
79	2017	Heel_horn_eros	35	196	193	105.3	104.4	8.4	8.5	1.0	1.9	0.98
80	2010	Sole_heamorrha	192	346	1103	96.1	96.2	10.3	10.3	-0.1	0.6	1.00
81	2011	Sole_heamorrha	155	218	473	98.0	98.0	10.1	10.1	0.0	0.6	1.00
82	2012	Sole_heamorrha	169	334	600	100.0	100.1	10.4	10.4	0.0	0.6	1.00
83	2013	Sole_heamorrha	151	351	618	102.2	102.2	10.0	9.9	0.0	0.7	1.00
84	2014	Sole_heamorrha	113	531	644	101.9	102.0	10.1	10.1	-0.1	0.6	1.00
85	2015	Sole_heamorrha	82	808	996	104.4	104.4	10.1	9.9	0.1	0.8	1.00
86	2016	Sole_heamorrha	65	680	853	104.2	104.2	10.4	10.4	0.0	1.0	1.00
87	2017	Sole_heamorrha	50	317	375	105.8	105.9	10.4	10.6	-0.1	1.7	0.99
88	2010	Sole_ulcer2	191	362	1153	97.1	97.0	9.9	9.9	0.0	0.6	1.00
89	2011	Sole_ulcer2	155	227	489	98.8	98.7	9.4	9.4	0.1	0.6	1.00
90	2012	Sole_ulcer2	169	347	622	101.8	101.8	9.5	9.5	0.0	0.6	1.00
91	2013	Sole_ulcer2	151	363	642	103.0	103.0	8.3	8.2	0.0	0.6	1.00
92	2014	Sole_ulcer2	113	568	685	102.7	102.6	9.0	9.0	0.1	0.6	1.00
93	2015	Sole_ulcer2	82	877	1087	103.7	103.7	10.1	9.8	0.0	0.9	1.00
94	2016	Sole_ulcer2	65	765	964	103.6	103.7	8.7	8.6	0.0	1.1	0.99
95	2017	Sole_ulcer2	50	347	415	105.0	104.8	8.9	8.7	0.2	2.1	0.97
96	2010	Cork_screw_cla	190	297	948	97.8	97.6	12.2	12.2	0.1	0.8	1.00
97	2011	Cork_screw_cla	155	186	396	97.5	97.5	10.2	10.2	0.1	0.7	1.00
98	2012	Cork_screw_cla	168	289	522	98.9	98.8	11.7	11.7	0.1	0.8	1.00
99	2013	Cork_screw_cla	151	309	558	100.5	100.3	11.1	11.0	0.3	0.8	1.00
100	2014	Cork_screw_cla	113	501	607	99.9	99.9	11.7	11.7	0.0	0.7	1.00
101	2015	Cork_screw_cla	82	811	1001	103.6	103.6	11.5	11.5	0.0	1.0	1.00
102	2016	Cork_screw_cla	65	700	883	98.9	99.0	13.4	13.2	-0.1	1.6	0.99
103	2017	Cork_screw_cla	50	310	374	103.7	103.8	10.8	10.7	0.0	1.7	0.99
104	2010	Skin_proferati	189	257	754	96.8	96.9	10.5	10.6	-0.1	0.6	1.00
105	2011	Skin_proferati	152	172	336	96.7	96.9	12.2	12.2	-0.2	0.5	1.00
106	2012	Skin_proferati	167	246	409	98.2	98.3	11.2	11.1	-0.2	0.6	1.00
107	2013	Skin_proferati	149	251	415	98.5	98.7	10.3	10.4	-0.1	0.6	1.00
108	2014	Skin_proferati	108	418	482	100.1	100.3	12.4	12.4	-0.2	0.6	1.00

HOL summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
109	2015	Skin_proferati	79	603	755	103.7	103.8	10.7	10.7	-0.1	0.6	1.00
110	2016	Skin_proferati	63	557	708	103.8	104.1	9.2	9.1	-0.3	1.2	0.99
111	2017	Skin_proferati	48	296	352	102.9	102.9	12.1	12.3	0.0	1.6	0.99
112	2010	White_line_dou	190	255	745	93.4	93.5	10.7	10.8	-0.1	0.6	1.00
113	2011	White_line_dou	152	172	332	95.1	95.2	11.3	11.2	-0.1	0.7	1.00
114	2012	White_line_dou	167	246	404	99.3	99.4	11.8	11.8	0.0	0.7	1.00
115	2013	White_line_dou	149	251	409	102.3	102.4	9.9	9.8	-0.1	0.8	1.00
116	2014	White_line_dou	108	415	478	102.5	102.5	11.0	11.1	0.0	0.8	1.00
117	2015	White_line_dou	79	599	751	106.5	106.4	12.0	11.7	0.1	1.1	1.00
118	2016	White_line_dou	63	553	703	103.4	103.3	13.0	12.9	0.1	1.3	0.99
119	2017	White_line_dou	45	310	353	107.1	106.8	11.8	12.0	0.3	2.3	0.98
120	2010	Dermatitis3	187	187	550	98.7	98.7	11.3	11.4	0.0	0.7	1.00
121	2011	Dermatitis3	150	128	251	100.4	100.5	12.8	12.8	-0.1	0.7	1.00
122	2012	Dermatitis3	167	185	299	100.0	100.0	11.6	11.7	0.0	0.7	1.00
123	2013	Dermatitis3	148	190	294	99.3	99.4	11.5	11.6	0.0	0.7	1.00
124	2014	Dermatitis3	105	340	393	99.4	99.4	13.8	13.9	-0.1	0.7	1.00
125	2015	Dermatitis3	77	431	542	103.2	103.2	12.5	12.4	0.1	1.0	1.00
126	2016	Dermatitis3	41	256	308	101.7	101.7	13.2	13.3	0.0	1.4	0.99
127	2010	Heel_horn_eros	157	119	309	97.9	98.0	10.8	10.7	-0.1	0.7	1.00
128	2011	Heel_horn_eros	144	74	136	99.2	99.3	10.8	10.8	-0.1	0.7	1.00
129	2012	Heel_horn_eros	157	98	146	99.9	99.9	10.5	10.5	0.0	0.6	1.00
130	2013	Heel_horn_eros	132	100	140	99.7	99.6	10.0	9.9	0.1	0.7	1.00
131	2014	Heel_horn_eros	93	173	183	101.4	101.4	10.5	10.6	0.0	0.8	1.00
132	2015	Heel_horn_eros	70	193	223	102.7	102.6	10.1	9.9	0.1	1.0	0.99
133	2016	Heel_horn_eros	24	130	119	103.9	104.1	5.9	6.4	-0.2	1.5	0.97
134	2010	Sole_heamorrha	187	166	478	96.2	96.2	10.1	10.1	0.0	0.7	1.00
135	2011	Sole_heamorrha	150	115	219	97.4	97.4	9.8	9.8	0.1	0.6	1.00
136	2012	Sole_heamorrha	166	159	250	99.8	99.8	10.2	10.3	0.0	0.6	1.00
137	2013	Sole_heamorrha	147	160	241	101.9	102.0	9.6	9.4	0.0	0.6	1.00
138	2014	Sole_heamorrha	105	273	312	101.5	101.6	10.2	10.2	-0.1	0.7	1.00
139	2015	Sole_heamorrha	75	342	420	104.0	104.1	9.5	9.4	-0.1	0.8	1.00
140	2016	Sole_heamorrha	37	198	229	103.5	103.6	11.4	11.6	-0.1	1.3	0.99
141	2010	Sole_ulcer3	187	178	516	97.7	97.7	10.0	10.0	-0.1	0.7	1.00
142	2011	Sole_ulcer3	150	123	237	99.8	99.7	9.7	9.6	0.1	0.6	1.00
143	2012	Sole_ulcer3	166	176	281	102.2	102.2	9.8	9.7	0.0	0.7	1.00
144	2013	Sole_ulcer3	148	181	278	102.9	103.0	8.8	8.7	-0.1	0.7	1.00

HOL summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
145	2014	Sole_ulcer3	105	324	374	102.8	102.7	9.1	9.0	0.1	0.7	1.00
146	2015	Sole_ulcer3	77	404	504	102.5	102.5	11.1	10.6	0.0	1.2	0.99
147	2016	Sole_ulcer3	38	233	273	103.2	103.1	8.1	7.8	0.1	1.7	0.98
148	2010	Cork_screw_cla	181	148	424	99.3	99.1	11.9	11.9	0.2	0.7	1.00
149	2011	Cork_screw_cla	148	101	192	98.6	98.4	11.5	11.5	0.2	0.8	1.00
150	2012	Cork_screw_cla	162	151	239	99.7	99.5	12.2	12.1	0.2	0.8	1.00
151	2013	Cork_screw_cla	147	163	251	100.9	100.5	11.2	11.1	0.3	0.8	1.00
152	2014	Cork_screw_cla	105	305	352	99.9	99.8	11.7	11.7	0.1	0.8	1.00
153	2015	Cork_screw_cla	76	381	471	101.9	101.8	11.0	10.9	0.1	1.1	1.00
154	2016	Cork_screw_cla	36	219	254	99.5	99.7	14.0	14.4	-0.2	1.8	0.99
155	2010	Skin_proferati	183	183	529	96.9	97.0	10.7	10.7	-0.1	0.5	1.00
156	2011	Skin_proferati	150	123	240	97.0	97.3	12.5	12.6	-0.3	0.6	1.00
157	2012	Skin_proferati	165	177	286	98.3	98.5	11.1	11.1	-0.2	0.5	1.00
158	2013	Skin_proferati	148	181	282	98.4	98.5	10.4	10.4	-0.2	0.6	1.00
159	2014	Skin_proferati	105	327	379	99.4	99.5	12.6	12.7	-0.1	0.7	1.00
160	2015	Skin_proferati	77	409	510	103.8	103.9	10.7	10.7	-0.1	0.8	1.00
161	2016	Skin_proferati	38	237	276	104.4	104.7	8.1	8.1	-0.2	0.9	0.99
162	2010	White_line_dou	186	179	518	93.5	93.8	11.0	11.1	-0.2	0.6	1.00
163	2011	White_line_dou	150	123	237	94.9	95.1	11.3	11.2	-0.2	0.7	1.00
164	2012	White_line_dou	166	176	281	99.3	99.5	11.6	11.6	-0.1	0.7	1.00
165	2013	White_line_dou	148	181	278	102.4	102.6	10.4	10.3	-0.1	0.8	1.00
166	2014	White_line_dou	105	325	376	102.5	102.5	10.5	10.4	0.0	0.8	1.00
167	2015	White_line_dou	77	405	506	106.2	106.1	12.2	11.9	0.1	1.1	1.00
168	2016	White_line_dou	38	233	273	104.2	104.4	12.3	12.1	-0.2	1.4	0.99
169	2010	Dermatitis	192	464	1478	98.3	98.4	11.0	11.1	-0.1	0.6	1.00
170	2011	Dermatitis	155	292	614	99.9	100.0	12.8	12.9	-0.1	0.6	1.00
171	2012	Dermatitis	170	433	783	100.0	100.1	11.4	11.5	-0.1	0.7	1.00
172	2013	Dermatitis	151	463	863	99.8	99.8	11.5	11.6	-0.1	0.7	1.00
173	2014	Dermatitis	113	713	859	99.7	99.7	13.8	13.9	0.0	0.6	1.00
174	2015	Dermatitis	82	1093	1340	103.9	103.8	12.3	12.2	0.1	0.8	1.00
175	2016	Dermatitis	66	1077	1362	102.1	102.3	13.3	13.3	-0.2	1.3	1.00
176	2017	Dermatitis	66	1026	1206	103.6	103.0	12.4	12.5	0.5	1.8	0.99
177	2018	Dermatitis	51	572	791	105.5	105.6	13.3	12.5	-0.2	2.9	0.98
178	2010	Heel_horn_eros	189	298	937	97.5	97.7	10.4	10.4	-0.1	0.6	1.00
179	2011	Heel_horn_eros	154	189	387	98.3	98.5	11.1	11.1	-0.1	0.6	1.00
180	2012	Heel_horn_eros	169	264	476	99.6	99.6	10.6	10.5	0.0	0.7	1.00

HOL summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
181	2013	Heel_horn_eros	151	277	506	99.8	99.8	9.8	9.7	0.1	0.7	1.00
182	2014	Heel_horn_eros	111	404	486	100.9	100.8	11.1	11.2	0.1	0.7	1.00
183	2015	Heel_horn_eros	82	569	700	103.4	103.4	9.7	9.7	0.0	1.0	0.99
184	2016	Heel_horn_eros	65	570	722	102.9	102.8	8.9	8.8	0.1	1.4	0.99
185	2017	Heel_horn_eros	66	488	577	103.3	102.7	8.9	8.9	0.6	1.7	0.98
186	2018	Heel_horn_eros	39	277	348	104.6	104.4	9.9	8.9	0.2	2.2	0.98
187	2010	Sole_heamorrha	192	439	1398	96.2	96.2	10.1	10.1	-0.1	0.6	1.00
188	2011	Sole_heamorrha	155	276	567	97.9	97.8	9.8	9.8	0.0	0.6	1.00
189	2012	Sole_heamorrha	169	404	726	99.8	99.8	10.2	10.2	0.0	0.6	1.00
190	2013	Sole_heamorrha	151	434	798	101.7	101.7	9.7	9.7	0.0	0.6	1.00
191	2014	Sole_heamorrha	113	645	780	101.8	101.8	10.0	10.1	0.0	0.7	1.00
192	2015	Sole_heamorrha	82	959	1170	104.0	104.1	9.7	9.6	-0.1	0.8	1.00
193	2016	Sole_heamorrha	66	924	1162	104.0	104.1	10.3	10.3	-0.1	1.1	0.99
194	2017	Sole_heamorrha	66	857	995	105.6	105.9	9.7	9.7	-0.2	2.1	0.98
195	2018	Sole_heamorrha	46	487	648	104.9	106.1	9.8	9.6	-1.3	3.2	0.95
196	2010	Sole_ulcer	193	450	1439	97.3	97.4	9.8	9.8	0.0	0.6	1.00
197	2011	Sole_ulcer	155	286	596	99.3	99.2	9.3	9.3	0.1	0.6	1.00
198	2012	Sole_ulcer	170	421	760	102.0	101.9	9.3	9.3	0.0	0.5	1.00
199	2013	Sole_ulcer	151	452	834	102.8	102.8	8.4	8.3	0.0	0.6	1.00
200	2014	Sole_ulcer	113	678	812	102.6	102.6	8.8	8.8	0.0	0.6	1.00
201	2015	Sole_ulcer	82	1045	1277	103.3	103.3	10.4	10.1	0.0	0.9	1.00
202	2016	Sole_ulcer	66	1034	1305	103.8	103.8	8.4	8.3	0.0	1.2	0.99
203	2017	Sole_ulcer	66	989	1161	104.7	104.7	8.4	8.2	0.0	2.0	0.97
204	2018	Sole_ulcer	50	515	718	103.9	104.7	7.7	7.9	-0.7	2.8	0.94
205	2010	Cork_screw_cla	191	371	1186	98.7	98.6	12.0	12.1	0.1	0.7	1.00
206	2011	Cork_screw_cla	155	235	484	98.2	98.1	10.6	10.5	0.2	0.7	1.00
207	2012	Cork_screw_cla	169	351	641	99.6	99.5	12.1	12.1	0.1	0.8	1.00
208	2013	Cork_screw_cla	151	384	730	100.7	100.4	11.1	11.1	0.3	0.8	1.00
209	2014	Cork_screw_cla	112	580	694	100.1	100.1	11.3	11.3	0.0	0.7	1.00
210	2015	Cork_screw_cla	82	942	1148	103.0	102.9	11.2	11.2	0.1	1.0	1.00
211	2016	Cork_screw_cla	66	973	1226	99.1	99.0	12.9	12.8	0.1	1.6	0.99
212	2017	Cork_screw_cla	66	920	1077	103.0	103.1	10.1	10.2	0.0	2.0	0.98
213	2018	Cork_screw_cla	48	484	663	101.5	101.7	10.6	11.1	-0.2	3.3	0.96
214	2010	Skin_proferati	190	447	1416	96.9	97.1	10.6	10.6	-0.2	0.6	1.00
215	2011	Skin_proferati	155	280	583	96.6	96.8	12.4	12.4	-0.2	0.6	1.00
216	2012	Skin_proferati	169	412	743	98.2	98.4	11.0	11.0	-0.2	0.6	1.00

HOL summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
217	2013	Skin_proferati	151	440	816	98.5	98.6	10.3	10.3	-0.2	0.6	1.00
218	2014	Skin_proferati	113	661	795	99.5	99.7	12.5	12.5	-0.1	0.6	1.00
219	2015	Skin_proferati	82	1018	1246	103.6	103.7	10.7	10.6	-0.1	0.8	1.00
220	2016	Skin_proferati	66	1014	1277	103.7	104.0	9.1	9.1	-0.3	1.1	0.99
221	2017	Skin_proferati	66	967	1137	103.3	103.1	11.3	11.4	0.2	1.6	0.99
222	2018	Skin_proferati	47	538	716	104.6	105.4	9.8	9.5	-0.8	2.2	0.97
223	2010	White_line_dou	192	455	1449	93.3	93.5	10.9	10.9	-0.2	0.7	1.00
224	2011	White_line_dou	155	287	599	95.0	95.1	11.1	11.2	-0.1	0.7	1.00
225	2012	White_line_dou	170	424	764	99.0	99.2	11.5	11.4	-0.1	0.7	1.00
226	2013	White_line_dou	151	456	841	102.3	102.4	9.9	9.8	-0.1	0.7	1.00
227	2014	White_line_dou	113	682	817	102.3	102.5	11.1	11.0	-0.1	0.8	1.00
228	2015	White_line_dou	82	1051	1284	106.5	106.4	11.6	11.5	0.2	1.1	1.00
229	2016	White_line_dou	66	1039	1312	103.7	103.5	12.7	12.5	0.2	1.4	0.99
230	2017	White_line_dou	66	997	1171	106.5	106.1	11.3	11.6	0.3	2.2	0.98
231	2018	White_line_dou	49	531	730	105.0	105.8	11.1	10.9	-0.7	2.5	0.97

HOL summery stastistics for SS and prev SS breeding value for nordic AI bulls with no offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2019	Dermatitis1	57	.	.	107.7	107.7	12.8	12.8	0.0	1.0	1.00
2	2020	Dermatitis1	70	.	.	108.7	108.5	12.5	12.1	0.2	2.4	0.98
3	2021	Dermatitis1	58	.	.	107.5	107.6	10.4	10.1	-0.1	1.1	0.99
4	2022	Dermatitis1	32	.	.	109.4	109.5	11.2	11.3	-0.1	1.6	0.99
5	2019	Heel_horn_eros	61	0	0	106.5	106.2	8.6	8.9	0.3	1.2	0.99
6	2020	Heel_horn_eros	70	.	.	106.9	106.7	8.6	8.4	0.2	1.8	0.98
7	2021	Heel_horn_eros	58	.	.	107.6	107.5	7.1	7.1	0.1	1.3	0.98
8	2022	Heel_horn_eros	32	.	.	109.6	109.3	8.4	8.6	0.3	1.3	0.99
9	2019	Sole_heamorrha	58	0	.	105.3	105.3	10.4	10.9	0.0	1.5	0.99
10	2020	Sole_heamorrha	70	.	.	103.1	104.0	7.3	7.1	-0.8	2.8	0.92
11	2021	Sole_heamorrha	58	.	.	105.5	105.5	9.3	9.2	-0.1	1.7	0.98
12	2022	Sole_heamorrha	32	.	.	104.9	104.7	7.1	7.4	0.2	1.4	0.98
13	2019	Sole_ulcer1	58	0	.	106.9	106.8	7.3	7.7	0.1	1.3	0.99
14	2020	Sole_ulcer1	70	.	.	104.5	105.1	6.4	6.3	-0.6	1.9	0.95
15	2021	Sole_ulcer1	58	.	.	106.2	106.5	8.0	8.2	-0.3	1.2	0.99
16	2022	Sole_ulcer1	32	.	.	107.0	107.1	6.6	7.0	-0.1	1.6	0.97
17	2019	Cork_screw_cla	58	0	.	104.5	104.7	10.3	10.7	-0.1	1.6	0.99
18	2020	Cork_screw_cla	70	.	.	101.7	102.5	7.9	7.9	-0.7	2.2	0.96
19	2021	Cork_screw_cla	58	.	.	104.2	104.3	8.8	9.0	-0.1	1.3	0.99
20	2022	Cork_screw_cla	32	.	.	104.7	104.3	8.6	8.7	0.3	1.4	0.99
21	2019	Skin_proferati	58	0	.	105.9	105.8	9.8	10.1	0.1	1.1	0.99
22	2020	Skin_proferati	70	.	.	106.3	106.4	8.8	8.9	-0.1	1.5	0.99
23	2021	Skin_proferati	58	.	.	106.9	107.3	8.7	8.7	-0.3	1.3	0.99
24	2022	Skin_proferati	32	.	.	108.1	108.0	9.5	9.7	0.0	1.4	0.99
25	2019	White_line_dou	58	0	.	108.8	108.6	10.5	10.9	0.3	1.3	0.99
26	2020	White_line_dou	70	.	.	106.8	106.9	9.2	9.1	0.0	1.7	0.98
27	2021	White_line_dou	58	.	.	105.8	105.8	9.5	9.7	0.0	1.3	0.99
28	2022	White_line_dou	32	.	.	106.7	106.8	10.6	10.6	-0.1	1.4	0.99
29	2019	Dermatitis2	69	0	0	107.1	107.3	12.3	12.1	-0.2	1.6	0.99
30	2020	Dermatitis2	70	.	.	107.9	107.9	12.3	11.9	0.0	2.4	0.98
31	2021	Dermatitis2	58	.	.	106.4	106.6	10.6	10.3	-0.2	1.3	0.99
32	2022	Dermatitis2	32	.	.	108.9	109.2	11.1	11.3	-0.2	1.8	0.99
33	2019	Heel_horn_eros	69	0	0	106.3	106.0	8.5	8.8	0.3	1.3	0.99
34	2020	Heel_horn_eros	70	.	.	106.1	106.3	8.3	8.3	-0.2	1.7	0.98
35	2021	Heel_horn_eros	58	.	.	107.0	107.1	7.2	7.3	-0.1	1.5	0.98
36	2022	Heel_horn_eros	32	.	.	109.3	109.3	8.4	8.7	0.0	1.2	0.99

HOL summery stastistics for SS and prev SS breeding value for nordic AI bulls with no offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
37	2019	Sole_heamorrha	69	0	0	106.3	106.3	9.9	10.2	0.1	1.4	0.99
38	2020	Sole_heamorrha	70	.	.	104.2	104.8	7.6	7.2	-0.7	2.4	0.95
39	2021	Sole_heamorrha	58	.	.	105.8	105.8	9.5	9.6	0.0	1.6	0.99
40	2022	Sole_heamorrha	32	.	.	105.3	105.3	7.5	7.6	0.0	1.2	0.99
41	2019	Sole_ulcer2	69	0	0	106.8	106.6	7.6	7.9	0.2	1.3	0.99
42	2020	Sole_ulcer2	70	.	.	104.3	104.8	6.2	6.2	-0.5	1.8	0.96
43	2021	Sole_ulcer2	58	.	.	106.3	106.6	8.2	8.4	-0.3	1.2	0.99
44	2022	Sole_ulcer2	32	.	.	106.6	106.5	5.6	5.9	0.1	1.2	0.98
45	2019	Cork_screw_cla	69	0	0	103.2	103.3	9.8	10.1	0.0	1.4	0.99
46	2020	Cork_screw_cla	70	.	.	101.3	102.0	8.3	8.1	-0.8	2.2	0.97
47	2021	Cork_screw_cla	58	.	.	102.9	102.9	8.5	8.8	-0.1	1.4	0.99
48	2022	Cork_screw_cla	32	.	.	103.6	103.4	8.8	8.9	0.2	1.3	0.99
49	2019	Skin_proferati	69	0	0	105.8	105.8	9.4	9.7	0.0	1.3	0.99
50	2020	Skin_proferati	70	.	.	106.2	106.4	8.5	8.8	-0.2	1.5	0.99
51	2021	Skin_proferati	58	.	.	106.9	107.2	8.3	8.2	-0.3	1.4	0.99
52	2022	Skin_proferati	32	.	.	108.1	108.1	9.4	9.3	0.0	1.4	0.99
53	2019	White_line_dou	69	0	0	107.6	107.5	10.1	10.3	0.1	1.5	0.99
54	2020	White_line_dou	70	.	.	107.0	106.9	8.9	8.8	0.1	1.7	0.98
55	2021	White_line_dou	58	.	.	106.2	105.9	9.0	9.3	0.3	1.4	0.99
56	2022	White_line_dou	32	.	.	106.8	106.5	9.2	9.4	0.2	1.3	0.99
57	2019	Dermatitis3	69	0	0	106.0	106.2	12.2	12.3	-0.2	1.5	0.99
58	2020	Dermatitis3	70	.	.	107.2	107.1	11.9	11.7	0.1	2.2	0.98
59	2021	Dermatitis3	58	.	.	105.9	106.0	10.3	10.0	-0.1	1.3	0.99
60	2022	Dermatitis3	32	.	.	108.3	108.3	11.2	11.1	0.0	1.7	0.99
61	2019	Heel_horn_eros	69	0	0	104.7	104.4	8.3	8.5	0.4	1.3	0.99
62	2020	Heel_horn_eros	70	.	.	105.4	105.1	8.6	8.5	0.3	1.5	0.98
63	2021	Heel_horn_eros	58	.	.	106.0	106.0	6.4	6.2	0.0	1.3	0.98
64	2022	Heel_horn_eros	32	.	.	107.9	107.6	8.2	8.2	0.3	1.2	0.99
65	2019	Sole_heamorrha	69	0	0	105.8	105.8	9.7	10.0	0.0	1.3	0.99
66	2020	Sole_heamorrha	70	.	.	104.1	104.8	7.8	7.6	-0.7	2.3	0.95
67	2021	Sole_heamorrha	58	.	.	105.5	105.6	9.6	9.6	-0.1	1.3	0.99
68	2022	Sole_heamorrha	32	.	.	105.5	105.3	7.8	8.0	0.2	1.1	0.99
69	2019	Sole_ulcer3	69	0	0	105.1	104.8	7.4	7.8	0.3	1.6	0.98
70	2020	Sole_ulcer3	70	.	.	102.9	103.2	6.6	6.7	-0.3	1.6	0.97
71	2021	Sole_ulcer3	58	.	.	104.7	104.9	7.9	8.0	-0.2	1.2	0.99
72	2022	Sole_ulcer3	32	.	.	104.2	104.3	5.6	5.6	-0.1	1.5	0.97

HOL summery stastistics for SS and prev SS breeding value for nordic AI bulls with no offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
73	2019	Cork_screw_cla	69	0	0	101.8	101.8	9.9	10.0	-0.1	1.6	0.99
74	2020	Cork_screw_cla	70	.	.	99.6	100.3	7.8	7.5	-0.8	2.7	0.94
75	2021	Cork_screw_cla	58	.	.	102.0	102.0	8.2	8.2	0.0	1.6	0.98
76	2022	Cork_screw_cla	32	.	.	101.9	101.3	8.7	8.8	0.6	1.5	0.99
77	2019	Skin_proferati	69	0	0	105.9	106.0	9.3	9.6	0.0	1.3	0.99
78	2020	Skin_proferati	70	.	.	106.2	106.5	8.5	8.6	-0.3	1.4	0.99
79	2021	Skin_proferati	58	.	.	106.8	107.1	8.5	8.5	-0.3	1.3	0.99
80	2022	Skin_proferati	32	.	.	108.3	108.4	9.4	9.5	-0.1	1.4	0.99
81	2019	White_line_dou	69	0	0	107.9	107.7	10.2	10.6	0.2	1.4	0.99
82	2020	White_line_dou	70	.	.	106.3	106.4	8.3	8.3	-0.1	1.7	0.98
83	2021	White_line_dou	58	.	.	106.5	106.4	9.0	9.0	0.2	1.4	0.99
84	2022	White_line_dou	32	.	.	106.3	106.0	8.9	9.1	0.2	1.2	0.99
85	2019	Dermatitis	57	.	.	106.6	106.8	12.8	12.7	-0.1	1.2	1.00
86	2020	Dermatitis	70	.	.	107.9	107.7	12.0	11.8	0.2	2.3	0.98
87	2021	Dermatitis	58	.	.	106.5	106.6	10.3	9.9	-0.1	1.2	0.99
88	2022	Dermatitis	32	.	.	108.6	108.8	11.2	11.1	-0.2	1.8	0.99
89	2019	Heel_horn_eros	61	0	0	105.2	104.9	8.3	8.5	0.3	1.3	0.99
90	2020	Heel_horn_eros	70	.	.	106.0	105.9	8.4	8.4	0.1	1.6	0.98
91	2021	Heel_horn_eros	58	.	.	106.9	106.7	6.6	6.6	0.2	1.4	0.98
92	2022	Heel_horn_eros	32	.	.	108.8	108.5	8.1	8.4	0.2	1.3	0.99
93	2019	Sole_heamorrha	58	0	.	106.1	106.2	10.1	10.4	-0.1	1.3	0.99
94	2020	Sole_heamorrha	70	.	.	103.8	104.6	7.5	7.2	-0.8	2.6	0.94
95	2021	Sole_heamorrha	58	.	.	105.6	105.6	9.4	9.4	0.0	1.5	0.99
96	2022	Sole_heamorrha	32	.	.	105.4	105.2	7.4	7.6	0.2	1.2	0.99
97	2019	Sole_ulcer	58	0	.	106.2	105.9	7.0	7.5	0.3	1.3	0.98
98	2020	Sole_ulcer	70	.	.	103.8	104.3	6.2	6.3	-0.4	1.8	0.96
99	2021	Sole_ulcer	58	.	.	105.6	105.8	7.8	8.0	-0.2	1.2	0.99
100	2022	Sole_ulcer	32	.	.	105.7	105.7	5.8	6.0	0.0	1.4	0.97
101	2019	Cork_screw_cla	58	0	.	103.1	103.2	10.1	10.3	-0.2	1.5	0.99
102	2020	Cork_screw_cla	70	.	.	100.6	101.4	7.7	7.5	-0.8	2.4	0.95
103	2021	Cork_screw_cla	58	.	.	102.8	102.9	8.3	8.4	-0.1	1.4	0.99
104	2022	Cork_screw_cla	32	.	.	103.2	102.8	8.5	8.5	0.3	1.3	0.99
105	2019	Skin_proferati	58	0	.	105.7	105.7	9.8	10.1	0.0	1.1	0.99
106	2020	Skin_proferati	70	.	.	106.3	106.5	8.6	8.6	-0.2	1.4	0.99
107	2021	Skin_proferati	58	.	.	106.9	107.1	8.5	8.5	-0.3	1.4	0.99
108	2022	Skin_proferati	32	.	.	108.2	108.2	9.3	9.5	0.1	1.3	0.99

HOL summery stastistics for SS and prev SS breeding value for nordic AI bulls with no offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
109	2019	White_line_dou	58	0	.	108.8	108.4	10.0	10.2	0.4	1.3	0.99
110	2020	White_line_dou	70	.	.	106.7	106.6	8.7	8.6	0.0	1.7	0.98
111	2021	White_line_dou	58	.	.	106.2	106.1	9.1	9.2	0.2	1.4	0.99
112	2022	White_line_dou	32	.	.	106.4	106.4	9.4	9.6	-0.1	1.3	0.99

HOL summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2015	Dermatitis1	113084	97.4	97.5	8.2	8.1	-0.1	0.6	1.00
2	2016	Dermatitis1	113000	99.1	99.2	8.9	8.8	-0.1	0.6	1.00
3	2017	Dermatitis1	106273	99.0	99.0	8.5	8.4	-0.1	0.7	1.00
4	2018	Dermatitis1	105524	100.3	100.4	8.8	8.7	0.0	0.9	0.99
5	2019	Dermatitis1	100438	100.5	100.6	9.0	8.9	0.0	1.2	0.99
6	2020	Dermatitis1	57450	101.3	101.3	8.7	8.5	0.0	1.7	0.98
7	2021	Dermatitis1	281	100.9	100.9	8.7	8.4	0.1	1.8	0.98
8	2015	Heel_horn_eros	70955	97.5	97.6	7.3	7.2	-0.1	0.6	1.00
9	2016	Heel_horn_eros	69072	98.5	98.6	7.8	7.7	-0.1	0.6	1.00
10	2017	Heel_horn_eros	59702	98.9	98.9	8.2	8.2	0.0	0.8	1.00
11	2018	Heel_horn_eros	57931	99.6	99.7	7.8	7.7	0.0	1.0	0.99
12	2019	Heel_horn_eros	54039	100.0	100.0	7.6	7.4	0.1	1.3	0.99
13	2020	Heel_horn_eros	27072	99.9	99.9	7.4	7.1	0.0	1.7	0.97
14	2021	Heel_horn_eros	103	.	.	.	.	.	.	0.96
15	2015	Sole_heamorrha	105706	97.8	97.9	7.6	7.6	-0.1	0.5	1.00
16	2016	Sole_heamorrha	104992	98.5	98.5	7.4	7.4	-0.1	0.6	1.00
17	2017	Sole_heamorrha	96206	99.0	99.1	7.8	7.7	-0.1	0.7	1.00
18	2018	Sole_heamorrha	93364	99.6	99.7	7.6	7.5	-0.1	0.9	0.99
19	2019	Sole_heamorrha	86535	100.1	100.3	7.6	7.6	-0.2	1.1	0.99
20	2020	Sole_heamorrha	46953	100.0	100.3	7.3	7.3	-0.2	1.6	0.98
21	2021	Sole_heamorrha	181	.	.	.	.	.	.	0.98
22	2015	Sole_ulcer1	110722	97.9	97.9	7.7	7.7	0.0	0.5	1.00
23	2016	Sole_ulcer1	109771	98.8	98.8	7.5	7.5	0.0	0.6	1.00
24	2017	Sole_ulcer1	102551	99.2	99.1	8.0	8.0	0.0	0.7	1.00
25	2018	Sole_ulcer1	101900	99.9	99.8	7.7	7.7	0.0	1.0	0.99
26	2019	Sole_ulcer1	97406	99.9	99.9	7.2	7.2	0.0	1.2	0.99
27	2020	Sole_ulcer1	53584	100.4	100.5	6.9	6.9	0.0	1.6	0.97
28	2021	Sole_ulcer1	208	.	.	.	.	.	.	0.97
29	2015	Cork_screw_cla	94506	98.7	98.6	8.7	8.7	0.1	0.6	1.00
30	2016	Cork_screw_cla	94894	98.2	98.1	8.4	8.4	0.0	0.7	1.00
31	2017	Cork_screw_cla	91623	99.2	99.1	8.5	8.4	0.1	0.7	1.00
32	2018	Cork_screw_cla	95745	99.7	99.7	8.6	8.5	0.0	0.9	0.99
33	2019	Cork_screw_cla	91361	99.5	99.6	8.5	8.4	-0.1	1.1	0.99
34	2020	Cork_screw_cla	48579	100.0	100.1	7.0	7.1	-0.2	1.5	0.98
35	2021	Cork_screw_cla	216	.	.	.	.	.	.	0.98
36	2015	Skin_proferati	108489	97.1	97.3	8.0	8.0	-0.2	0.6	1.00

HOL summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
37	2016	Skin_proferati	107231	98.4	98.6	7.9	7.9	-0.2	0.6	1.00
38	2017	Skin_proferati	100109	98.7	98.9	8.5	8.5	-0.2	0.7	1.00
39	2018	Skin_proferati	100213	100.2	100.4	7.9	7.9	-0.2	0.9	0.99
40	2019	Skin_proferati	96051	100.6	100.8	7.6	7.5	-0.2	1.2	0.99
41	2020	Skin_proferati	53091	100.7	100.9	7.4	7.2	-0.2	1.6	0.98
42	2021	Skin_proferati	210	.	.	.	.	.	.	0.97
43	2015	White_line_dou	111362	96.1	96.2	7.7	7.7	-0.1	0.6	1.00
44	2016	White_line_dou	110468	97.6	97.7	7.8	7.8	-0.1	0.6	1.00
45	2017	White_line_dou	103209	98.8	98.9	8.5	8.4	-0.1	0.8	1.00
46	2018	White_line_dou	102375	99.7	99.7	9.1	9.0	0.0	1.0	0.99
47	2019	White_line_dou	97924	99.8	99.7	8.6	8.6	0.0	1.3	0.99
48	2020	White_line_dou	54189	100.9	100.9	8.0	8.0	0.0	1.6	0.98
49	2021	White_line_dou	208	.	.	.	.	.	.	0.98
50	2015	Dermatitis2	90658	98.2	98.2	8.3	8.3	0.0	0.6	1.00
51	2016	Dermatitis2	91956	99.4	99.5	8.7	8.7	0.0	0.7	1.00
52	2017	Dermatitis2	87655	99.3	99.3	8.3	8.3	0.0	0.8	1.00
53	2018	Dermatitis2	82865	100.5	100.5	8.7	8.6	0.0	1.0	0.99
54	2019	Dermatitis2	43611	100.3	100.4	9.2	9.2	-0.1	1.3	0.99
55	2020	Dermatitis2	274	101.0	100.9	8.5	8.4	0.1	1.2	0.99
56	2015	Heel_horn_eros	54937	97.8	97.9	7.3	7.2	0.0	0.6	1.00
57	2016	Heel_horn_eros	51153	98.8	98.8	7.9	7.8	0.0	0.7	1.00
58	2017	Heel_horn_eros	47119	99.2	99.2	8.2	8.1	0.0	0.8	0.99
59	2018	Heel_horn_eros	43607	99.7	99.7	7.7	7.7	0.0	1.1	0.99
60	2019	Heel_horn_eros	20217	100.3	100.3	7.6	7.5	0.0	1.3	0.99
61	2020	Heel_horn_eros	101	.	.	.	.	.	.	0.99
62	2015	Sole_heamorrha	85709	97.5	97.5	7.9	7.9	-0.1	0.5	1.00
63	2016	Sole_heamorrha	85040	98.4	98.5	7.8	7.8	-0.1	0.6	1.00
64	2017	Sole_heamorrha	80890	98.9	98.9	8.1	8.0	0.0	0.7	1.00
65	2018	Sole_heamorrha	74935	99.7	99.8	8.1	7.9	-0.1	1.0	0.99
66	2019	Sole_heamorrha	37028	99.9	100.0	7.8	7.7	-0.1	1.2	0.99
67	2020	Sole_heamorrha	218	.	.	.	.	.	.	0.98
68	2015	Sole_ulcer2	88724	97.8	97.8	7.8	7.8	0.1	0.6	1.00
69	2016	Sole_ulcer2	89273	98.9	98.9	7.7	7.7	0.0	0.6	1.00
70	2017	Sole_ulcer2	84893	99.3	99.2	7.9	7.9	0.1	0.8	1.00
71	2018	Sole_ulcer2	80706	99.9	99.9	7.8	7.7	0.0	1.0	0.99
72	2019	Sole_ulcer2	40627	99.8	99.8	7.3	7.1	0.0	1.3	0.98

HOL summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
73	2020	Sole_ulcer2	215	.	.	.	.	.	.	0.97
74	2015	Cork_screw_cla	75077	98.5	98.5	8.1	8.1	0.0	0.6	1.00
75	2016	Cork_screw_cla	78414	98.1	98.1	8.2	8.2	0.0	0.7	1.00
76	2017	Cork_screw_cla	78576	99.5	99.4	8.3	8.2	0.0	0.8	1.00
77	2018	Cork_screw_cla	74324	99.7	99.7	8.3	8.2	0.0	1.0	0.99
78	2019	Cork_screw_cla	36660	99.7	99.8	8.6	8.6	-0.1	1.1	0.99
79	2020	Cork_screw_cla	218	.	.	.	.	.	.	0.99
80	2015	Skin_proferati	85604	97.1	97.3	8.1	8.1	-0.2	0.6	1.00
81	2016	Skin_proferati	86171	98.4	98.6	8.0	8.0	-0.2	0.6	1.00
82	2017	Skin_proferati	82631	98.8	99.0	8.5	8.5	-0.2	0.8	1.00
83	2018	Skin_proferati	78578	100.2	100.4	7.9	7.9	-0.2	1.0	0.99
84	2019	Skin_proferati	39979	100.7	101.0	7.8	7.7	-0.2	1.1	0.99
85	2020	Skin_proferati	225	.	.	.	.	.	.	0.99
86	2015	White_line_dou	88364	96.2	96.3	8.1	8.0	-0.1	0.6	1.00
87	2016	White_line_dou	88721	97.7	97.8	8.2	8.1	-0.1	0.7	1.00
88	2017	White_line_dou	84596	99.0	99.0	8.6	8.6	0.0	0.8	1.00
89	2018	White_line_dou	80516	99.8	99.9	9.2	9.0	0.0	1.1	0.99
90	2019	White_line_dou	40731	99.6	99.6	8.7	8.6	0.0	1.3	0.99
91	2020	White_line_dou	217	.	.	.	.	.	.	0.98
92	2015	Dermatitis3	64619	98.5	98.5	8.2	8.2	0.0	0.7	1.00
93	2016	Dermatitis3	66878	99.6	99.7	8.6	8.6	-0.1	0.7	1.00
94	2017	Dermatitis3	59825	99.3	99.4	8.3	8.3	-0.1	0.9	0.99
95	2018	Dermatitis3	30369	100.9	100.9	8.6	8.5	-0.1	1.1	0.99
96	2019	Dermatitis3	340	99.7	99.8	9.3	9.4	-0.1	1.1	0.99
97	2015	Heel_horn_eros	35085	98.3	98.4	7.4	7.4	-0.1	0.6	1.00
98	2016	Heel_horn_eros	35189	99.1	99.1	7.9	7.8	0.0	0.7	1.00
99	2017	Heel_horn_eros	30351	99.4	99.5	8.0	7.9	0.0	0.9	0.99
100	2018	Heel_horn_eros	13548	100.0	100.1	7.8	7.7	-0.1	1.1	0.99
101	2019	Heel_horn_eros	131	.	.	.	.	.	.	0.98
102	2015	Sole_heamorrha	56876	97.8	97.8	7.7	7.7	0.0	0.6	1.00
103	2016	Sole_heamorrha	57009	98.5	98.5	7.6	7.6	0.0	0.6	1.00
104	2017	Sole_heamorrha	49710	99.4	99.5	8.0	8.0	0.0	0.8	1.00
105	2018	Sole_heamorrha	24200	100.6	100.7	8.1	8.0	0.0	1.0	0.99
106	2019	Sole_heamorrha	252	99.4	99.5	8.4	8.3	-0.1	1.0	0.99
107	2015	Sole_ulcer3	62910	98.7	98.7	8.0	7.9	0.0	0.6	1.00
108	2016	Sole_ulcer3	64636	99.5	99.4	7.8	7.7	0.0	0.7	1.00

HOL summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
109	2017	Sole_ulcer3	58190	99.8	99.7	7.9	7.8	0.1	0.8	0.99
110	2018	Sole_ulcer3	28283	100.8	100.8	8.0	7.8	0.0	1.2	0.99
111	2019	Sole_ulcer3	284	99.0	99.1	7.7	7.5	-0.1	1.2	0.99
112	2015	Cork_screw_cla	55091	99.5	99.3	8.5	8.5	0.1	0.7	1.00
113	2016	Cork_screw_cla	59958	98.7	98.7	8.3	8.3	0.1	0.7	1.00
114	2017	Cork_screw_cla	53539	99.7	99.7	8.2	8.2	0.0	0.8	1.00
115	2018	Cork_screw_cla	25395	99.9	99.9	8.1	8.0	0.0	1.0	0.99
116	2019	Cork_screw_cla	258	100.0	100.0	8.3	8.2	0.0	1.0	0.99
117	2015	Skin_proferati	60836	97.4	97.6	8.2	8.2	-0.2	0.6	1.00
118	2016	Skin_proferati	63084	98.6	98.8	8.1	8.0	-0.2	0.7	1.00
119	2017	Skin_proferati	56788	99.0	99.2	8.5	8.5	-0.2	0.8	1.00
120	2018	Skin_proferati	27875	100.7	100.9	8.0	8.0	-0.2	1.0	0.99
121	2019	Skin_proferati	291	100.2	100.5	7.7	7.7	-0.3	1.0	0.99
122	2015	White_line_dou	62656	96.7	96.8	8.3	8.3	-0.2	0.6	1.00
123	2016	White_line_dou	64398	98.0	98.2	8.1	8.1	-0.2	0.7	1.00
124	2017	White_line_dou	58032	99.2	99.2	8.6	8.5	-0.1	0.8	1.00
125	2018	White_line_dou	28404	100.8	100.9	9.2	9.0	-0.1	1.1	0.99
126	2019	White_line_dou	284	98.0	98.2	9.4	9.1	-0.1	1.1	0.99
127	2015	Dermatitis	113084	98.1	98.1	8.0	8.0	-0.1	0.6	1.00
128	2016	Dermatitis	113000	99.4	99.4	8.5	8.5	-0.1	0.6	1.00
129	2017	Dermatitis	106273	99.2	99.2	8.1	8.1	0.0	0.7	1.00
130	2018	Dermatitis	105524	100.4	100.5	8.4	8.4	0.0	1.0	0.99
131	2019	Dermatitis	100438	100.6	100.6	8.7	8.6	0.0	1.3	0.99
132	2020	Dermatitis	57450	101.3	101.4	8.3	8.1	0.0	1.7	0.98
133	2021	Dermatitis	281	101.0	101.0	8.0	7.7	0.0	1.7	0.98
134	2015	Heel_horn_eros	70955	97.9	97.9	7.1	7.0	-0.1	0.6	1.00
135	2016	Heel_horn_eros	69072	98.7	98.7	7.6	7.6	0.0	0.6	1.00
136	2017	Heel_horn_eros	59702	99.1	99.1	8.0	7.9	0.0	0.8	1.00
137	2018	Heel_horn_eros	57931	99.6	99.7	7.5	7.4	0.0	1.0	0.99
138	2019	Heel_horn_eros	54039	100.1	100.0	7.3	7.1	0.1	1.2	0.99
139	2020	Heel_horn_eros	27072	99.7	99.7	7.0	6.8	0.0	1.7	0.97
140	2021	Heel_horn_eros	103	.	.	.	.	.	.	0.96
141	2015	Sole_heamorrha	105706	97.5	97.5	7.6	7.6	-0.1	0.5	1.00
142	2016	Sole_heamorrha	104992	98.3	98.4	7.5	7.4	-0.1	0.6	1.00
143	2017	Sole_heamorrha	96206	99.0	99.0	7.8	7.8	0.0	0.7	1.00
144	2018	Sole_heamorrha	93364	99.6	99.7	7.8	7.7	-0.1	0.9	0.99

HOL summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
145	2019	Sole_heamorrha	86535	100.0	100.1	7.6	7.6	-0.1	1.1	0.99
146	2020	Sole_heamorrha	46953	100.2	100.4	7.3	7.3	-0.2	1.5	0.98
147	2021	Sole_heamorrha	181	.	.	.	.	.	.	0.98
148	2015	Sole_ulcer	110722	98.0	98.0	7.7	7.7	0.0	0.5	1.00
149	2016	Sole_ulcer	109771	98.9	98.8	7.6	7.6	0.0	0.6	1.00
150	2017	Sole_ulcer	102551	99.2	99.1	7.8	7.8	0.0	0.7	1.00
151	2018	Sole_ulcer	101900	99.7	99.7	7.7	7.6	0.0	1.0	0.99
152	2019	Sole_ulcer	97406	99.8	99.7	7.1	7.0	0.0	1.2	0.98
153	2020	Sole_ulcer	53584	100.1	100.2	6.8	6.8	0.0	1.5	0.98
154	2021	Sole_ulcer	208	.	.	.	.	.	.	0.98
155	2015	Cork_screw_cla	94506	98.9	98.9	8.2	8.2	0.1	0.6	1.00
156	2016	Cork_screw_cla	94894	98.3	98.3	8.1	8.1	0.0	0.6	1.00
157	2017	Cork_screw_cla	91623	99.3	99.3	8.1	8.1	0.0	0.7	1.00
158	2018	Cork_screw_cla	95745	99.7	99.7	8.1	8.0	0.0	0.9	0.99
159	2019	Cork_screw_cla	91361	99.6	99.7	8.2	8.1	-0.1	1.1	0.99
160	2020	Cork_screw_cla	48579	99.8	100.1	6.8	6.8	-0.2	1.5	0.98
161	2021	Cork_screw_cla	216	.	.	.	.	.	.	0.97
162	2015	Skin_proferati	108489	97.1	97.3	8.0	8.0	-0.2	0.6	1.00
163	2016	Skin_proferati	107231	98.4	98.6	7.9	7.9	-0.2	0.6	1.00
164	2017	Skin_proferati	100109	98.7	98.9	8.5	8.5	-0.2	0.7	1.00
165	2018	Skin_proferati	100213	100.2	100.4	7.8	7.8	-0.2	0.9	0.99
166	2019	Skin_proferati	96051	100.6	100.8	7.5	7.4	-0.2	1.2	0.99
167	2020	Skin_proferati	53091	100.7	100.9	7.3	7.1	-0.2	1.6	0.98
168	2021	Skin_proferati	210	.	.	.	.	.	.	0.97
169	2015	White_line_dou	111362	96.1	96.2	7.9	7.9	-0.1	0.6	1.00
170	2016	White_line_dou	110468	97.6	97.7	8.0	7.9	-0.1	0.6	1.00
171	2017	White_line_dou	103209	98.7	98.8	8.5	8.4	-0.1	0.8	1.00
172	2018	White_line_dou	102375	99.7	99.7	9.0	8.8	-0.1	1.0	0.99
173	2019	White_line_dou	97924	99.8	99.8	8.4	8.3	0.0	1.3	0.99
174	2020	White_line_dou	54189	100.7	100.7	7.9	7.9	0.0	1.5	0.98
175	2021	White_line_dou	208	.	.	.	.	.	.	0.98

sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2015	Dermatitis1	7053	98.4	98.4	11.0	11.0	-0.1	1.1	1.00
2	2016	Dermatitis1	11307	100.5	100.6	11.5	11.5	0.0	1.1	1.00
3	2017	Dermatitis1	16847	99.8	99.8	11.0	10.9	0.0	1.2	0.99
4	2018	Dermatitis1	23642	101.4	101.4	11.4	11.3	0.0	1.2	0.99
5	2019	Dermatitis1	26044	102.2	102.2	11.7	11.6	0.0	1.2	0.99
6	2020	Dermatitis1	18467	102.9	102.9	11.6	11.5	0.0	1.5	0.99
7	2021	Dermatitis1	50	.	.	.	.	.	.	0.98
8	2015	Heel_horn_eros	4383	99.0	99.1	9.4	9.4	0.0	1.0	0.99
9	2016	Heel_horn_eros	6745	100.1	100.1	9.5	9.5	0.0	1.1	0.99
10	2017	Heel_horn_eros	9010	100.0	100.0	9.7	9.7	0.0	1.1	0.99
11	2018	Heel_horn_eros	11878	101.1	101.1	9.5	9.4	0.0	1.2	0.99
12	2019	Heel_horn_eros	12650	101.9	101.8	9.2	9.1	0.1	1.3	0.99
13	2020	Heel_horn_eros	8171	101.7	101.6	9.2	9.1	0.0	1.5	0.99
14	2021	Heel_horn_eros	22	.	.	.	.	.	.	0.97
15	2015	Sole_heamorrha	6620	99.0	99.1	9.2	9.2	-0.1	1.0	0.99
16	2016	Sole_heamorrha	10198	99.8	99.9	9.0	8.9	-0.1	1.1	0.99
17	2017	Sole_heamorrha	14325	100.4	100.4	9.3	9.2	0.0	1.1	0.99
18	2018	Sole_heamorrha	19631	101.5	101.6	8.9	8.8	-0.1	1.2	0.99
19	2019	Sole_heamorrha	21125	102.8	103.0	8.9	9.0	-0.2	1.3	0.99
20	2020	Sole_heamorrha	14398	102.6	102.8	8.7	8.7	-0.2	1.7	0.98
21	2021	Sole_heamorrha	30	.	.	.	.	.	.	0.95
22	2015	Sole_ulcer1	7035	99.8	99.8	8.1	8.1	0.0	1.0	0.99
23	2016	Sole_ulcer1	10881	100.5	100.5	7.8	7.8	0.0	1.0	0.99
24	2017	Sole_ulcer1	15689	100.7	100.6	8.6	8.6	0.0	1.0	0.99
25	2018	Sole_ulcer1	22417	101.8	101.8	8.1	8.1	0.1	1.1	0.99
26	2019	Sole_ulcer1	24727	102.3	102.3	7.8	7.8	-0.1	1.2	0.99
27	2020	Sole_ulcer1	16846	103.1	103.2	7.4	7.5	-0.2	1.5	0.98
28	2021	Sole_ulcer1	36	.	.	.	.	.	.	0.97
29	2015	Cork_screw_cla	5396	100.0	99.9	10.7	10.6	0.1	1.1	0.99
30	2016	Cork_screw_cla	8734	98.8	98.7	10.5	10.4	0.0	1.1	0.99
31	2017	Cork_screw_cla	13121	100.3	100.2	10.3	10.3	0.1	1.1	0.99
32	2018	Cork_screw_cla	20198	101.5	101.5	10.1	10.1	0.0	1.2	0.99
33	2019	Cork_screw_cla	22715	101.0	101.3	10.5	10.4	-0.3	1.3	0.99
34	2020	Cork_screw_cla	15629	101.6	102.0	9.1	9.3	-0.3	1.8	0.98
35	2021	Cork_screw_cla	31	.	.	.	.	.	.	0.96
36	2015	Skin_proferati	6731	97.7	97.9	9.8	9.8	-0.2	1.0	0.99
37	2016	Skin_proferati	10468	99.4	99.6	9.6	9.6	-0.2	1.1	0.99

sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
38	2017	Skin_proferati	15045	100.1	100.2	9.8	9.8	-0.1	1.1	0.99
39	2018	Skin_proferati	21794	101.7	101.8	9.2	9.2	-0.2	1.1	0.99
40	2019	Skin_proferati	23891	102.5	102.7	8.9	8.9	-0.2	1.2	0.99
41	2020	Skin_proferati	16213	102.8	103.0	9.1	9.0	-0.2	1.4	0.99
42	2021	Skin_proferati	39	.	.	.	.	.	.	0.98
43	2015	White_line_dou	7114	98.1	98.1	9.6	9.6	0.0	1.1	0.99
44	2016	White_line_dou	11013	99.1	99.2	9.7	9.7	-0.1	1.1	0.99
45	2017	White_line_dou	15851	100.6	100.6	10.4	10.4	0.0	1.2	0.99
46	2018	White_line_dou	22457	101.6	101.6	10.8	10.8	0.0	1.3	0.99
47	2019	White_line_dou	24879	102.0	102.0	10.7	10.8	0.0	1.4	0.99
48	2020	White_line_dou	17073	103.6	103.6	9.7	9.8	0.0	1.7	0.99
49	2021	White_line_dou	36	.	.	.	.	.	.	0.99
50	2015	Dermatitis2	6392	98.8	98.8	11.0	11.0	0.0	1.1	0.99
51	2016	Dermatitis2	10133	100.5	100.5	11.3	11.2	0.0	1.1	0.99
52	2017	Dermatitis2	14805	99.8	99.7	10.7	10.7	0.0	1.2	0.99
53	2018	Dermatitis2	20258	101.2	101.2	11.3	11.3	0.0	1.2	0.99
54	2019	Dermatitis2	12368	101.3	101.4	11.9	11.8	-0.1	1.4	0.99
55	2020	Dermatitis2	97	.	.	.	.	.	.	0.99
56	2015	Heel_horn_eros	3652	99.2	99.2	9.4	9.4	0.0	1.0	0.99
57	2016	Heel_horn_eros	5561	100.1	100.1	9.5	9.4	0.0	1.1	0.99
58	2017	Heel_horn_eros	7262	100.2	100.1	9.5	9.5	0.0	1.1	0.99
59	2018	Heel_horn_eros	9580	101.1	101.1	9.3	9.2	0.0	1.3	0.99
60	2019	Heel_horn_eros	5090	101.9	101.9	9.2	9.0	0.0	1.3	0.99
61	2020	Heel_horn_eros	23	.	.	.	.	.	.	0.98
62	2015	Sole_heamorrha	6136	99.0	99.0	9.2	9.2	0.0	1.0	0.99
63	2016	Sole_heamorrha	9573	99.9	100.0	9.0	8.9	-0.1	1.0	0.99
64	2017	Sole_heamorrha	13129	100.4	100.4	9.3	9.3	0.0	1.1	0.99
65	2018	Sole_heamorrha	17586	101.6	101.6	9.1	9.0	-0.1	1.2	0.99
66	2019	Sole_heamorrha	10268	102.4	102.5	9.0	9.0	-0.2	1.2	0.99
67	2020	Sole_heamorrha	70	.	.	.	.	.	.	0.99
68	2015	Sole_ulcer2	6319	99.7	99.6	8.1	8.1	0.1	1.0	0.99
69	2016	Sole_ulcer2	9743	100.6	100.6	7.9	7.9	0.0	1.0	0.99
70	2017	Sole_ulcer2	14307	101.0	100.9	8.3	8.3	0.1	1.0	0.99
71	2018	Sole_ulcer2	19704	102.0	101.9	8.0	8.0	0.0	1.1	0.99
72	2019	Sole_ulcer2	11462	102.0	102.0	7.7	7.6	0.0	1.2	0.99
73	2020	Sole_ulcer2	78	.	.	.	.	.	.	0.98
74	2015	Cork_screw_cla	4998	99.6	99.6	10.1	10.1	0.1	1.1	0.99

sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
75	2016	Cork_screw_cla	8036	98.6	98.5	10.5	10.4	0.1	1.1	0.99
76	2017	Cork_screw_cla	12819	100.4	100.4	10.3	10.2	0.0	1.1	0.99
77	2018	Cork_screw_cla	17618	101.2	101.2	10.2	10.2	0.0	1.2	0.99
78	2019	Cork_screw_cla	10303	100.9	101.1	10.8	10.7	-0.2	1.3	0.99
79	2020	Cork_screw_cla	75	.	.	.	.	.	.	0.98
80	2015	Skin_proferati	5922	97.8	97.9	9.7	9.7	-0.2	1.0	0.99
81	2016	Skin_proferati	9171	99.5	99.7	9.5	9.5	-0.2	1.0	0.99
82	2017	Skin_proferati	13537	100.1	100.2	9.7	9.6	-0.1	1.0	0.99
83	2018	Skin_proferati	18801	101.7	101.9	9.0	9.0	-0.2	1.1	0.99
84	2019	Skin_proferati	10767	102.4	102.7	8.8	8.8	-0.2	1.1	0.99
85	2020	Skin_proferati	77	.	.	.	.	.	.	0.99
86	2015	White_line_dou	6277	98.3	98.3	9.4	9.4	0.0	1.1	0.99
87	2016	White_line_dou	9662	99.5	99.6	9.6	9.6	0.0	1.1	0.99
88	2017	White_line_dou	14102	101.0	100.9	10.1	10.0	0.0	1.1	0.99
89	2018	White_line_dou	19489	101.9	101.9	10.5	10.4	0.0	1.3	0.99
90	2019	White_line_dou	11343	101.8	101.8	10.5	10.5	0.0	1.4	0.99
91	2020	White_line_dou	76	.	.	.	.	.	.	0.98
92	2015	Dermatitis3	4907	98.6	98.6	10.9	10.8	0.0	1.2	0.99
93	2016	Dermatitis3	7998	100.4	100.4	11.2	11.1	-0.1	1.2	0.99
94	2017	Dermatitis3	10978	99.5	99.5	10.6	10.5	0.0	1.2	0.99
95	2018	Dermatitis3	7948	101.2	101.2	11.2	11.1	0.0	1.3	0.99
96	2019	Dermatitis3	79	.	.	.	.	.	.	0.99
97	2015	Heel_horn_eros	2593	99.6	99.6	9.4	9.4	0.0	1.0	0.99
98	2016	Heel_horn_eros	3940	100.2	100.2	9.6	9.5	0.0	1.1	0.99
99	2017	Heel_horn_eros	5142	100.1	100.0	9.4	9.4	0.0	1.1	0.99
100	2018	Heel_horn_eros	3281	100.9	100.9	9.5	9.4	-0.1	1.3	0.99
101	2019	Heel_horn_eros	21	.	.	.	.	.	.	0.97
102	2015	Sole_heamorrha	4443	99.1	99.1	9.0	9.0	0.0	1.0	0.99
103	2016	Sole_heamorrha	6842	99.8	99.8	8.9	8.9	0.0	1.0	0.99
104	2017	Sole_heamorrha	8611	101.1	101.1	9.3	9.2	0.0	1.1	0.99
105	2018	Sole_heamorrha	5795	102.4	102.4	9.1	9.0	0.0	1.2	0.99
106	2019	Sole_heamorrha	61	.	.	.	.	.	.	0.99
107	2015	Sole_ulcer3	4750	100.3	100.3	8.3	8.3	0.0	1.0	0.99
108	2016	Sole_ulcer3	7736	100.9	100.9	8.1	8.1	0.0	1.0	0.99
109	2017	Sole_ulcer3	10677	101.3	101.3	8.4	8.4	0.0	1.1	0.99
110	2018	Sole_ulcer3	7375	102.5	102.4	8.2	8.1	0.1	1.2	0.99
111	2019	Sole_ulcer3	69	.	.	.	.	.	.	0.98

sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
112	2015	Cork_screw_cla	4005	100.1	100.0	10.5	10.4	0.1	1.1	0.99
113	2016	Cork_screw_cla	7046	99.0	98.9	10.6	10.5	0.1	1.2	0.99
114	2017	Cork_screw_cla	9576	100.5	100.4	10.0	9.9	0.1	1.2	0.99
115	2018	Cork_screw_cla	6539	100.9	100.9	10.0	9.9	0.0	1.3	0.99
116	2019	Cork_screw_cla	52	.	.	.	.	.	.	0.99
117	2015	Skin_proferati	4471	98.1	98.3	9.7	9.7	-0.2	1.0	0.99
118	2016	Skin_proferati	7426	99.6	99.8	9.5	9.5	-0.2	1.0	0.99
119	2017	Skin_proferati	10084	100.1	100.2	9.8	9.7	-0.2	1.0	0.99
120	2018	Skin_proferati	6906	101.9	102.0	9.2	9.2	-0.2	1.1	0.99
121	2019	Skin_proferati	68	.	.	.	.	.	.	0.98
122	2015	White_line_dou	4695	98.7	98.8	9.5	9.5	-0.1	1.1	0.99
123	2016	White_line_dou	7675	99.7	99.9	9.5	9.5	-0.2	1.1	0.99
124	2017	White_line_dou	10569	101.3	101.3	10.0	9.9	0.0	1.1	0.99
125	2018	White_line_dou	7276	102.9	103.0	10.1	10.0	0.0	1.3	0.99
126	2019	White_line_dou	67	.	.	.	.	.	.	0.98
127	2015	Dermatitis	7053	98.6	98.7	10.8	10.8	0.0	1.1	0.99
128	2016	Dermatitis	11307	100.4	100.5	11.2	11.1	0.0	1.1	0.99
129	2017	Dermatitis	16847	99.7	99.7	10.7	10.6	0.0	1.2	0.99
130	2018	Dermatitis	23642	101.1	101.1	11.1	11.1	0.0	1.2	0.99
131	2019	Dermatitis	26044	101.7	101.8	11.5	11.4	-0.1	1.3	0.99
132	2020	Dermatitis	18467	102.4	102.5	11.3	11.2	-0.1	1.5	0.99
133	2021	Dermatitis	50	.	.	.	.	.	.	0.98
134	2015	Heel_horn_eros	4383	99.2	99.2	9.2	9.2	0.0	1.0	0.99
135	2016	Heel_horn_eros	6745	100.2	100.2	9.4	9.3	0.0	1.1	0.99
136	2017	Heel_horn_eros	9010	100.1	100.0	9.5	9.5	0.0	1.1	0.99
137	2018	Heel_horn_eros	11878	101.0	101.0	9.2	9.1	0.0	1.2	0.99
138	2019	Heel_horn_eros	12650	101.8	101.7	8.8	8.7	0.1	1.3	0.99
139	2020	Heel_horn_eros	8171	101.2	101.1	8.9	8.7	0.0	1.4	0.99
140	2021	Heel_horn_eros	22	.	.	.	.	.	.	0.97
141	2015	Sole_heamorrha	6620	98.8	98.9	9.1	9.1	0.0	1.0	0.99
142	2016	Sole_heamorrha	10198	99.7	99.7	8.8	8.8	0.0	1.0	0.99
143	2017	Sole_heamorrha	14325	100.5	100.5	9.2	9.1	0.0	1.1	0.99
144	2018	Sole_heamorrha	19631	101.6	101.7	8.9	8.8	-0.1	1.2	0.99
145	2019	Sole_heamorrha	21125	102.6	102.9	8.8	8.8	-0.2	1.2	0.99
146	2020	Sole_heamorrha	14398	102.9	103.1	8.5	8.5	-0.2	1.6	0.98
147	2021	Sole_heamorrha	30	.	.	.	.	.	.	0.96
148	2015	Sole_ulcer	7035	99.9	99.9	8.1	8.2	0.0	1.0	0.99

sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
149	2016	Sole_ulcer	10881	100.6	100.6	7.9	7.9	0.0	1.0	0.99
150	2017	Sole_ulcer	15689	100.8	100.7	8.4	8.4	0.0	1.0	0.99
151	2018	Sole_ulcer	22417	101.8	101.7	8.0	7.9	0.1	1.1	0.99
152	2019	Sole_ulcer	24727	102.2	102.3	7.5	7.5	-0.1	1.2	0.99
153	2020	Sole_ulcer	16846	102.8	102.9	7.2	7.3	-0.1	1.4	0.98
154	2021	Sole_ulcer	36	.	.	.	.	.	.	0.98
155	2015	Cork_screw_cla	5396	99.9	99.8	10.3	10.2	0.1	1.1	0.99
156	2016	Cork_screw_cla	8734	98.7	98.7	10.3	10.3	0.0	1.1	0.99
157	2017	Cork_screw_cla	13121	100.2	100.2	10.1	10.0	0.1	1.1	0.99
158	2018	Cork_screw_cla	20198	101.1	101.1	9.8	9.8	0.0	1.2	0.99
159	2019	Cork_screw_cla	22715	100.8	101.0	10.2	10.2	-0.2	1.3	0.99
160	2020	Cork_screw_cla	15629	101.0	101.3	9.0	9.1	-0.3	1.7	0.98
161	2021	Cork_screw_cla	31	.	.	.	.	.	.	0.95
162	2015	Skin_proferati	6731	97.8	98.0	9.7	9.7	-0.2	1.0	0.99
163	2016	Skin_proferati	10468	99.4	99.6	9.6	9.6	-0.2	1.0	0.99
164	2017	Skin_proferati	15045	100.1	100.2	9.8	9.8	-0.1	1.1	0.99
165	2018	Skin_proferati	21794	101.6	101.8	9.1	9.1	-0.2	1.1	0.99
166	2019	Skin_proferati	23891	102.5	102.7	8.8	8.8	-0.2	1.1	0.99
167	2020	Skin_proferati	16213	102.7	102.9	9.0	8.9	-0.2	1.3	0.99
168	2021	Skin_proferati	39	.	.	.	.	.	.	0.98
169	2015	White_line_dou	7114	98.2	98.3	9.5	9.5	-0.1	1.1	0.99
170	2016	White_line_dou	11013	99.3	99.4	9.5	9.5	-0.1	1.1	0.99
171	2017	White_line_dou	15851	100.7	100.7	10.0	10.0	0.0	1.1	0.99
172	2018	White_line_dou	22457	101.8	101.8	10.4	10.2	0.0	1.3	0.99
173	2019	White_line_dou	24879	102.3	102.3	10.1	10.1	0.0	1.4	0.99
174	2020	White_line_dou	17073	103.5	103.5	9.3	9.3	0.0	1.5	0.99
175	2021	White_line_dou	36	.	.	.	.	.	.	0.99

sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2019	Dermatitis1	22764	102.1	102.1	11.5	11.5	0.0	1.1	1.00
2	2020	Dermatitis1	34024	102.9	102.9	11.2	11.1	0.0	1.5	0.99
3	2021	Dermatitis1	59470	104.5	104.4	10.3	10.1	0.1	1.6	0.99
4	2022	Dermatitis1	48630	105.2	105.1	10.2	10.1	0.1	1.4	0.99
5	2019	Heel_horn_eros	36029	102.2	102.1	8.8	8.7	0.1	1.2	0.99
6	2020	Heel_horn_eros	47795	102.1	102.1	8.8	8.7	0.0	1.4	0.99
7	2021	Heel_horn_eros	60381	104.1	104.0	8.6	8.5	0.1	1.4	0.99
8	2022	Heel_horn_eros	48630	104.3	104.1	8.4	8.4	0.3	1.3	0.99
9	2019	Sole_heamorrha	27757	102.7	103.0	8.8	8.8	-0.2	1.2	0.99
10	2020	Sole_heamorrha	39521	102.1	102.3	8.4	8.5	-0.3	2.0	0.97
11	2021	Sole_heamorrha	59846	102.5	102.8	8.6	8.7	-0.4	2.2	0.97
12	2022	Sole_heamorrha	48630	102.0	102.1	8.4	8.4	-0.1	1.6	0.98
13	2019	Sole_ulcer1	23960	102.2	102.3	7.7	7.7	-0.1	1.1	0.99
14	2020	Sole_ulcer1	36159	102.8	103.0	7.3	7.4	-0.2	1.5	0.98
15	2021	Sole_ulcer1	59776	102.7	102.9	7.5	7.7	-0.2	1.5	0.98
16	2022	Sole_ulcer1	48630	102.9	103.1	7.3	7.5	-0.1	1.3	0.98
17	2019	Cork_screw_cla	25732	100.8	101.0	10.5	10.4	-0.3	1.2	0.99
18	2020	Cork_screw_cla	38166	101.3	101.6	8.9	9.1	-0.3	1.9	0.98
19	2021	Cork_screw_cla	59966	102.3	102.5	8.9	8.9	-0.2	1.8	0.98
20	2022	Cork_screw_cla	48630	101.9	102.0	8.9	8.9	-0.2	1.4	0.99
21	2019	Skin_proferati	24734	102.2	102.3	8.8	8.8	-0.2	1.1	0.99
22	2020	Skin_proferati	37225	102.6	102.9	8.7	8.7	-0.3	1.3	0.99
23	2021	Skin_proferati	59829	103.8	104.0	8.2	8.3	-0.3	1.5	0.98
24	2022	Skin_proferati	48630	104.3	104.3	8.2	8.2	0.0	1.3	0.99
25	2019	White_line_dou	23823	102.1	102.1	10.5	10.6	0.0	1.3	0.99
26	2020	White_line_dou	35694	103.6	103.5	9.8	9.7	0.0	1.7	0.98
27	2021	White_line_dou	59767	103.9	103.7	9.6	9.5	0.2	1.7	0.98
28	2022	White_line_dou	48630	104.1	104.0	9.3	9.3	0.1	1.4	0.99
29	2019	Dermatitis2	32357	101.6	101.7	11.6	11.5	-0.1	1.3	0.99
30	2020	Dermatitis2	57540	102.7	102.8	11.2	11.1	-0.1	1.7	0.99
31	2021	Dermatitis2	60862	104.1	104.0	10.2	10.0	0.1	1.7	0.99
32	2022	Dermatitis2	48630	104.9	104.9	10.0	10.0	0.0	1.5	0.99
33	2019	Heel_horn_eros	42036	102.2	102.1	8.6	8.5	0.1	1.2	0.99
34	2020	Heel_horn_eros	58395	101.9	101.9	8.6	8.5	0.0	1.5	0.98
35	2021	Heel_horn_eros	60862	103.7	103.8	8.4	8.3	0.0	1.4	0.99
36	2022	Heel_horn_eros	48630	104.0	103.9	8.3	8.3	0.2	1.3	0.99
37	2019	Sole_heamorrha	35107	102.7	102.9	8.8	8.8	-0.2	1.1	0.99

sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
38	2020	Sole_heamorrha	57867	102.8	103.0	8.4	8.5	-0.2	1.7	0.98
39	2021	Sole_heamorrha	60862	103.0	103.2	8.6	8.7	-0.2	1.8	0.98
40	2022	Sole_heamorrha	48630	102.7	102.8	8.4	8.5	-0.1	1.4	0.99
41	2019	Sole_ulcer2	33446	102.4	102.4	7.5	7.6	0.0	1.2	0.99
42	2020	Sole_ulcer2	57796	102.8	102.9	7.3	7.4	-0.2	1.4	0.98
43	2021	Sole_ulcer2	60862	102.9	103.0	7.4	7.6	-0.2	1.4	0.98
44	2022	Sole_ulcer2	48630	102.8	102.9	7.2	7.3	-0.1	1.2	0.99
45	2019	Cork_screw_cla	35372	100.6	100.9	10.4	10.4	-0.2	1.3	0.99
46	2020	Cork_screw_cla	57968	100.9	101.1	9.1	9.3	-0.2	1.9	0.98
47	2021	Cork_screw_cla	60862	101.7	101.9	8.9	9.0	-0.2	1.8	0.98
48	2022	Cork_screw_cla	48630	101.3	101.4	8.9	8.9	-0.1	1.4	0.99
49	2019	Skin_proferati	34636	102.4	102.6	8.6	8.7	-0.2	1.1	0.99
50	2020	Skin_proferati	57871	102.5	102.8	8.7	8.7	-0.3	1.4	0.99
51	2021	Skin_proferati	60862	103.6	104.0	8.1	8.2	-0.3	1.4	0.98
52	2022	Skin_proferati	48630	104.1	104.1	8.1	8.2	-0.1	1.3	0.99
53	2019	White_line_dou	33576	102.4	102.4	9.9	10.0	0.0	1.3	0.99
54	2020	White_line_dou	57805	103.3	103.2	9.3	9.3	0.0	1.6	0.99
55	2021	White_line_dou	60862	103.8	103.6	9.1	9.1	0.2	1.6	0.99
56	2022	White_line_dou	48630	103.8	103.7	8.8	8.9	0.1	1.4	0.99
57	2019	Dermatitis3	48318	101.5	101.6	11.3	11.3	-0.1	1.4	0.99
58	2020	Dermatitis3	58729	102.1	102.3	10.9	10.8	-0.1	1.6	0.99
59	2021	Dermatitis3	60862	103.7	103.6	9.9	9.8	0.0	1.6	0.99
60	2022	Dermatitis3	48630	104.3	104.4	9.8	9.8	-0.1	1.5	0.99
61	2019	Heel_horn_eros	48837	101.8	101.7	8.5	8.4	0.1	1.2	0.99
62	2020	Heel_horn_eros	58729	101.0	101.0	8.7	8.5	0.0	1.4	0.99
63	2021	Heel_horn_eros	60862	103.0	103.0	8.5	8.4	0.0	1.4	0.99
64	2022	Heel_horn_eros	48630	103.1	102.9	8.2	8.1	0.2	1.2	0.99
65	2019	Sole_heamorrha	48546	102.5	102.8	8.9	8.9	-0.2	1.2	0.99
66	2020	Sole_heamorrha	58729	102.7	102.9	8.4	8.5	-0.2	1.7	0.98
67	2021	Sole_heamorrha	60862	102.9	103.2	8.6	8.7	-0.3	1.8	0.98
68	2022	Sole_heamorrha	48630	102.6	102.8	8.4	8.5	-0.1	1.4	0.99
69	2019	Sole_ulcer3	48450	102.1	102.1	7.5	7.5	-0.1	1.3	0.98
70	2020	Sole_ulcer3	58729	102.3	102.4	7.3	7.3	-0.1	1.5	0.98
71	2021	Sole_ulcer3	60862	101.8	101.9	7.3	7.5	-0.2	1.4	0.98
72	2022	Sole_ulcer3	48630	101.6	101.7	7.1	7.2	-0.1	1.3	0.98
73	2019	Cork_screw_cla	48598	100.5	100.7	10.3	10.3	-0.2	1.4	0.99
74	2020	Cork_screw_cla	58729	100.3	100.6	9.1	9.2	-0.3	2.1	0.97

sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
75	2021	Cork_screw_cla	60862	101.1	101.4	8.9	8.9	-0.3	2.2	0.97
76	2022	Cork_screw_cla	48630	100.3	100.5	8.9	8.8	-0.3	1.6	0.98
77	2019	Skin_proferati	48489	102.2	102.4	8.8	8.8	-0.2	1.1	0.99
78	2020	Skin_proferati	58729	102.6	102.8	8.7	8.7	-0.3	1.4	0.99
79	2021	Skin_proferati	60862	103.6	103.9	8.1	8.2	-0.3	1.4	0.99
80	2022	Skin_proferati	48630	104.2	104.3	8.1	8.2	0.0	1.2	0.99
81	2019	White_line_dou	48458	102.5	102.5	9.8	9.8	0.0	1.4	0.99
82	2020	White_line_dou	58729	103.5	103.5	9.2	9.2	0.0	1.6	0.99
83	2021	White_line_dou	60862	103.9	103.7	9.1	9.1	0.1	1.6	0.98
84	2022	White_line_dou	48630	103.7	103.6	8.7	8.8	0.1	1.4	0.99
85	2019	Dermatitis	22764	101.7	101.7	11.3	11.3	-0.1	1.2	0.99
86	2020	Dermatitis	34024	102.5	102.6	10.9	10.8	-0.1	1.5	0.99
87	2021	Dermatitis	59470	104.0	104.0	10.0	9.8	0.1	1.6	0.99
88	2022	Dermatitis	48630	104.7	104.7	9.9	9.8	0.0	1.4	0.99
89	2019	Heel_horn_eros	36029	102.0	101.9	8.4	8.4	0.1	1.2	0.99
90	2020	Heel_horn_eros	47795	101.6	101.6	8.5	8.4	0.0	1.4	0.99
91	2021	Heel_horn_eros	60381	103.5	103.5	8.4	8.3	0.0	1.4	0.99
92	2022	Heel_horn_eros	48630	103.7	103.5	8.2	8.1	0.2	1.2	0.99
93	2019	Sole_heamorrha	27757	102.6	102.8	8.7	8.7	-0.2	1.1	0.99
94	2020	Sole_heamorrha	39521	102.5	102.7	8.3	8.4	-0.2	1.8	0.98
95	2021	Sole_heamorrha	59846	102.8	103.1	8.5	8.6	-0.3	1.9	0.98
96	2022	Sole_heamorrha	48630	102.5	102.6	8.3	8.3	-0.1	1.4	0.99
97	2019	Sole_ulcer	23960	102.1	102.2	7.4	7.4	-0.1	1.1	0.99
98	2020	Sole_ulcer	36159	102.5	102.7	7.1	7.2	-0.1	1.4	0.98
99	2021	Sole_ulcer	59776	102.3	102.5	7.2	7.4	-0.2	1.4	0.98
100	2022	Sole_ulcer	48630	102.3	102.4	7.1	7.2	-0.1	1.2	0.99
101	2019	Cork_screw_cla	25732	100.6	100.8	10.2	10.2	-0.2	1.2	0.99
102	2020	Cork_screw_cla	38166	100.7	101.0	8.8	9.0	-0.3	1.9	0.98
103	2021	Cork_screw_cla	59966	101.6	101.9	8.7	8.8	-0.3	1.9	0.98
104	2022	Cork_screw_cla	48630	101.0	101.2	8.7	8.7	-0.2	1.5	0.99
105	2019	Skin_proferati	24734	102.1	102.3	8.7	8.7	-0.2	1.0	0.99
106	2020	Skin_proferati	37225	102.5	102.8	8.6	8.6	-0.3	1.3	0.99
107	2021	Skin_proferati	59829	103.7	103.9	8.1	8.2	-0.3	1.4	0.99
108	2022	Skin_proferati	48630	104.2	104.3	8.1	8.2	0.0	1.2	0.99
109	2019	White_line_dou	23823	102.3	102.3	9.9	9.9	0.0	1.3	0.99
110	2020	White_line_dou	35694	103.5	103.5	9.3	9.3	0.0	1.6	0.99

sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
111	2021	White_line_dou	59767	103.9	103.7	9.1	9.1	0.2	1.6	0.98
112	2022	White_line_dou	48630	103.9	103.7	8.8	8.9	0.1	1.4	0.99

RDC summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2010	Dermatitis1	156	106	271	98.0	98.0	13.4	13.3	0.0	0.7	1.00
2	2011	Dermatitis1	163	143	339	98.2	98.0	12.3	12.3	0.1	0.7	1.00
3	2012	Dermatitis1	164	138	263	99.7	99.7	12.8	12.7	0.0	0.7	1.00
4	2013	Dermatitis1	118	217	380	101.4	101.4	11.9	11.8	0.1	0.8	1.00
5	2014	Dermatitis1	85	346	523	99.3	99.1	12.4	12.2	0.2	0.8	1.00
6	2015	Dermatitis1	71	386	507	101.9	101.7	11.8	11.6	0.2	0.9	1.00
7	2016	Dermatitis1	70	392	573	101.6	101.5	10.7	10.8	0.1	1.2	0.99
8	2017	Dermatitis1	65	365	497	102.8	102.6	11.5	10.8	0.3	1.9	0.99
9	2018	Dermatitis1	27	181	219	102.6	102.6	11.2	9.9	0.0	3.1	0.96
10	2010	Heel_horn_eros	112	114	249	95.0	95.2	12.5	12.4	-0.2	0.6	1.00
11	2011	Heel_horn_eros	135	138	289	97.1	97.4	10.7	10.6	-0.2	0.6	1.00
12	2012	Heel_horn_eros	132	123	208	96.6	96.7	10.5	10.5	-0.1	0.7	1.00
13	2013	Heel_horn_eros	105	172	287	98.7	98.7	9.9	9.8	0.0	0.6	1.00
14	2014	Heel_horn_eros	78	254	358	98.8	98.7	10.8	10.8	0.2	0.7	1.00
15	2015	Heel_horn_eros	71	238	319	100.3	100.1	10.0	9.8	0.2	1.0	1.00
16	2016	Heel_horn_eros	70	235	348	99.1	98.8	10.2	10.5	0.3	1.1	0.99
17	2017	Heel_horn_eros	60	210	276	102.5	102.3	8.9	9.2	0.3	2.0	0.98
18	2018	Heel_horn_eros	20	106	106	104.0	103.8	8.6	8.1	0.2	2.0	0.97
19	2010	Sole_heamorrha	152	113	287	96.9	97.1	9.2	9.3	-0.2	0.7	1.00
20	2011	Sole_heamorrha	163	151	351	99.5	99.6	9.2	9.2	-0.1	0.7	1.00
21	2012	Sole_heamorrha	161	142	268	100.3	100.5	10.6	10.6	-0.2	0.7	1.00
22	2013	Sole_heamorrha	117	221	391	99.7	99.8	10.6	10.6	-0.1	0.7	1.00
23	2014	Sole_heamorrha	82	350	517	99.1	99.3	10.8	10.8	-0.2	0.7	1.00
24	2015	Sole_heamorrha	71	359	479	100.7	100.8	8.8	9.1	-0.1	1.0	0.99
25	2016	Sole_heamorrha	70	349	507	99.9	100.0	12.2	12.1	0.0	1.3	0.99
26	2017	Sole_heamorrha	64	314	421	102.3	102.5	9.7	9.8	-0.2	2.2	0.97
27	2018	Sole_heamorrha	26	157	181	103.9	103.0	12.9	12.6	0.9	3.5	0.96
28	2010	Sole_ulcer1	154	110	277	95.2	95.4	10.8	10.8	-0.2	0.6	1.00
29	2011	Sole_ulcer1	163	146	342	100.7	100.9	11.7	11.6	-0.2	0.7	1.00
30	2012	Sole_ulcer1	161	142	271	98.5	98.8	12.5	12.4	-0.3	0.7	1.00
31	2013	Sole_ulcer1	117	223	387	101.2	101.2	11.5	11.6	-0.1	0.7	1.00
32	2014	Sole_ulcer1	84	346	519	99.5	99.6	11.5	11.4	-0.1	0.8	1.00
33	2015	Sole_ulcer1	71	380	498	100.7	100.7	12.9	12.9	0.0	1.1	1.00
34	2016	Sole_ulcer1	70	383	561	99.7	99.8	13.6	13.4	-0.1	1.5	0.99
35	2017	Sole_ulcer1	65	355	481	101.0	101.0	11.3	11.2	0.0	2.5	0.98
36	2018	Sole_ulcer1	27	168	199	103.9	103.3	10.6	10.2	0.6	2.6	0.97

RDC summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
37	2010	Cork_screw_cla	134	108	254	93.6	93.7	12.6	12.7	0.0	0.8	1.00
38	2011	Cork_screw_cla	153	140	320	99.5	99.5	10.9	10.9	0.0	0.9	1.00
39	2012	Cork_screw_cla	147	137	249	99.2	99.3	12.9	12.9	-0.1	0.8	1.00
40	2013	Cork_screw_cla	114	206	356	95.7	95.8	11.8	12.0	-0.1	0.8	1.00
41	2014	Cork_screw_cla	82	324	482	96.5	96.5	14.4	14.5	0.0	1.0	1.00
42	2015	Cork_screw_cla	71	345	461	97.4	97.3	11.0	11.3	0.1	1.4	0.99
43	2016	Cork_screw_cla	70	356	522	100.3	100.4	12.3	12.4	-0.1	1.6	0.99
44	2017	Cork_screw_cla	64	324	435	102.0	102.1	12.3	12.2	-0.1	2.1	0.99
45	2018	Cork_screw_cla	26	153	175	100.4	99.5	11.6	10.4	0.9	2.8	0.97
46	2010	Skin_proferati	132	113	268	96.3	96.4	14.1	14.1	-0.1	0.6	1.00
47	2011	Skin_proferati	152	140	319	96.1	96.0	11.6	11.6	0.1	0.6	1.00
48	2012	Skin_proferati	146	139	253	97.2	97.2	12.8	12.8	0.1	0.7	1.00
49	2013	Skin_proferati	113	206	360	98.1	98.2	12.8	12.7	-0.1	0.6	1.00
50	2014	Skin_proferati	81	320	478	100.0	99.8	10.8	10.8	0.2	0.9	1.00
51	2015	Skin_proferati	71	340	458	101.8	101.7	12.1	12.1	0.1	1.0	1.00
52	2016	Skin_proferati	70	350	511	102.2	102.0	12.0	12.4	0.2	1.2	1.00
53	2017	Skin_proferati	64	325	439	102.9	102.7	11.5	11.3	0.3	2.1	0.98
54	2018	Skin_proferati	28	150	182	101.9	101.4	11.2	10.5	0.5	3.3	0.96
55	2010	White_line_dou	156	112	283	97.7	97.9	11.7	11.5	-0.1	0.7	1.00
56	2011	White_line_dou	164	148	347	99.1	99.2	13.3	13.1	-0.1	0.7	1.00
57	2012	White_line_dou	164	142	272	99.0	99.2	14.4	14.2	-0.2	0.7	1.00
58	2013	White_line_dou	118	225	393	100.1	100.1	13.9	13.7	0.0	0.8	1.00
59	2014	White_line_dou	83	356	530	96.0	96.2	15.3	15.0	-0.2	0.9	1.00
60	2015	White_line_dou	71	385	505	100.5	100.6	12.2	11.8	0.0	1.3	0.99
61	2016	White_line_dou	70	388	568	99.5	99.9	13.8	13.3	-0.4	1.7	0.99
62	2017	White_line_dou	65	364	494	100.9	100.8	12.0	11.5	0.2	2.3	0.98
63	2018	White_line_dou	27	180	210	100.1	99.6	11.8	11.0	0.6	2.9	0.97
64	2010	Dermatitis2	145	87	219	98.0	98.0	13.5	13.4	0.0	0.7	1.00
65	2011	Dermatitis2	159	112	265	97.7	97.6	11.9	11.9	0.1	0.6	1.00
66	2012	Dermatitis2	158	116	217	99.3	99.3	12.2	12.1	0.0	0.7	1.00
67	2013	Dermatitis2	115	180	307	101.1	101.0	11.5	11.3	0.1	0.7	1.00
68	2014	Dermatitis2	83	281	415	99.8	99.6	11.7	11.7	0.2	0.7	1.00
69	2015	Dermatitis2	71	310	405	101.8	101.6	10.9	10.7	0.1	0.9	1.00
70	2016	Dermatitis2	66	262	388	101.5	101.3	10.2	10.4	0.2	1.1	0.99
71	2017	Dermatitis2	28	151	145	103.8	103.5	11.9	11.2	0.3	1.7	0.99
72	2010	Heel_horn_eros	97	92	192	93.8	94.0	12.1	12.0	-0.2	0.6	1.00

RDC summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
73	2011	Heel_horn_eros	125	103	212	97.7	97.8	10.7	10.7	-0.1	0.7	1.00
74	2012	Heel_horn_eros	127	96	158	97.0	97.2	10.8	10.8	-0.2	0.8	1.00
75	2013	Heel_horn_eros	91	145	221	98.8	98.7	10.2	10.1	0.1	0.6	1.00
76	2014	Heel_horn_eros	77	189	262	98.5	98.4	10.6	10.5	0.1	0.7	1.00
77	2015	Heel_horn_eros	69	186	239	99.9	99.9	9.9	9.8	0.0	0.9	1.00
78	2016	Heel_horn_eros	57	164	225	98.8	98.5	10.2	10.4	0.3	1.0	1.00
79	2017	Heel_horn_eros	17	100	72	103.1	102.9	11.8	12.0	0.2	1.6	0.99
80	2010	Sole_heamorrha	144	93	232	96.0	96.2	10.0	10.0	-0.2	0.6	1.00
81	2011	Sole_heamorrha	158	120	284	99.4	99.6	9.5	9.5	-0.1	0.7	1.00
82	2012	Sole_heamorrha	157	123	230	99.6	99.8	11.4	11.5	-0.2	0.7	1.00
83	2013	Sole_heamorrha	113	192	328	99.0	99.1	10.9	10.9	-0.1	0.7	1.00
84	2014	Sole_heamorrha	82	295	429	98.6	98.7	11.5	11.5	-0.1	0.6	1.00
85	2015	Sole_heamorrha	71	310	403	100.4	100.5	9.4	9.6	-0.1	1.0	0.99
86	2016	Sole_heamorrha	65	259	379	99.2	99.3	13.1	13.0	-0.1	1.2	1.00
87	2017	Sole_heamorrha	27	139	138	100.3	100.7	11.1	12.2	-0.4	2.0	0.99
88	2010	Sole_ulcer2	144	92	231	97.1	97.1	11.0	10.9	-0.1	0.6	1.00
89	2011	Sole_ulcer2	163	115	274	101.6	101.6	12.5	12.5	-0.1	0.7	1.00
90	2012	Sole_ulcer2	159	120	223	99.4	99.5	13.5	13.4	-0.1	0.7	1.00
91	2013	Sole_ulcer2	116	182	311	102.3	102.2	12.1	12.0	0.1	0.8	1.00
92	2014	Sole_ulcer2	83	287	421	99.5	99.6	12.0	11.8	-0.1	0.8	1.00
93	2015	Sole_ulcer2	71	309	399	101.3	101.2	13.1	12.9	0.1	1.1	1.00
94	2016	Sole_ulcer2	66	264	394	99.7	99.7	14.2	13.6	0.0	1.7	0.99
95	2017	Sole_ulcer2	27	157	147	99.7	99.4	11.6	12.2	0.3	1.8	0.99
96	2010	Cork_screw_cla	115	92	208	92.9	93.0	12.9	13.0	-0.1	0.8	1.00
97	2011	Cork_screw_cla	141	113	253	100.7	100.9	11.2	11.4	-0.1	0.8	1.00
98	2012	Cork_screw_cla	149	108	194	99.8	99.8	13.3	13.4	-0.1	0.8	1.00
99	2013	Cork_screw_cla	107	169	281	97.5	97.6	11.5	11.6	-0.1	0.8	1.00
100	2014	Cork_screw_cla	82	254	375	97.5	97.4	13.7	13.9	0.1	1.1	1.00
101	2015	Cork_screw_cla	71	270	359	97.8	97.7	11.2	11.5	0.1	1.5	0.99
102	2016	Cork_screw_cla	65	230	340	100.0	100.1	12.2	12.6	-0.1	2.2	0.98
103	2017	Cork_screw_cla	27	127	124	99.3	99.3	13.9	13.9	0.0	3.0	0.98
104	2010	Skin_proferati	109	49	66	96.1	96.2	14.7	14.7	-0.1	0.7	1.00
105	2011	Skin_proferati	129	43	35	96.1	96.1	12.0	12.0	0.0	0.6	1.00
106	2012	Skin_proferati	125	51	61	96.6	96.6	13.6	13.7	0.0	0.7	1.00
107	2013	Skin_proferati	94	63	81	97.9	98.0	14.3	14.2	-0.1	0.7	1.00
108	2014	Skin_proferati	58	98	101	99.9	99.9	10.0	10.1	0.0	0.6	1.00

RDC summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
109	2015	Skin_proferati	47	104	107	101.2	101.0	13.8	13.7	0.2	1.1	1.00
110	2016	Skin_proferati	37	107	105	100.1	99.9	14.0	14.6	0.2	1.5	1.00
111	2017	Skin_proferati	13	99	54	106.9	106.4	14.5	15.1	0.5	2.0	0.99
112	2010	White_line_dou	140	47	63	95.8	95.8	11.7	11.6	-0.1	0.7	1.00
113	2011	White_line_dou	143	45	33	98.5	98.6	11.4	11.3	-0.1	0.8	1.00
114	2012	White_line_dou	138	52	57	98.8	99.0	13.7	13.7	-0.1	0.8	1.00
115	2013	White_line_dou	104	63	77	98.4	98.4	12.9	12.7	0.0	0.9	1.00
116	2014	White_line_dou	60	99	98	95.4	95.6	13.9	13.8	-0.2	0.8	1.00
117	2015	White_line_dou	47	107	104	100.6	100.6	10.7	10.4	0.0	1.4	0.99
118	2016	White_line_dou	37	109	101	97.7	98.4	12.9	12.9	-0.7	2.1	0.99
119	2017	White_line_dou	12	99	54	102.0	101.3	10.3	9.9	0.7	2.6	0.97
120	2010	Dermatitis3	106	36	50	97.3	97.2	14.0	13.8	0.0	0.7	1.00
121	2011	Dermatitis3	119	35	22	98.4	98.2	12.2	12.1	0.2	0.7	1.00
122	2012	Dermatitis3	128	38	40	100.4	100.4	13.0	12.8	0.1	0.7	1.00
123	2013	Dermatitis3	86	51	60	101.2	101.1	11.4	11.5	0.1	0.8	1.00
124	2014	Dermatitis3	56	73	72	98.4	98.3	12.6	12.4	0.2	0.8	1.00
125	2015	Dermatitis3	43	73	70	101.5	101.3	12.8	12.6	0.2	1.1	1.00
126	2016	Dermatitis3	11	83	52	102.6	102.1	8.2	8.4	0.5	1.5	0.98
127	2010	Heel_horn_eros	64	32	31	93.6	93.7	13.1	13.0	-0.1	0.6	1.00
128	2011	Heel_horn_eros	87	28	11	98.2	98.4	10.8	10.7	-0.1	0.7	1.00
129	2012	Heel_horn_eros	78	30	18	97.7	97.9	11.6	11.5	-0.2	0.6	1.00
130	2013	Heel_horn_eros	58	34	24	99.3	99.2	10.6	10.4	0.0	0.6	1.00
131	2014	Heel_horn_eros	41	44	29	97.6	97.4	10.3	10.3	0.2	0.7	1.00
132	2015	Heel_horn_eros	25	46	31	102.8	102.7	8.0	8.0	0.1	1.1	0.99
133	2010	Sole_heamorrha	103	36	46	96.7	96.8	10.2	10.2	-0.2	0.7	1.00
134	2011	Sole_heamorrha	110	34	18	100.3	100.5	10.3	10.4	-0.2	0.6	1.00
135	2012	Sole_heamorrha	109	38	35	100.1	100.3	12.5	12.5	-0.2	0.7	1.00
136	2013	Sole_heamorrha	75	50	51	99.9	100.0	12.2	12.2	-0.1	0.7	1.00
137	2014	Sole_heamorrha	50	65	56	98.9	99.0	11.5	11.4	-0.1	0.7	1.00
138	2015	Sole_heamorrha	39	63	57	100.3	100.4	9.5	9.5	-0.1	1.3	0.99
139	2010	Sole_ulcer3	114	36	49	97.6	97.7	11.1	11.1	-0.1	0.6	1.00
140	2011	Sole_ulcer3	120	36	21	103.3	103.4	12.1	12.0	-0.1	0.6	1.00
141	2012	Sole_ulcer3	125	39	39	99.7	99.8	13.5	13.5	-0.1	0.7	1.00
142	2013	Sole_ulcer3	86	51	58	103.5	103.5	12.1	12.0	0.0	0.8	1.00
143	2014	Sole_ulcer3	55	72	68	100.0	100.2	10.4	10.3	-0.2	1.1	0.99
144	2015	Sole_ulcer3	43	70	67	100.8	100.6	14.3	14.3	0.2	1.1	1.00

RDC summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
145	2016	Sole_ulcer3	10	83	46	94.6	94.8	11.3	11.4	-0.2	1.7	0.99
146	2010	Cork_screw_cla	81	36	44	94.9	94.8	12.8	13.0	0.1	0.9	1.00
147	2011	Cork_screw_cla	106	33	19	101.1	101.2	11.6	11.7	0.0	0.8	1.00
148	2012	Cork_screw_cla	106	38	38	100.3	100.5	13.5	13.6	-0.2	0.8	1.00
149	2013	Cork_screw_cla	76	50	55	97.7	97.8	12.1	12.2	-0.1	0.8	1.00
150	2014	Cork_screw_cla	51	70	64	97.6	97.5	12.7	12.8	0.1	1.2	1.00
151	2015	Cork_screw_cla	41	66	63	98.9	99.3	9.8	10.0	-0.4	1.2	0.99
152	2016	Cork_screw_cla	10	77	46	100.0	99.3	7.1	6.2	0.7	2.3	0.95
153	2010	Skin_proferati	82	39	53	96.4	96.4	14.5	14.6	-0.1	0.7	1.00
154	2011	Skin_proferati	107	33	22	95.7	95.7	11.6	11.7	0.0	0.6	1.00
155	2012	Skin_proferati	102	40	44	97.1	97.1	13.9	14.0	0.0	0.7	1.00
156	2013	Skin_proferati	73	53	63	98.4	98.4	14.8	14.8	0.0	0.6	1.00
157	2014	Skin_proferati	50	74	71	100.4	100.6	11.0	11.1	-0.2	0.7	1.00
158	2015	Skin_proferati	42	69	69	101.1	100.9	14.3	14.3	0.3	1.0	1.00
159	2016	Skin_proferati	10	82	49	102.6	102.2	12.5	13.6	0.4	1.4	1.00
160	2010	White_line_dou	110	36	50	97.0	97.0	12.0	11.9	0.0	0.7	1.00
161	2011	White_line_dou	119	35	21	98.9	99.0	11.6	11.5	-0.1	0.8	1.00
162	2012	White_line_dou	126	39	39	98.5	98.5	13.6	13.6	-0.1	0.8	1.00
163	2013	White_line_dou	82	52	59	98.7	98.8	14.0	13.7	-0.1	1.0	1.00
164	2014	White_line_dou	55	71	68	95.9	96.0	14.3	14.2	-0.1	0.8	1.00
165	2015	White_line_dou	43	69	67	100.6	100.6	11.2	10.9	0.0	1.5	0.99
166	2016	White_line_dou	10	83	46	92.3	92.8	13.5	13.7	-0.5	2.0	0.99
167	2010	Dermatitis	156	106	271	98.3	98.4	13.0	12.9	0.0	0.6	1.00
168	2011	Dermatitis	163	143	339	98.3	98.2	11.9	11.7	0.2	0.7	1.00
169	2012	Dermatitis	164	138	263	99.7	99.7	12.5	12.3	0.0	0.7	1.00
170	2013	Dermatitis	118	217	380	101.3	101.2	11.4	11.4	0.1	0.8	1.00
171	2014	Dermatitis	85	346	523	99.3	99.1	11.9	11.8	0.1	0.7	1.00
172	2015	Dermatitis	71	386	507	101.7	101.5	11.2	11.1	0.2	0.9	1.00
173	2016	Dermatitis	70	392	573	101.7	101.4	10.1	10.3	0.3	1.1	0.99
174	2017	Dermatitis	65	365	497	102.8	102.5	10.7	10.1	0.3	1.9	0.98
175	2018	Dermatitis	27	181	219	103.0	103.0	10.6	9.3	0.0	3.1	0.96
176	2010	Heel_horn_eros	112	114	249	95.2	95.4	12.5	12.4	-0.2	0.6	1.00
177	2011	Heel_horn_eros	135	138	289	97.5	97.7	10.7	10.5	-0.2	0.7	1.00
178	2012	Heel_horn_eros	132	123	208	96.7	96.9	10.8	10.8	-0.2	0.7	1.00
179	2013	Heel_horn_eros	105	172	287	98.9	98.9	10.0	10.0	0.0	0.6	1.00
180	2014	Heel_horn_eros	78	254	358	98.7	98.5	10.7	10.7	0.1	0.7	1.00

RDC summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
181	2015	Heel_horn_eros	71	238	319	100.2	100.1	10.0	9.9	0.1	1.0	1.00
182	2016	Heel_horn_eros	70	235	348	99.2	98.9	9.9	10.3	0.3	1.1	0.99
183	2017	Heel_horn_eros	60	210	276	102.5	102.2	8.9	9.1	0.3	1.9	0.98
184	2018	Heel_horn_eros	20	106	106	103.8	103.8	8.7	8.1	0.0	2.1	0.97
185	2010	Sole_heamorrha	152	113	287	96.6	96.7	9.6	9.7	-0.2	0.7	1.00
186	2011	Sole_heamorrha	163	151	351	99.5	99.7	9.6	9.6	-0.1	0.6	1.00
187	2012	Sole_heamorrha	161	142	268	100.0	100.2	11.4	11.4	-0.3	0.7	1.00
188	2013	Sole_heamorrha	117	221	391	99.6	99.7	11.0	11.0	-0.2	0.7	1.00
189	2014	Sole_heamorrha	82	350	517	98.8	98.9	11.4	11.5	-0.1	0.6	1.00
190	2015	Sole_heamorrha	71	359	479	100.7	100.7	9.2	9.4	-0.1	1.0	0.99
191	2016	Sole_heamorrha	70	349	507	99.9	100.0	12.7	12.6	0.0	1.4	0.99
192	2017	Sole_heamorrha	64	314	421	102.4	102.6	10.3	10.3	-0.2	2.1	0.98
193	2018	Sole_heamorrha	26	157	181	104.0	103.0	12.7	12.1	0.9	3.5	0.96
194	2010	Sole_ulcer	154	110	277	96.5	96.5	10.8	10.7	-0.1	0.6	1.00
195	2011	Sole_ulcer	163	146	342	101.4	101.5	12.3	12.3	-0.1	0.7	1.00
196	2012	Sole_ulcer	161	142	271	99.0	99.2	13.4	13.3	-0.1	0.6	1.00
197	2013	Sole_ulcer	117	223	387	101.9	101.9	11.7	11.7	0.0	0.7	1.00
198	2014	Sole_ulcer	84	346	519	99.6	99.6	11.7	11.6	-0.1	0.8	1.00
199	2015	Sole_ulcer	71	380	498	100.9	100.9	13.0	12.9	0.0	1.0	1.00
200	2016	Sole_ulcer	70	383	561	99.9	100.0	13.5	13.1	-0.1	1.6	0.99
201	2017	Sole_ulcer	65	355	481	100.8	100.8	11.3	11.1	0.0	2.3	0.98
202	2018	Sole_ulcer	27	168	199	103.9	103.3	10.0	9.6	0.6	2.6	0.97
203	2010	Cork_screw_cla	134	108	254	93.8	93.9	12.6	12.7	-0.1	0.8	1.00
204	2011	Cork_screw_cla	153	140	320	100.2	100.3	10.9	11.1	-0.1	0.7	1.00
205	2012	Cork_screw_cla	147	137	249	99.8	99.9	12.7	12.8	-0.1	0.8	1.00
206	2013	Cork_screw_cla	114	206	356	96.4	96.6	12.0	12.1	-0.2	0.8	1.00
207	2014	Cork_screw_cla	82	324	482	97.5	97.4	13.3	13.5	0.1	1.1	1.00
208	2015	Cork_screw_cla	71	345	461	97.5	97.5	10.8	11.1	0.0	1.3	0.99
209	2016	Cork_screw_cla	70	356	522	100.0	100.1	11.8	12.1	-0.1	1.9	0.99
210	2017	Cork_screw_cla	64	324	435	101.6	101.8	11.6	11.5	-0.1	2.3	0.98
211	2018	Cork_screw_cla	26	153	175	99.7	98.8	11.0	9.9	0.8	2.4	0.98
212	2010	Skin_proferati	132	113	268	95.9	96.0	14.4	14.4	-0.1	0.7	1.00
213	2011	Skin_proferati	152	140	319	96.0	96.0	11.7	11.7	0.0	0.7	1.00
214	2012	Skin_proferati	146	139	253	97.0	97.0	13.3	13.3	0.0	0.7	1.00
215	2013	Skin_proferati	113	206	360	98.0	98.0	13.4	13.4	0.0	0.7	1.00
216	2014	Skin_proferati	81	320	478	99.8	99.7	11.4	11.5	0.0	1.0	1.00

RDC summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
217	2015	Skin_proferati	71	340	458	101.8	101.7	12.2	12.2	0.1	1.0	1.00
218	2016	Skin_proferati	70	350	511	102.2	102.1	12.0	12.5	0.1	1.3	0.99
219	2017	Skin_proferati	64	325	439	102.8	102.5	11.6	11.4	0.3	2.1	0.98
220	2018	Skin_proferati	28	150	182	101.3	100.9	11.5	10.8	0.4	3.0	0.97
221	2010	White_line_dou	156	112	283	96.8	96.8	11.2	11.2	0.0	0.7	1.00
222	2011	White_line_dou	164	148	347	98.2	98.4	12.4	12.3	-0.2	0.7	1.00
223	2012	White_line_dou	164	142	272	98.5	98.6	13.9	13.8	-0.2	0.8	1.00
224	2013	White_line_dou	118	225	393	98.9	98.9	13.2	13.0	0.1	0.9	1.00
225	2014	White_line_dou	83	356	530	96.1	96.2	14.2	13.9	-0.2	0.8	1.00
226	2015	White_line_dou	71	385	505	101.0	100.9	10.7	10.4	0.1	1.3	0.99
227	2016	White_line_dou	70	388	568	99.2	99.6	13.3	12.6	-0.4	2.0	0.99
228	2017	White_line_dou	65	364	494	100.8	100.6	11.0	10.7	0.2	2.2	0.98
229	2018	White_line_dou	27	180	210	99.9	99.4	10.8	10.2	0.4	2.5	0.97

RDC summery stastistics for SS and prev SS breeding value for nordic AI bulls with no offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2019	Dermatitis1	69	.	.	104.2	103.9	9.0	8.9	0.3	1.1	0.99
2	2020	Dermatitis1	74	.	.	104.0	104.0	8.5	8.2	-0.1	1.7	0.98
3	2021	Dermatitis1	72	.	.	105.6	105.3	7.7	7.6	0.2	1.3	0.98
4	2022	Dermatitis1	50	.	.	104.3	104.6	7.6	7.2	-0.3	1.5	0.98
5	2019	Heel_horn_eros	73	0	0	103.3	102.8	8.5	8.8	0.5	1.2	0.99
6	2020	Heel_horn_eros	74	.	.	105.5	104.9	6.8	7.0	0.6	1.4	0.98
7	2021	Heel_horn_eros	72	.	.	105.3	105.3	6.9	7.0	0.0	1.3	0.98
8	2022	Heel_horn_eros	50	.	.	103.6	103.2	7.0	7.2	0.4	1.3	0.98
9	2019	Sole_heamorrha	70	0	.	103.1	103.2	8.0	7.8	-0.1	1.0	0.99
10	2020	Sole_heamorrha	74	.	.	105.3	105.0	9.0	8.9	0.3	1.9	0.98
11	2021	Sole_heamorrha	72	.	.	104.2	104.4	7.9	7.9	-0.2	1.2	0.99
12	2022	Sole_heamorrha	50	.	.	105.8	105.9	8.5	8.4	-0.1	1.4	0.99
13	2019	Sole_ulcer1	69	.	.	102.4	102.3	8.3	8.0	0.1	1.2	0.99
14	2020	Sole_ulcer1	74	.	.	106.4	106.2	8.4	8.5	0.2	1.7	0.98
15	2021	Sole_ulcer1	72	.	.	103.8	104.1	8.3	8.3	-0.3	0.9	0.99
16	2022	Sole_ulcer1	50	.	.	106.8	106.6	8.9	9.0	0.1	1.3	0.99
17	2019	Cork_screw_cla	70	0	.	102.3	102.1	9.8	9.9	0.2	1.4	0.99
18	2020	Cork_screw_cla	74	.	.	104.3	103.9	9.4	9.1	0.4	1.6	0.99
19	2021	Cork_screw_cla	72	.	.	101.5	101.4	8.7	8.8	0.0	1.4	0.99
20	2022	Cork_screw_cla	50	.	.	103.7	103.4	10.4	10.3	0.2	1.5	0.99
21	2019	Skin_proferati	69	.	.	104.4	103.9	8.2	8.2	0.4	1.1	0.99
22	2020	Skin_proferati	74	.	.	103.9	103.7	7.7	7.7	0.2	1.7	0.98
23	2021	Skin_proferati	72	.	.	106.7	106.3	7.2	7.0	0.4	1.1	0.99
24	2022	Skin_proferati	50	.	.	104.2	103.9	6.2	6.0	0.3	1.1	0.98
25	2019	White_line_dou	69	.	.	101.9	102.0	10.0	9.7	0.0	1.2	0.99
26	2020	White_line_dou	74	.	.	101.4	101.2	8.5	8.2	0.2	1.8	0.98
27	2021	White_line_dou	72	.	.	102.1	102.1	8.0	7.5	0.0	1.4	0.99
28	2022	White_line_dou	50	.	.	102.4	101.9	8.6	8.3	0.5	1.6	0.98
29	2019	Dermatitis2	77	0	0	103.8	103.6	8.5	8.6	0.2	1.1	0.99
30	2020	Dermatitis2	74	.	.	103.8	103.7	8.0	7.7	0.1	1.7	0.98
31	2021	Dermatitis2	72	.	.	105.7	105.4	7.2	7.1	0.3	1.2	0.99
32	2022	Dermatitis2	50	.	.	103.8	103.9	7.1	6.8	-0.1	1.4	0.98
33	2019	Heel_horn_eros	77	0	0	103.1	102.5	8.3	8.4	0.5	1.3	0.99
34	2020	Heel_horn_eros	74	.	.	105.4	104.9	6.9	7.0	0.4	1.5	0.98
35	2021	Heel_horn_eros	72	.	.	105.5	105.3	7.0	7.0	0.2	1.3	0.98
36	2022	Heel_horn_eros	50	.	.	103.7	103.2	7.0	7.1	0.5	1.2	0.99

RDC summery stastistics for SS and prev SS breeding value for nordic AI bulls with no offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
37	2019	Sole_heamorrha	77	0	0	102.9	103.0	8.0	7.9	-0.1	1.2	0.99
38	2020	Sole_heamorrha	74	.	.	105.8	105.4	9.3	9.1	0.4	1.8	0.98
39	2021	Sole_heamorrha	72	.	.	104.4	104.5	8.2	8.3	-0.1	1.2	0.99
40	2022	Sole_heamorrha	50	.	.	106.1	105.9	8.9	8.9	0.2	1.4	0.99
41	2019	Sole_ulcer2	77	0	0	102.2	101.8	8.0	7.7	0.4	1.1	0.99
42	2020	Sole_ulcer2	74	.	.	106.1	105.9	8.3	8.2	0.3	1.6	0.98
43	2021	Sole_ulcer2	72	.	.	104.1	104.0	8.2	8.1	0.1	1.0	0.99
44	2022	Sole_ulcer2	50	.	.	106.7	106.2	8.3	8.3	0.5	1.4	0.99
45	2019	Cork_screw_cla	77	0	0	101.7	101.7	9.6	9.7	0.0	1.8	0.98
46	2020	Cork_screw_cla	74	.	.	104.5	104.1	10.1	10.0	0.4	1.7	0.99
47	2021	Cork_screw_cla	72	.	.	102.0	101.8	9.3	9.3	0.1	1.7	0.98
48	2022	Cork_screw_cla	50	.	.	104.2	103.9	10.8	10.5	0.3	1.6	0.99
49	2019	Skin_proferati	77	0	0	103.7	103.5	8.7	8.7	0.2	1.1	0.99
50	2020	Skin_proferati	74	.	.	103.6	103.4	7.6	7.6	0.2	1.5	0.98
51	2021	Skin_proferati	72	.	.	106.4	106.2	7.2	7.1	0.2	1.2	0.99
52	2022	Skin_proferati	50	.	.	103.8	103.7	6.2	6.2	0.1	0.9	0.99
53	2019	White_line_dou	77	0	0	102.0	101.9	9.3	9.0	0.1	1.5	0.99
54	2020	White_line_dou	74	.	.	101.7	101.6	8.5	8.3	0.1	1.5	0.98
55	2021	White_line_dou	72	.	.	101.5	101.5	7.7	7.4	0.0	1.3	0.99
56	2022	White_line_dou	50	.	.	102.8	102.2	8.5	8.5	0.6	1.4	0.99
57	2019	Dermatitis3	77	0	0	104.1	103.7	8.5	8.5	0.3	1.3	0.99
58	2020	Dermatitis3	74	.	.	104.4	104.4	8.5	8.1	0.1	1.7	0.98
59	2021	Dermatitis3	72	.	.	105.8	105.3	7.2	7.1	0.5	1.3	0.98
60	2022	Dermatitis3	50	.	.	104.2	104.2	7.6	7.2	0.0	1.4	0.98
61	2019	Heel_horn_eros	77	0	0	103.0	102.4	8.5	8.5	0.6	1.4	0.99
62	2020	Heel_horn_eros	74	.	.	105.8	105.3	6.9	7.0	0.5	1.5	0.98
63	2021	Heel_horn_eros	72	.	.	105.5	105.4	7.1	7.1	0.1	1.2	0.99
64	2022	Heel_horn_eros	50	.	.	103.9	103.3	7.0	7.2	0.6	1.2	0.99
65	2019	Sole_heamorrha	77	0	0	103.3	103.2	8.3	8.3	0.0	1.1	0.99
66	2020	Sole_heamorrha	74	.	.	106.1	105.7	9.3	9.1	0.4	1.9	0.98
67	2021	Sole_heamorrha	72	.	.	104.8	104.8	8.3	8.4	0.0	1.1	0.99
68	2022	Sole_heamorrha	50	.	.	106.7	106.6	9.0	8.9	0.2	1.4	0.99
69	2019	Sole_ulcer3	77	0	0	102.5	102.2	8.2	8.2	0.3	1.3	0.99
70	2020	Sole_ulcer3	74	.	.	105.8	105.6	8.4	8.4	0.2	1.7	0.98
71	2021	Sole_ulcer3	72	.	.	104.1	104.0	8.4	8.4	0.1	1.0	0.99
72	2022	Sole_ulcer3	50	.	.	106.3	105.9	8.3	8.2	0.4	1.3	0.99

RDC summery stastistics for SS and prev SS breeding value for nordic AI bulls with no offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
73	2019	Cork_screw_cla	77	0	0	100.8	101.1	9.5	9.6	-0.3	1.8	0.98
74	2020	Cork_screw_cla	74	.	.	102.5	102.2	9.9	9.7	0.3	1.7	0.98
75	2021	Cork_screw_cla	72	.	.	100.4	100.5	9.1	9.2	-0.1	1.6	0.99
76	2022	Cork_screw_cla	50	.	.	102.8	102.7	10.7	10.5	0.1	1.4	0.99
77	2019	Skin_proferati	77	0	0	103.7	103.5	8.8	8.8	0.2	1.3	0.99
78	2020	Skin_proferati	74	.	.	103.2	103.1	7.8	7.7	0.1	1.5	0.98
79	2021	Skin_proferati	72	.	.	106.3	106.1	7.2	7.1	0.2	1.1	0.99
80	2022	Skin_proferati	50	.	.	103.9	103.9	6.2	6.1	0.0	0.9	0.99
81	2019	White_line_dou	77	0	0	101.6	101.4	9.1	8.7	0.2	1.6	0.99
82	2020	White_line_dou	74	.	.	101.0	100.8	8.2	7.9	0.2	1.5	0.98
83	2021	White_line_dou	72	.	.	101.5	101.2	7.7	7.4	0.3	1.4	0.98
84	2022	White_line_dou	50	.	.	102.1	101.2	8.2	8.0	0.8	1.6	0.98
85	2019	Dermatitis	69	.	.	104.2	103.8	8.5	8.5	0.4	1.0	0.99
86	2020	Dermatitis	74	.	.	104.2	104.1	8.3	7.9	0.0	1.7	0.98
87	2021	Dermatitis	72	.	.	105.8	105.3	7.3	7.1	0.5	1.2	0.99
88	2022	Dermatitis	50	.	.	104.1	104.3	7.4	7.0	-0.1	1.5	0.98
89	2019	Heel_horn_eros	73	0	0	103.3	102.8	8.4	8.5	0.6	1.2	0.99
90	2020	Heel_horn_eros	74	.	.	105.6	105.1	6.9	7.0	0.5	1.5	0.98
91	2021	Heel_horn_eros	72	.	.	105.4	105.3	7.0	7.1	0.1	1.3	0.98
92	2022	Heel_horn_eros	50	.	.	103.8	103.2	7.0	7.2	0.6	1.3	0.98
93	2019	Sole_heamorrha	70	0	.	103.3	103.3	8.4	8.2	0.0	1.1	0.99
94	2020	Sole_heamorrha	74	.	.	105.7	105.4	9.1	9.0	0.3	1.8	0.98
95	2021	Sole_heamorrha	72	.	.	104.5	104.7	8.1	8.2	-0.2	1.2	0.99
96	2022	Sole_heamorrha	50	.	.	106.3	106.2	8.7	8.8	0.1	1.4	0.99
97	2019	Sole_ulcer	69	.	.	102.6	102.3	8.1	8.0	0.3	1.1	0.99
98	2020	Sole_ulcer	74	.	.	106.0	105.8	8.3	8.3	0.2	1.6	0.98
99	2021	Sole_ulcer	72	.	.	104.0	104.0	8.2	8.1	0.0	1.0	0.99
100	2022	Sole_ulcer	50	.	.	106.5	106.2	8.3	8.4	0.3	1.3	0.99
101	2019	Cork_screw_cla	70	0	.	101.7	101.6	9.6	9.8	0.1	1.5	0.99
102	2020	Cork_screw_cla	74	.	.	103.6	103.1	9.7	9.6	0.4	1.7	0.99
103	2021	Cork_screw_cla	72	.	.	101.1	101.1	8.9	9.0	0.0	1.5	0.99
104	2022	Cork_screw_cla	50	.	.	103.4	103.2	10.6	10.3	0.2	1.6	0.99
105	2019	Skin_proferati	69	.	.	104.5	104.3	8.1	8.2	0.2	1.0	0.99
106	2020	Skin_proferati	74	.	.	103.5	103.3	7.7	7.6	0.2	1.6	0.98
107	2021	Skin_proferati	72	.	.	106.4	106.2	7.0	7.1	0.3	1.2	0.99
108	2022	Skin_proferati	50	.	.	104.0	103.8	6.2	6.0	0.1	1.0	0.99

RDC summery stastistics for SS and prev SS breeding value for nordic AI bulls with no offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
109	2019	White_line_dou	69	.	.	101.7	101.6	9.2	8.9	0.1	1.2	0.99
110	2020	White_line_dou	74	.	.	101.3	101.1	8.2	8.1	0.2	1.6	0.98
111	2021	White_line_dou	72	.	.	101.7	101.6	7.7	7.3	0.1	1.3	0.99
112	2022	White_line_dou	50	.	.	102.4	101.7	8.2	8.1	0.7	1.5	0.98

RDC summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2015	Dermatitis1	28782	100.5	99.8	8.7	8.9	0.7	0.6	1.00
2	2016	Dermatitis1	27314	99.8	99.1	7.9	8.1	0.7	0.6	1.00
3	2017	Dermatitis1	25363	100.5	99.8	8.3	8.5	0.7	0.7	1.00
4	2018	Dermatitis1	23360	99.8	99.0	8.0	8.1	0.7	0.9	0.99
5	2019	Dermatitis1	20039	101.1	100.4	8.0	8.1	0.7	1.1	0.99
6	2020	Dermatitis1	8859	100.8	100.1	7.8	7.5	0.8	1.5	0.98
7	2021	Dermatitis1	5	.	.	.	.	.	.	0.97
8	2015	Heel_horn_eros	21845	98.6	98.5	8.0	7.9	0.1	0.5	1.00
9	2016	Heel_horn_eros	19558	98.8	98.7	7.7	7.6	0.1	0.6	1.00
10	2017	Heel_horn_eros	17136	99.3	99.2	7.7	7.6	0.2	0.7	1.00
11	2018	Heel_horn_eros	15230	99.9	99.7	7.5	7.4	0.2	0.9	0.99
12	2019	Heel_horn_eros	12075	100.1	99.8	8.3	8.3	0.3	1.2	0.99
13	2020	Heel_horn_eros	4555	100.4	100.1	7.1	7.1	0.3	1.4	0.98
14	2021	Heel_horn_eros	3	.	.	.	.	.	.	0.11
15	2015	Sole_heamorrha	29266	99.6	98.2	7.3	7.5	1.4	0.7	1.00
16	2016	Sole_heamorrha	26532	99.6	98.2	7.3	7.5	1.4	0.8	1.00
17	2017	Sole_heamorrha	24416	99.9	98.5	6.8	7.0	1.4	0.8	0.99
18	2018	Sole_heamorrha	21527	100.1	98.6	7.0	7.2	1.4	1.0	0.99
19	2019	Sole_heamorrha	17812	100.8	99.5	7.2	7.5	1.3	1.2	0.99
20	2020	Sole_heamorrha	7560	102.1	100.9	6.9	7.2	1.1	1.6	0.97
21	2021	Sole_heamorrha	5	.	.	.	.	.	.	0.99
22	2015	Sole_ulcer1	29631	98.4	95.6	8.9	10.4	2.8	1.7	1.00
23	2016	Sole_ulcer1	27450	99.1	96.4	8.1	9.4	2.7	1.6	0.99
24	2017	Sole_ulcer1	25333	99.2	96.5	8.0	9.4	2.7	1.7	0.99
25	2018	Sole_ulcer1	23193	100.3	97.8	7.5	8.8	2.5	1.7	0.99
26	2019	Sole_ulcer1	19775	100.1	97.6	7.7	8.9	2.5	1.8	0.99
27	2020	Sole_ulcer1	8714	100.9	98.7	7.0	8.3	2.2	2.3	0.97
28	2021	Sole_ulcer1	3	.	.	.	.	.	.	1.00
29	2015	Cork_screw_cla	26255	98.4	96.3	8.9	9.7	2.0	1.2	1.00
30	2016	Cork_screw_cla	24717	97.9	95.8	8.8	9.6	2.1	1.2	0.99
31	2017	Cork_screw_cla	23196	98.9	97.0	7.8	8.5	2.0	1.2	0.99
32	2018	Cork_screw_cla	21431	100.3	98.5	7.4	8.1	1.8	1.3	0.99
33	2019	Cork_screw_cla	18508	100.3	98.5	8.3	9.0	1.7	1.5	0.99
34	2020	Cork_screw_cla	7821	100.4	98.6	7.2	7.7	1.8	1.7	0.98
35	2021	Cork_screw_cla	5	.	.	.	.	.	.	0.99
36	2015	Skin_proferati	26379	99.7	98.4	8.1	8.2	1.3	0.7	1.00

RDC summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
37	2016	Skin_proferati	24188	99.1	97.7	8.4	8.5	1.4	0.7	1.00
38	2017	Skin_proferati	22438	100.3	98.9	8.2	8.3	1.4	0.8	1.00
39	2018	Skin_proferati	21153	99.7	98.3	8.7	8.7	1.3	0.9	0.99
40	2019	Skin_proferati	18112	101.2	99.8	8.6	8.7	1.4	1.2	0.99
41	2020	Skin_proferati	7854	101.4	99.8	7.6	7.5	1.7	1.6	0.98
42	2021	Skin_proferati	4	.	.	.	.	.	.	0.63
43	2015	White_line_dou	30027	99.9	99.1	9.4	9.3	0.9	0.6	1.00
44	2016	White_line_dou	27889	98.6	97.7	10.6	10.5	0.8	0.7	1.00
45	2017	White_line_dou	25772	99.7	98.8	9.3	9.2	0.9	0.8	1.00
46	2018	White_line_dou	23638	99.7	98.9	9.4	9.3	0.8	1.0	0.99
47	2019	White_line_dou	20013	100.7	100.1	9.3	9.2	0.6	1.2	0.99
48	2020	White_line_dou	8866	99.6	98.8	8.6	8.3	0.8	1.6	0.98
49	2021	White_line_dou	5	.	.	.	.	.	.	0.99
50	2015	Dermatitis2	23328	100.6	100.3	8.3	8.7	0.3	0.7	1.00
51	2016	Dermatitis2	21742	99.9	99.5	7.5	7.8	0.4	0.7	1.00
52	2017	Dermatitis2	20177	100.5	100.1	7.7	8.1	0.4	0.8	1.00
53	2018	Dermatitis2	16930	99.7	99.3	7.6	7.9	0.4	1.0	0.99
54	2019	Dermatitis2	6052	100.7	100.4	8.1	8.4	0.3	1.1	0.99
55	2020	Dermatitis2	13	.	.	.	.	.	.	0.98
56	2015	Heel_horn_eros	16253	98.9	98.9	8.1	8.2	0.1	0.6	1.00
57	2016	Heel_horn_eros	14185	98.8	98.6	7.8	7.9	0.1	0.7	1.00
58	2017	Heel_horn_eros	12871	99.5	99.3	7.6	7.7	0.1	0.8	0.99
59	2018	Heel_horn_eros	10036	99.8	99.7	7.6	7.7	0.1	1.0	0.99
60	2019	Heel_horn_eros	3303	99.9	99.8	8.3	8.5	0.1	1.2	0.99
61	2020	Heel_horn_eros	7	.	.	.	.	.	.	1.00
62	2015	Sole_heamorrha	24677	99.3	97.9	7.5	7.7	1.4	0.7	1.00
63	2016	Sole_heamorrha	22827	99.3	97.9	7.6	7.7	1.4	0.7	1.00
64	2017	Sole_heamorrha	20731	99.8	98.3	7.0	7.2	1.4	0.8	0.99
65	2018	Sole_heamorrha	17005	100.2	98.8	7.0	7.1	1.4	1.0	0.99
66	2019	Sole_heamorrha	5882	100.8	99.5	7.7	8.0	1.3	1.1	0.99
67	2020	Sole_heamorrha	15	.	.	.	.	.	.	0.95
68	2015	Sole_ulcer2	24240	99.1	96.8	9.5	11.7	2.3	2.3	1.00
69	2016	Sole_ulcer2	22596	99.7	97.5	8.6	10.6	2.2	2.1	1.00
70	2017	Sole_ulcer2	20564	99.6	97.3	8.3	10.1	2.2	2.1	0.99
71	2018	Sole_ulcer2	16893	100.5	98.6	7.7	9.3	1.9	2.0	0.99
72	2019	Sole_ulcer2	6223	100.3	98.5	7.9	9.6	1.9	2.2	0.99

RDC summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
73	2020	Sole_ulcer2	10	.	.	.	.	.	.	0.92
74	2015	Cork_screw_cla	20556	98.5	96.6	9.1	10.2	1.9	1.4	1.00
75	2016	Cork_screw_cla	19184	98.4	96.4	8.7	9.8	2.0	1.4	1.00
76	2017	Cork_screw_cla	18161	99.2	97.4	7.8	8.7	1.9	1.4	0.99
77	2018	Cork_screw_cla	15083	100.4	98.7	7.3	8.1	1.7	1.4	0.99
78	2019	Cork_screw_cla	5425	100.7	99.1	8.3	9.4	1.6	1.8	0.99
79	2020	Cork_screw_cla	10	.	.	.	.	.	.	0.99
80	2015	Skin_proferati	20251	99.8	98.2	8.6	8.9	1.6	0.8	1.00
81	2016	Skin_proferati	18933	98.8	97.1	8.9	9.3	1.6	0.8	1.00
82	2017	Skin_proferati	18037	100.3	98.7	8.5	8.8	1.6	0.9	1.00
83	2018	Skin_proferati	14856	99.5	97.9	8.8	9.0	1.6	1.0	0.99
84	2019	Skin_proferati	5397	100.9	99.3	8.7	9.1	1.6	1.3	0.99
85	2020	Skin_proferati	12	.	.	.	.	.	.	0.98
86	2015	White_line_dou	23608	99.2	97.3	8.4	8.8	1.8	0.9	1.00
87	2016	White_line_dou	22009	98.2	96.3	9.2	9.7	1.8	0.9	1.00
88	2017	White_line_dou	20271	99.8	98.1	8.2	8.6	1.8	1.0	0.99
89	2018	White_line_dou	16607	99.8	98.1	8.3	8.6	1.7	1.2	0.99
90	2019	White_line_dou	6112	100.5	99.1	8.6	8.9	1.4	1.5	0.99
91	2020	White_line_dou	10	.	.	.	.	.	.	0.98
92	2015	Dermatitis3	16399	101.0	100.9	8.4	8.9	0.1	0.8	1.00
93	2016	Dermatitis3	15233	100.0	99.8	7.6	8.1	0.2	0.8	1.00
94	2017	Dermatitis3	12258	100.6	100.4	7.7	8.2	0.2	0.9	1.00
95	2018	Dermatitis3	4319	99.7	99.6	8.2	8.6	0.1	1.1	0.99
96	2019	Dermatitis3	20	.	.	.	.	.	.	0.98
97	2015	Heel_horn_eros	10311	99.0	99.0	8.3	8.4	0.1	0.6	1.00
98	2016	Heel_horn_eros	9351	98.8	98.7	8.1	8.2	0.1	0.7	1.00
99	2017	Heel_horn_eros	7101	99.2	99.1	7.9	8.0	0.2	0.8	0.99
100	2018	Heel_horn_eros	2188	99.5	99.5	7.9	7.9	0.1	1.1	0.99
101	2019	Heel_horn_eros	12	.	.	.	.	.	.	0.99
102	2015	Sole_heamorrha	15046	99.7	98.0	8.0	8.3	1.7	0.8	1.00
103	2016	Sole_heamorrha	13451	99.6	97.8	8.1	8.4	1.7	0.8	1.00
104	2017	Sole_heamorrha	10340	100.1	98.3	7.5	7.7	1.8	0.9	0.99
105	2018	Sole_heamorrha	3654	100.1	98.4	7.6	7.8	1.7	1.0	0.99
106	2019	Sole_heamorrha	20	.	.	.	.	.	.	0.99
107	2015	Sole_ulcer3	16977	99.7	97.9	9.8	12.1	1.8	2.5	1.00
108	2016	Sole_ulcer3	15606	99.8	98.0	8.6	10.7	1.8	2.2	1.00

RDC summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
109	2017	Sole_ulcer3	12355	100.0	98.2	8.4	10.4	1.8	2.2	0.99
110	2018	Sole_ulcer3	4425	100.2	98.5	8.2	10.0	1.7	2.2	0.99
111	2019	Sole_ulcer3	15	.	.	.	.	.	.	0.97
112	2015	Cork_screw_cla	14404	98.7	97.0	9.3	10.6	1.7	1.6	1.00
113	2016	Cork_screw_cla	13596	98.6	96.8	8.6	9.8	1.8	1.5	0.99
114	2017	Cork_screw_cla	10798	99.6	98.0	7.8	9.0	1.6	1.6	0.99
115	2018	Cork_screw_cla	3792	99.9	98.1	7.6	8.6	1.8	1.6	0.99
116	2019	Cork_screw_cla	17	.	.	.	.	.	.	0.94
117	2015	Skin_proferati	14161	100.0	98.3	8.5	9.0	1.7	0.9	1.00
118	2016	Skin_proferati	13580	99.0	97.2	8.9	9.5	1.7	0.9	1.00
119	2017	Skin_proferati	10755	100.6	98.9	8.6	9.2	1.7	1.0	1.00
120	2018	Skin_proferati	3789	99.0	97.1	8.9	9.3	1.9	1.1	0.99
121	2019	Skin_proferati	22	.	.	.	.	.	.	0.99
122	2015	White_line_dou	16466	99.4	98.1	8.6	9.0	1.3	0.8	1.00
123	2016	White_line_dou	15336	98.3	96.9	9.8	10.3	1.3	0.9	1.00
124	2017	White_line_dou	12124	100.0	98.8	8.6	9.0	1.2	1.0	1.00
125	2018	White_line_dou	4368	99.9	98.7	8.7	9.1	1.2	1.1	0.99
126	2019	White_line_dou	17	.	.	.	.	.	.	0.99
127	2015	Dermatitis	28782	100.6	100.2	8.4	8.9	0.3	0.7	1.00
128	2016	Dermatitis	27314	99.8	99.4	7.6	7.9	0.4	0.7	1.00
129	2017	Dermatitis	25363	100.5	100.1	7.8	8.2	0.4	0.8	1.00
130	2018	Dermatitis	23360	99.8	99.4	7.7	8.0	0.3	0.9	0.99
131	2019	Dermatitis	20039	101.0	100.6	7.7	7.9	0.3	1.2	0.99
132	2020	Dermatitis	8859	100.8	100.4	7.5	7.4	0.5	1.5	0.98
133	2021	Dermatitis	5	.	.	.	.	.	.	0.97
134	2015	Heel_horn_eros	21845	98.7	98.6	8.1	8.1	0.1	0.5	1.00
135	2016	Heel_horn_eros	19558	98.8	98.7	7.7	7.7	0.1	0.6	1.00
136	2017	Heel_horn_eros	17136	99.3	99.2	7.6	7.7	0.2	0.7	1.00
137	2018	Heel_horn_eros	15230	99.9	99.8	7.5	7.5	0.1	1.0	0.99
138	2019	Heel_horn_eros	12075	100.0	99.8	8.2	8.3	0.2	1.3	0.99
139	2020	Heel_horn_eros	4555	100.3	100.0	7.1	7.2	0.4	1.4	0.98
140	2021	Heel_horn_eros	3	.	.	.	.	.	.	0.00
141	2015	Sole_heamorrha	29266	99.5	98.0	7.6	7.8	1.5	0.8	1.00
142	2016	Sole_heamorrha	26532	99.4	97.9	7.6	7.8	1.5	0.8	1.00
143	2017	Sole_heamorrha	24416	99.8	98.2	7.1	7.3	1.6	0.8	0.99
144	2018	Sole_heamorrha	21527	100.1	98.6	7.1	7.3	1.5	1.0	0.99

RDC summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
145	2019	Sole_heamorrha	17812	100.8	99.4	7.4	7.7	1.4	1.2	0.99
146	2020	Sole_heamorrha	7560	102.0	100.7	6.9	7.2	1.3	1.6	0.97
147	2021	Sole_heamorrha	5	.	.	.	.	.	.	0.98
148	2015	Sole_ulcer	29631	99.0	96.7	9.4	11.3	2.2	2.2	1.00
149	2016	Sole_ulcer	27450	99.3	97.2	8.3	10.1	2.1	2.0	0.99
150	2017	Sole_ulcer	25333	99.4	97.2	8.2	9.8	2.2	2.0	0.99
151	2018	Sole_ulcer	23193	100.3	98.3	7.6	9.1	1.9	1.9	0.99
152	2019	Sole_ulcer	19775	100.1	98.1	7.7	9.2	2.0	2.1	0.98
153	2020	Sole_ulcer	8714	100.8	99.0	6.9	8.3	1.8	2.3	0.97
154	2021	Sole_ulcer	3	.	.	.	.	.	.	-0.69
155	2015	Cork_screw_cla	26255	98.6	96.8	9.0	10.0	1.8	1.4	1.00
156	2016	Cork_screw_cla	24717	98.3	96.4	8.5	9.5	1.9	1.4	0.99
157	2017	Cork_screw_cla	23196	99.2	97.5	7.7	8.6	1.8	1.4	0.99
158	2018	Cork_screw_cla	21431	100.3	98.6	7.2	7.9	1.7	1.4	0.99
159	2019	Cork_screw_cla	18508	100.3	98.7	8.1	9.1	1.6	1.9	0.98
160	2020	Cork_screw_cla	7821	100.5	98.8	7.0	7.8	1.7	1.7	0.98
161	2021	Cork_screw_cla	5	.	.	.	.	.	.	1.00
162	2015	Skin_proferati	26379	99.7	98.2	8.5	8.8	1.5	0.8	1.00
163	2016	Skin_proferati	24188	98.9	97.3	8.7	9.1	1.6	0.8	1.00
164	2017	Skin_proferati	22438	100.3	98.8	8.5	8.9	1.6	0.9	1.00
165	2018	Skin_proferati	21153	99.6	98.0	8.7	9.0	1.6	1.1	0.99
166	2019	Skin_proferati	18112	101.3	99.8	8.7	9.0	1.5	1.4	0.99
167	2020	Skin_proferati	7854	101.2	99.5	7.7	7.9	1.7	1.6	0.98
168	2021	Skin_proferati	4	.	.	.	.	.	.	0.51
169	2015	White_line_dou	30027	99.6	98.4	8.7	9.0	1.3	0.8	1.00
170	2016	White_line_dou	27889	98.3	97.0	9.9	10.2	1.3	0.8	1.00
171	2017	White_line_dou	25772	99.7	98.5	8.6	8.9	1.2	0.9	1.00
172	2018	White_line_dou	23638	99.7	98.6	8.7	9.0	1.2	1.2	0.99
173	2019	White_line_dou	20013	100.6	99.6	8.8	8.9	1.0	1.5	0.99
174	2020	White_line_dou	8866	99.7	98.3	8.1	8.2	1.4	1.6	0.98
175	2021	White_line_dou	5	.	.	.	.	.	.	0.97

sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2015	Dermatitis1	5444	100.6	99.9	10.6	10.9	0.7	1.0	1.00
2	2016	Dermatitis1	7644	99.8	99.1	10.0	10.2	0.7	1.0	1.00
3	2017	Dermatitis1	9086	100.6	99.9	10.3	10.5	0.7	1.0	1.00
4	2018	Dermatitis1	10599	100.3	99.6	9.7	9.9	0.7	1.1	0.99
5	2019	Dermatitis1	10658	101.9	101.2	9.8	10.0	0.7	1.2	0.99
6	2020	Dermatitis1	6551	101.2	100.4	9.4	9.2	0.8	1.6	0.99
7	2021	Dermatitis1	8	.	.	.	.	.	.	0.97
8	2015	Heel_horn_eros	3923	98.5	98.4	9.1	9.0	0.1	0.9	1.00
9	2016	Heel_horn_eros	5285	98.7	98.5	9.1	9.1	0.2	0.9	1.00
10	2017	Heel_horn_eros	5601	99.1	98.9	8.8	8.7	0.2	1.0	0.99
11	2018	Heel_horn_eros	6337	99.7	99.5	8.6	8.6	0.2	1.1	0.99
12	2019	Heel_horn_eros	6060	99.6	99.3	9.7	9.8	0.4	1.1	0.99
13	2020	Heel_horn_eros	3282	100.2	99.7	8.2	8.1	0.5	1.3	0.99
14	2021	Heel_horn_eros	5	.	.	.	.	.	.	0.94
15	2015	Sole_heamorrha	5714	99.5	98.0	8.8	9.0	1.4	0.9	0.99
16	2016	Sole_heamorrha	7746	99.8	98.3	8.7	9.0	1.5	1.0	0.99
17	2017	Sole_heamorrha	8639	100.0	98.5	8.3	8.6	1.5	1.0	0.99
18	2018	Sole_heamorrha	9636	100.4	98.9	8.3	8.6	1.6	1.0	0.99
19	2019	Sole_heamorrha	9133	101.5	100.1	8.5	8.9	1.4	1.2	0.99
20	2020	Sole_heamorrha	5487	103.1	101.8	8.5	9.0	1.3	1.6	0.98
21	2021	Sole_heamorrha	5	.	.	.	.	.	.	0.99
22	2015	Sole_ulcer1	5475	97.8	94.7	10.6	12.4	3.1	2.0	1.00
23	2016	Sole_ulcer1	7437	99.3	96.4	9.6	11.2	2.8	1.9	1.00
24	2017	Sole_ulcer1	8683	99.2	96.3	9.8	11.5	3.0	2.0	1.00
25	2018	Sole_ulcer1	9969	100.7	98.0	9.2	10.7	2.7	1.9	0.99
26	2019	Sole_ulcer1	9948	100.3	97.5	9.2	10.7	2.8	1.9	0.99
27	2020	Sole_ulcer1	6195	101.8	99.2	8.8	10.6	2.6	2.5	0.98
28	2021	Sole_ulcer1	6	.	.	.	.	.	.	0.97
29	2015	Cork_screw_cla	4772	97.1	94.7	11.0	12.0	2.3	1.4	1.00
30	2016	Cork_screw_cla	6770	97.5	95.2	10.6	11.6	2.3	1.4	1.00
31	2017	Cork_screw_cla	7838	98.8	96.5	9.7	10.5	2.3	1.4	0.99
32	2018	Cork_screw_cla	9170	100.2	98.1	9.6	10.4	2.1	1.4	0.99
33	2019	Cork_screw_cla	8934	99.7	97.6	10.3	11.3	2.1	1.6	0.99
34	2020	Cork_screw_cla	5594	100.5	98.2	9.4	10.2	2.3	1.7	0.99
35	2021	Cork_screw_cla	7	.	.	.	.	.	.	0.99
36	2015	Skin_proferati	5007	100.1	98.7	9.9	10.0	1.4	0.9	1.00
37	2016	Skin_proferati	6805	99.3	97.8	10.1	10.2	1.5	0.9	1.00

sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
38	2017	Skin_proferati	7861	100.6	99.1	9.8	9.8	1.4	0.9	1.00
39	2018	Skin_proferati	9123	100.1	98.6	10.3	10.3	1.5	1.0	1.00
40	2019	Skin_proferati	9010	101.9	100.3	10.0	10.1	1.6	1.1	0.99
41	2020	Skin_proferati	5615	102.5	100.4	8.8	8.8	2.1	1.5	0.99
42	2021	Skin_proferati	3	.	.	.	.	.	.	0.98
43	2015	White_line_dou	5622	99.2	98.3	11.1	11.0	0.9	0.9	1.00
44	2016	White_line_dou	7682	97.7	96.9	12.2	12.0	0.9	0.9	1.00
45	2017	White_line_dou	8810	99.8	98.9	10.6	10.4	0.9	1.0	1.00
46	2018	White_line_dou	10083	99.0	98.1	10.7	10.6	0.9	1.1	0.99
47	2019	White_line_dou	10088	99.9	99.2	10.4	10.3	0.7	1.2	0.99
48	2020	White_line_dou	6467	99.2	98.2	9.6	9.3	1.0	1.6	0.99
49	2021	White_line_dou	6	.	.	.	.	.	.	0.99
50	2015	Dermatitis2	4541	100.8	100.5	9.9	10.4	0.3	1.0	1.00
51	2016	Dermatitis2	6380	100.0	99.6	9.4	9.9	0.4	1.0	1.00
52	2017	Dermatitis2	7709	100.6	100.2	9.4	9.8	0.3	1.1	0.99
53	2018	Dermatitis2	8765	100.3	100.0	9.1	9.5	0.3	1.1	0.99
54	2019	Dermatitis2	4213	101.8	101.5	9.6	10.1	0.3	1.2	0.99
55	2020	Dermatitis2	19	.	.	.	.	.	.	0.99
56	2015	Heel_horn_eros	3062	98.7	98.6	9.1	9.2	0.1	0.9	1.00
57	2016	Heel_horn_eros	4065	98.7	98.5	9.2	9.4	0.1	0.9	1.00
58	2017	Heel_horn_eros	4602	99.4	99.2	8.6	8.8	0.2	1.0	0.99
59	2018	Heel_horn_eros	4891	99.8	99.7	8.5	8.7	0.2	1.1	0.99
60	2019	Heel_horn_eros	2169	99.7	99.5	9.6	9.9	0.2	1.2	0.99
61	2020	Heel_horn_eros	7	.	.	.	.	.	.	0.98
62	2015	Sole_heamorrha	4905	99.1	97.7	9.1	9.3	1.4	0.9	1.00
63	2016	Sole_heamorrha	6720	99.4	97.9	9.0	9.2	1.5	0.9	1.00
64	2017	Sole_heamorrha	7738	99.9	98.3	8.6	8.8	1.5	1.0	0.99
65	2018	Sole_heamorrha	8590	100.5	99.0	8.5	8.7	1.5	1.1	0.99
66	2019	Sole_heamorrha	4111	101.2	99.8	8.9	9.2	1.4	1.2	0.99
67	2020	Sole_heamorrha	20	.	.	.	.	.	.	0.99
68	2015	Sole_ulcer2	4660	98.6	96.0	11.2	13.8	2.5	2.7	1.00
69	2016	Sole_ulcer2	6402	99.7	97.5	10.3	12.7	2.2	2.6	1.00
70	2017	Sole_ulcer2	7516	99.6	97.3	10.0	12.3	2.4	2.5	1.00
71	2018	Sole_ulcer2	8546	100.9	98.9	9.4	11.5	2.0	2.4	0.99
72	2019	Sole_ulcer2	4218	100.4	98.3	9.5	11.6	2.1	2.5	0.99
73	2020	Sole_ulcer2	24	.	.	.	.	.	.	0.98
74	2015	Cork_screw_cla	3928	97.4	95.2	11.1	12.5	2.2	1.8	1.00

sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
75	2016	Cork_screw_cla	5519	98.3	96.1	10.7	12.0	2.2	1.7	1.00
76	2017	Cork_screw_cla	6568	99.2	97.1	9.6	10.9	2.1	1.7	0.99
77	2018	Cork_screw_cla	7317	100.5	98.6	9.4	10.5	2.0	1.7	0.99
78	2019	Cork_screw_cla	3499	100.5	98.6	10.2	11.5	1.9	2.1	0.99
79	2020	Cork_screw_cla	16	.	.	.	.	.	.	0.99
80	2015	Skin_proferati	4029	100.1	98.5	10.2	10.6	1.6	1.0	1.00
81	2016	Skin_proferati	5506	99.0	97.3	10.6	11.0	1.7	1.0	1.00
82	2017	Skin_proferati	6590	100.8	99.1	10.0	10.4	1.6	1.1	1.00
83	2018	Skin_proferati	7397	100.0	98.4	10.3	10.6	1.6	1.1	0.99
84	2019	Skin_proferati	3548	101.9	100.2	10.0	10.6	1.7	1.3	0.99
85	2020	Skin_proferati	20	.	.	.	.	.	.	0.99
86	2015	White_line_dou	4564	98.6	96.8	10.1	10.7	1.9	1.1	1.00
87	2016	White_line_dou	6208	97.4	95.5	10.9	11.4	1.9	1.2	1.00
88	2017	White_line_dou	7312	100.0	98.2	9.8	10.3	1.8	1.2	0.99
89	2018	White_line_dou	8304	99.0	97.2	9.7	10.2	1.8	1.4	0.99
90	2019	White_line_dou	4120	99.9	98.5	9.7	10.2	1.4	1.6	0.99
91	2020	White_line_dou	20	.	.	.	.	.	.	0.99
92	2015	Dermatitis3	3298	101.2	101.1	10.0	10.7	0.1	1.2	1.00
93	2016	Dermatitis3	4724	100.1	99.9	9.5	10.0	0.2	1.1	1.00
94	2017	Dermatitis3	5266	100.8	100.7	9.4	10.0	0.1	1.2	0.99
95	2018	Dermatitis3	3022	100.4	100.3	9.4	10.0	0.1	1.3	0.99
96	2019	Dermatitis3	17	.	.	.	.	.	.	0.99
97	2015	Heel_horn_eros	2024	98.6	98.5	9.3	9.4	0.1	0.9	1.00
98	2016	Heel_horn_eros	2803	99.2	99.0	9.5	9.6	0.1	0.9	1.00
99	2017	Heel_horn_eros	2860	99.4	99.2	9.0	9.0	0.2	1.0	0.99
100	2018	Heel_horn_eros	1467	99.9	99.7	8.7	8.7	0.2	1.1	0.99
101	2019	Heel_horn_eros	7	.	.	.	.	.	.	1.00
102	2015	Sole_heamorrha	3171	99.7	97.9	9.6	9.9	1.8	1.0	1.00
103	2016	Sole_heamorrha	4167	99.7	97.8	9.5	9.8	1.8	1.0	1.00
104	2017	Sole_heamorrha	4294	100.4	98.6	9.0	9.3	1.8	1.0	0.99
105	2018	Sole_heamorrha	2415	100.4	98.5	9.0	9.3	1.8	1.1	0.99
106	2019	Sole_heamorrha	15	.	.	.	.	.	.	0.98
107	2015	Sole_ulcer3	3256	99.3	97.4	11.5	14.3	1.9	2.9	1.00
108	2016	Sole_ulcer3	4515	99.9	98.1	10.3	12.8	1.8	2.7	1.00
109	2017	Sole_ulcer3	5128	100.0	98.1	10.4	12.8	1.9	2.7	0.99
110	2018	Sole_ulcer3	2961	100.7	99.0	9.5	11.8	1.8	2.6	0.99
111	2019	Sole_ulcer3	18	.	.	.	.	.	.	0.97

sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
112	2015	Cork_screw_cla	2788	97.4	95.4	11.3	13.0	2.0	2.0	1.00
113	2016	Cork_screw_cla	3986	98.4	96.5	10.3	11.8	1.9	1.9	0.99
114	2017	Cork_screw_cla	4352	99.3	97.5	9.6	11.0	1.8	1.9	0.99
115	2018	Cork_screw_cla	2425	99.9	98.0	9.5	10.8	2.0	1.9	0.99
116	2019	Cork_screw_cla	15	.	.	.	.	.	.	0.98
117	2015	Skin_proferati	2799	100.5	98.8	10.3	10.9	1.7	1.1	1.00
118	2016	Skin_proferati	3979	99.3	97.5	10.5	11.1	1.8	1.1	1.00
119	2017	Skin_proferati	4376	101.1	99.5	10.2	10.7	1.7	1.2	1.00
120	2018	Skin_proferati	2511	99.3	97.5	10.6	11.1	1.8	1.2	0.99
121	2019	Skin_proferati	14	.	.	.	.	.	.	1.00
122	2015	White_line_dou	3142	99.2	97.9	10.1	10.6	1.3	1.1	1.00
123	2016	White_line_dou	4387	97.4	96.1	11.2	11.7	1.3	1.2	1.00
124	2017	White_line_dou	4973	100.1	98.9	10.0	10.5	1.3	1.2	0.99
125	2018	White_line_dou	2911	99.2	97.9	9.9	10.5	1.3	1.3	0.99
126	2019	White_line_dou	16	.	.	.	.	.	.	0.99
127	2015	Dermatitis	5444	100.7	100.4	10.2	10.8	0.3	1.1	1.00
128	2016	Dermatitis	7644	99.8	99.4	9.6	10.0	0.4	1.0	1.00
129	2017	Dermatitis	9086	100.6	100.2	9.7	10.1	0.3	1.1	1.00
130	2018	Dermatitis	10599	100.3	100.0	9.3	9.7	0.3	1.2	0.99
131	2019	Dermatitis	10658	101.8	101.4	9.4	9.8	0.4	1.3	0.99
132	2020	Dermatitis	6551	101.3	100.8	9.0	9.0	0.5	1.6	0.99
133	2021	Dermatitis	8	.	.	.	.	.	.	0.97
134	2015	Heel_horn_eros	3923	98.5	98.4	9.2	9.2	0.1	0.9	1.00
135	2016	Heel_horn_eros	5285	98.6	98.5	9.1	9.2	0.1	0.9	1.00
136	2017	Heel_horn_eros	5601	99.2	98.9	8.7	8.8	0.2	1.0	0.99
137	2018	Heel_horn_eros	6337	99.8	99.6	8.6	8.7	0.2	1.1	0.99
138	2019	Heel_horn_eros	6060	99.6	99.3	9.6	9.8	0.4	1.2	0.99
139	2020	Heel_horn_eros	3282	100.2	99.6	8.2	8.3	0.6	1.3	0.99
140	2021	Heel_horn_eros	5	.	.	.	.	.	.	0.95
141	2015	Sole_heamorrha	5714	99.3	97.7	9.2	9.5	1.6	0.9	1.00
142	2016	Sole_heamorrha	7746	99.5	97.9	9.1	9.4	1.6	1.0	1.00
143	2017	Sole_heamorrha	8639	100.0	98.3	8.6	8.9	1.7	1.0	0.99
144	2018	Sole_heamorrha	9636	100.4	98.8	8.5	8.8	1.7	1.1	0.99
145	2019	Sole_heamorrha	9133	101.4	99.8	8.7	9.1	1.6	1.2	0.99
146	2020	Sole_heamorrha	5487	103.1	101.6	8.6	9.0	1.6	1.5	0.99
147	2021	Sole_heamorrha	5	.	.	.	.	.	.	1.00
148	2015	Sole_ulcer	5475	98.5	96.0	11.1	13.5	2.5	2.6	1.00

sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
149	2016	Sole_ulcer	7437	99.3	97.1	9.9	12.1	2.3	2.4	1.00
150	2017	Sole_ulcer	8683	99.5	97.1	10.0	12.1	2.4	2.4	1.00
151	2018	Sole_ulcer	9969	100.7	98.6	9.2	11.1	2.1	2.3	0.99
152	2019	Sole_ulcer	9948	100.4	98.2	9.1	11.1	2.2	2.4	0.99
153	2020	Sole_ulcer	6195	101.8	99.8	8.6	10.7	2.0	2.7	0.98
154	2021	Sole_ulcer	6	.	.	.	.	.	.	0.98
155	2015	Cork_screw_cla	4772	97.3	95.2	10.9	12.3	2.1	1.7	1.00
156	2016	Cork_screw_cla	6770	98.0	95.9	10.3	11.5	2.1	1.7	0.99
157	2017	Cork_screw_cla	7838	99.1	97.1	9.5	10.7	2.0	1.7	0.99
158	2018	Cork_screw_cla	9170	100.3	98.3	9.2	10.3	2.0	1.7	0.99
159	2019	Cork_screw_cla	8934	99.9	98.0	10.0	11.4	1.9	2.1	0.99
160	2020	Cork_screw_cla	5594	100.4	98.3	9.1	10.2	2.1	1.8	0.99
161	2021	Cork_screw_cla	7	.	.	.	.	.	.	0.99
162	2015	Skin_proferati	5007	100.1	98.5	10.2	10.6	1.6	1.0	1.00
163	2016	Skin_proferati	6805	99.1	97.4	10.4	10.8	1.7	1.0	1.00
164	2017	Skin_proferati	7861	100.7	99.0	10.0	10.4	1.6	1.0	1.00
165	2018	Skin_proferati	9123	99.9	98.2	10.3	10.6	1.7	1.1	0.99
166	2019	Skin_proferati	9010	101.9	100.2	10.0	10.5	1.7	1.3	0.99
167	2020	Skin_proferati	5615	102.1	100.1	8.9	9.2	2.0	1.5	0.99
168	2021	Skin_proferati	3	.	.	.	.	.	.	0.99
169	2015	White_line_dou	5622	98.9	97.6	10.3	10.6	1.3	1.0	1.00
170	2016	White_line_dou	7682	97.4	96.1	11.3	11.7	1.3	1.0	1.00
171	2017	White_line_dou	8810	99.9	98.6	9.9	10.2	1.3	1.1	0.99
172	2018	White_line_dou	10083	98.9	97.7	10.0	10.3	1.3	1.2	0.99
173	2019	White_line_dou	10088	99.7	98.7	9.8	10.0	1.1	1.5	0.99
174	2020	White_line_dou	6467	99.2	97.5	9.0	9.2	1.6	1.6	0.99
175	2021	White_line_dou	6	.	.	.	.	.	.	0.98

sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2019	Dermatitis1	10539	101.6	100.9	9.4	9.7	0.7	1.2	0.99
2	2020	Dermatitis1	14684	101.0	100.5	9.2	9.0	0.5	1.7	0.98
3	2021	Dermatitis1	23263	102.2	101.7	8.6	8.5	0.5	1.7	0.98
4	2022	Dermatitis1	19053	102.8	102.3	8.1	8.2	0.5	1.3	0.99
5	2019	Heel_horn_eros	15128	99.3	99.0	9.2	9.3	0.4	1.1	0.99
6	2020	Heel_horn_eros	19016	100.9	100.4	7.9	7.8	0.5	1.3	0.99
7	2021	Heel_horn_eros	23445	101.6	101.5	7.7	7.6	0.2	1.4	0.98
8	2022	Heel_horn_eros	19053	101.7	101.4	7.6	7.6	0.3	1.2	0.99
9	2019	Sole_heamorrha	12102	101.0	99.5	8.3	8.8	1.5	1.2	0.99
10	2020	Sole_heamorrha	16274	102.9	101.4	8.6	9.0	1.6	1.6	0.98
11	2021	Sole_heamorrha	23331	104.2	102.4	8.3	8.5	1.8	1.6	0.98
12	2022	Sole_heamorrha	19053	103.1	101.6	8.1	8.2	1.6	1.3	0.99
13	2019	Sole_ulcer1	11203	99.9	97.0	9.2	10.8	2.8	1.9	0.99
14	2020	Sole_ulcer1	15291	102.3	99.5	8.8	10.4	2.7	2.4	0.98
15	2021	Sole_ulcer1	23306	103.5	101.0	8.5	9.8	2.5	1.9	0.99
16	2022	Sole_ulcer1	19053	102.6	100.2	7.9	9.2	2.4	1.8	0.99
17	2019	Cork_screw_cla	12232	99.6	97.4	10.1	11.1	2.2	1.6	0.99
18	2020	Cork_screw_cla	16282	101.2	98.8	9.1	9.7	2.4	1.7	0.99
19	2021	Cork_screw_cla	23340	101.1	98.6	8.9	9.5	2.5	1.6	0.99
20	2022	Cork_screw_cla	19053	100.6	98.2	9.0	9.6	2.4	1.5	0.99
21	2019	Skin_proferati	12127	101.4	99.8	9.9	10.1	1.6	1.1	0.99
22	2020	Skin_proferati	16119	102.2	100.3	8.4	8.4	1.9	1.5	0.99
23	2021	Skin_proferati	23333	101.8	100.1	8.3	8.3	1.7	1.4	0.99
24	2022	Skin_proferati	19053	102.3	100.7	8.1	8.0	1.7	1.2	0.99
25	2019	White_line_dou	11067	99.8	99.1	10.3	10.2	0.7	1.2	0.99
26	2020	White_line_dou	14837	99.0	97.8	9.5	9.2	1.2	1.6	0.99
27	2021	White_line_dou	23290	101.1	99.8	8.8	8.6	1.2	1.4	0.99
28	2022	White_line_dou	19053	99.9	98.8	8.6	8.4	1.1	1.3	0.99
29	2019	Dermatitis2	15480	101.5	101.1	9.3	9.7	0.4	1.2	0.99
30	2020	Dermatitis2	23363	101.1	100.9	8.7	8.8	0.3	1.6	0.98
31	2021	Dermatitis2	23565	102.0	101.8	8.3	8.4	0.2	1.5	0.98
32	2022	Dermatitis2	19053	102.6	102.4	7.9	8.1	0.2	1.2	0.99
33	2019	Heel_horn_eros	18368	99.4	99.1	9.0	9.4	0.4	1.2	0.99
34	2020	Heel_horn_eros	23535	100.6	100.1	7.9	8.1	0.5	1.3	0.99
35	2021	Heel_horn_eros	23565	101.6	101.5	7.7	7.8	0.1	1.4	0.98
36	2022	Heel_horn_eros	19053	101.7	101.5	7.6	7.7	0.2	1.2	0.99
37	2019	Sole_heamorrha	15686	100.7	99.2	8.6	9.0	1.5	1.2	0.99

sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
38	2020	Sole_heamorrha	23365	102.8	101.2	8.8	9.0	1.7	1.6	0.98
39	2021	Sole_heamorrha	23565	104.1	102.3	8.6	8.7	1.9	1.6	0.98
40	2022	Sole_heamorrha	19053	103.0	101.3	8.2	8.3	1.7	1.3	0.99
41	2019	Sole_ulcer2	15489	100.1	97.7	9.3	11.5	2.3	2.5	0.99
42	2020	Sole_ulcer2	23369	102.5	100.3	8.7	10.8	2.2	2.8	0.98
43	2021	Sole_ulcer2	23565	103.7	101.7	8.4	10.2	1.9	2.3	0.99
44	2022	Sole_ulcer2	19053	102.7	100.8	8.0	9.7	1.9	2.2	0.99
45	2019	Cork_screw_cla	16624	99.8	97.8	10.1	11.5	2.1	2.2	0.99
46	2020	Cork_screw_cla	23421	101.2	98.9	9.1	10.1	2.3	1.9	0.99
47	2021	Cork_screw_cla	23565	101.6	99.4	9.1	9.9	2.2	1.9	0.98
48	2022	Cork_screw_cla	19053	100.9	98.7	9.2	10.1	2.2	1.7	0.99
49	2019	Skin_proferati	16532	101.4	99.7	9.9	10.4	1.7	1.3	0.99
50	2020	Skin_proferati	23420	101.9	99.9	8.7	9.0	2.0	1.5	0.99
51	2021	Skin_proferati	23565	101.5	99.7	8.4	8.7	1.8	1.4	0.99
52	2022	Skin_proferati	19053	101.9	100.2	8.1	8.3	1.7	1.2	0.99
53	2019	White_line_dou	15622	99.6	98.0	9.7	10.1	1.6	1.6	0.99
54	2020	White_line_dou	23377	99.3	97.0	8.8	9.3	2.3	1.6	0.99
55	2021	White_line_dou	23565	100.9	98.9	8.5	9.0	2.0	1.5	0.99
56	2022	White_line_dou	19053	99.9	97.9	8.2	8.6	2.0	1.4	0.99
57	2019	Dermatitis3	21156	101.6	101.4	9.1	9.5	0.2	1.4	0.99
58	2020	Dermatitis3	23644	101.3	101.1	8.8	9.0	0.1	1.7	0.98
59	2021	Dermatitis3	23565	102.4	102.4	8.3	8.4	0.0	1.7	0.98
60	2022	Dermatitis3	19053	102.9	102.8	7.8	8.1	0.0	1.4	0.99
61	2019	Heel_horn_eros	21264	99.3	98.9	9.3	9.5	0.4	1.2	0.99
62	2020	Heel_horn_eros	23644	100.8	100.2	8.1	8.1	0.5	1.4	0.99
63	2021	Heel_horn_eros	23565	101.6	101.5	7.8	7.8	0.2	1.4	0.98
64	2022	Heel_horn_eros	19053	101.7	101.4	7.7	7.8	0.3	1.2	0.99
65	2019	Sole_heamorrha	21194	101.1	99.3	9.0	9.4	1.8	1.2	0.99
66	2020	Sole_heamorrha	23644	103.1	101.1	8.8	9.1	2.0	1.6	0.98
67	2021	Sole_heamorrha	23565	104.4	102.2	8.7	8.8	2.2	1.6	0.98
68	2022	Sole_heamorrha	19053	103.2	101.3	8.4	8.5	2.0	1.3	0.99
69	2019	Sole_ulcer3	21164	100.2	98.3	9.3	11.6	1.9	2.8	0.99
70	2020	Sole_ulcer3	23644	102.0	100.4	8.7	10.8	1.7	2.8	0.98
71	2021	Sole_ulcer3	23565	103.5	102.1	8.4	10.3	1.4	2.4	0.99
72	2022	Sole_ulcer3	19053	102.6	101.2	8.0	9.8	1.4	2.3	0.99
73	2019	Cork_screw_cla	21185	100.0	98.2	9.9	11.6	1.7	2.5	0.99
74	2020	Cork_screw_cla	23644	100.4	98.4	8.9	10.1	2.0	2.0	0.99

sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
75	2021	Cork_screw_cla	23565	100.9	99.0	9.0	10.1	1.9	2.0	0.98
76	2022	Cork_screw_cla	19053	100.3	98.4	9.1	10.2	1.9	1.9	0.99
77	2019	Skin_proferati	21176	101.7	99.9	10.0	10.7	1.8	1.5	0.99
78	2020	Skin_proferati	23644	101.7	99.7	8.8	9.2	2.0	1.5	0.99
79	2021	Skin_proferati	23565	101.5	99.6	8.5	8.9	1.9	1.4	0.99
80	2022	Skin_proferati	19053	102.0	100.3	8.2	8.6	1.7	1.3	0.99
81	2019	White_line_dou	21165	99.5	98.4	9.6	10.1	1.1	1.6	0.99
82	2020	White_line_dou	23644	98.9	97.0	8.9	9.3	1.9	1.7	0.98
83	2021	White_line_dou	23565	100.4	98.9	8.4	8.9	1.5	1.6	0.98
84	2022	White_line_dou	19053	99.5	97.9	8.0	8.4	1.6	1.4	0.99
85	2019	Dermatitis	10539	101.5	101.1	9.1	9.4	0.4	1.2	0.99
86	2020	Dermatitis	14684	101.2	100.9	8.8	8.8	0.3	1.6	0.98
87	2021	Dermatitis	23263	102.2	102.0	8.3	8.4	0.2	1.6	0.98
88	2022	Dermatitis	19053	102.8	102.6	7.8	8.1	0.2	1.3	0.99
89	2019	Heel_horn_eros	15128	99.3	98.9	9.1	9.3	0.4	1.1	0.99
90	2020	Heel_horn_eros	19016	100.8	100.3	7.9	8.0	0.5	1.3	0.99
91	2021	Heel_horn_eros	23445	101.6	101.5	7.7	7.7	0.1	1.4	0.98
92	2022	Heel_horn_eros	19053	101.7	101.4	7.6	7.7	0.3	1.2	0.99
93	2019	Sole_heamorrha	12102	100.8	99.2	8.6	9.0	1.6	1.2	0.99
94	2020	Sole_heamorrha	16274	103.0	101.2	8.7	9.0	1.8	1.6	0.98
95	2021	Sole_heamorrha	23331	104.3	102.3	8.5	8.6	2.0	1.6	0.98
96	2022	Sole_heamorrha	19053	103.1	101.4	8.2	8.3	1.8	1.3	0.99
97	2019	Sole_ulcer	11203	100.0	97.6	9.2	11.2	2.3	2.4	0.99
98	2020	Sole_ulcer	15291	102.3	100.2	8.6	10.5	2.1	2.6	0.98
99	2021	Sole_ulcer	23306	103.5	101.7	8.3	10.0	1.9	2.2	0.99
100	2022	Sole_ulcer	19053	102.6	100.8	7.9	9.5	1.8	2.1	0.99
101	2019	Cork_screw_cla	12232	99.8	97.9	9.9	11.2	1.9	2.1	0.99
102	2020	Cork_screw_cla	16282	100.9	98.7	8.8	9.7	2.2	1.8	0.99
103	2021	Cork_screw_cla	23340	101.1	99.0	8.9	9.7	2.1	1.8	0.99
104	2022	Cork_screw_cla	19053	100.5	98.4	8.9	9.8	2.1	1.7	0.99
105	2019	Skin_proferati	12127	101.4	99.7	9.8	10.4	1.7	1.3	0.99
106	2020	Skin_proferati	16119	101.8	99.9	8.6	8.8	2.0	1.4	0.99
107	2021	Skin_proferati	23333	101.6	99.8	8.4	8.6	1.8	1.4	0.99
108	2022	Skin_proferati	19053	102.1	100.4	8.1	8.3	1.7	1.2	0.99
109	2019	White_line_dou	11067	99.5	98.4	9.6	9.9	1.1	1.4	0.99
110	2020	White_line_dou	14837	99.0	97.2	8.9	9.2	1.8	1.6	0.99

sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
111	2021	White_line_dou	23290	100.7	99.2	8.4	8.7	1.6	1.5	0.99
112	2022	White_line_dou	19053	99.7	98.2	8.1	8.3	1.5	1.3	0.99

JER summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2010	Dermatitis1	55	74	87	103.5	103.6	11.9	11.9	-0.1	0.8	1.00
2	2011	Dermatitis1	47	65	65	101.6	101.8	13.3	13.5	-0.1	0.8	1.00
3	2012	Dermatitis1	47	154	285	104.0	104.1	13.7	13.8	-0.1	0.7	1.00
4	2013	Dermatitis1	49	129	243	101.4	101.7	11.6	11.5	-0.3	0.9	1.00
5	2014	Dermatitis1	36	221	272	96.7	97.1	14.2	14.2	-0.4	1.0	1.00
6	2015	Dermatitis1	30	532	520	101.2	101.5	11.4	11.7	-0.3	0.8	1.00
7	2016	Dermatitis1	26	411	430	97.7	97.7	14.8	14.8	0.0	1.4	1.00
8	2017	Dermatitis1	29	555	439	100.1	100.3	13.1	13.2	-0.2	2.0	0.99
9	2018	Dermatitis1	13	370	393	99.6	98.7	9.0	9.8	0.9	2.9	0.95
10	2010	Heel_horn_eros	51	48	53	105.0	105.1	12.2	12.3	0.0	0.7	1.00
11	2011	Heel_horn_eros	40	46	41	100.0	100.3	12.9	13.0	-0.2	0.7	1.00
12	2012	Heel_horn_eros	44	95	165	103.5	103.7	12.9	12.8	-0.3	0.9	1.00
13	2013	Heel_horn_eros	45	87	168	99.4	99.7	14.8	15.0	-0.3	1.0	1.00
14	2014	Heel_horn_eros	35	139	173	97.5	97.8	12.7	12.5	-0.2	0.9	1.00
15	2015	Heel_horn_eros	30	306	291	101.4	101.9	10.9	10.6	-0.5	1.3	0.99
16	2016	Heel_horn_eros	24	219	217	98.8	98.3	14.1	14.0	0.5	1.9	0.99
17	2017	Heel_horn_eros	29	236	185	102.5	103.0	12.9	13.5	-0.5	3.2	0.97
18	2010	Sole_heamorrha	55	75	89	106.0	106.3	14.5	14.5	-0.3	0.9	1.00
19	2011	Sole_heamorrha	47	68	64	102.0	102.4	12.1	11.9	-0.5	1.1	1.00
20	2012	Sole_heamorrha	46	152	269	98.0	98.5	15.8	15.8	-0.4	1.0	1.00
21	2013	Sole_heamorrha	49	127	234	100.0	100.7	16.5	16.7	-0.6	1.0	1.00
22	2014	Sole_heamorrha	36	217	267	103.4	104.1	19.4	19.6	-0.8	0.9	1.00
23	2015	Sole_heamorrha	30	499	485	101.3	101.7	19.8	19.8	-0.5	1.0	1.00
24	2016	Sole_heamorrha	26	365	386	100.5	100.8	16.0	16.0	-0.3	1.4	1.00
25	2017	Sole_heamorrha	29	465	366	103.2	103.3	16.7	16.8	-0.1	2.4	0.99
26	2018	Sole_heamorrha	12	316	316	97.7	97.3	11.0	10.3	0.4	3.7	0.94
27	2010	Sole_ulcer1	55	81	95	102.9	102.8	14.5	14.4	0.1	1.1	1.00
28	2011	Sole_ulcer1	47	74	70	98.2	98.2	12.3	12.4	0.0	1.1	1.00
29	2012	Sole_ulcer1	47	170	309	100.6	100.6	14.6	14.4	0.0	1.0	1.00
30	2013	Sole_ulcer1	49	141	262	98.2	98.6	17.6	17.9	-0.4	1.3	1.00
31	2014	Sole_ulcer1	36	242	296	101.6	101.4	21.7	21.7	0.2	1.2	1.00
32	2015	Sole_ulcer1	30	568	550	102.1	102.0	18.4	18.7	0.0	1.3	1.00
33	2016	Sole_ulcer1	26	438	458	98.1	97.8	20.4	20.2	0.2	1.9	1.00
34	2017	Sole_ulcer1	29	590	462	104.2	104.2	17.6	17.0	0.0	2.8	0.99
35	2018	Sole_ulcer1	14	361	407	99.6	98.9	15.5	16.3	0.8	3.5	0.98
36	2010	Cork_screw_cla	55	75	89	102.3	102.5	16.0	15.9	-0.2	0.9	1.00

JER summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
37	2011	Cork_screw_cla	47	66	61	101.6	101.9	13.5	13.6	-0.3	1.1	1.00
38	2012	Cork_screw_cla	46	162	296	101.5	101.9	13.2	13.2	-0.4	0.8	1.00
39	2013	Cork_screw_cla	50	130	247	99.0	99.4	17.4	17.3	-0.3	0.9	1.00
40	2014	Cork_screw_cla	36	228	276	101.4	101.6	16.9	17.2	-0.2	1.2	1.00
41	2015	Cork_screw_cla	30	539	533	101.5	102.3	21.3	21.3	-0.8	0.9	1.00
42	2016	Cork_screw_cla	26	423	449	98.1	97.9	21.9	22.3	0.2	2.1	1.00
43	2017	Cork_screw_cla	29	565	444	105.5	106.6	16.3	16.4	-1.0	2.3	0.99
44	2018	Cork_screw_cla	13	342	359	97.7	97.3	16.9	17.1	0.4	2.6	0.99
45	2010	Skin_proferati	55	81	94	101.7	101.7	13.2	13.0	0.0	1.0	1.00
46	2011	Skin_proferati	47	73	69	102.8	103.0	10.8	10.8	-0.2	0.8	1.00
47	2012	Skin_proferati	47	170	309	103.6	103.8	11.4	11.3	-0.1	1.0	1.00
48	2013	Skin_proferati	49	140	261	101.3	101.6	11.9	11.7	-0.3	1.0	1.00
49	2014	Skin_proferati	36	242	295	98.5	98.8	13.9	13.7	-0.3	0.8	1.00
50	2015	Skin_proferati	30	567	547	101.6	102.1	14.0	13.6	-0.5	1.2	1.00
51	2016	Skin_proferati	26	438	458	99.6	99.8	14.6	14.1	-0.2	2.0	0.99
52	2017	Skin_proferati	29	581	456	102.2	102.1	12.5	13.1	0.1	3.1	0.97
53	2018	Skin_proferati	13	377	400	98.9	98.1	13.4	10.7	0.8	3.7	0.98
54	2010	White_line_dou	55	81	95	102.1	102.4	18.4	18.3	-0.3	0.9	1.00
55	2011	White_line_dou	47	74	69	98.0	98.2	13.5	13.4	-0.2	0.9	1.00
56	2012	White_line_dou	47	170	308	98.6	99.2	19.9	20.0	-0.7	1.0	1.00
57	2013	White_line_dou	49	141	263	94.5	95.1	21.9	21.9	-0.6	1.0	1.00
58	2014	White_line_dou	36	243	297	104.6	104.8	24.1	24.1	-0.2	1.1	1.00
59	2015	White_line_dou	30	568	551	100.3	100.8	24.8	24.7	-0.5	1.5	1.00
60	2016	White_line_dou	26	438	458	99.4	99.7	29.2	28.3	-0.3	2.0	1.00
61	2017	White_line_dou	29	589	461	103.0	103.6	22.2	21.3	-0.5	2.6	0.99
62	2018	White_line_dou	13	387	412	95.9	95.6	26.8	25.3	0.3	3.6	0.99
63	2010	Dermatitis2	54	60	73	102.0	102.2	10.8	10.8	-0.2	0.8	1.00
64	2011	Dermatitis2	46	55	52	100.7	100.8	13.0	13.1	-0.1	0.7	1.00
65	2012	Dermatitis2	47	128	232	103.8	103.9	12.8	12.8	-0.1	1.0	1.00
66	2013	Dermatitis2	49	109	200	101.7	102.0	10.5	10.4	-0.2	0.9	1.00
67	2014	Dermatitis2	36	186	229	95.9	96.3	12.9	13.1	-0.4	1.0	1.00
68	2015	Dermatitis2	30	431	409	101.1	101.1	10.8	10.8	0.0	0.8	1.00
69	2016	Dermatitis2	26	317	323	97.2	97.0	14.6	14.7	0.2	1.5	0.99
70	2017	Dermatitis2	22	251	166	99.0	99.3	12.6	12.5	-0.3	2.1	0.99
71	2010	Heel_horn_eros	42	43	44	104.4	104.4	10.1	10.1	0.0	0.9	1.00
72	2011	Heel_horn_eros	36	40	36	100.5	100.5	12.0	12.2	-0.1	0.8	1.00

JER summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
73	2012	Heel_horn_eros	41	82	134	102.9	103.2	12.4	12.2	-0.3	1.0	1.00
74	2013	Heel_horn_eros	38	83	140	98.6	99.0	13.6	13.6	-0.4	0.9	1.00
75	2014	Heel_horn_eros	32	122	138	97.2	97.5	11.8	11.6	-0.3	0.8	1.00
76	2015	Heel_horn_eros	30	217	200	100.9	101.5	10.2	10.3	-0.6	1.0	0.99
77	2016	Heel_horn_eros	23	156	139	99.3	98.9	13.5	13.4	0.4	1.9	0.99
78	2017	Heel_horn_eros	16	109	61	102.3	103.1	11.4	12.6	-0.8	3.6	0.96
79	2010	Sole_heamorrha	55	62	74	105.4	105.8	14.6	14.6	-0.4	0.9	1.00
80	2011	Sole_heamorrha	46	54	50	101.7	102.1	12.1	12.0	-0.4	1.0	1.00
81	2012	Sole_heamorrha	47	120	210	98.3	98.7	15.6	15.7	-0.4	0.8	1.00
82	2013	Sole_heamorrha	49	104	187	99.0	99.6	17.7	17.9	-0.7	0.9	1.00
83	2014	Sole_heamorrha	36	175	217	103.9	104.4	20.6	20.8	-0.5	0.9	1.00
84	2015	Sole_heamorrha	30	386	366	101.3	101.7	20.8	20.8	-0.4	1.0	1.00
85	2016	Sole_heamorrha	25	272	270	99.2	99.2	18.3	18.1	0.0	1.4	1.00
86	2017	Sole_heamorrha	21	204	130	104.6	104.9	17.6	17.4	-0.3	2.4	0.99
87	2010	Sole_ulcer2	55	67	81	103.8	103.7	16.1	16.0	0.1	0.9	1.00
88	2011	Sole_ulcer2	46	62	56	99.5	99.4	13.0	13.2	0.1	1.1	1.00
89	2012	Sole_ulcer2	47	138	247	101.1	101.2	16.5	16.3	-0.1	0.9	1.00
90	2013	Sole_ulcer2	49	117	212	97.9	98.1	20.8	21.1	-0.2	1.3	1.00
91	2014	Sole_ulcer2	36	199	244	102.8	102.5	24.0	24.1	0.3	1.1	1.00
92	2015	Sole_ulcer2	30	461	436	102.4	102.7	22.4	22.5	-0.3	1.1	1.00
93	2016	Sole_ulcer2	26	340	346	98.0	97.8	24.3	24.0	0.2	1.7	1.00
94	2017	Sole_ulcer2	22	268	176	104.2	104.0	19.0	18.5	0.2	2.8	0.99
95	2010	Cork_screw_cla	53	63	74	101.3	101.5	15.5	15.5	-0.2	0.8	1.00
96	2011	Cork_screw_cla	45	56	50	100.8	101.1	14.5	14.5	-0.4	1.1	1.00
97	2012	Cork_screw_cla	47	129	235	99.4	99.9	13.7	13.7	-0.6	0.7	1.00
98	2013	Cork_screw_cla	48	112	203	98.4	98.9	16.2	16.2	-0.5	0.9	1.00
99	2014	Cork_screw_cla	36	188	227	102.2	102.6	17.1	17.3	-0.4	1.1	1.00
100	2015	Cork_screw_cla	30	448	425	100.4	101.2	19.8	19.7	-0.7	0.9	1.00
101	2016	Cork_screw_cla	25	338	336	98.6	98.6	20.0	20.2	0.1	2.0	1.00
102	2017	Cork_screw_cla	22	241	162	105.2	106.5	16.7	17.0	-1.4	2.4	0.99
103	2010	Skin_proferati	55	66	79	101.5	101.5	13.1	12.9	0.0	0.9	1.00
104	2011	Skin_proferati	46	60	55	102.5	102.7	10.2	10.1	-0.2	0.8	1.00
105	2012	Skin_proferati	47	135	240	103.3	103.6	11.2	11.1	-0.2	1.0	1.00
106	2013	Skin_proferati	49	113	203	101.3	101.5	12.2	11.9	-0.2	1.1	1.00
107	2014	Skin_proferati	36	195	237	98.8	99.2	13.8	13.6	-0.4	1.0	1.00
108	2015	Skin_proferati	30	450	421	101.6	101.9	13.7	13.3	-0.3	1.2	1.00

JER summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
109	2016	Skin_proferati	26	335	341	99.6	99.8	14.8	14.2	-0.2	2.1	0.99
110	2017	Skin_proferati	23	250	175	102.0	101.5	12.4	13.0	0.4	2.9	0.97
111	2010	White_line_dou	55	66	79	103.1	103.4	18.5	18.4	-0.3	0.9	1.00
112	2011	White_line_dou	46	60	55	99.5	99.7	13.8	13.6	-0.2	1.0	1.00
113	2012	White_line_dou	47	135	241	99.4	100.0	21.0	20.9	-0.6	0.9	1.00
114	2013	White_line_dou	49	113	202	94.4	94.9	24.4	24.5	-0.5	1.1	1.00
115	2014	White_line_dou	36	194	236	105.4	105.5	27.0	26.9	-0.1	1.1	1.00
116	2015	White_line_dou	30	449	421	100.8	101.4	27.8	27.6	-0.5	1.3	1.00
117	2016	White_line_dou	26	336	342	98.8	99.1	30.9	29.8	-0.3	2.4	1.00
118	2017	White_line_dou	23	255	177	105.9	106.0	22.7	22.0	-0.1	2.6	0.99
119	2010	Dermatitis3	50	49	57	101.6	101.7	11.6	11.5	-0.1	0.8	1.00
120	2011	Dermatitis3	45	43	40	100.4	100.5	13.6	13.7	-0.1	0.8	1.00
121	2012	Dermatitis3	46	88	142	103.2	103.4	13.2	13.3	-0.2	0.9	1.00
122	2013	Dermatitis3	45	84	141	101.3	101.4	10.2	9.9	-0.1	0.8	1.00
123	2014	Dermatitis3	35	139	168	96.7	97.1	12.8	12.8	-0.5	1.1	1.00
124	2015	Dermatitis3	30	271	231	101.0	101.2	11.9	11.6	-0.2	1.2	1.00
125	2016	Dermatitis3	20	156	141	95.8	95.5	16.6	16.5	0.3	2.1	0.99
126	2010	Heel_horn_eros	28	42	36	105.1	105.0	9.9	10.2	0.1	1.0	1.00
127	2011	Heel_horn_eros	25	36	29	101.5	101.5	14.6	14.7	0.0	0.7	1.00
128	2012	Heel_horn_eros	29	68	88	104.4	104.5	13.3	13.2	-0.1	1.1	1.00
129	2013	Heel_horn_eros	27	71	94	96.2	96.5	14.4	14.6	-0.3	0.9	1.00
130	2014	Heel_horn_eros	27	92	91	96.8	97.3	12.4	12.1	-0.4	0.9	1.00
131	2015	Heel_horn_eros	29	132	105	100.9	101.6	11.1	10.8	-0.6	1.3	0.99
132	2016	Heel_horn_eros	12	77	53	97.3	96.4	12.4	11.1	0.9	3.1	0.97
133	2010	Sole_heamorrha	48	49	53	104.7	105.0	14.9	14.8	-0.3	1.0	1.00
134	2011	Sole_heamorrha	45	41	37	101.6	102.0	13.1	13.0	-0.4	0.9	1.00
135	2012	Sole_heamorrha	43	84	129	97.8	98.4	14.2	14.2	-0.6	0.8	1.00
136	2013	Sole_heamorrha	44	77	127	97.6	98.2	17.3	17.4	-0.6	0.8	1.00
137	2014	Sole_heamorrha	35	125	153	104.5	104.9	21.2	21.3	-0.4	1.0	1.00
138	2015	Sole_heamorrha	30	232	199	100.9	101.5	20.9	20.8	-0.6	1.0	1.00
139	2016	Sole_heamorrha	18	124	106	98.3	98.3	22.2	21.5	0.0	1.7	1.00
140	2010	Sole_ulcer3	51	52	61	103.9	103.7	13.5	13.3	0.2	1.0	1.00
141	2011	Sole_ulcer3	46	47	42	99.8	99.6	13.8	14.0	0.2	1.1	1.00
142	2012	Sole_ulcer3	46	94	151	99.7	99.7	15.0	14.9	0.0	1.1	1.00
143	2013	Sole_ulcer3	48	84	145	97.7	97.9	19.4	20.0	-0.2	1.5	1.00
144	2014	Sole_ulcer3	35	150	180	103.7	103.2	23.2	23.0	0.5	1.4	1.00

JER summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
145	2015	Sole_ulcer3	30	292	247	102.2	102.1	21.0	21.0	0.1	1.3	1.00
146	2016	Sole_ulcer3	21	160	149	99.2	99.5	24.1	23.8	-0.3	2.6	0.99
147	2010	Cork_screw_cla	48	51	58	101.1	101.3	16.6	16.6	-0.3	0.8	1.00
148	2011	Cork_screw_cla	45	42	37	101.9	102.2	14.1	13.9	-0.3	1.2	1.00
149	2012	Cork_screw_cla	45	88	141	98.6	99.1	13.4	13.5	-0.5	0.9	1.00
150	2013	Cork_screw_cla	47	81	140	98.8	99.3	15.1	15.0	-0.5	0.9	1.00
151	2014	Cork_screw_cla	35	145	175	102.6	102.9	17.0	17.2	-0.3	1.1	1.00
152	2015	Cork_screw_cla	30	281	237	100.9	101.7	20.4	20.4	-0.8	0.9	1.00
153	2016	Cork_screw_cla	21	139	132	96.3	96.0	19.2	19.6	0.3	2.0	0.99
154	2010	Skin_proferati	51	52	61	101.0	101.1	13.5	13.2	-0.1	1.0	1.00
155	2011	Skin_proferati	46	47	42	101.8	102.1	10.5	10.5	-0.3	0.8	1.00
156	2012	Skin_proferati	46	94	152	103.3	103.4	11.2	11.0	-0.1	1.0	1.00
157	2013	Skin_proferati	48	84	145	101.0	101.3	11.2	11.1	-0.2	1.1	1.00
158	2014	Skin_proferati	35	150	181	98.5	98.9	12.7	12.7	-0.4	0.7	1.00
159	2015	Skin_proferati	30	290	245	101.4	101.6	13.0	12.6	-0.2	1.2	1.00
160	2016	Skin_proferati	21	157	145	99.0	99.3	14.8	14.0	-0.3	2.1	0.99
161	2010	White_line_dou	50	53	61	103.6	103.9	17.6	17.6	-0.3	0.8	1.00
162	2011	White_line_dou	46	47	42	100.4	100.6	13.2	13.0	-0.2	1.1	1.00
163	2012	White_line_dou	45	96	153	99.3	99.8	20.0	19.8	-0.5	0.9	1.00
164	2013	White_line_dou	48	84	145	94.3	95.0	24.4	24.5	-0.7	1.1	1.00
165	2014	White_line_dou	35	150	180	106.1	106.1	26.1	26.1	0.0	1.1	1.00
166	2015	White_line_dou	30	293	249	101.5	102.0	27.9	27.7	-0.6	1.4	1.00
167	2016	White_line_dou	21	160	149	97.3	97.6	32.4	31.8	-0.2	1.9	1.00
168	2010	Dermatitis	55	74	87	102.1	102.3	11.4	11.4	-0.2	0.8	1.00
169	2011	Dermatitis	47	65	65	101.1	101.3	13.1	13.3	-0.1	0.7	1.00
170	2012	Dermatitis	47	154	285	103.7	103.8	13.2	13.1	-0.1	0.9	1.00
171	2013	Dermatitis	49	129	243	101.8	102.0	10.6	10.4	-0.2	0.9	1.00
172	2014	Dermatitis	36	221	272	96.2	96.4	13.6	13.7	-0.2	1.0	1.00
173	2015	Dermatitis	30	532	520	101.1	101.2	11.2	11.3	-0.1	0.8	1.00
174	2016	Dermatitis	26	411	430	97.5	97.2	15.0	15.1	0.3	1.6	0.99
175	2017	Dermatitis	29	555	439	100.1	100.2	12.1	12.2	-0.1	1.9	0.99
176	2018	Dermatitis	13	370	393	99.8	99.2	9.6	10.1	0.7	2.8	0.96
177	2010	Heel_horn_eros	51	48	53	105.1	105.2	11.5	11.6	-0.1	0.8	1.00
178	2011	Heel_horn_eros	40	46	41	100.3	100.5	12.5	12.5	-0.3	0.6	1.00
179	2012	Heel_horn_eros	44	95	165	103.5	103.6	12.3	12.2	-0.2	0.9	1.00
180	2013	Heel_horn_eros	45	87	168	99.9	100.1	13.9	13.9	-0.2	0.9	1.00

JER summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
181	2014	Heel_horn_eros	35	139	173	97.3	97.5	11.9	11.7	-0.2	0.9	1.00
182	2015	Heel_horn_eros	30	306	291	101.1	101.6	10.5	10.3	-0.6	1.3	0.99
183	2016	Heel_horn_eros	24	219	217	99.1	98.7	13.2	13.0	0.4	2.2	0.99
184	2017	Heel_horn_eros	29	236	185	102.4	103.0	12.2	13.0	-0.6	3.2	0.97
185	2010	Sole_heamorrha	55	75	89	105.1	105.4	14.6	14.6	-0.3	0.9	1.00
186	2011	Sole_heamorrha	47	68	64	101.4	101.9	12.4	12.3	-0.5	1.0	1.00
187	2012	Sole_heamorrha	46	152	269	98.2	98.8	15.5	15.6	-0.6	0.8	1.00
188	2013	Sole_heamorrha	49	127	234	99.2	99.9	17.4	17.5	-0.7	0.8	1.00
189	2014	Sole_heamorrha	36	217	267	103.7	104.3	20.4	20.5	-0.6	0.9	1.00
190	2015	Sole_heamorrha	30	499	485	101.0	101.7	20.4	20.4	-0.6	1.0	1.00
191	2016	Sole_heamorrha	26	365	386	100.2	100.3	17.9	17.7	-0.1	1.5	1.00
192	2017	Sole_heamorrha	29	465	366	103.2	103.4	16.7	16.9	-0.2	2.2	0.99
193	2018	Sole_heamorrha	12	316	316	97.7	97.3	13.8	12.9	0.3	4.0	0.96
194	2010	Sole_ulcer	55	81	95	103.6	103.4	14.1	14.0	0.1	0.9	1.00
195	2011	Sole_ulcer	47	74	70	99.2	99.1	12.8	13.0	0.1	1.1	1.00
196	2012	Sole_ulcer	47	170	309	100.6	100.6	15.2	15.0	0.0	1.0	1.00
197	2013	Sole_ulcer	49	141	262	98.0	98.2	19.0	19.5	-0.2	1.3	1.00
198	2014	Sole_ulcer	36	242	296	102.8	102.6	22.7	22.6	0.3	1.2	1.00
199	2015	Sole_ulcer	30	568	550	102.2	102.2	20.4	20.6	0.0	1.2	1.00
200	2016	Sole_ulcer	26	438	458	98.3	98.1	22.1	21.6	0.3	2.0	1.00
201	2017	Sole_ulcer	29	590	462	103.8	103.6	18.1	17.5	0.2	2.6	0.99
202	2018	Sole_ulcer	14	361	407	99.3	98.6	16.9	17.3	0.7	3.2	0.98
203	2010	Cork_screw_cla	55	75	89	102.0	102.3	15.9	15.8	-0.2	0.8	1.00
204	2011	Cork_screw_cla	47	66	61	101.3	101.6	13.6	13.7	-0.4	1.1	1.00
205	2012	Cork_screw_cla	46	162	296	100.1	100.6	13.4	13.4	-0.5	0.8	1.00
206	2013	Cork_screw_cla	50	130	247	98.9	99.3	15.8	15.8	-0.4	0.9	1.00
207	2014	Cork_screw_cla	36	228	276	102.2	102.4	16.7	16.9	-0.3	1.2	1.00
208	2015	Cork_screw_cla	30	539	533	100.9	101.7	20.2	20.2	-0.8	0.8	1.00
209	2016	Cork_screw_cla	26	423	449	99.0	98.9	20.1	20.5	0.2	1.8	1.00
210	2017	Cork_screw_cla	29	565	444	104.7	105.8	16.3	16.5	-1.1	2.1	0.99
211	2018	Cork_screw_cla	13	342	359	97.5	97.2	15.2	14.6	0.3	2.7	0.98
212	2010	Skin_proferati	55	81	94	101.3	101.4	13.1	12.8	-0.1	1.0	1.00
213	2011	Skin_proferati	47	73	69	102.5	102.8	10.5	10.5	-0.3	0.8	1.00
214	2012	Skin_proferati	47	170	309	103.6	103.7	11.2	11.1	-0.2	1.0	1.00
215	2013	Skin_proferati	49	140	261	101.3	101.5	11.7	11.4	-0.2	1.1	1.00
216	2014	Skin_proferati	36	242	295	98.3	98.5	13.4	13.3	-0.2	0.8	1.00

JER summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
217	2015	Skin_proferati	30	567	547	101.5	101.9	13.4	12.9	-0.3	1.2	1.00
218	2016	Skin_proferati	26	438	458	99.5	99.8	14.5	14.1	-0.3	2.2	0.99
219	2017	Skin_proferati	29	581	456	102.6	102.2	11.7	12.2	0.4	2.9	0.97
220	2018	Skin_proferati	13	377	400	99.1	98.2	13.0	10.5	0.9	3.5	0.98
221	2010	White_line_dou	55	81	95	103.0	103.4	17.9	18.0	-0.4	0.9	1.00
222	2011	White_line_dou	47	74	69	99.2	99.4	13.2	13.1	-0.3	0.9	1.00
223	2012	White_line_dou	47	170	308	99.3	99.8	20.3	20.3	-0.6	0.9	1.00
224	2013	White_line_dou	49	141	263	94.6	95.2	23.5	23.5	-0.6	1.1	1.00
225	2014	White_line_dou	36	243	297	105.2	105.3	25.5	25.5	-0.1	1.0	1.00
226	2015	White_line_dou	30	568	551	100.9	101.4	26.8	26.6	-0.5	1.4	1.00
227	2016	White_line_dou	26	438	458	99.0	99.3	29.7	29.0	-0.3	1.9	1.00
228	2017	White_line_dou	29	589	461	102.9	103.1	22.2	21.5	-0.2	2.5	0.99
229	2018	White_line_dou	13	387	412	95.8	95.2	26.1	25.4	0.6	3.4	0.99

JER summery stastistics for SS and prev SS breeding value for nordic AI bulls with no offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2019	Dermatitis1	41	.	.	97.5	98.1	10.6	10.8	-0.7	1.8	0.99
2	2020	Dermatitis1	32	.	.	101.6	101.4	10.0	9.4	0.2	2.2	0.98
3	2021	Dermatitis1	40	.	.	101.8	102.1	7.9	7.6	-0.3	1.6	0.98
4	2022	Dermatitis1	13	.	.	99.7	100.7	6.9	7.0	-1.0	1.7	0.97
5	2019	Heel_horn_eros	42	0	.	99.7	100.3	8.5	9.0	-0.5	2.2	0.97
6	2020	Heel_horn_eros	32	.	.	99.7	99.6	6.8	6.2	0.1	2.3	0.94
7	2021	Heel_horn_eros	40	.	.	102.2	102.9	5.9	5.6	-0.6	1.7	0.96
8	2022	Heel_horn_eros	13	.	.	100.2	100.8	5.6	5.8	-0.6	1.3	0.97
9	2019	Sole_heamorrha	42	0	.	99.5	99.6	10.2	10.4	-0.2	1.6	0.99
10	2020	Sole_heamorrha	32	.	.	100.1	99.3	9.3	8.7	0.8	2.0	0.98
11	2021	Sole_heamorrha	40	.	.	102.5	102.5	8.0	8.4	0.0	1.3	0.99
12	2022	Sole_heamorrha	13	.	.	100.4	100.0	7.5	7.6	0.4	0.7	1.00
13	2019	Sole_ulcer1	41	.	.	98.6	98.4	13.8	13.4	0.2	2.1	0.99
14	2020	Sole_ulcer1	32	.	.	101.2	100.8	11.8	11.2	0.4	2.1	0.98
15	2021	Sole_ulcer1	40	.	.	102.6	102.5	9.3	8.9	0.2	1.5	0.99
16	2022	Sole_ulcer1	13	.	.	100.4	99.8	8.2	8.4	0.5	1.3	0.99
17	2019	Cork_screw_cla	42	0	.	103.2	103.9	10.8	10.8	-0.6	1.8	0.99
18	2020	Cork_screw_cla	32	.	.	99.0	98.8	11.9	11.8	0.3	1.8	0.99
19	2021	Cork_screw_cla	40	.	.	102.8	103.2	7.7	7.8	-0.4	1.3	0.99
20	2022	Cork_screw_cla	13	.	.	102.6	103.0	8.3	8.1	-0.4	1.0	0.99
21	2019	Skin_proferati	41	.	.	100.8	100.6	8.3	8.8	0.1	2.2	0.97
22	2020	Skin_proferati	32	.	.	99.2	98.4	9.1	7.8	0.8	2.9	0.95
23	2021	Skin_proferati	40	.	.	103.3	103.4	7.1	7.0	-0.2	1.4	0.98
24	2022	Skin_proferati	13	.	.	99.5	99.0	6.2	6.3	0.5	1.5	0.97
25	2019	White_line_dou	41	.	.	101.3	101.7	14.1	13.8	-0.4	1.7	0.99
26	2020	White_line_dou	32	.	.	98.3	97.9	16.2	14.7	0.4	2.2	0.99
27	2021	White_line_dou	40	.	.	104.6	104.6	10.4	10.1	0.0	1.4	0.99
28	2022	White_line_dou	13	.	.	102.6	101.9	13.7	13.6	0.7	1.6	0.99
29	2019	Dermatitis2	51	0	0	97.9	98.3	9.9	10.0	-0.4	2.3	0.97
30	2020	Dermatitis2	32	.	.	102.1	102.1	9.3	8.9	0.0	2.1	0.97
31	2021	Dermatitis2	40	.	.	101.5	101.9	8.0	7.5	-0.4	1.6	0.98
32	2022	Dermatitis2	13	.	.	100.0	101.2	6.2	6.1	-1.2	1.8	0.96
33	2019	Heel_horn_eros	51	0	0	100.5	100.7	7.5	7.7	-0.2	2.3	0.95
34	2020	Heel_horn_eros	32	.	.	100.2	100.2	5.7	5.3	0.0	2.1	0.93
35	2021	Heel_horn_eros	40	.	.	101.8	102.5	5.6	5.4	-0.7	1.6	0.96
36	2022	Heel_horn_eros	13	.	.	100.1	100.6	4.9	5.0	-0.5	1.4	0.96

JER summery stastistics for SS and prev SS breeding value for nordic AI bulls with no offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
37	2019	Sole_heamorrha	51	0	0	100.5	100.5	11.1	11.0	-0.1	1.7	0.99
38	2020	Sole_heamorrha	32	.	.	99.9	99.3	10.7	10.0	0.7	2.1	0.98
39	2021	Sole_heamorrha	40	.	.	102.8	102.8	7.7	8.1	0.0	1.2	0.99
40	2022	Sole_heamorrha	13	.	.	101.2	100.8	7.9	8.2	0.4	0.9	0.99
41	2019	Sole_ulcer2	51	0	0	99.9	99.9	14.5	14.0	0.1	1.9	0.99
42	2020	Sole_ulcer2	32	.	.	99.6	99.1	13.1	12.3	0.5	1.9	0.99
43	2021	Sole_ulcer2	40	.	.	103.1	102.9	9.9	9.4	0.2	1.4	0.99
44	2022	Sole_ulcer2	13	.	.	100.8	99.9	10.2	10.1	0.8	1.7	0.99
45	2019	Cork_screw_cla	51	0	0	103.5	104.2	10.5	10.8	-0.6	1.7	0.99
46	2020	Cork_screw_cla	32	.	.	99.0	99.0	12.0	11.6	0.0	1.6	0.99
47	2021	Cork_screw_cla	40	.	.	102.3	102.7	8.1	8.2	-0.4	1.4	0.99
48	2022	Cork_screw_cla	13	.	.	102.3	102.6	8.4	8.2	-0.3	0.9	1.00
49	2019	Skin_proferati	51	0	0	100.7	100.2	7.6	8.1	0.4	2.3	0.96
50	2020	Skin_proferati	32	.	.	99.0	98.3	8.8	7.6	0.6	2.6	0.96
51	2021	Skin_proferati	40	.	.	103.2	103.3	6.5	6.6	-0.1	1.3	0.98
52	2022	Skin_proferati	13	.	.	99.3	98.8	5.8	5.9	0.5	1.5	0.97
53	2019	White_line_dou	51	0	0	101.6	101.8	15.2	14.6	-0.3	1.7	0.99
54	2020	White_line_dou	32	.	.	97.6	97.3	16.9	15.2	0.3	2.4	0.99
55	2021	White_line_dou	40	.	.	104.6	104.5	10.8	10.5	0.1	1.1	1.00
56	2022	White_line_dou	13	.	.	102.2	101.3	14.3	13.9	0.9	1.7	0.99
57	2019	Dermatitis3	51	0	0	97.9	98.2	10.5	10.4	-0.3	2.3	0.98
58	2020	Dermatitis3	32	.	.	102.2	101.9	10.4	9.7	0.3	2.3	0.98
59	2021	Dermatitis3	40	.	.	101.7	102.0	8.1	7.7	-0.4	1.7	0.98
60	2022	Dermatitis3	13	.	.	99.1	99.9	6.4	6.2	-0.8	2.1	0.94
61	2019	Heel_horn_eros	51	0	0	100.0	100.2	8.2	8.4	-0.2	2.3	0.96
62	2020	Heel_horn_eros	32	.	.	99.7	99.9	6.0	5.7	-0.2	2.3	0.93
63	2021	Heel_horn_eros	40	.	.	101.2	101.9	5.9	5.7	-0.6	1.8	0.95
64	2022	Heel_horn_eros	13	.	.	99.7	100.3	4.8	5.0	-0.6	1.3	0.96
65	2019	Sole_heamorrha	51	0	0	101.3	101.3	10.7	10.8	0.0	1.6	0.99
66	2020	Sole_heamorrha	32	.	.	99.8	99.0	10.7	9.9	0.8	2.2	0.98
67	2021	Sole_heamorrha	40	.	.	103.0	103.0	7.9	8.2	0.0	1.0	0.99
68	2022	Sole_heamorrha	13	.	.	101.2	100.9	7.7	8.0	0.3	1.0	0.99
69	2019	Sole_ulcer3	51	0	0	99.4	99.0	14.7	14.3	0.4	1.7	0.99
70	2020	Sole_ulcer3	32	.	.	100.1	99.5	11.6	11.0	0.6	2.1	0.98
71	2021	Sole_ulcer3	40	.	.	101.9	101.4	9.9	9.5	0.5	1.2	0.99
72	2022	Sole_ulcer3	13	.	.	100.5	99.6	8.8	7.9	0.9	1.8	0.98

JER summery stastistics for SS and prev SS breeding value for nordic AI bulls with no offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
73	2019	Cork_screw_cla	51	0	0	102.9	103.5	9.7	10.2	-0.6	1.8	0.98
74	2020	Cork_screw_cla	32	.	.	98.5	98.4	11.0	10.7	0.2	1.5	0.99
75	2021	Cork_screw_cla	40	.	.	102.3	102.6	8.2	8.4	-0.3	1.4	0.99
76	2022	Cork_screw_cla	13	.	.	101.9	102.2	8.2	8.2	-0.2	0.9	0.99
77	2019	Skin_proferati	51	0	0	100.6	100.1	7.5	8.3	0.5	2.5	0.96
78	2020	Skin_proferati	32	.	.	99.8	99.3	9.4	8.1	0.6	2.7	0.96
79	2021	Skin_proferati	40	.	.	103.1	103.2	7.0	7.0	-0.1	1.3	0.98
80	2022	Skin_proferati	13	.	.	99.2	98.8	6.1	5.8	0.4	1.5	0.97
81	2019	White_line_dou	51	0	0	101.5	101.5	15.1	14.4	0.0	1.7	0.99
82	2020	White_line_dou	32	.	.	97.5	96.8	15.9	14.5	0.7	2.2	0.99
83	2021	White_line_dou	40	.	.	104.8	104.6	10.4	10.2	0.2	1.0	1.00
84	2022	White_line_dou	13	.	.	102.4	101.2	13.3	13.2	1.2	1.5	0.99
85	2019	Dermatitis	41	.	.	97.7	98.3	10.1	10.3	-0.6	1.6	0.99
86	2020	Dermatitis	32	.	.	102.0	101.8	9.9	9.3	0.3	2.1	0.98
87	2021	Dermatitis	40	.	.	101.6	102.0	8.0	7.4	-0.4	1.6	0.98
88	2022	Dermatitis	13	.	.	99.4	100.5	6.3	6.4	-1.1	2.0	0.95
89	2019	Heel_horn_eros	42	0	.	99.6	100.1	7.9	8.3	-0.5	2.0	0.97
90	2020	Heel_horn_eros	32	.	.	99.7	99.8	6.0	5.6	-0.1	2.2	0.93
91	2021	Heel_horn_eros	40	.	.	101.7	102.3	5.7	5.4	-0.6	1.7	0.95
92	2022	Heel_horn_eros	13	.	.	100.0	100.5	4.9	5.1	-0.5	1.2	0.97
93	2019	Sole_heamorrha	42	0	.	99.7	99.9	11.0	11.0	-0.2	1.5	0.99
94	2020	Sole_heamorrha	32	.	.	99.8	99.2	10.2	9.5	0.7	2.0	0.98
95	2021	Sole_heamorrha	40	.	.	102.8	102.7	7.8	8.1	0.1	1.1	0.99
96	2022	Sole_heamorrha	13	.	.	100.8	100.5	7.6	7.7	0.3	1.2	0.99
97	2019	Sole_ulcer	41	.	.	98.4	98.2	14.5	14.0	0.1	1.9	0.99
98	2020	Sole_ulcer	32	.	.	100.3	99.8	11.9	11.4	0.5	2.1	0.99
99	2021	Sole_ulcer	40	.	.	102.5	102.1	9.6	9.3	0.4	1.2	0.99
100	2022	Sole_ulcer	13	.	.	100.5	99.7	9.1	8.6	0.8	1.7	0.98
101	2019	Cork_screw_cla	42	0	.	103.0	103.6	10.1	10.4	-0.7	1.7	0.99
102	2020	Cork_screw_cla	32	.	.	98.8	98.5	11.3	11.3	0.3	1.6	0.99
103	2021	Cork_screw_cla	40	.	.	102.4	102.8	7.8	7.9	-0.4	1.3	0.99
104	2022	Cork_screw_cla	13	.	.	102.2	102.6	8.2	8.1	-0.5	0.9	0.99
105	2019	Skin_proferati	41	.	.	100.7	100.5	7.9	8.5	0.2	2.2	0.97
106	2020	Skin_proferati	32	.	.	99.4	98.8	9.0	7.8	0.6	2.7	0.96
107	2021	Skin_proferati	40	.	.	103.2	103.3	6.8	6.8	-0.1	1.3	0.98
108	2022	Skin_proferati	13	.	.	99.4	98.8	6.1	5.9	0.5	1.7	0.96

JER summery stastistics for SS and prev SS breeding value for nordic AI bulls with no offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
109	2019	White_line_dou	41	.	.	100.8	101.0	14.5	14.0	-0.2	1.7	0.99
110	2020	White_line_dou	32	.	.	97.8	97.3	16.1	14.6	0.5	2.3	0.99
111	2021	White_line_dou	40	.	.	104.7	104.5	10.3	10.2	0.2	1.1	0.99
112	2022	White_line_dou	13	.	.	102.4	101.3	13.6	13.3	1.1	1.6	0.99

JER summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2015	Dermatitis1	9662	101.5	101.6	8.9	8.9	-0.1	0.7	1.00
2	2016	Dermatitis1	9818	101.2	101.3	9.0	9.0	-0.1	0.8	1.00
3	2017	Dermatitis1	9414	100.5	100.5	9.3	9.3	0.0	0.9	1.00
4	2018	Dermatitis1	10183	101.3	101.1	8.6	8.5	0.1	1.1	0.99
5	2019	Dermatitis1	10581	99.2	99.1	10.2	10.2	0.1	1.6	0.99
6	2020	Dermatitis1	9320	100.5	100.5	9.1	9.0	0.1	2.0	0.98
7	2021	Dermatitis1	1221	99.7	99.8	7.3	7.2	-0.1	1.9	0.97
8	2015	Heel_horn_eros	6088	101.9	101.9	8.3	8.4	-0.1	0.6	1.00
9	2016	Heel_horn_eros	6162	100.1	100.0	9.0	9.1	0.0	0.7	1.00
10	2017	Heel_horn_eros	5942	100.4	100.6	7.9	7.9	-0.2	0.8	0.99
11	2018	Heel_horn_eros	5435	100.5	100.4	8.8	8.6	0.1	1.3	0.99
12	2019	Heel_horn_eros	4902	99.7	99.6	9.3	9.3	0.0	1.6	0.99
13	2020	Heel_horn_eros	3643	99.9	99.9	8.4	8.6	0.0	1.9	0.98
14	2021	Heel_horn_eros	409	99.6	100.2	5.8	5.9	-0.6	1.9	0.95
15	2015	Sole_heamorrha	9600	101.0	101.1	12.1	12.2	-0.1	0.7	1.00
16	2016	Sole_heamorrha	9746	101.1	101.3	12.7	13.0	-0.2	0.8	1.00
17	2017	Sole_heamorrha	8931	102.5	102.7	11.9	12.0	-0.2	0.9	1.00
18	2018	Sole_heamorrha	9094	98.7	98.9	13.1	13.0	-0.2	1.0	1.00
19	2019	Sole_heamorrha	8897	100.8	101.0	11.1	11.0	-0.2	1.2	0.99
20	2020	Sole_heamorrha	7210	101.0	101.2	10.2	10.2	-0.3	1.7	0.99
21	2021	Sole_heamorrha	875	101.2	101.4	8.4	8.0	-0.1	2.4	0.96
22	2015	Sole_ulcer1	10525	101.0	100.8	11.0	11.0	0.2	0.8	1.00
23	2016	Sole_ulcer1	10641	100.6	100.4	14.0	14.1	0.2	0.9	1.00
24	2017	Sole_ulcer1	10226	101.7	101.4	11.5	11.6	0.3	0.9	1.00
25	2018	Sole_ulcer1	10857	99.9	99.9	12.4	12.3	0.0	1.2	1.00
26	2019	Sole_ulcer1	11150	100.5	100.3	12.4	12.2	0.2	1.4	0.99
27	2020	Sole_ulcer1	9660	100.4	100.2	11.3	11.0	0.2	2.0	0.98
28	2021	Sole_ulcer1	1228	101.7	101.6	10.1	9.8	0.1	2.5	0.97
29	2015	Cork_screw_cla	9860	102.8	102.9	10.2	10.2	-0.1	0.7	1.00
30	2016	Cork_screw_cla	9966	99.0	99.0	13.6	13.6	0.0	0.8	1.00
31	2017	Cork_screw_cla	9432	101.5	101.8	11.4	11.4	-0.3	0.8	1.00
32	2018	Cork_screw_cla	10318	98.3	98.3	15.6	15.6	0.0	1.1	1.00
33	2019	Cork_screw_cla	10910	100.8	101.1	12.0	12.1	-0.3	1.3	0.99
34	2020	Cork_screw_cla	8765	101.6	102.0	11.2	11.4	-0.4	1.8	0.99
35	2021	Cork_screw_cla	1010	101.7	102.9	9.9	10.1	-1.1	2.7	0.96
36	2015	Skin_proferati	10528	102.2	102.1	8.0	8.0	0.1	0.7	1.00

JER summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
37	2016	Skin_proferati	10633	101.4	101.2	9.2	9.1	0.1	0.8	1.00
38	2017	Skin_proferati	10234	101.4	101.2	8.3	8.2	0.2	0.8	1.00
39	2018	Skin_proferati	10872	100.8	100.9	8.3	8.2	-0.1	1.1	0.99
40	2019	Skin_proferati	11024	99.3	99.1	10.1	9.8	0.2	1.7	0.99
41	2020	Skin_proferati	9371	101.2	100.8	7.7	7.8	0.3	2.2	0.96
42	2021	Skin_proferati	1209	99.2	100.2	9.2	9.5	-0.9	2.4	0.97
43	2015	White_line_dou	10508	101.1	101.2	18.7	18.8	-0.1	0.8	1.00
44	2016	White_line_dou	10642	100.9	101.0	19.0	19.1	-0.1	0.9	1.00
45	2017	White_line_dou	10231	101.9	102.0	14.9	15.0	-0.1	1.0	1.00
46	2018	White_line_dou	10817	97.8	98.0	19.2	19.0	-0.2	1.3	1.00
47	2019	White_line_dou	11134	101.8	101.9	16.9	16.7	-0.1	1.4	1.00
48	2020	White_line_dou	9635	99.9	100.0	15.9	15.7	-0.1	2.0	0.99
49	2021	White_line_dou	1229	101.7	101.6	14.3	13.7	0.0	2.9	0.98
50	2015	Dermatitis2	8218	101.4	101.5	8.6	8.6	-0.1	0.7	1.00
51	2016	Dermatitis2	8335	100.7	100.8	8.5	8.5	-0.1	0.8	1.00
52	2017	Dermatitis2	7723	100.3	100.3	8.8	8.7	-0.1	0.9	0.99
53	2018	Dermatitis2	8553	101.3	101.2	8.1	8.0	0.1	1.2	0.99
54	2019	Dermatitis2	6967	99.0	99.0	9.8	9.7	0.0	1.9	0.98
55	2020	Dermatitis2	731	100.8	100.7	9.2	8.9	0.1	2.6	0.96
56	2015	Heel_horn_eros	5067	101.7	101.8	8.4	8.5	-0.1	0.7	1.00
57	2016	Heel_horn_eros	5112	99.8	99.9	8.3	8.3	0.0	0.7	1.00
58	2017	Heel_horn_eros	4224	100.4	100.6	7.6	7.6	-0.2	0.8	0.99
59	2018	Heel_horn_eros	4108	100.4	100.4	8.0	7.8	0.0	1.3	0.99
60	2019	Heel_horn_eros	2684	99.3	99.3	8.4	8.5	0.0	1.8	0.98
61	2020	Heel_horn_eros	242	.	.	.	.	.	.	0.96
62	2015	Sole_heamorrha	7953	101.4	101.5	13.2	13.4	-0.1	0.7	1.00
63	2016	Sole_heamorrha	7747	101.5	101.7	14.4	14.6	-0.1	0.8	1.00
64	2017	Sole_heamorrha	6765	102.7	102.8	12.6	12.7	-0.2	0.9	1.00
65	2018	Sole_heamorrha	7301	98.9	99.0	14.3	14.2	-0.1	1.1	1.00
66	2019	Sole_heamorrha	5073	100.5	100.7	12.2	12.1	-0.1	1.3	0.99
67	2020	Sole_heamorrha	479	102.6	102.6	12.3	12.3	0.0	1.4	0.99
68	2015	Sole_ulcer2	8771	102.1	101.9	13.1	13.0	0.2	0.8	1.00
69	2016	Sole_ulcer2	8810	101.3	100.9	16.6	16.7	0.4	0.9	1.00
70	2017	Sole_ulcer2	8303	102.4	102.1	13.2	13.3	0.3	0.9	1.00
71	2018	Sole_ulcer2	9061	99.8	99.7	15.1	15.1	0.1	1.3	1.00
72	2019	Sole_ulcer2	7300	100.5	100.3	14.7	14.4	0.2	1.6	0.99

JER summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
73	2020	Sole_ulcer2	745	102.1	101.7	12.9	12.5	0.4	1.8	0.99
74	2015	Cork_screw_cla	8062	101.9	102.0	10.6	10.6	-0.2	0.6	1.00
75	2016	Cork_screw_cla	8196	98.9	99.0	13.0	13.0	-0.1	0.8	1.00
76	2017	Cork_screw_cla	7889	101.5	101.8	11.3	11.4	-0.4	0.8	1.00
77	2018	Cork_screw_cla	8800	98.0	98.1	14.7	14.6	-0.1	1.1	1.00
78	2019	Cork_screw_cla	6706	100.6	101.0	11.9	12.0	-0.4	1.4	0.99
79	2020	Cork_screw_cla	547	102.2	102.6	11.8	12.1	-0.4	1.8	0.99
80	2015	Skin_proferati	8787	102.4	102.3	8.1	8.1	0.1	0.7	1.00
81	2016	Skin_proferati	8834	101.2	101.1	9.4	9.4	0.1	0.8	1.00
82	2017	Skin_proferati	8320	101.6	101.4	8.1	8.1	0.2	0.8	1.00
83	2018	Skin_proferati	9075	100.7	100.7	8.3	8.1	-0.1	1.1	0.99
84	2019	Skin_proferati	7204	99.3	99.1	10.0	9.5	0.2	1.7	0.99
85	2020	Skin_proferati	741	100.3	100.0	8.5	8.4	0.3	2.1	0.97
86	2015	White_line_dou	8771	102.0	102.0	19.7	19.9	0.0	0.8	1.00
87	2016	White_line_dou	8821	101.7	101.6	21.2	21.4	0.1	0.9	1.00
88	2017	White_line_dou	8279	102.5	102.5	16.4	16.5	0.1	0.9	1.00
89	2018	White_line_dou	9050	98.3	98.3	20.4	20.2	-0.1	1.4	1.00
90	2019	White_line_dou	7301	101.5	101.5	18.4	18.1	-0.1	1.5	1.00
91	2020	White_line_dou	746	102.9	102.9	17.6	17.2	0.0	1.7	1.00
92	2015	Dermatitis3	6051	101.0	101.1	9.1	9.1	-0.1	0.8	1.00
93	2016	Dermatitis3	6138	100.7	100.9	8.8	8.8	-0.2	0.9	0.99
94	2017	Dermatitis3	5495	100.2	100.3	9.2	9.1	-0.1	1.0	0.99
95	2018	Dermatitis3	4980	101.2	101.1	8.8	8.7	0.1	1.5	0.99
96	2019	Dermatitis3	628	99.4	99.4	10.8	10.5	0.1	2.2	0.98
97	2015	Heel_horn_eros	3539	102.0	102.0	8.9	8.9	0.0	0.7	1.00
98	2016	Heel_horn_eros	3333	99.9	99.8	8.8	8.9	0.0	0.8	1.00
99	2017	Heel_horn_eros	2734	100.3	100.4	8.0	8.0	-0.2	0.9	0.99
100	2018	Heel_horn_eros	2007	100.6	100.5	8.6	8.2	0.1	1.8	0.98
101	2019	Heel_horn_eros	193	.	.	.	.	.	.	0.95
102	2015	Sole_heamorrha	5588	101.8	101.9	13.6	13.8	-0.1	0.7	1.00
103	2016	Sole_heamorrha	5500	101.6	101.7	14.8	15.0	-0.1	0.8	1.00
104	2017	Sole_heamorrha	4731	103.0	103.1	12.7	12.8	-0.1	0.9	1.00
105	2018	Sole_heamorrha	3722	99.0	99.1	14.9	14.8	-0.1	1.2	1.00
106	2019	Sole_heamorrha	381	98.1	98.3	13.2	12.9	-0.2	1.7	0.99
107	2015	Sole_ulcer3	6388	101.9	101.6	12.3	12.3	0.3	0.9	1.00
108	2016	Sole_ulcer3	6539	101.7	101.3	15.6	15.5	0.4	0.9	1.00

JER summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
109	2017	Sole_ulcer3	5906	102.6	102.1	12.8	12.8	0.5	1.0	1.00
110	2018	Sole_ulcer3	5217	100.4	100.3	13.4	13.2	0.1	1.7	0.99
111	2019	Sole_ulcer3	650	96.9	96.9	14.4	13.7	0.0	2.5	0.99
112	2015	Cork_screw_cla	5877	102.0	102.2	10.8	10.8	-0.2	0.7	1.00
113	2016	Cork_screw_cla	6214	99.3	99.4	12.9	13.0	-0.1	0.8	1.00
114	2017	Cork_screw_cla	5717	101.8	102.2	11.3	11.3	-0.4	0.9	1.00
115	2018	Cork_screw_cla	4737	98.2	98.3	14.7	14.7	-0.1	1.2	1.00
116	2019	Cork_screw_cla	467	98.0	98.2	12.1	12.3	-0.2	1.7	0.99
117	2015	Skin_proferati	6433	102.2	102.1	7.9	7.8	0.2	0.8	1.00
118	2016	Skin_proferati	6564	100.9	100.8	8.9	8.8	0.1	0.8	1.00
119	2017	Skin_proferati	5918	101.4	101.1	7.9	7.9	0.2	0.9	0.99
120	2018	Skin_proferati	5145	100.9	100.9	7.8	7.6	-0.1	1.3	0.99
121	2019	Skin_proferati	640	98.8	98.8	10.2	9.9	0.0	1.9	0.98
122	2015	White_line_dou	6391	102.5	102.4	19.4	19.6	0.1	0.8	1.00
123	2016	White_line_dou	6541	102.3	102.2	20.8	21.0	0.1	1.0	1.00
124	2017	White_line_dou	5900	103.1	103.0	16.1	16.2	0.1	1.0	1.00
125	2018	White_line_dou	5210	98.9	99.0	19.9	19.8	0.0	1.4	1.00
126	2019	White_line_dou	652	96.5	96.5	20.1	20.0	-0.1	1.7	1.00
127	2015	Dermatitis	9662	101.1	101.2	8.7	8.7	-0.1	0.7	1.00
128	2016	Dermatitis	9818	100.8	101.0	8.6	8.6	-0.2	0.8	1.00
129	2017	Dermatitis	9414	100.3	100.4	8.9	8.9	-0.1	0.9	1.00
130	2018	Dermatitis	10183	101.3	101.2	8.4	8.3	0.1	1.2	0.99
131	2019	Dermatitis	10581	99.0	99.0	10.0	9.9	0.0	1.6	0.99
132	2020	Dermatitis	9320	100.7	100.6	8.6	8.4	0.0	2.0	0.97
133	2021	Dermatitis	1221	99.6	99.7	7.3	6.7	-0.1	1.9	0.97
134	2015	Heel_horn_eros	6088	101.8	101.8	8.3	8.3	-0.1	0.6	1.00
135	2016	Heel_horn_eros	6162	99.9	99.9	8.6	8.6	0.0	0.7	1.00
136	2017	Heel_horn_eros	5942	100.3	100.5	7.6	7.6	-0.2	0.8	0.99
137	2018	Heel_horn_eros	5435	100.6	100.5	8.3	8.0	0.1	1.4	0.99
138	2019	Heel_horn_eros	4902	99.6	99.6	8.7	8.7	0.0	1.6	0.98
139	2020	Heel_horn_eros	3643	99.9	99.9	7.9	8.2	0.0	1.9	0.97
140	2021	Heel_horn_eros	409	99.6	100.1	5.6	6.7	-0.6	2.3	0.95
141	2015	Sole_heamorrha	9600	101.2	101.3	12.7	12.8	-0.1	0.7	1.00
142	2016	Sole_heamorrha	9746	101.2	101.3	13.8	14.0	-0.1	0.8	1.00
143	2017	Sole_heamorrha	8931	102.5	102.7	12.2	12.3	-0.2	0.8	1.00
144	2018	Sole_heamorrha	9094	98.6	98.8	14.0	13.9	-0.2	1.0	1.00

JER summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
145	2019	Sole_heamorrha	8897	100.9	101.1	11.7	11.6	-0.2	1.2	1.00
146	2020	Sole_heamorrha	7210	100.9	101.1	10.8	10.6	-0.2	1.7	0.99
147	2021	Sole_heamorrha	875	101.5	101.4	8.9	7.8	0.0	2.6	0.96
148	2015	Sole_ulcer	10525	101.5	101.2	11.9	11.8	0.2	0.8	1.00
149	2016	Sole_ulcer	10641	101.0	100.7	15.2	15.3	0.3	0.8	1.00
150	2017	Sole_ulcer	10226	102.0	101.6	12.4	12.5	0.4	0.9	1.00
151	2018	Sole_ulcer	10857	99.9	99.9	13.3	13.2	0.0	1.3	1.00
152	2019	Sole_ulcer	11150	100.7	100.4	13.2	12.8	0.3	1.5	0.99
153	2020	Sole_ulcer	9660	100.2	99.9	11.8	11.7	0.2	2.1	0.98
154	2021	Sole_ulcer	1228	101.7	101.9	10.6	11.4	-0.1	2.8	0.97
155	2015	Cork_screw_cla	9860	102.1	102.2	10.4	10.4	-0.2	0.7	1.00
156	2016	Cork_screw_cla	9966	99.0	99.0	13.1	13.1	-0.1	0.8	1.00
157	2017	Cork_screw_cla	9432	101.5	101.8	11.4	11.5	-0.3	0.8	1.00
158	2018	Cork_screw_cla	10318	97.9	98.0	15.0	15.0	-0.1	1.1	1.00
159	2019	Cork_screw_cla	10910	101.0	101.4	11.5	11.7	-0.4	1.3	0.99
160	2020	Cork_screw_cla	8765	101.3	101.8	10.9	11.4	-0.5	1.9	0.99
161	2021	Cork_screw_cla	1010	101.5	102.8	9.4	11.0	-1.3	3.2	0.96
162	2015	Skin_proferati	10528	102.1	102.0	8.0	7.9	0.1	0.7	1.00
163	2016	Skin_proferati	10633	101.2	101.1	9.2	9.1	0.1	0.8	1.00
164	2017	Skin_proferati	10234	101.4	101.2	8.1	8.1	0.2	0.8	1.00
165	2018	Skin_proferati	10872	100.8	100.9	8.1	8.0	-0.1	1.1	0.99
166	2019	Skin_proferati	11024	99.3	99.1	10.2	9.8	0.2	1.7	0.99
167	2020	Skin_proferati	9371	101.2	101.0	7.5	7.9	0.2	2.4	0.95
168	2021	Skin_proferati	1209	99.2	100.1	9.0	11.9	-0.9	4.0	0.96
169	2015	White_line_dou	10508	101.7	101.7	19.1	19.3	0.0	0.8	1.00
170	2016	White_line_dou	10642	101.4	101.3	20.3	20.4	0.0	0.9	1.00
171	2017	White_line_dou	10231	102.2	102.1	15.7	15.9	0.0	0.9	1.00
172	2018	White_line_dou	10817	98.2	98.3	19.8	19.6	-0.1	1.3	1.00
173	2019	White_line_dou	11134	101.7	101.7	17.4	17.2	0.0	1.4	1.00
174	2020	White_line_dou	9635	99.8	99.8	16.2	16.3	0.0	2.1	0.99
175	2021	White_line_dou	1229	101.6	102.0	14.3	15.5	-0.4	3.2	0.98

sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2015	Dermatitis1	1782	101.5	101.5	10.7	10.8	-0.1	1.2	0.99
2	2016	Dermatitis1	2101	100.8	101.0	10.5	10.5	-0.2	1.3	0.99
3	2017	Dermatitis1	3181	100.3	100.4	10.8	10.7	-0.1	1.3	0.99
4	2018	Dermatitis1	4083	101.2	101.1	10.1	10.1	0.1	1.4	0.99
5	2019	Dermatitis1	4740	98.1	98.0	12.3	12.3	0.1	1.6	0.99
6	2020	Dermatitis1	4741	100.6	100.4	11.1	11.2	0.2	2.1	0.98
7	2021	Dermatitis1	490	98.9	97.9	10.2	10.2	1.1	3.0	0.96
8	2015	Heel_horn_eros	989	101.8	101.9	10.0	10.0	-0.1	1.1	0.99
9	2016	Heel_horn_eros	1121	99.8	99.9	10.0	10.2	-0.1	1.1	0.99
10	2017	Heel_horn_eros	1848	99.8	100.2	9.7	9.7	-0.4	1.3	0.99
11	2018	Heel_horn_eros	2156	99.9	99.9	10.2	10.0	0.0	1.6	0.99
12	2019	Heel_horn_eros	2418	98.5	98.4	10.6	10.7	0.0	1.8	0.99
13	2020	Heel_horn_eros	2188	100.4	100.3	9.9	10.1	0.1	1.9	0.98
14	2021	Heel_horn_eros	232	.	.	.	.	.	.	0.96
15	2015	Sole_heamorrha	1761	100.1	100.2	14.2	14.4	-0.1	1.2	1.00
16	2016	Sole_heamorrha	2025	101.1	101.3	14.8	15.0	-0.2	1.8	0.99
17	2017	Sole_heamorrha	3038	102.3	102.5	13.7	13.8	-0.2	1.2	1.00
18	2018	Sole_heamorrha	3767	97.5	97.7	15.2	15.1	-0.2	1.3	1.00
19	2019	Sole_heamorrha	4389	100.2	100.4	12.9	12.9	-0.2	1.5	0.99
20	2020	Sole_heamorrha	4176	99.7	99.9	12.7	12.7	-0.2	2.0	0.99
21	2021	Sole_heamorrha	469	102.6	101.7	10.2	9.8	0.9	2.4	0.97
22	2015	Sole_ulcer1	2151	99.6	99.4	13.7	13.6	0.2	1.2	1.00
23	2016	Sole_ulcer1	2316	100.3	100.1	16.2	16.2	0.3	1.7	0.99
24	2017	Sole_ulcer1	3317	101.5	101.3	13.8	13.9	0.3	1.3	1.00
25	2018	Sole_ulcer1	4311	98.8	98.8	15.1	15.0	-0.1	1.4	1.00
26	2019	Sole_ulcer1	5136	100.3	100.1	14.7	14.4	0.2	1.7	0.99
27	2020	Sole_ulcer1	4996	99.4	99.2	14.0	13.6	0.2	2.2	0.99
28	2021	Sole_ulcer1	553	103.1	102.5	13.4	12.9	0.6	2.3	0.99
29	2015	Cork_screw_cla	1912	102.2	102.3	12.2	12.1	-0.1	1.0	1.00
30	2016	Cork_screw_cla	2229	98.4	98.3	15.2	15.2	0.1	1.7	0.99
31	2017	Cork_screw_cla	3189	101.0	101.3	12.9	12.9	-0.3	1.1	1.00
32	2018	Cork_screw_cla	4242	96.9	96.9	17.2	17.1	0.0	1.4	1.00
33	2019	Cork_screw_cla	5128	100.1	100.6	13.1	13.2	-0.4	1.6	0.99
34	2020	Cork_screw_cla	4978	100.3	100.6	12.5	12.7	-0.3	1.8	0.99
35	2021	Cork_screw_cla	486	101.5	101.1	10.9	10.8	0.4	2.0	0.98
36	2015	Skin_proferati	2136	101.9	101.8	9.9	9.8	0.1	1.1	0.99
37	2016	Skin_proferati	2315	100.8	100.7	10.5	10.5	0.1	1.3	0.99

sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
38	2017	Skin_proferati	3345	100.8	100.6	10.0	9.8	0.2	1.2	0.99
39	2018	Skin_proferati	4343	100.3	100.5	10.0	9.9	-0.2	1.4	0.99
40	2019	Skin_proferati	5112	98.4	98.2	11.7	11.3	0.2	2.0	0.99
41	2020	Skin_proferati	4848	101.1	100.5	9.5	9.5	0.6	2.3	0.97
42	2021	Skin_proferati	554	98.7	97.9	10.9	9.8	0.7	3.0	0.96
43	2015	White_line_dou	2150	100.0	100.2	21.3	21.4	-0.1	1.1	1.00
44	2016	White_line_dou	2336	100.8	100.9	21.5	21.5	-0.1	2.0	1.00
45	2017	White_line_dou	3340	101.9	102.0	16.6	16.8	-0.1	1.3	1.00
46	2018	White_line_dou	4327	96.4	96.6	21.7	21.5	-0.2	1.6	1.00
47	2019	White_line_dou	5150	101.7	101.9	18.4	18.3	-0.2	1.7	1.00
48	2020	White_line_dou	5004	98.6	98.6	17.3	17.0	-0.1	2.1	0.99
49	2021	White_line_dou	562	103.1	102.7	16.4	15.4	0.5	2.8	0.99
50	2015	Dermatitis2	1515	101.4	101.5	10.2	10.3	-0.1	1.2	0.99
51	2016	Dermatitis2	1856	100.4	100.5	9.8	9.8	-0.2	1.3	0.99
52	2017	Dermatitis2	2719	99.8	99.8	9.9	9.9	-0.1	1.2	0.99
53	2018	Dermatitis2	3486	101.4	101.3	9.6	9.5	0.2	1.4	0.99
54	2019	Dermatitis2	3344	98.3	98.3	11.6	11.5	0.1	1.7	0.99
55	2020	Dermatitis2	310	101.2	101.1	10.9	10.7	0.1	2.0	0.98
56	2015	Heel_horn_eros	760	101.6	101.8	9.7	9.7	-0.2	1.1	0.99
57	2016	Heel_horn_eros	962	99.8	99.9	9.0	9.2	0.0	1.3	0.99
58	2017	Heel_horn_eros	1440	99.7	100.1	9.1	9.1	-0.4	1.3	0.99
59	2018	Heel_horn_eros	1787	99.8	99.8	9.2	9.0	0.0	1.5	0.99
60	2019	Heel_horn_eros	1306	98.5	98.5	9.5	9.7	0.1	1.9	0.98
61	2020	Heel_horn_eros	175	.	.	.	.	.	.	0.97
62	2015	Sole_heamorrha	1549	100.3	100.4	15.8	15.9	-0.1	1.1	1.00
63	2016	Sole_heamorrha	1818	101.1	101.3	16.4	16.6	-0.1	1.9	0.99
64	2017	Sole_heamorrha	2610	102.6	102.7	14.4	14.5	-0.2	1.2	1.00
65	2018	Sole_heamorrha	3210	97.2	97.4	16.5	16.4	-0.1	1.4	1.00
66	2019	Sole_heamorrha	3058	100.2	100.4	13.7	13.6	-0.2	1.5	0.99
67	2020	Sole_heamorrha	299	102.3	102.5	14.9	14.9	-0.2	1.6	0.99
68	2015	Sole_ulcer2	1780	100.2	100.0	16.0	15.9	0.2	1.2	1.00
69	2016	Sole_ulcer2	1999	100.7	100.3	19.0	19.1	0.4	1.9	0.99
70	2017	Sole_ulcer2	2863	102.3	102.0	15.8	15.8	0.3	1.3	1.00
71	2018	Sole_ulcer2	3765	98.5	98.5	17.7	17.5	0.0	1.5	1.00
72	2019	Sole_ulcer2	3605	100.4	100.2	16.9	16.5	0.2	1.6	1.00
73	2020	Sole_ulcer2	339	101.9	101.7	14.9	14.4	0.2	1.9	0.99
74	2015	Cork_screw_cla	1782	101.2	101.4	12.5	12.4	-0.1	1.0	1.00

sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
75	2016	Cork_screw_cla	1946	98.3	98.4	14.4	14.4	-0.1	1.7	0.99
76	2017	Cork_screw_cla	2791	101.1	101.5	12.9	12.9	-0.4	1.1	1.00
77	2018	Cork_screw_cla	3708	96.4	96.5	16.1	16.0	-0.1	1.4	1.00
78	2019	Cork_screw_cla	3581	100.4	100.9	12.8	13.0	-0.4	1.6	0.99
79	2020	Cork_screw_cla	299	101.6	102.2	13.8	14.0	-0.6	1.8	0.99
80	2015	Skin_proferati	1779	101.7	101.7	9.9	9.7	0.1	1.1	0.99
81	2016	Skin_proferati	2014	100.8	100.7	10.6	10.6	0.1	1.3	0.99
82	2017	Skin_proferati	2870	100.9	100.7	9.6	9.5	0.2	1.2	0.99
83	2018	Skin_proferati	3776	100.0	100.2	9.8	9.5	-0.1	1.4	0.99
84	2019	Skin_proferati	3558	98.3	98.2	11.4	10.9	0.1	1.9	0.99
85	2020	Skin_proferati	342	101.2	100.9	10.1	9.9	0.3	2.2	0.98
86	2015	White_line_dou	1785	100.3	100.3	22.9	23.0	0.0	1.1	1.00
87	2016	White_line_dou	2006	100.8	100.7	24.0	24.1	0.0	2.3	1.00
88	2017	White_line_dou	2867	102.4	102.5	18.6	18.7	0.0	1.2	1.00
89	2018	White_line_dou	3772	96.8	97.0	22.9	22.5	-0.2	1.7	1.00
90	2019	White_line_dou	3602	101.4	101.5	20.0	19.7	-0.1	1.6	1.00
91	2020	White_line_dou	352	102.2	102.3	18.0	17.6	-0.2	1.8	1.00
92	2015	Dermatitis3	1190	101.3	101.4	10.8	10.8	-0.1	1.3	0.99
93	2016	Dermatitis3	1451	100.7	100.9	10.3	10.2	-0.3	1.4	0.99
94	2017	Dermatitis3	2077	99.8	99.9	10.4	10.3	-0.1	1.3	0.99
95	2018	Dermatitis3	2008	101.4	101.3	10.3	10.2	0.1	1.7	0.99
96	2019	Dermatitis3	245	.	.	.	.	.	.	0.99
97	2015	Heel_horn_eros	659	101.7	101.7	10.5	10.4	0.0	1.1	0.99
98	2016	Heel_horn_eros	751	100.0	100.0	9.7	9.9	-0.1	1.2	0.99
99	2017	Heel_horn_eros	1083	99.3	99.7	9.1	9.1	-0.4	1.3	0.99
100	2018	Heel_horn_eros	822	100.0	100.1	9.4	8.9	-0.1	1.9	0.98
101	2019	Heel_horn_eros	89	.	.	.	.	.	.	0.98
102	2015	Sole_heamorrha	1224	100.8	100.9	16.0	16.1	-0.1	1.1	1.00
103	2016	Sole_heamorrha	1399	100.8	100.9	16.8	16.9	-0.1	2.1	0.99
104	2017	Sole_heamorrha	1935	102.7	102.8	14.1	14.2	-0.1	1.2	1.00
105	2018	Sole_heamorrha	1805	97.5	97.7	16.8	16.6	-0.2	1.5	1.00
106	2019	Sole_heamorrha	231	.	.	.	.	.	.	0.99
107	2015	Sole_ulcer3	1344	100.1	99.8	15.1	15.0	0.4	1.2	1.00
108	2016	Sole_ulcer3	1543	100.7	100.3	18.0	17.9	0.4	1.7	1.00
109	2017	Sole_ulcer3	2229	102.3	101.9	15.0	15.0	0.5	1.3	1.00
110	2018	Sole_ulcer3	2152	99.7	99.7	15.8	15.5	0.0	1.8	0.99
111	2019	Sole_ulcer3	269	98.7	98.4	16.9	16.4	0.2	2.0	0.99

sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
112	2015	Cork_screw_cla	1384	101.5	101.7	12.4	12.5	-0.2	1.0	1.00
113	2016	Cork_screw_cla	1554	98.8	98.8	14.3	14.3	0.0	1.9	0.99
114	2017	Cork_screw_cla	2214	101.6	102.1	12.7	12.7	-0.4	1.1	1.00
115	2018	Cork_screw_cla	2089	97.0	97.1	16.1	16.2	-0.1	1.5	1.00
116	2019	Cork_screw_cla	246	.	.	.	.	.	.	0.99
117	2015	Skin_proferati	1368	101.6	101.5	9.8	9.7	0.1	1.2	0.99
118	2016	Skin_proferati	1556	100.7	100.7	10.0	9.9	0.0	1.3	0.99
119	2017	Skin_proferati	2218	100.4	100.2	9.5	9.3	0.3	1.3	0.99
120	2018	Skin_proferati	2084	100.3	100.5	9.4	9.1	-0.2	1.6	0.99
121	2019	Skin_proferati	270	96.1	96.3	12.0	11.5	-0.2	2.0	0.99
122	2015	White_line_dou	1339	101.1	101.0	21.8	22.0	0.0	1.1	1.00
123	2016	White_line_dou	1557	101.3	101.1	23.6	23.7	0.1	2.4	0.99
124	2017	White_line_dou	2243	102.7	102.6	17.7	17.8	0.0	1.2	1.00
125	2018	White_line_dou	2172	98.0	98.2	22.2	21.9	-0.2	1.7	1.00
126	2019	White_line_dou	279	97.9	98.0	20.9	20.8	-0.1	1.4	1.00
127	2015	Dermatitis	1782	101.3	101.3	10.5	10.5	-0.1	1.2	0.99
128	2016	Dermatitis	2101	100.4	100.6	10.1	10.1	-0.2	1.3	0.99
129	2017	Dermatitis	3181	100.2	100.2	10.3	10.2	-0.1	1.2	0.99
130	2018	Dermatitis	4083	101.3	101.2	9.9	9.8	0.1	1.4	0.99
131	2019	Dermatitis	4740	98.1	98.1	12.0	11.9	0.0	1.6	0.99
132	2020	Dermatitis	4741	100.7	100.6	10.7	10.7	0.1	2.1	0.98
133	2021	Dermatitis	490	98.7	97.9	10.0	10.1	0.8	2.8	0.96
134	2015	Heel_horn_eros	989	101.8	101.9	9.8	9.8	-0.1	1.0	0.99
135	2016	Heel_horn_eros	1121	99.7	99.7	9.4	9.5	-0.1	1.1	0.99
136	2017	Heel_horn_eros	1848	99.7	100.1	9.3	9.2	-0.4	1.3	0.99
137	2018	Heel_horn_eros	2156	100.1	100.1	9.5	9.2	0.0	1.6	0.99
138	2019	Heel_horn_eros	2418	98.4	98.4	9.9	10.0	0.0	1.8	0.98
139	2020	Heel_horn_eros	2188	100.4	100.3	9.3	9.5	0.1	1.9	0.98
140	2021	Heel_horn_eros	232	.	.	.	.	.	.	0.96
141	2015	Sole_heamorrha	1761	100.1	100.2	15.1	15.2	-0.1	1.1	1.00
142	2016	Sole_heamorrha	2025	101.1	101.3	16.0	16.2	-0.2	1.8	0.99
143	2017	Sole_heamorrha	3038	102.4	102.5	14.0	14.1	-0.2	1.2	1.00
144	2018	Sole_heamorrha	3767	97.2	97.4	16.2	16.1	-0.2	1.4	1.00
145	2019	Sole_heamorrha	4389	100.5	100.7	13.5	13.5	-0.2	1.5	0.99
146	2020	Sole_heamorrha	4176	99.5	99.7	13.2	13.2	-0.2	2.0	0.99
147	2021	Sole_heamorrha	469	102.9	102.0	10.9	10.3	0.9	2.3	0.98
148	2015	Sole_ulcer	2151	100.0	99.7	14.6	14.5	0.3	1.2	1.00

sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
149	2016	Sole_ulcer	2316	100.9	100.5	17.6	17.6	0.4	1.6	1.00
150	2017	Sole_ulcer	3317	101.8	101.4	14.8	14.8	0.4	1.2	1.00
151	2018	Sole_ulcer	4311	98.8	98.8	16.0	15.8	0.0	1.5	1.00
152	2019	Sole_ulcer	5136	100.5	100.2	15.4	14.9	0.3	1.7	0.99
153	2020	Sole_ulcer	4996	99.3	99.0	14.4	14.0	0.3	2.2	0.99
154	2021	Sole_ulcer	553	103.1	102.5	14.1	13.6	0.6	2.1	0.99
155	2015	Cork_screw_cla	1912	101.6	101.7	12.2	12.1	-0.1	1.0	1.00
156	2016	Cork_screw_cla	2229	98.5	98.5	14.6	14.7	0.0	1.7	0.99
157	2017	Cork_screw_cla	3189	101.1	101.5	12.6	12.6	-0.4	1.1	1.00
158	2018	Cork_screw_cla	4242	96.6	96.6	16.4	16.4	0.0	1.3	1.00
159	2019	Cork_screw_cla	5128	100.5	101.0	12.6	12.9	-0.5	1.5	0.99
160	2020	Cork_screw_cla	4978	100.0	100.5	12.1	12.3	-0.5	1.8	0.99
161	2021	Cork_screw_cla	486	101.6	101.3	10.2	10.1	0.3	2.2	0.98
162	2015	Skin_proferati	2136	101.7	101.6	9.7	9.6	0.1	1.1	0.99
163	2016	Skin_proferati	2315	100.5	100.5	10.3	10.2	0.0	1.2	0.99
164	2017	Skin_proferati	3345	100.8	100.6	9.6	9.5	0.2	1.2	0.99
165	2018	Skin_proferati	4343	100.3	100.4	9.7	9.5	-0.2	1.4	0.99
166	2019	Skin_proferati	5112	98.4	98.2	11.5	11.0	0.2	2.0	0.99
167	2020	Skin_proferati	4848	101.1	100.5	9.2	9.1	0.6	2.3	0.97
168	2021	Skin_proferati	554	98.7	98.0	10.6	9.6	0.7	2.9	0.96
169	2015	White_line_dou	2150	100.5	100.5	21.7	21.8	0.0	1.1	1.00
170	2016	White_line_dou	2336	101.3	101.2	22.9	23.0	0.0	2.1	1.00
171	2017	White_line_dou	3340	102.2	102.3	17.5	17.6	0.0	1.2	1.00
172	2018	White_line_dou	4327	96.7	96.9	22.2	22.0	-0.2	1.5	1.00
173	2019	White_line_dou	5150	101.5	101.6	18.9	18.7	-0.1	1.6	1.00
174	2020	White_line_dou	5004	98.7	98.6	17.4	17.1	0.0	2.1	0.99
175	2021	White_line_dou	562	103.0	102.4	16.5	15.7	0.6	2.6	0.99

sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2019	Dermatitis1	8302	98.9	98.8	11.5	11.5	0.1	1.4	0.99
2	2020	Dermatitis1	10926	100.5	100.4	11.0	11.0	0.2	1.7	0.99
3	2021	Dermatitis1	14318	99.2	98.7	10.1	10.1	0.5	2.2	0.98
4	2022	Dermatitis1	11855	101.1	100.9	9.7	9.6	0.1	2.0	0.98
5	2019	Heel_horn_eros	10627	99.1	99.1	10.1	10.3	0.0	1.7	0.99
6	2020	Heel_horn_eros	13493	99.7	99.6	9.7	9.9	0.2	1.9	0.98
7	2021	Heel_horn_eros	14577	100.8	100.4	8.5	8.7	0.3	2.0	0.97
8	2022	Heel_horn_eros	11855	101.9	101.9	7.8	8.0	0.0	1.8	0.97
9	2019	Sole_heamorrha	8655	100.4	100.7	13.1	13.0	-0.3	1.4	0.99
10	2020	Sole_heamorrha	11489	100.2	100.4	12.1	12.0	-0.2	1.7	0.99
11	2021	Sole_heamorrha	14339	103.1	102.6	10.3	10.2	0.5	1.9	0.98
12	2022	Sole_heamorrha	11855	102.1	101.7	9.9	9.9	0.4	1.5	0.99
13	2019	Sole_ulcer1	7906	100.6	100.4	13.8	13.5	0.2	1.6	0.99
14	2020	Sole_ulcer1	10669	99.7	99.5	13.8	13.5	0.3	1.8	0.99
15	2021	Sole_ulcer1	14255	102.8	102.5	11.9	11.6	0.4	1.8	0.99
16	2022	Sole_ulcer1	11855	101.8	101.4	11.1	10.8	0.4	1.7	0.99
17	2019	Cork_screw_cla	7915	99.8	100.2	13.3	13.4	-0.4	1.5	0.99
18	2020	Cork_screw_cla	10687	100.4	100.7	12.3	12.5	-0.3	1.6	0.99
19	2021	Cork_screw_cla	14323	103.3	103.3	10.3	10.6	0.0	1.7	0.99
20	2022	Cork_screw_cla	11855	103.6	103.7	9.7	9.7	-0.2	1.4	0.99
21	2019	Skin_proferati	7931	98.6	98.4	11.3	10.9	0.2	1.9	0.99
22	2020	Skin_proferati	10810	101.2	100.4	9.5	9.5	0.8	2.1	0.98
23	2021	Skin_proferati	14254	99.4	98.7	9.6	9.3	0.7	2.3	0.97
24	2022	Skin_proferati	11855	102.2	101.5	8.2	8.2	0.7	2.2	0.97
25	2019	White_line_dou	7893	101.1	101.3	18.1	17.9	-0.3	1.5	1.00
26	2020	White_line_dou	10666	98.1	98.2	17.0	16.8	-0.1	1.8	0.99
27	2021	White_line_dou	14247	104.4	104.3	14.5	14.1	0.1	1.8	0.99
28	2022	White_line_dou	11855	102.0	101.9	12.8	12.6	0.1	1.5	0.99
29	2019	Dermatitis2	9689	98.6	98.6	11.0	10.9	0.0	1.5	0.99
30	2020	Dermatitis2	15374	100.8	100.7	10.2	10.1	0.1	1.8	0.98
31	2021	Dermatitis2	14809	99.0	98.7	9.3	9.4	0.3	2.1	0.98
32	2022	Dermatitis2	11855	101.0	101.1	9.1	9.0	0.0	2.0	0.98
33	2019	Heel_horn_eros	11737	99.0	99.1	9.1	9.3	-0.1	1.8	0.98
34	2020	Heel_horn_eros	15511	100.0	99.9	8.7	8.8	0.1	1.8	0.98
35	2021	Heel_horn_eros	14809	100.8	100.5	7.5	7.9	0.3	1.9	0.97
36	2022	Heel_horn_eros	11855	101.9	101.9	7.1	7.2	0.0	1.7	0.97
37	2019	Sole_heamorrha	9975	100.7	100.9	13.9	13.8	-0.2	1.4	1.00

sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
38	2020	Sole_heamorrha	15385	99.7	99.8	13.1	13.1	-0.2	1.8	0.99
39	2021	Sole_heamorrha	14809	103.4	102.9	11.2	10.9	0.5	2.0	0.98
40	2022	Sole_heamorrha	11855	102.1	101.7	10.5	10.5	0.4	1.5	0.99
41	2019	Sole_ulcer2	9431	100.7	100.5	15.6	15.2	0.2	1.6	0.99
42	2020	Sole_ulcer2	15345	99.2	98.9	15.1	14.8	0.2	2.1	0.99
43	2021	Sole_ulcer2	14809	103.2	102.8	13.2	12.8	0.4	1.7	0.99
44	2022	Sole_ulcer2	11855	101.8	101.3	11.9	11.7	0.4	1.7	0.99
45	2019	Cork_screw_cla	9454	100.4	100.9	13.1	13.2	-0.6	1.5	0.99
46	2020	Cork_screw_cla	15387	99.8	100.3	12.1	12.2	-0.5	1.6	0.99
47	2021	Cork_screw_cla	14809	103.5	103.6	10.2	10.4	-0.2	1.7	0.99
48	2022	Cork_screw_cla	11855	102.9	103.2	9.5	9.5	-0.3	1.4	0.99
49	2019	Skin_proferati	9476	98.7	98.6	10.9	10.4	0.1	1.9	0.99
50	2020	Skin_proferati	15342	101.0	100.4	9.0	8.9	0.6	2.0	0.97
51	2021	Skin_proferati	14809	99.6	98.9	9.2	8.8	0.7	2.1	0.97
52	2022	Skin_proferati	11855	102.1	101.5	7.8	7.8	0.7	2.0	0.97
53	2019	White_line_dou	9425	101.3	101.4	19.1	18.7	-0.2	1.5	1.00
54	2020	White_line_dou	15332	98.0	98.1	18.1	17.7	-0.1	1.9	0.99
55	2021	White_line_dou	14809	104.3	104.0	15.5	14.9	0.3	1.9	0.99
56	2022	White_line_dou	11855	101.8	101.6	13.6	13.3	0.2	1.6	0.99
57	2019	Dermatitis3	12802	98.5	98.5	11.8	11.7	0.0	1.5	0.99
58	2020	Dermatitis3	15686	100.8	100.8	10.8	10.7	0.1	1.8	0.99
59	2021	Dermatitis3	14809	98.7	98.4	9.9	9.9	0.3	2.1	0.98
60	2022	Dermatitis3	11855	100.7	100.7	9.6	9.3	0.0	2.0	0.98
61	2019	Heel_horn_eros	12958	98.8	98.8	9.7	9.8	0.0	1.9	0.98
62	2020	Heel_horn_eros	15686	99.9	99.8	9.4	9.6	0.1	1.9	0.98
63	2021	Heel_horn_eros	14809	100.1	99.8	8.2	8.5	0.3	1.9	0.97
64	2022	Heel_horn_eros	11855	101.5	101.5	7.5	7.8	0.0	1.8	0.97
65	2019	Sole_heamorrha	12816	100.7	100.9	14.1	14.0	-0.2	1.4	1.00
66	2020	Sole_heamorrha	15686	99.7	99.9	13.2	13.1	-0.2	1.7	0.99
67	2021	Sole_heamorrha	14809	103.5	103.1	11.0	10.8	0.4	1.8	0.99
68	2022	Sole_heamorrha	11855	102.2	101.9	10.3	10.3	0.3	1.4	0.99
69	2019	Sole_ulcer3	12778	100.9	100.5	14.8	14.3	0.4	1.8	0.99
70	2020	Sole_ulcer3	15686	99.4	99.0	14.4	13.9	0.3	2.0	0.99
71	2021	Sole_ulcer3	14809	102.8	102.2	12.7	12.4	0.6	1.6	0.99
72	2022	Sole_ulcer3	11855	101.3	100.7	11.5	11.2	0.6	1.7	0.99
73	2019	Cork_screw_cla	12801	100.4	101.0	12.8	13.1	-0.6	1.5	0.99
74	2020	Cork_screw_cla	15686	100.0	100.6	11.8	12.0	-0.5	1.7	0.99

sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
75	2021	Cork_screw_cla	14809	103.2	103.4	9.9	10.2	-0.2	1.7	0.99
76	2022	Cork_screw_cla	11855	102.5	102.7	9.3	9.4	-0.2	1.4	0.99
77	2019	Skin_proferati	12777	98.5	98.3	11.3	10.9	0.2	2.0	0.99
78	2020	Skin_proferati	15686	101.3	100.6	9.1	8.9	0.7	2.1	0.97
79	2021	Skin_proferati	14809	99.2	98.6	9.5	9.0	0.7	2.2	0.97
80	2022	Skin_proferati	11855	102.2	101.6	8.1	8.0	0.7	2.1	0.97
81	2019	White_line_dou	12768	101.2	101.2	18.5	18.3	0.0	1.5	1.00
82	2020	White_line_dou	15686	98.6	98.4	17.2	17.0	0.2	1.9	0.99
83	2021	White_line_dou	14809	104.0	103.5	14.8	14.4	0.5	1.6	0.99
84	2022	White_line_dou	11855	102.1	101.7	13.1	12.9	0.4	1.5	0.99
85	2019	Dermatitis	8302	98.7	98.7	11.3	11.2	0.0	1.4	0.99
86	2020	Dermatitis	10926	100.8	100.6	10.5	10.5	0.1	1.7	0.99
87	2021	Dermatitis	14318	98.9	98.6	9.7	9.7	0.4	2.1	0.98
88	2022	Dermatitis	11855	100.9	100.9	9.4	9.2	0.0	2.0	0.98
89	2019	Heel_horn_eros	10627	99.0	99.0	9.5	9.7	0.0	1.8	0.98
90	2020	Heel_horn_eros	13493	99.8	99.7	9.2	9.4	0.1	1.9	0.98
91	2021	Heel_horn_eros	14577	100.5	100.2	8.0	8.3	0.3	1.9	0.97
92	2022	Heel_horn_eros	11855	101.7	101.7	7.4	7.6	0.0	1.8	0.97
93	2019	Sole_heamorrha	8655	100.6	100.8	13.7	13.5	-0.2	1.3	1.00
94	2020	Sole_heamorrha	11489	99.9	100.1	12.6	12.6	-0.2	1.7	0.99
95	2021	Sole_heamorrha	14339	103.4	103.0	10.7	10.6	0.5	1.8	0.99
96	2022	Sole_heamorrha	11855	102.1	101.8	10.1	10.1	0.3	1.5	0.99
97	2019	Sole_ulcer	7906	100.8	100.5	14.4	14.0	0.3	1.6	0.99
98	2020	Sole_ulcer	10669	99.5	99.2	14.2	13.9	0.3	1.8	0.99
99	2021	Sole_ulcer	14255	102.9	102.4	12.4	12.1	0.5	1.6	0.99
100	2022	Sole_ulcer	11855	101.6	101.1	11.3	11.1	0.5	1.7	0.99
101	2019	Cork_screw_cla	7915	100.0	100.6	12.9	13.1	-0.5	1.4	0.99
102	2020	Cork_screw_cla	10687	100.1	100.6	11.8	12.0	-0.4	1.6	0.99
103	2021	Cork_screw_cla	14323	103.4	103.5	10.0	10.2	-0.1	1.6	0.99
104	2022	Cork_screw_cla	11855	102.9	103.2	9.3	9.4	-0.2	1.3	0.99
105	2019	Skin_proferati	7931	98.6	98.4	11.1	10.7	0.2	1.9	0.99
106	2020	Skin_proferati	10810	101.2	100.5	9.1	9.0	0.7	2.0	0.97
107	2021	Skin_proferati	14254	99.4	98.7	9.4	9.0	0.7	2.2	0.97
108	2022	Skin_proferati	11855	102.2	101.5	8.0	8.0	0.7	2.1	0.97
109	2019	White_line_dou	7893	101.0	101.2	18.4	18.1	-0.1	1.4	1.00
110	2020	White_line_dou	10666	98.2	98.2	17.2	17.0	0.0	1.8	0.99

sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
111	2021	White_line_dou	14247	104.2	103.9	14.7	14.3	0.3	1.6	0.99
112	2022	White_line_dou	11855	102.0	101.7	13.1	12.9	0.3	1.5	0.99

Claw

SS full vs reduc run

Comparison of singlestep GEBV full for Aug22 evaluation and singlestep GEBV reduced for Aug22 evaluation. Standardized to base, which is cows born from 9 to 11 years back.

Column description:

BYR = birth year

Name = trait name

No = number of animals behind the statistics

Mean_noff = average number of offspring with phenotype

Std_noff = standard deviation of number of offspring with phenotype

Mean_ss = mean singlestep full GEBV for Aug22

Mean_oss = mean singlestep reduced GEBV for Aug22

Std_ss = standard deviation for singlestep full GEBV for Aug22

Std_oss = standard deviation for singlestep reduced GEBV for Aug22

Mean_dif = mean difference between GEBVs (diff = full Aug22 – reduced Aug22)

Std_dif = standard deviation for difference between GEBVs (diff = full Aug22 – reduced Aug22)

Corr_SS = correlation between GEBVs (full Aug22 and reduced Aug22)

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77		Description
78	HOL	Nordic AI bulls
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102	RDC	Nordic AI bulls
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HOL summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2010	Dermatitis1	192	464	1478	98.5	98.5	11.1	11.0	0.0	1.2	0.99
2	2011	Dermatitis1	155	292	614	100.5	100.6	13.2	13.0	-0.1	1.4	0.99
3	2012	Dermatitis1	170	433	782	100.8	100.8	11.7	11.7	0.0	1.4	0.99
4	2013	Dermatitis1	151	461	843	101.3	101.0	11.7	11.7	0.3	1.5	0.99
5	2014	Dermatitis1	113	710	853	101.4	100.8	13.9	13.9	0.6	1.5	0.99
6	2015	Dermatitis1	82	1089	1335	105.5	103.9	12.5	10.7	1.6	7.3	0.82
7	2016	Dermatitis1	66	1039	1315	104.3	104.1	12.7	10.7	0.3	7.6	0.80
8	2017	Dermatitis1	65	631	794	105.1	103.7	12.0	9.9	1.5	6.7	0.83
9	2018	Dermatitis1	19	157	217	104.2	105.6	12.7	10.3	-1.4	6.8	0.85
10	2010	Heel_horn_eros	189	298	937	98.4	98.3	10.6	10.6	0.1	1.4	0.99
11	2011	Heel_horn_eros	154	189	387	99.2	99.1	11.4	11.2	0.1	1.4	0.99
12	2012	Heel_horn_eros	169	264	476	100.9	101.1	10.7	10.5	-0.2	1.3	0.99
13	2013	Heel_horn_eros	151	275	492	101.6	101.6	10.0	10.1	0.0	1.4	0.99
14	2014	Heel_horn_eros	111	402	484	102.6	102.3	11.4	11.5	0.3	1.4	0.99
15	2015	Heel_horn_eros	82	567	698	106.0	105.9	10.5	8.8	0.1	6.4	0.79
16	2016	Heel_horn_eros	65	543	689	104.6	106.4	8.6	8.7	-1.7	5.9	0.76
17	2017	Heel_horn_eros	61	303	373	105.4	105.0	9.4	8.5	0.4	6.8	0.72
18	2018	Heel_horn_eros	15	80	104	107.3	108.3	6.5	6.9	-1.1	4.9	0.73
19	2010	Sole_heamorrha	192	439	1398	98.0	98.0	10.6	10.6	0.0	1.4	0.99
20	2011	Sole_heamorrha	155	276	567	99.8	99.8	10.4	10.3	-0.1	1.3	0.99
21	2012	Sole_heamorrha	169	404	725	101.3	101.8	10.4	10.4	-0.5	1.5	0.99
22	2013	Sole_heamorrha	151	431	776	102.8	103.1	10.4	10.7	-0.2	1.6	0.99
23	2014	Sole_heamorrha	113	642	774	103.5	103.5	10.4	10.5	0.0	1.7	0.99
24	2015	Sole_heamorrha	82	951	1159	105.0	106.3	9.4	8.5	-1.3	5.4	0.82
25	2016	Sole_heamorrha	66	873	1098	105.5	106.0	10.7	9.8	-0.6	6.3	0.81
26	2017	Sole_heamorrha	64	513	637	108.0	108.4	10.4	7.6	-0.5	7.0	0.74
27	2018	Sole_heamorrha	19	122	168	103.7	104.5	8.2	7.7	-0.8	5.0	0.80
28	2010	Sole_ulcer1	193	450	1439	98.6	98.5	10.1	10.2	0.1	1.2	0.99
29	2011	Sole_ulcer1	155	286	596	100.5	100.5	9.3	9.3	0.0	1.2	0.99
30	2012	Sole_ulcer1	170	421	758	103.1	103.5	9.3	9.5	-0.4	1.4	0.99
31	2013	Sole_ulcer1	151	448	807	104.1	104.0	8.4	8.5	0.1	1.6	0.98
32	2014	Sole_ulcer1	113	675	804	103.6	103.2	9.2	9.2	0.4	1.5	0.99
33	2015	Sole_ulcer1	82	1038	1267	104.9	106.0	9.9	9.0	-1.1	5.8	0.82
34	2016	Sole_ulcer1	66	978	1235	104.6	106.1	8.9	7.2	-1.6	7.3	0.61
35	2017	Sole_ulcer1	64	582	725	106.3	106.8	8.7	7.1	-0.5	5.8	0.75
36	2018	Sole_ulcer1	19	140	196	104.6	106.2	5.9	5.8	-1.6	3.2	0.85

HOL summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
37	2010	Cork_screw_cla	191	371	1186	99.9	99.9	12.9	12.8	0.0	1.8	0.99
38	2011	Cork_screw_cla	155	235	484	99.3	99.5	10.3	10.3	-0.1	1.5	0.99
39	2012	Cork_screw_cla	169	352	644	101.4	101.9	12.5	12.4	-0.5	1.9	0.99
40	2013	Cork_screw_cla	151	382	710	102.0	102.8	11.7	12.0	-0.9	2.1	0.98
41	2014	Cork_screw_cla	112	582	692	101.5	103.3	11.1	10.9	-1.7	2.3	0.98
42	2015	Cork_screw_cla	82	977	1199	104.8	106.9	11.6	9.8	-2.1	7.6	0.76
43	2016	Cork_screw_cla	66	978	1233	100.2	103.6	12.4	10.5	-3.4	8.3	0.75
44	2017	Cork_screw_cla	64	558	695	105.2	107.8	11.1	9.3	-2.6	6.8	0.79
45	2018	Cork_screw_cla	19	132	184	101.5	103.7	10.8	8.9	-2.3	5.4	0.87
46	2010	Skin_proferati	190	447	1416	98.0	98.0	10.8	10.9	0.0	1.3	0.99
47	2011	Skin_proferati	155	280	583	97.5	97.7	12.5	12.7	-0.2	1.2	1.00
48	2012	Skin_proferati	169	412	743	99.3	99.3	10.9	11.3	-0.1	1.4	0.99
49	2013	Skin_proferati	151	437	791	99.8	99.7	10.2	10.5	0.1	1.5	0.99
50	2014	Skin_proferati	113	658	788	100.9	100.5	12.5	12.8	0.4	1.2	1.00
51	2015	Skin_proferati	82	1014	1239	104.7	104.0	10.7	9.1	0.7	6.5	0.80
52	2016	Skin_proferati	66	963	1213	104.8	104.0	8.9	8.2	0.8	6.3	0.73
53	2017	Skin_proferati	64	572	713	104.5	104.4	11.1	9.8	0.2	7.4	0.75
54	2018	Skin_proferati	19	138	193	102.3	102.2	8.2	8.5	0.1	6.1	0.73
55	2010	White_line_dou	192	455	1449	95.7	95.6	11.5	11.4	0.2	1.6	0.99
56	2011	White_line_dou	155	287	599	97.2	97.1	11.4	11.2	0.2	1.4	0.99
57	2012	White_line_dou	170	423	763	100.9	100.9	11.8	11.8	0.0	1.8	0.99
58	2013	White_line_dou	151	452	815	104.8	104.4	10.1	9.9	0.4	1.9	0.98
59	2014	White_line_dou	113	680	810	104.3	103.5	12.0	11.8	0.8	1.6	0.99
60	2015	White_line_dou	82	1046	1276	108.8	107.4	11.9	10.1	1.4	6.4	0.84
61	2016	White_line_dou	66	988	1248	104.7	105.1	13.6	10.1	-0.4	7.7	0.83
62	2017	White_line_dou	64	591	735	108.1	106.4	13.1	8.6	1.7	8.9	0.74
63	2018	White_line_dou	19	141	198	107.1	107.2	8.1	7.6	-0.1	5.5	0.76
64	2010	Dermatitis2	192	368	1177	99.3	99.3	11.2	11.1	0.0	1.2	0.99
65	2011	Dermatitis2	155	231	497	100.7	100.6	13.0	12.9	0.0	1.3	0.99
66	2012	Dermatitis2	169	353	626	100.7	100.8	11.6	11.7	0.0	1.3	0.99
67	2013	Dermatitis2	151	367	615	100.4	100.3	11.9	11.8	0.2	1.5	0.99
68	2014	Dermatitis2	113	591	716	100.3	100.0	13.9	14.0	0.2	1.4	0.99
69	2015	Dermatitis2	82	844	1045	104.3	103.0	12.2	10.4	1.3	7.4	0.80
70	2016	Dermatitis2	63	471	649	102.6	102.9	13.3	10.3	-0.3	8.3	0.78
71	2017	Dermatitis2	17	53	46	104.6	104.2	12.0	10.7	0.4	6.6	0.84
72	2010	Heel_horn_eros	181	235	726	98.8	98.6	10.7	10.6	0.2	1.4	0.99

HOL summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
73	2011	Heel_horn_eros	153	143	302	99.4	99.3	11.3	11.1	0.1	1.4	0.99
74	2012	Heel_horn_eros	168	207	367	100.6	100.8	10.7	10.5	-0.2	1.3	0.99
75	2013	Heel_horn_eros	150	209	345	101.0	101.1	9.9	9.9	-0.1	1.5	0.99
76	2014	Heel_horn_eros	109	313	376	102.2	102.1	11.4	11.5	0.1	1.5	0.99
77	2015	Heel_horn_eros	82	427	528	105.1	105.2	10.1	9.0	-0.1	6.0	0.81
78	2016	Heel_horn_eros	59	226	298	104.5	106.5	8.8	8.5	-1.9	5.7	0.78
79	2010	Sole_heamorrha	192	346	1102	97.8	97.7	10.6	10.6	0.1	1.3	0.99
80	2011	Sole_heamorrha	155	218	472	99.6	99.8	10.4	10.4	-0.1	1.1	0.99
81	2012	Sole_heamorrha	169	332	586	101.7	102.1	10.6	10.6	-0.5	1.3	0.99
82	2013	Sole_heamorrha	151	344	571	104.0	104.1	10.1	10.5	0.0	1.4	0.99
83	2014	Sole_heamorrha	113	529	642	103.8	103.8	10.1	10.2	0.0	1.4	0.99
84	2015	Sole_heamorrha	82	740	914	106.0	106.8	9.8	9.1	-0.8	5.3	0.85
85	2016	Sole_heamorrha	62	389	526	105.1	105.9	10.9	9.8	-0.8	6.3	0.82
86	2017	Sole_heamorrha	13	49	36	108.2	109.6	11.5	6.8	-1.4	8.1	0.72
87	2010	Sole_ulcer2	191	362	1153	98.4	98.4	10.1	10.2	0.0	1.1	0.99
88	2011	Sole_ulcer2	155	227	489	100.2	100.3	9.5	9.5	-0.1	1.0	0.99
89	2012	Sole_ulcer2	169	344	606	103.2	103.4	9.6	9.7	-0.3	1.2	0.99
90	2013	Sole_ulcer2	151	356	591	104.5	104.4	8.3	8.3	0.1	1.3	0.99
91	2014	Sole_ulcer2	113	566	683	104.0	103.9	9.0	9.1	0.1	1.2	0.99
92	2015	Sole_ulcer2	82	799	989	104.8	105.9	9.5	8.6	-1.1	5.3	0.84
93	2016	Sole_ulcer2	62	438	597	103.9	105.9	8.4	8.1	-2.0	6.3	0.71
94	2017	Sole_ulcer2	16	51	41	106.0	108.9	7.0	7.3	-2.9	4.4	0.81
95	2010	Cork_screw_cla	190	297	948	99.1	99.1	12.4	12.3	0.0	1.7	0.99
96	2011	Cork_screw_cla	155	186	396	98.9	98.9	10.2	10.1	0.0	1.5	0.99
97	2012	Cork_screw_cla	168	287	511	100.4	100.7	11.5	11.3	-0.3	1.8	0.99
98	2013	Cork_screw_cla	151	307	518	101.7	102.4	11.2	11.4	-0.7	2.0	0.98
99	2014	Cork_screw_cla	113	523	635	101.5	102.8	11.5	11.2	-1.3	2.1	0.98
100	2015	Cork_screw_cla	82	787	974	105.1	106.4	11.6	9.8	-1.2	7.1	0.79
101	2016	Cork_screw_cla	61	420	564	100.5	103.6	13.2	10.2	-3.1	8.4	0.77
102	2017	Cork_screw_cla	14	53	42	104.9	109.3	11.7	8.1	-4.4	6.2	0.87
103	2010	Skin_proferati	189	257	754	97.9	98.0	10.6	10.7	0.0	1.1	0.99
104	2011	Skin_proferati	152	172	336	97.9	98.1	12.3	12.5	-0.2	1.1	1.00
105	2012	Skin_proferati	167	244	399	99.5	99.5	11.2	11.5	-0.1	1.3	0.99
106	2013	Skin_proferati	149	245	381	99.6	99.5	10.2	10.6	0.0	1.6	0.99
107	2014	Skin_proferati	108	418	482	101.4	101.1	12.3	12.6	0.3	1.1	1.00
108	2015	Skin_proferati	79	562	697	104.7	104.2	10.9	9.4	0.6	6.6	0.80

HOL summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
109	2016	Skin_proferati	58	358	480	105.0	104.4	9.1	8.2	0.5	6.3	0.74
110	2017	Skin_proferati	15	49	38	106.7	106.8	13.2	10.8	-0.1	8.4	0.77
111	2010	White_line_dou	190	255	745	95.8	95.7	11.1	11.1	0.1	1.3	0.99
112	2011	White_line_dou	152	172	332	97.8	97.7	11.5	11.3	0.0	1.3	0.99
113	2012	White_line_dou	167	244	394	101.8	101.7	12.1	12.2	0.1	1.6	0.99
114	2013	White_line_dou	149	246	376	104.9	104.5	10.1	10.0	0.4	1.6	0.99
115	2014	White_line_dou	108	415	478	105.0	104.3	11.3	11.1	0.7	1.4	0.99
116	2015	White_line_dou	79	558	693	108.6	107.1	11.7	10.0	1.4	5.7	0.88
117	2016	White_line_dou	58	356	478	104.8	105.6	13.3	10.7	-0.8	6.9	0.86
118	2017	White_line_dou	15	49	38	107.2	107.1	13.6	7.5	0.1	9.3	0.76
119	2010	Dermatitis3	187	187	549	99.0	99.0	11.4	11.3	0.0	1.1	0.99
120	2011	Dermatitis3	150	128	251	100.7	100.8	12.8	12.6	0.0	1.2	1.00
121	2012	Dermatitis3	166	183	288	100.1	100.1	11.6	11.7	0.0	1.2	0.99
122	2013	Dermatitis3	148	189	291	99.6	99.4	11.5	11.5	0.2	1.3	0.99
123	2014	Dermatitis3	105	324	378	99.7	99.4	13.7	13.7	0.4	1.3	1.00
124	2015	Dermatitis3	75	251	318	103.9	102.2	12.3	10.7	1.7	8.2	0.76
125	2016	Dermatitis3	10	62	47	102.5	101.9	15.3	13.2	0.6	8.0	0.85
126	2010	Heel_horn_eros	157	119	309	99.0	98.8	10.7	10.7	0.2	1.3	0.99
127	2011	Heel_horn_eros	144	74	135	100.3	100.3	10.8	10.8	0.0	1.3	0.99
128	2012	Heel_horn_eros	157	97	142	101.0	101.1	10.5	10.4	-0.1	1.2	0.99
129	2013	Heel_horn_eros	132	100	140	100.6	100.5	9.9	10.0	0.1	1.4	0.99
130	2014	Heel_horn_eros	89	170	175	102.5	102.3	10.3	10.5	0.2	1.3	0.99
131	2015	Heel_horn_eros	55	139	142	105.1	104.6	10.9	9.3	0.5	6.6	0.80
132	2010	Sole_heamorrha	187	166	478	97.8	97.8	10.4	10.4	0.0	1.2	0.99
133	2011	Sole_heamorrha	150	115	219	99.1	99.2	10.2	10.2	-0.1	1.1	0.99
134	2012	Sole_heamorrha	166	157	242	101.5	101.9	10.5	10.6	-0.3	1.3	0.99
135	2013	Sole_heamorrha	147	160	239	103.7	103.8	9.7	10.0	-0.1	1.4	0.99
136	2014	Sole_heamorrha	103	261	297	103.3	103.4	10.3	10.3	0.0	1.3	0.99
137	2015	Sole_heamorrha	71	198	243	105.8	106.2	9.8	9.2	-0.4	4.9	0.87
138	2010	Sole_ulcer3	187	178	516	99.1	99.0	10.0	10.1	0.0	1.1	0.99
139	2011	Sole_ulcer3	150	123	237	101.1	101.2	9.7	9.7	-0.1	0.9	1.00
140	2012	Sole_ulcer3	165	174	271	103.7	103.9	9.8	9.9	-0.2	1.1	0.99
141	2013	Sole_ulcer3	148	180	275	104.2	104.2	8.8	8.8	0.0	1.3	0.99
142	2014	Sole_ulcer3	105	304	354	104.1	103.8	9.0	9.2	0.3	1.1	0.99
143	2015	Sole_ulcer3	73	234	291	103.1	104.1	9.9	9.6	-1.0	5.5	0.84
144	2010	Cork_screw_cla	181	148	426	100.0	100.0	11.9	11.9	-0.1	1.7	0.99

HOL summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
145	2011	Cork_screw_cla	148	102	195	99.3	99.4	11.4	11.2	-0.2	1.5	0.99
146	2012	Cork_screw_cla	163	153	239	100.5	100.8	11.8	11.6	-0.4	1.9	0.99
147	2013	Cork_screw_cla	147	173	267	101.5	102.4	11.2	11.5	-0.9	2.1	0.98
148	2014	Cork_screw_cla	104	312	362	100.7	102.4	11.4	11.2	-1.8	2.3	0.98
149	2015	Cork_screw_cla	73	231	286	103.1	105.2	10.9	9.4	-2.1	7.3	0.75
150	2010	Skin_proferati	183	183	529	97.9	98.0	10.8	10.8	-0.1	1.2	0.99
151	2011	Skin_proferati	150	123	240	98.1	98.3	12.6	12.7	-0.2	1.0	1.00
152	2012	Skin_proferati	164	176	276	99.5	99.5	11.1	11.5	0.0	1.3	0.99
153	2013	Skin_proferati	148	181	280	99.5	99.3	10.5	10.7	0.2	1.3	0.99
154	2014	Skin_proferati	105	307	359	100.7	100.3	12.4	12.6	0.3	1.1	1.00
155	2015	Skin_proferati	73	237	293	104.7	104.0	11.2	9.8	0.7	6.7	0.81
156	2010	White_line_dou	186	179	518	95.9	95.9	11.4	11.4	0.1	1.3	0.99
157	2011	White_line_dou	150	123	237	97.5	97.5	11.5	11.4	0.0	1.3	0.99
158	2012	White_line_dou	165	174	271	102.0	102.0	11.9	11.9	0.0	1.4	0.99
159	2013	White_line_dou	148	181	276	105.1	104.8	10.6	10.7	0.4	1.6	0.99
160	2014	White_line_dou	105	305	356	104.8	104.1	10.7	10.6	0.7	1.4	0.99
161	2015	White_line_dou	73	235	291	108.4	107.2	11.7	10.1	1.2	5.4	0.89
162	2010	Dermatitis	192	464	1478	98.9	98.9	11.0	11.0	0.0	1.1	0.99
163	2011	Dermatitis	155	292	614	100.5	100.6	12.8	12.6	-0.1	1.2	1.00
164	2012	Dermatitis	170	433	782	100.5	100.5	11.4	11.5	0.0	1.2	0.99
165	2013	Dermatitis	151	461	843	100.2	100.1	11.6	11.5	0.2	1.4	0.99
166	2014	Dermatitis	113	710	853	100.3	99.9	13.7	13.8	0.5	1.4	0.99
167	2015	Dermatitis	82	1089	1335	104.3	102.9	12.2	10.4	1.4	7.4	0.79
168	2016	Dermatitis	66	1039	1315	103.1	102.9	13.1	10.7	0.2	7.6	0.81
169	2017	Dermatitis	65	631	794	103.9	102.8	11.6	9.9	1.1	6.3	0.84
170	2018	Dermatitis	19	157	217	103.2	104.6	12.1	10.3	-1.5	6.5	0.84
171	2010	Heel_horn_eros	189	298	937	98.9	98.7	10.4	10.4	0.2	1.3	0.99
172	2011	Heel_horn_eros	154	189	387	99.6	99.5	11.2	11.0	0.1	1.4	0.99
173	2012	Heel_horn_eros	169	264	476	100.8	100.9	10.6	10.4	-0.1	1.3	0.99
174	2013	Heel_horn_eros	151	275	492	101.0	101.1	9.8	9.8	-0.1	1.5	0.99
175	2014	Heel_horn_eros	111	402	484	102.3	102.2	11.0	11.1	0.1	1.3	0.99
176	2015	Heel_horn_eros	82	567	698	104.9	104.9	10.1	8.8	0.0	6.0	0.80
177	2016	Heel_horn_eros	65	543	689	104.3	106.1	8.5	8.7	-1.8	5.5	0.80
178	2017	Heel_horn_eros	61	303	373	104.9	104.2	8.6	8.3	0.6	6.3	0.72
179	2018	Heel_horn_eros	15	80	104	106.5	107.4	6.6	6.8	-0.9	5.0	0.72
180	2010	Sole_heamorrha	192	439	1398	97.8	97.8	10.4	10.3	0.0	1.2	0.99

HOL summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
181	2011	Sole_heamorrha	155	276	567	99.5	99.6	10.1	10.1	-0.1	1.1	0.99
182	2012	Sole_heamorrha	169	404	725	101.5	101.9	10.4	10.4	-0.4	1.4	0.99
183	2013	Sole_heamorrha	151	431	776	103.4	103.5	10.0	10.3	-0.2	1.4	0.99
184	2014	Sole_heamorrha	113	642	774	103.6	103.7	10.1	10.1	-0.1	1.4	0.99
185	2015	Sole_heamorrha	82	951	1159	105.7	106.5	9.6	8.8	-0.8	5.1	0.85
186	2016	Sole_heamorrha	66	873	1098	105.1	105.8	10.7	9.6	-0.7	6.4	0.81
187	2017	Sole_heamorrha	64	513	637	108.0	108.2	10.2	7.5	-0.1	6.5	0.78
188	2018	Sole_heamorrha	19	122	168	103.9	104.9	8.0	7.7	-1.0	4.3	0.85
189	2010	Sole_ulcer	193	450	1439	98.7	98.7	9.9	10.0	0.1	1.0	0.99
190	2011	Sole_ulcer	155	286	596	100.7	100.6	9.4	9.3	0.1	1.0	0.99
191	2012	Sole_ulcer	170	421	758	103.3	103.6	9.4	9.6	-0.3	1.2	0.99
192	2013	Sole_ulcer	151	448	807	104.3	104.2	8.3	8.4	0.1	1.3	0.99
193	2014	Sole_ulcer	113	675	804	103.9	103.7	8.8	8.9	0.2	1.1	0.99
194	2015	Sole_ulcer	82	1038	1267	104.3	105.4	9.5	8.8	-1.1	5.3	0.84
195	2016	Sole_ulcer	66	978	1235	104.3	105.7	8.3	7.5	-1.4	6.2	0.69
196	2017	Sole_ulcer	64	582	725	106.0	106.5	8.1	6.9	-0.5	5.1	0.78
197	2018	Sole_ulcer	19	140	196	104.2	105.8	5.9	6.0	-1.6	2.5	0.91
198	2010	Cork_screw_cla	191	371	1186	99.7	99.7	12.1	12.0	0.0	1.7	0.99
199	2011	Cork_screw_cla	155	235	484	99.2	99.3	10.5	10.4	-0.1	1.5	0.99
200	2012	Cork_screw_cla	169	352	644	100.6	101.1	11.8	11.7	-0.5	1.8	0.99
201	2013	Cork_screw_cla	151	382	710	101.5	102.4	11.1	11.5	-0.9	2.0	0.98
202	2014	Cork_screw_cla	112	582	692	101.2	102.8	11.0	10.8	-1.6	2.2	0.98
203	2015	Cork_screw_cla	82	977	1199	104.2	106.0	11.2	9.4	-1.8	7.1	0.78
204	2016	Cork_screw_cla	66	978	1233	99.9	103.0	12.4	10.4	-3.1	7.7	0.78
205	2017	Cork_screw_cla	64	558	695	104.9	107.0	10.7	9.3	-2.1	6.4	0.81
206	2018	Cork_screw_cla	19	132	184	101.4	103.1	11.0	8.9	-1.7	5.0	0.89
207	2010	Skin_proferati	190	447	1416	98.0	98.1	10.7	10.7	0.0	1.1	0.99
208	2011	Skin_proferati	155	280	583	97.7	97.9	12.4	12.6	-0.2	1.1	1.00
209	2012	Skin_proferati	169	412	743	99.4	99.5	10.9	11.3	-0.1	1.3	0.99
210	2013	Skin_proferati	151	437	791	99.5	99.5	10.3	10.5	0.1	1.4	0.99
211	2014	Skin_proferati	113	658	788	100.8	100.4	12.4	12.7	0.4	1.2	1.00
212	2015	Skin_proferati	82	1014	1239	104.6	103.9	10.7	9.4	0.7	6.5	0.80
213	2016	Skin_proferati	66	963	1213	104.8	104.1	8.9	8.1	0.7	6.1	0.75
214	2017	Skin_proferati	64	572	713	104.6	104.5	10.9	9.7	0.1	7.2	0.77
215	2018	Skin_proferati	19	138	193	102.1	102.2	8.1	8.6	-0.1	6.0	0.74
216	2010	White_line_dou	192	455	1449	95.7	95.6	11.3	11.3	0.1	1.3	0.99

HOL summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
217	2011	White_line_dou	155	287	599	97.5	97.5	11.3	11.1	0.0	1.2	0.99
218	2012	White_line_dou	170	423	763	101.4	101.5	11.8	11.8	0.0	1.6	0.99
219	2013	White_line_dou	151	452	815	104.9	104.5	10.1	10.0	0.4	1.6	0.99
220	2014	White_line_dou	113	680	810	104.8	104.1	11.2	11.0	0.7	1.3	0.99
221	2015	White_line_dou	82	1046	1276	108.5	107.4	11.4	9.7	1.1	5.6	0.87
222	2016	White_line_dou	66	988	1248	105.0	105.3	12.4	10.1	-0.4	6.5	0.85
223	2017	White_line_dou	64	591	735	108.4	107.0	11.7	8.2	1.4	7.7	0.75
224	2018	White_line_dou	19	141	198	107.1	107.5	8.1	7.9	-0.4	4.5	0.84

HOL summery stastistics for SS and prev SS breeding value for nordic AI bulls with no offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2019	Dermatitis1	69	.	.	108.7	106.8	11.4	9.7	1.9	4.2	0.93
2	2020	Dermatitis1	70	.	.	109.0	108.7	11.3	9.9	0.3	4.6	0.91
3	2021	Dermatitis1	58	.	.	107.8	107.6	9.8	8.3	0.3	3.9	0.92
4	2022	Dermatitis1	26	.	.	109.8	109.5	10.0	9.1	0.3	3.4	0.94
5	2019	Heel_horn_eros	69	.	.	108.9	108.8	8.6	8.1	0.1	3.8	0.90
6	2020	Heel_horn_eros	70	.	.	108.7	109.1	8.5	8.2	-0.3	3.6	0.91
7	2021	Heel_horn_eros	58	.	.	109.4	109.2	7.0	6.3	0.2	3.4	0.87
8	2022	Heel_horn_eros	26	.	.	110.7	111.5	8.4	8.5	-0.8	3.3	0.92
9	2019	Sole_heamorrha	69	.	.	106.4	106.2	10.8	10.0	0.2	3.9	0.93
10	2020	Sole_heamorrha	70	.	.	105.3	105.8	6.9	6.4	-0.6	3.4	0.87
11	2021	Sole_heamorrha	58	.	.	106.6	105.9	9.4	8.6	0.7	3.5	0.93
12	2022	Sole_heamorrha	26	.	.	104.4	104.6	7.0	6.6	-0.2	3.4	0.88
13	2019	Sole_ulcer1	69	.	.	107.5	106.9	7.6	8.4	0.6	3.1	0.93
14	2020	Sole_ulcer1	70	.	.	105.8	106.6	6.1	6.2	-0.7	3.2	0.87
15	2021	Sole_ulcer1	58	.	.	106.8	106.2	7.7	7.7	0.6	2.7	0.94
16	2022	Sole_ulcer1	26	.	.	107.7	107.2	5.8	6.0	0.4	3.0	0.87
17	2019	Cork_screw_cla	69	.	.	105.8	106.7	10.2	9.0	-0.9	5.1	0.87
18	2020	Cork_screw_cla	70	.	.	103.8	104.8	8.1	7.2	-0.9	3.3	0.91
19	2021	Cork_screw_cla	58	.	.	105.3	105.3	8.7	8.2	-0.1	3.7	0.90
20	2022	Cork_screw_cla	26	.	.	104.0	105.3	7.5	7.0	-1.3	3.0	0.92
21	2019	Skin_proferati	69	.	.	106.8	106.3	9.1	9.7	0.5	4.1	0.91
22	2020	Skin_proferati	70	.	.	107.0	107.1	8.9	9.0	-0.1	4.0	0.90
23	2021	Skin_proferati	58	.	.	107.5	107.4	8.9	8.1	0.2	4.2	0.88
24	2022	Skin_proferati	26	.	.	109.0	109.5	9.7	9.4	-0.5	3.0	0.95
25	2019	White_line_dou	69	.	.	108.7	106.9	11.2	10.5	1.8	4.4	0.92
26	2020	White_line_dou	70	.	.	108.6	106.6	8.8	7.4	2.0	3.8	0.91
27	2021	White_line_dou	58	.	.	106.7	104.7	9.1	8.0	2.0	3.4	0.93
28	2022	White_line_dou	26	.	.	108.5	106.7	9.9	8.4	1.8	4.9	0.87
29	2019	Dermatitis2	69	.	.	107.2	105.2	11.4	9.7	2.0	4.1	0.94
30	2020	Dermatitis2	70	.	.	107.6	107.4	11.1	9.6	0.2	4.5	0.91
31	2021	Dermatitis2	58	.	.	106.2	105.9	10.0	8.5	0.3	3.8	0.93
32	2022	Dermatitis2	26	.	.	108.3	108.0	9.9	8.8	0.3	3.3	0.94
33	2019	Heel_horn_eros	69	.	.	108.2	107.9	8.6	8.0	0.3	3.5	0.91
34	2020	Heel_horn_eros	70	.	.	108.4	108.6	8.4	8.2	-0.3	3.0	0.93
35	2021	Heel_horn_eros	58	.	.	108.9	108.4	7.4	6.6	0.4	3.5	0.88
36	2022	Heel_horn_eros	26	.	.	109.9	110.5	8.4	8.6	-0.6	3.0	0.94

HOL summery stastistics for SS and prev SS breeding value for nordic AI bulls with no offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
37	2019	Sole_heamorrha	69	.	.	107.6	107.0	10.6	10.1	0.6	3.8	0.93
38	2020	Sole_heamorrha	70	.	.	106.1	106.2	7.1	6.6	-0.2	3.1	0.90
39	2021	Sole_heamorrha	58	.	.	106.9	106.0	9.5	8.7	0.9	3.2	0.94
40	2022	Sole_heamorrha	26	.	.	105.5	105.3	7.5	7.0	0.3	3.4	0.89
41	2019	Sole_ulcer2	69	.	.	107.7	107.5	7.7	8.6	0.2	3.2	0.93
42	2020	Sole_ulcer2	70	.	.	105.7	106.4	6.1	6.4	-0.7	3.2	0.87
43	2021	Sole_ulcer2	58	.	.	107.2	106.6	7.8	7.7	0.5	2.7	0.94
44	2022	Sole_ulcer2	26	.	.	107.9	107.5	5.4	5.5	0.4	3.2	0.83
45	2019	Cork_screw_cla	69	.	.	104.8	105.1	10.5	9.3	-0.3	4.5	0.90
46	2020	Cork_screw_cla	70	.	.	103.9	103.9	7.9	7.0	0.0	3.1	0.92
47	2021	Cork_screw_cla	58	.	.	104.4	103.6	8.6	8.1	0.7	3.9	0.89
48	2022	Cork_screw_cla	26	.	.	103.2	103.7	8.3	7.0	-0.5	3.4	0.92
49	2019	Skin_proferati	69	.	.	106.6	105.9	9.1	9.7	0.7	4.0	0.91
50	2020	Skin_proferati	70	.	.	107.1	107.2	8.7	8.9	-0.1	3.7	0.91
51	2021	Skin_proferati	58	.	.	107.6	107.2	8.6	8.0	0.4	4.0	0.89
52	2022	Skin_proferati	26	.	.	109.2	109.4	9.5	9.1	-0.2	3.0	0.95
53	2019	White_line_dou	69	.	.	108.9	107.2	10.2	10.0	1.7	3.8	0.93
54	2020	White_line_dou	70	.	.	108.7	107.2	8.4	7.4	1.5	3.4	0.91
55	2021	White_line_dou	58	.	.	107.3	105.4	8.9	8.3	1.8	2.9	0.95
56	2022	White_line_dou	26	.	.	109.3	107.5	9.2	7.9	1.7	4.7	0.86
57	2019	Dermatitis3	69	.	.	105.9	104.2	11.3	9.8	1.8	3.9	0.94
58	2020	Dermatitis3	70	.	.	107.0	106.8	10.7	9.4	0.1	4.4	0.91
59	2021	Dermatitis3	58	.	.	105.5	105.6	9.8	8.9	0.0	3.7	0.93
60	2022	Dermatitis3	26	.	.	107.4	107.0	9.8	8.7	0.4	3.4	0.94
61	2019	Heel_horn_eros	69	.	.	106.9	107.0	8.1	7.9	-0.2	3.6	0.90
62	2020	Heel_horn_eros	70	.	.	107.3	107.8	8.3	8.1	-0.5	3.5	0.91
63	2021	Heel_horn_eros	58	.	.	107.9	107.9	6.3	5.9	0.0	3.1	0.87
64	2022	Heel_horn_eros	26	.	.	109.1	110.1	8.7	8.9	-1.0	3.1	0.94
65	2019	Sole_heamorrha	69	.	.	107.1	106.2	10.4	9.9	0.8	3.5	0.94
66	2020	Sole_heamorrha	70	.	.	106.3	106.0	7.5	6.8	0.2	3.0	0.91
67	2021	Sole_heamorrha	58	.	.	106.6	105.2	9.5	8.9	1.3	3.1	0.94
68	2022	Sole_heamorrha	26	.	.	105.7	105.0	7.8	7.1	0.7	3.4	0.90
69	2019	Sole_ulcer3	69	.	.	106.0	106.0	7.4	8.2	0.0	3.0	0.93
70	2020	Sole_ulcer3	70	.	.	103.9	104.9	6.5	6.6	-1.0	2.9	0.90
71	2021	Sole_ulcer3	58	.	.	105.5	105.2	7.6	7.9	0.3	2.4	0.95
72	2022	Sole_ulcer3	26	.	.	105.9	105.7	5.3	5.4	0.2	2.6	0.88

HOL summery stastistics for SS and prev SS breeding value for nordic AI bulls with no offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
73	2019	Cork_screw_cla	69	.	.	102.9	104.0	10.3	9.2	-1.1	4.9	0.88
74	2020	Cork_screw_cla	70	.	.	101.6	102.3	7.4	6.5	-0.6	3.3	0.90
75	2021	Cork_screw_cla	58	.	.	103.1	102.8	7.9	7.8	0.3	4.0	0.87
76	2022	Cork_screw_cla	26	.	.	100.6	101.6	8.6	7.4	-1.0	3.3	0.93
77	2019	Skin_proferati	69	.	.	106.6	105.7	9.2	9.8	0.9	3.9	0.92
78	2020	Skin_proferati	70	.	.	107.1	107.2	8.5	8.8	-0.1	3.6	0.91
79	2021	Skin_proferati	58	.	.	107.4	106.9	8.7	8.0	0.4	4.1	0.88
80	2022	Skin_proferati	26	.	.	109.2	109.5	9.5	9.1	-0.3	3.1	0.95
81	2019	White_line_dou	69	.	.	109.0	108.1	10.2	10.4	0.9	3.7	0.93
82	2020	White_line_dou	70	.	.	108.0	107.0	8.0	7.3	1.0	3.4	0.91
83	2021	White_line_dou	58	.	.	107.6	106.3	8.8	7.9	1.2	3.2	0.93
84	2022	White_line_dou	26	.	.	108.8	107.7	8.9	8.1	1.1	4.1	0.89
85	2019	Dermatitis	69	.	.	107.1	105.3	11.3	9.7	1.8	4.0	0.94
86	2020	Dermatitis	70	.	.	107.7	107.6	10.9	9.6	0.1	4.5	0.91
87	2021	Dermatitis	58	.	.	106.3	106.2	9.8	8.4	0.1	3.8	0.92
88	2022	Dermatitis	26	.	.	108.3	108.0	9.9	8.8	0.2	3.3	0.95
89	2019	Heel_horn_eros	69	.	.	107.8	107.8	8.3	7.9	0.0	3.5	0.91
90	2020	Heel_horn_eros	70	.	.	108.0	108.4	8.3	8.1	-0.4	3.4	0.92
91	2021	Heel_horn_eros	58	.	.	108.6	108.4	6.7	6.1	0.2	3.2	0.88
92	2022	Heel_horn_eros	26	.	.	109.7	110.5	8.5	8.6	-0.9	3.0	0.94
93	2019	Sole_heamorrha	69	.	.	107.1	106.4	10.5	9.9	0.7	3.6	0.94
94	2020	Sole_heamorrha	70	.	.	105.9	106.0	7.1	6.5	-0.1	3.2	0.89
95	2021	Sole_heamorrha	58	.	.	106.6	105.6	9.4	8.7	1.0	3.2	0.94
96	2022	Sole_heamorrha	26	.	.	105.4	105.0	7.3	7.0	0.4	3.3	0.89
97	2019	Sole_ulcer	69	.	.	106.9	106.7	7.3	8.2	0.2	2.9	0.94
98	2020	Sole_ulcer	70	.	.	104.9	105.8	6.1	6.2	-0.9	3.0	0.88
99	2021	Sole_ulcer	58	.	.	106.3	105.8	7.6	7.8	0.5	2.6	0.94
100	2022	Sole_ulcer	26	.	.	106.8	106.6	5.3	5.5	0.3	2.9	0.85
101	2019	Cork_screw_cla	69	.	.	104.2	105.1	10.1	9.0	-0.8	4.8	0.88
102	2020	Cork_screw_cla	70	.	.	102.8	103.3	7.6	6.6	-0.5	3.2	0.91
103	2021	Cork_screw_cla	58	.	.	104.0	103.8	8.1	7.9	0.3	3.8	0.89
104	2022	Cork_screw_cla	26	.	.	102.2	103.2	8.0	7.0	-0.9	3.0	0.93
105	2019	Skin_proferati	69	.	.	106.7	105.9	9.1	9.7	0.8	3.9	0.91
106	2020	Skin_proferati	70	.	.	107.0	107.1	8.6	8.9	-0.1	3.8	0.91
107	2021	Skin_proferati	58	.	.	107.4	107.2	8.6	8.0	0.2	3.9	0.89
108	2022	Skin_proferati	26	.	.	109.2	109.5	9.6	9.2	-0.3	3.1	0.95

HOL summery stastistics for SS and prev SS breeding value for nordic AI bulls with no offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
109	2019	White_line_dou	69	.	.	108.9	107.5	10.4	10.2	1.4	3.8	0.93
110	2020	White_line_dou	70	.	.	108.4	107.0	8.2	7.2	1.4	3.5	0.91
111	2021	White_line_dou	58	.	.	107.2	105.7	8.8	7.9	1.6	3.1	0.94
112	2022	White_line_dou	26	.	.	108.9	107.3	9.1	8.1	1.6	4.3	0.88

HOL summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2015	Dermatitis1	113081	98.4	98.4	8.1	8.1	0.0	1.2	0.99
2	2016	Dermatitis1	113012	100.1	99.9	8.8	8.7	0.2	1.2	0.99
3	2017	Dermatitis1	106436	99.9	99.7	8.4	7.8	0.2	3.1	0.93
4	2018	Dermatitis1	105988	101.2	100.7	8.6	7.2	0.5	4.4	0.86
5	2019	Dermatitis1	92143	101.4	100.9	8.7	7.2	0.6	4.6	0.85
6	2020	Dermatitis1	17725	102.0	101.0	8.1	6.4	1.0	4.5	0.83
7	2015	Heel_horn_eros	70944	98.8	98.8	7.3	7.2	0.0	1.1	0.99
8	2016	Heel_horn_eros	69065	99.9	99.8	7.8	7.7	0.1	1.2	0.99
9	2017	Heel_horn_eros	59723	100.2	100.2	8.2	7.6	0.0	3.3	0.91
10	2018	Heel_horn_eros	58551	101.1	101.1	7.7	6.9	0.0	3.9	0.86
11	2019	Heel_horn_eros	48148	101.5	101.5	7.4	6.7	-0.1	4.0	0.85
12	2020	Heel_horn_eros	8451	101.7	101.3	7.1	6.4	0.3	4.0	0.83
13	2015	Sole_heamorrha	105705	99.3	99.4	7.7	7.7	-0.1	1.0	0.99
14	2016	Sole_heamorrha	104978	100.0	100.1	7.5	7.5	-0.2	1.1	0.99
15	2017	Sole_heamorrha	96200	100.6	100.8	7.8	7.4	-0.2	2.7	0.94
16	2018	Sole_heamorrha	93336	101.0	101.6	7.5	7.1	-0.5	3.6	0.88
17	2019	Sole_heamorrha	77285	101.7	102.0	7.7	6.8	-0.3	3.8	0.87
18	2020	Sole_heamorrha	14241	102.2	102.3	7.3	6.5	-0.1	4.1	0.83
19	2015	Sole_ulcer1	110720	99.1	99.1	7.7	7.7	0.0	1.0	0.99
20	2016	Sole_ulcer1	109750	100.0	99.9	7.5	7.5	0.1	1.1	0.99
21	2017	Sole_ulcer1	102606	100.3	100.3	7.9	7.2	0.0	3.1	0.92
22	2018	Sole_ulcer1	102249	100.8	101.4	7.5	7.1	-0.5	3.9	0.86
23	2019	Sole_ulcer1	86150	100.9	101.4	6.9	6.3	-0.6	3.7	0.84
24	2020	Sole_ulcer1	16139	101.7	101.9	6.2	6.0	-0.1	3.2	0.86
25	2015	Cork_screw_cla	94506	99.9	100.2	8.6	8.7	-0.3	1.2	0.99
26	2016	Cork_screw_cla	94891	99.4	100.0	8.3	8.4	-0.6	1.3	0.99
27	2017	Cork_screw_cla	93358	100.4	101.4	8.3	8.0	-1.0	3.1	0.93
28	2018	Cork_screw_cla	101772	100.8	101.6	8.3	7.3	-0.8	4.0	0.88
29	2019	Cork_screw_cla	85728	100.8	102.0	8.2	7.7	-1.2	4.0	0.87
30	2020	Cork_screw_cla	15397	101.4	102.7	7.0	6.6	-1.3	3.6	0.86
31	2015	Skin_proferati	108487	98.2	98.2	8.0	8.0	0.0	1.1	0.99
32	2016	Skin_proferati	107217	99.6	99.5	7.9	7.9	0.1	1.2	0.99
33	2017	Skin_proferati	100228	99.8	99.8	8.4	8.0	0.0	3.1	0.93
34	2018	Skin_proferati	101098	101.3	100.9	7.7	6.7	0.4	4.2	0.84
35	2019	Skin_proferati	85175	101.7	101.2	7.3	6.5	0.5	4.1	0.83
36	2020	Skin_proferati	15869	101.7	100.9	6.8	6.3	0.8	4.3	0.79

HOL summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
37	2015	White_line_dou	111352	98.4	98.2	7.9	7.8	0.2	1.1	0.99
38	2016	White_line_dou	110456	99.8	99.4	8.0	7.9	0.4	1.1	0.99
39	2017	White_line_dou	103313	101.0	100.2	8.6	7.8	0.8	2.9	0.94
40	2018	White_line_dou	102852	101.6	101.4	9.0	7.9	0.2	4.2	0.88
41	2019	White_line_dou	87070	101.6	100.9	8.6	7.0	0.7	4.4	0.86
42	2020	White_line_dou	16294	102.6	101.6	7.9	6.4	1.0	4.5	0.82
43	2015	Dermatitis2	90669	98.6	98.6	8.2	8.2	0.0	1.2	0.99
44	2016	Dermatitis2	92124	99.8	99.7	8.6	8.5	0.1	1.2	0.99
45	2017	Dermatitis2	87820	99.6	99.7	8.2	7.6	0.0	3.1	0.92
46	2018	Dermatitis2	73840	101.0	100.5	8.5	7.0	0.5	4.8	0.83
47	2019	Dermatitis2	12920	100.2	100.0	9.1	7.1	0.2	5.3	0.82
48	2015	Heel_horn_eros	54938	98.9	98.9	7.3	7.2	0.0	1.1	0.99
49	2016	Heel_horn_eros	51215	99.9	99.8	7.9	7.9	0.1	1.2	0.99
50	2017	Heel_horn_eros	47576	100.3	100.2	8.2	7.5	0.1	3.3	0.92
51	2018	Heel_horn_eros	37942	101.0	101.0	7.8	7.0	0.0	4.0	0.86
52	2019	Heel_horn_eros	6116	101.9	102.0	7.6	6.8	-0.2	3.9	0.86
53	2015	Sole_heamorrha	85704	99.2	99.2	8.1	8.1	-0.1	1.0	0.99
54	2016	Sole_heamorrha	85084	100.1	100.1	7.9	7.9	-0.1	1.0	0.99
55	2017	Sole_heamorrha	80658	100.6	100.7	8.1	7.7	-0.1	2.6	0.95
56	2018	Sole_heamorrha	64841	101.3	101.7	7.9	7.5	-0.5	3.6	0.89
57	2019	Sole_heamorrha	10637	101.5	101.7	7.6	6.7	-0.3	3.6	0.88
58	2015	Sole_ulcer2	88724	99.1	99.1	7.9	7.8	0.0	1.0	0.99
59	2016	Sole_ulcer2	89307	100.2	100.1	7.7	7.6	0.1	1.0	0.99
60	2017	Sole_ulcer2	84574	100.5	100.6	7.8	7.3	-0.1	2.8	0.93
61	2018	Sole_ulcer2	69403	101.1	101.5	7.5	7.2	-0.4	3.7	0.88
62	2019	Sole_ulcer2	11890	100.6	101.4	6.5	6.1	-0.8	3.6	0.84
63	2015	Cork_screw_cla	75133	99.9	100.1	8.1	8.1	-0.2	1.2	0.99
64	2016	Cork_screw_cla	80146	99.5	99.9	8.1	8.1	-0.4	1.2	0.99
65	2017	Cork_screw_cla	83658	101.0	101.5	8.2	7.7	-0.5	3.0	0.93
66	2018	Cork_screw_cla	67722	101.3	101.7	8.2	7.0	-0.5	4.1	0.87
67	2019	Cork_screw_cla	11241	101.5	102.2	8.6	7.3	-0.7	4.5	0.85
68	2015	Skin_proferati	85607	98.3	98.3	8.1	8.1	0.0	1.2	0.99
69	2016	Skin_proferati	86297	99.5	99.5	8.0	8.0	0.1	1.2	0.99
70	2017	Skin_proferati	83049	100.0	100.0	8.4	8.0	0.0	3.1	0.93
71	2018	Skin_proferati	67621	101.4	100.9	7.8	6.8	0.5	4.2	0.84
72	2019	Skin_proferati	11588	101.7	101.2	7.8	6.6	0.6	4.5	0.82

HOL summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
73	2015	White_line_dou	88360	98.6	98.4	8.2	8.2	0.2	1.0	0.99
74	2016	White_line_dou	88830	100.1	99.7	8.3	8.2	0.4	1.0	0.99
75	2017	White_line_dou	84571	101.3	100.5	8.6	8.0	0.7	2.8	0.95
76	2018	White_line_dou	69509	101.9	101.6	8.9	7.8	0.3	3.9	0.90
77	2019	White_line_dou	11858	101.2	101.1	8.7	7.1	0.2	4.2	0.88
78	2015	Dermatitis3	64722	98.6	98.6	8.2	8.1	0.0	1.2	0.99
79	2016	Dermatitis3	66713	99.8	99.7	8.5	8.5	0.1	1.2	0.99
80	2017	Dermatitis3	51466	99.6	99.6	8.2	7.7	-0.1	3.3	0.92
81	2018	Dermatitis3	8584	101.2	100.6	8.4	7.0	0.7	4.9	0.81
82	2015	Heel_horn_eros	35177	99.4	99.4	7.4	7.3	0.0	1.2	0.99
83	2016	Heel_horn_eros	35369	100.1	100.0	7.8	7.8	0.0	1.1	0.99
84	2017	Heel_horn_eros	25329	100.5	100.5	8.0	7.4	0.0	3.3	0.91
85	2018	Heel_horn_eros	3978	101.2	101.0	8.0	7.1	0.2	4.1	0.86
86	2015	Sole_heamorrha	56899	99.5	99.5	7.9	7.9	0.0	1.1	0.99
87	2016	Sole_heamorrha	56483	100.2	100.2	7.7	7.7	-0.1	1.0	0.99
88	2017	Sole_heamorrha	41521	101.2	101.2	8.1	7.7	0.0	2.6	0.95
89	2018	Sole_heamorrha	6662	102.6	102.9	8.0	7.5	-0.2	3.6	0.89
90	2015	Sole_ulcer3	62935	100.0	100.0	8.0	8.0	0.0	1.0	0.99
91	2016	Sole_ulcer3	64029	100.7	100.7	7.7	7.7	0.1	1.0	0.99
92	2017	Sole_ulcer3	47864	101.1	101.1	7.6	7.2	0.0	2.8	0.93
93	2018	Sole_ulcer3	7835	102.1	102.6	7.3	7.4	-0.5	3.6	0.88
94	2015	Cork_screw_cla	56646	100.2	100.5	8.4	8.4	-0.3	1.3	0.99
95	2016	Cork_screw_cla	63430	99.6	100.2	8.2	8.2	-0.6	1.3	0.99
96	2017	Cork_screw_cla	46886	100.7	101.7	8.0	7.8	-1.0	3.0	0.93
97	2018	Cork_screw_cla	7329	101.2	101.9	7.7	6.9	-0.8	3.7	0.88
98	2015	Skin_proferati	60950	98.5	98.5	8.2	8.2	0.0	1.2	0.99
99	2016	Skin_proferati	62932	99.7	99.6	8.0	8.0	0.1	1.1	0.99
100	2017	Skin_proferati	46787	100.0	100.0	8.5	8.1	0.0	3.1	0.93
101	2018	Skin_proferati	7680	101.8	101.4	8.0	6.9	0.5	4.4	0.83
102	2015	White_line_dou	62729	99.1	98.9	8.4	8.5	0.1	1.0	0.99
103	2016	White_line_dou	64039	100.4	100.1	8.3	8.2	0.3	1.0	0.99
104	2017	White_line_dou	47924	101.4	100.9	8.5	8.0	0.5	2.7	0.95
105	2018	White_line_dou	7836	103.5	103.4	8.8	8.4	0.2	3.6	0.91
106	2015	Dermatitis	113081	98.5	98.5	8.0	7.9	0.0	1.2	0.99
107	2016	Dermatitis	113012	99.8	99.7	8.5	8.4	0.1	1.2	0.99
108	2017	Dermatitis	106436	99.6	99.6	8.0	7.5	0.0	3.1	0.92

HOL summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
109	2018	Dermatitis	105988	100.9	100.4	8.2	6.8	0.5	4.5	0.84
110	2019	Dermatitis	92143	101.0	100.6	8.4	6.8	0.5	4.5	0.84
111	2020	Dermatitis	17725	101.6	100.8	7.6	6.1	0.8	4.3	0.83
112	2015	Heel_horn_eros	70944	99.0	99.0	7.1	7.0	0.0	1.1	0.99
113	2016	Heel_horn_eros	69065	99.8	99.8	7.6	7.6	0.1	1.1	0.99
114	2017	Heel_horn_eros	59723	100.2	100.2	8.0	7.4	0.0	3.2	0.92
115	2018	Heel_horn_eros	58551	100.9	100.9	7.5	6.7	0.0	3.7	0.87
116	2019	Heel_horn_eros	48148	101.4	101.5	7.1	6.6	-0.1	3.7	0.86
117	2020	Heel_horn_eros	8451	101.5	101.2	6.7	6.2	0.3	3.7	0.84
118	2015	Sole_heamorrha	105705	99.1	99.1	7.7	7.7	-0.1	1.0	0.99
119	2016	Sole_heamorrha	104978	99.9	100.0	7.6	7.6	-0.1	1.0	0.99
120	2017	Sole_heamorrha	96200	100.7	100.7	7.9	7.5	-0.1	2.5	0.95
121	2018	Sole_heamorrha	93336	101.1	101.5	7.7	7.3	-0.4	3.4	0.90
122	2019	Sole_heamorrha	77285	101.6	101.8	7.6	6.8	-0.2	3.6	0.88
123	2020	Sole_heamorrha	14241	102.2	102.2	7.1	6.4	0.0	3.7	0.86
124	2015	Sole_ulcer	110720	99.3	99.2	7.8	7.8	0.0	0.9	0.99
125	2016	Sole_ulcer	109750	100.1	100.0	7.6	7.5	0.1	1.0	0.99
126	2017	Sole_ulcer	102606	100.4	100.4	7.7	7.2	0.0	2.8	0.93
127	2018	Sole_ulcer	102249	100.7	101.2	7.3	7.1	-0.5	3.5	0.88
128	2019	Sole_ulcer	86150	100.7	101.3	6.7	6.3	-0.6	3.4	0.87
129	2020	Sole_ulcer	16139	101.5	101.7	6.1	6.0	-0.2	2.9	0.89
130	2015	Cork_screw_cla	94506	100.0	100.2	8.2	8.2	-0.3	1.2	0.99
131	2016	Cork_screw_cla	94891	99.4	100.0	8.1	8.1	-0.6	1.2	0.99
132	2017	Cork_screw_cla	93358	100.5	101.4	8.0	7.7	-0.9	2.9	0.93
133	2018	Cork_screw_cla	101772	100.8	101.4	7.9	6.9	-0.6	3.8	0.88
134	2019	Cork_screw_cla	85728	100.8	101.8	8.0	7.3	-1.0	3.9	0.87
135	2020	Cork_screw_cla	15397	101.3	102.5	6.8	6.3	-1.1	3.5	0.86
136	2015	Skin_proferati	108487	98.3	98.3	8.0	8.0	0.0	1.1	0.99
137	2016	Skin_proferati	107217	99.5	99.4	7.9	7.9	0.1	1.1	0.99
138	2017	Skin_proferati	100228	99.9	99.9	8.4	8.0	0.0	3.0	0.93
139	2018	Skin_proferati	101098	101.3	100.9	7.7	6.7	0.4	4.1	0.85
140	2019	Skin_proferati	85175	101.7	101.2	7.2	6.5	0.5	3.9	0.84
141	2020	Skin_proferati	15869	101.7	100.9	6.8	6.3	0.8	4.1	0.80
142	2015	White_line_dou	111352	98.5	98.3	8.1	8.1	0.2	1.0	0.99
143	2016	White_line_dou	110456	99.9	99.5	8.1	8.0	0.3	1.0	0.99
144	2017	White_line_dou	103313	100.9	100.3	8.5	7.9	0.6	2.7	0.95

HOL summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
145	2018	White_line_dou	102852	101.6	101.4	8.8	7.9	0.1	3.6	0.91
146	2019	White_line_dou	87070	101.6	101.1	8.2	7.0	0.5	3.8	0.89
147	2020	White_line_dou	16294	102.5	101.7	7.6	6.5	0.8	4.0	0.85

sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2015	Dermatitis1	7054	99.3	99.3	10.8	10.4	0.0	2.4	0.98
2	2016	Dermatitis1	11313	101.5	101.2	11.3	11.0	0.3	2.4	0.98
3	2017	Dermatitis1	16898	100.7	100.5	10.8	9.9	0.2	3.7	0.94
4	2018	Dermatitis1	24091	102.2	101.6	11.1	9.7	0.6	4.7	0.91
5	2019	Dermatitis1	25111	103.0	102.2	11.4	9.9	0.8	5.0	0.90
6	2020	Dermatitis1	5891	103.7	102.5	11.1	9.4	1.2	5.1	0.89
7	2015	Heel_horn_eros	4385	100.4	100.4	9.4	9.3	0.0	2.2	0.97
8	2016	Heel_horn_eros	6745	101.5	101.5	9.5	9.4	0.0	2.1	0.98
9	2017	Heel_horn_eros	9010	101.4	101.2	9.8	9.1	0.2	4.0	0.91
10	2018	Heel_horn_eros	12020	102.7	102.6	9.5	8.8	0.1	3.8	0.91
11	2019	Heel_horn_eros	11572	103.4	103.6	9.1	8.6	-0.2	4.1	0.89
12	2020	Heel_horn_eros	2631	103.8	103.5	9.2	8.4	0.4	4.5	0.87
13	2015	Sole_heamorrha	6621	100.5	100.6	9.3	9.2	-0.1	2.1	0.97
14	2016	Sole_heamorrha	10198	101.3	101.5	9.1	9.0	-0.2	2.1	0.97
15	2017	Sole_heamorrha	14322	102.0	102.3	9.4	8.9	-0.3	3.3	0.94
16	2018	Sole_heamorrha	19659	102.9	103.5	8.9	8.5	-0.6	3.9	0.90
17	2019	Sole_heamorrha	19203	104.4	104.7	9.2	8.3	-0.2	4.3	0.88
18	2020	Sole_heamorrha	4370	104.9	104.9	8.7	8.0	-0.1	4.7	0.85
19	2015	Sole_ulcer1	7036	101.0	101.0	8.1	8.2	0.1	1.9	0.97
20	2016	Sole_ulcer1	10876	101.8	101.7	7.8	7.9	0.1	1.9	0.97
21	2017	Sole_ulcer1	15683	101.8	101.9	8.6	7.9	-0.1	3.7	0.91
22	2018	Sole_ulcer1	22507	102.7	103.5	8.0	7.8	-0.8	3.9	0.88
23	2019	Sole_ulcer1	22409	103.3	104.0	7.6	7.2	-0.7	3.8	0.87
24	2020	Sole_ulcer1	5182	104.5	104.6	7.0	7.0	-0.1	3.5	0.88
25	2015	Cork_screw_cla	5397	101.1	101.5	10.5	10.5	-0.4	2.3	0.98
26	2016	Cork_screw_cla	8734	100.0	100.8	10.3	10.3	-0.8	2.3	0.97
27	2017	Cork_screw_cla	13455	101.5	102.8	10.1	9.8	-1.3	4.1	0.92
28	2018	Cork_screw_cla	21767	102.5	103.3	9.9	8.9	-0.8	4.5	0.89
29	2019	Cork_screw_cla	21486	102.5	104.3	10.2	9.4	-1.8	4.8	0.88
30	2020	Cork_screw_cla	4632	103.4	105.1	9.2	8.5	-1.7	4.5	0.87
31	2015	Skin_proferati	6737	98.9	98.9	9.7	9.7	0.0	2.0	0.98
32	2016	Skin_proferati	10465	100.6	100.5	9.5	9.6	0.1	2.0	0.98
33	2017	Skin_proferati	15029	101.2	100.9	9.7	9.5	0.2	3.6	0.93
34	2018	Skin_proferati	21916	102.7	102.1	9.2	8.6	0.6	4.1	0.89
35	2019	Skin_proferati	21414	103.5	102.8	8.8	8.6	0.7	4.1	0.89
36	2020	Skin_proferati	4919	103.6	102.5	8.9	8.8	1.1	4.7	0.86
37	2015	White_line_dou	7115	100.4	100.1	9.7	9.5	0.3	2.2	0.97

sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
38	2016	White_line_dou	11012	101.4	100.9	9.7	9.5	0.5	2.2	0.97
39	2017	White_line_dou	15858	102.8	101.7	10.5	9.6	1.1	3.8	0.93
40	2018	White_line_dou	22585	103.4	103.1	10.8	9.4	0.3	4.9	0.89
41	2019	White_line_dou	22752	103.8	103.0	10.8	8.9	0.9	5.1	0.88
42	2020	White_line_dou	5276	105.4	103.9	9.7	8.2	1.4	5.2	0.85
43	2015	Dermatitis2	6396	99.2	99.1	10.8	10.4	0.0	2.4	0.98
44	2016	Dermatitis2	10174	100.9	100.8	11.1	10.7	0.1	2.4	0.98
45	2017	Dermatitis2	15109	100.0	100.2	10.5	9.6	-0.2	3.6	0.94
46	2018	Dermatitis2	18978	101.5	100.9	11.0	9.5	0.6	5.0	0.89
47	2019	Dermatitis2	3760	101.0	100.6	11.4	9.6	0.4	5.5	0.88
48	2015	Heel_horn_eros	3656	100.4	100.3	9.5	9.4	0.0	2.1	0.97
49	2016	Heel_horn_eros	5566	101.3	101.3	9.5	9.4	0.0	2.0	0.98
50	2017	Heel_horn_eros	7335	101.4	101.1	9.6	9.1	0.3	3.8	0.92
51	2018	Heel_horn_eros	8482	102.6	102.5	9.4	8.8	0.1	3.8	0.92
52	2019	Heel_horn_eros	1497	103.3	103.5	9.1	8.5	-0.2	3.8	0.91
53	2015	Sole_heamorrha	6137	100.7	100.7	9.3	9.3	-0.1	1.9	0.98
54	2016	Sole_heamorrha	9575	101.6	101.7	9.1	9.1	-0.1	1.9	0.98
55	2017	Sole_heamorrha	13206	102.1	102.2	9.4	9.0	-0.1	3.0	0.95
56	2018	Sole_heamorrha	15629	103.1	103.6	9.1	8.7	-0.5	3.7	0.92
57	2019	Sole_heamorrha	2897	103.4	103.6	8.8	8.0	-0.2	3.7	0.91
58	2015	Sole_ulcer2	6320	101.0	100.9	8.1	8.2	0.0	1.8	0.98
59	2016	Sole_ulcer2	9744	101.9	101.9	7.9	8.0	0.0	1.7	0.98
60	2017	Sole_ulcer2	14282	102.2	102.3	8.3	7.9	-0.1	3.2	0.92
61	2018	Sole_ulcer2	17409	102.9	103.6	7.9	7.8	-0.6	3.5	0.90
62	2019	Sole_ulcer2	3329	102.3	103.3	7.3	7.0	-1.0	3.6	0.88
63	2015	Cork_screw_cla	5002	101.0	101.3	10.0	9.9	-0.2	2.3	0.97
64	2016	Cork_screw_cla	8252	100.0	100.6	10.3	10.1	-0.6	2.2	0.98
65	2017	Cork_screw_cla	13615	101.9	102.6	10.2	9.5	-0.7	3.9	0.93
66	2018	Cork_screw_cla	16156	102.7	103.1	10.1	8.9	-0.4	4.6	0.89
67	2019	Cork_screw_cla	3008	102.6	103.6	10.7	9.3	-1.0	5.0	0.88
68	2015	Skin_proferati	5923	98.9	98.9	9.6	9.6	0.0	1.9	0.98
69	2016	Skin_proferati	9171	100.7	100.7	9.5	9.6	0.0	1.9	0.98
70	2017	Skin_proferati	13575	101.2	101.1	9.6	9.4	0.2	3.5	0.93
71	2018	Skin_proferati	16319	102.8	102.1	9.0	8.5	0.7	4.0	0.89
72	2019	Skin_proferati	3101	103.4	102.5	8.9	8.6	0.8	4.1	0.89
73	2015	White_line_dou	6278	100.7	100.4	9.5	9.3	0.3	2.0	0.98
74	2016	White_line_dou	9666	101.9	101.4	9.7	9.5	0.4	1.9	0.98

sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
75	2017	White_line_dou	14182	103.2	102.3	10.1	9.4	1.0	3.3	0.95
76	2018	White_line_dou	17271	103.8	103.4	10.4	9.1	0.4	4.2	0.91
77	2019	White_line_dou	3301	102.7	102.6	10.9	9.0	0.1	4.6	0.91
78	2015	Dermatitis3	4936	98.8	98.8	10.6	10.3	0.0	2.3	0.98
79	2016	Dermatitis3	8088	100.6	100.4	10.9	10.7	0.2	2.2	0.98
80	2017	Dermatitis3	9835	99.7	100.0	10.4	9.5	-0.3	3.7	0.93
81	2018	Dermatitis3	2351	101.4	100.6	10.8	9.6	0.8	4.8	0.90
82	2015	Heel_horn_eros	2599	100.7	100.7	9.4	9.3	0.0	2.1	0.98
83	2016	Heel_horn_eros	3951	101.2	101.2	9.4	9.4	0.0	1.9	0.98
84	2017	Heel_horn_eros	4280	101.2	101.1	9.4	8.8	0.2	4.0	0.91
85	2018	Heel_horn_eros	875	102.1	102.1	10.0	9.1	0.0	4.2	0.91
86	2015	Sole_heamorrha	4448	100.8	100.8	9.1	9.1	0.0	1.9	0.98
87	2016	Sole_heamorrha	6810	101.5	101.6	9.0	9.0	-0.1	1.9	0.98
88	2017	Sole_heamorrha	7222	102.9	102.8	9.4	9.0	0.1	2.9	0.95
89	2018	Sole_heamorrha	1538	104.4	104.7	9.0	8.7	-0.3	3.7	0.91
90	2015	Sole_ulcer3	4748	101.6	101.6	8.2	8.3	0.0	1.7	0.98
91	2016	Sole_ulcer3	7672	102.2	102.2	8.1	8.1	0.0	1.7	0.98
92	2017	Sole_ulcer3	9088	102.4	102.5	8.2	7.8	-0.1	3.2	0.92
93	2018	Sole_ulcer3	2074	103.5	104.2	7.7	8.0	-0.7	3.6	0.89
94	2015	Cork_screw_cla	4116	101.0	101.4	10.3	10.3	-0.4	2.3	0.97
95	2016	Cork_screw_cla	7333	99.8	100.7	10.4	10.3	-0.9	2.3	0.98
96	2017	Cork_screw_cla	8235	101.6	102.9	9.9	9.4	-1.3	3.8	0.92
97	2018	Cork_screw_cla	1849	101.9	102.9	9.6	9.0	-1.0	4.0	0.91
98	2015	Skin_proferati	4474	99.2	99.2	9.6	9.6	0.0	1.9	0.98
99	2016	Skin_proferati	7399	100.8	100.7	9.5	9.5	0.1	1.8	0.98
100	2017	Skin_proferati	8299	101.0	100.9	9.7	9.5	0.1	3.5	0.94
101	2018	Skin_proferati	1920	102.9	102.2	9.2	8.7	0.7	4.0	0.90
102	2015	White_line_dou	4696	101.1	100.9	9.7	9.6	0.2	1.9	0.98
103	2016	White_line_dou	7643	102.2	101.8	9.7	9.6	0.3	1.9	0.98
104	2017	White_line_dou	9010	103.3	102.7	10.0	9.4	0.6	3.2	0.95
105	2018	White_line_dou	2059	105.5	105.1	9.7	9.2	0.4	3.8	0.92
106	2015	Dermatitis	7054	99.1	99.1	10.6	10.2	0.0	2.3	0.98
107	2016	Dermatitis	11313	100.9	100.7	11.0	10.6	0.2	2.3	0.98
108	2017	Dermatitis	16898	100.1	100.2	10.5	9.6	-0.1	3.6	0.94
109	2018	Dermatitis	24091	101.6	100.9	10.8	9.4	0.6	4.8	0.90
110	2019	Dermatitis	25111	102.1	101.5	11.1	9.6	0.6	4.9	0.90
111	2020	Dermatitis	5891	102.8	101.9	10.7	9.2	0.9	4.9	0.89

sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
112	2015	Heel_horn_eros	4385	100.4	100.4	9.2	9.1	0.0	2.1	0.97
113	2016	Heel_horn_eros	6745	101.4	101.4	9.3	9.2	0.0	2.0	0.98
114	2017	Heel_horn_eros	9010	101.3	101.1	9.5	8.9	0.2	3.9	0.91
115	2018	Heel_horn_eros	12020	102.4	102.2	9.1	8.6	0.1	3.6	0.92
116	2019	Heel_horn_eros	11572	103.2	103.4	8.8	8.4	-0.2	3.8	0.90
117	2020	Heel_horn_eros	2631	103.4	103.1	8.8	8.2	0.3	4.2	0.88
118	2015	Sole_heamorrha	6621	100.5	100.5	9.2	9.2	-0.1	1.9	0.98
119	2016	Sole_heamorrha	10198	101.3	101.4	8.9	8.9	-0.1	1.9	0.98
120	2017	Sole_heamorrha	14322	102.2	102.3	9.3	8.9	-0.1	3.0	0.95
121	2018	Sole_heamorrha	19659	103.0	103.4	8.9	8.5	-0.4	3.7	0.91
122	2019	Sole_heamorrha	19203	104.3	104.4	9.1	8.2	-0.1	4.0	0.90
123	2020	Sole_heamorrha	4370	105.0	104.9	8.5	7.8	0.1	4.2	0.87
124	2015	Sole_ulcer	7036	101.1	101.1	8.1	8.2	0.0	1.7	0.98
125	2016	Sole_ulcer	10876	101.9	101.8	7.8	7.9	0.0	1.7	0.98
126	2017	Sole_ulcer	15683	101.9	102.0	8.2	7.8	-0.1	3.3	0.92
127	2018	Sole_ulcer	22507	102.6	103.3	7.7	7.7	-0.8	3.5	0.90
128	2019	Sole_ulcer	22409	103.1	103.9	7.3	7.1	-0.7	3.4	0.89
129	2020	Sole_ulcer	5182	104.2	104.4	6.8	6.9	-0.2	3.1	0.90
130	2015	Cork_screw_cla	5397	100.9	101.3	10.1	10.1	-0.4	2.2	0.98
131	2016	Cork_screw_cla	8734	99.8	100.5	10.2	10.1	-0.8	2.2	0.98
132	2017	Cork_screw_cla	13455	101.4	102.5	10.0	9.5	-1.1	3.8	0.92
133	2018	Cork_screw_cla	21767	102.2	102.8	9.7	8.7	-0.6	4.3	0.90
134	2019	Cork_screw_cla	21486	102.3	103.8	10.1	9.2	-1.5	4.7	0.89
135	2020	Cork_screw_cla	4632	102.9	104.4	9.1	8.4	-1.5	4.3	0.88
136	2015	Skin_proferati	6737	98.9	98.9	9.7	9.7	0.0	1.9	0.98
137	2016	Skin_proferati	10465	100.6	100.5	9.5	9.6	0.1	1.9	0.98
138	2017	Skin_proferati	15029	101.2	101.0	9.7	9.5	0.2	3.5	0.93
139	2018	Skin_proferati	21916	102.7	102.1	9.1	8.6	0.6	4.0	0.90
140	2019	Skin_proferati	21414	103.5	102.9	8.7	8.5	0.6	4.0	0.89
141	2020	Skin_proferati	4919	103.6	102.6	8.8	8.7	1.0	4.5	0.87
142	2015	White_line_dou	7115	100.6	100.3	9.6	9.5	0.2	2.0	0.98
143	2016	White_line_dou	11012	101.7	101.3	9.6	9.4	0.4	1.9	0.98
144	2017	White_line_dou	15858	102.8	102.0	10.1	9.4	0.8	3.3	0.95
145	2018	White_line_dou	22585	103.5	103.3	10.2	9.2	0.2	4.2	0.91
146	2019	White_line_dou	22752	104.0	103.4	10.1	8.8	0.6	4.3	0.90
147	2020	White_line_dou	5276	105.5	104.3	9.2	8.1	1.2	4.6	0.87

sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2019	Dermatitis1	23910	103.1	102.1	11.3	9.9	0.9	4.8	0.91
2	2020	Dermatitis1	52562	103.7	102.8	10.7	9.4	0.8	4.6	0.90
3	2021	Dermatitis1	58431	104.9	104.6	9.9	9.0	0.3	3.8	0.92
4	2022	Dermatitis1	15086	105.6	104.8	9.7	8.7	0.8	3.6	0.93
5	2019	Heel_horn_eros	37449	103.8	103.8	8.8	8.4	0.0	3.9	0.90
6	2020	Heel_horn_eros	55822	104.1	103.9	8.7	8.3	0.2	3.7	0.91
7	2021	Heel_horn_eros	58431	105.7	105.6	8.5	8.2	0.1	3.2	0.93
8	2022	Heel_horn_eros	15086	106.0	105.8	8.3	8.0	0.3	3.1	0.93
9	2019	Sole_heamorrha	29818	104.4	104.7	9.1	8.2	-0.2	4.2	0.88
10	2020	Sole_heamorrha	54083	103.6	104.0	8.6	8.1	-0.4	4.1	0.88
11	2021	Sole_heamorrha	58431	104.1	103.9	8.7	8.3	0.3	3.2	0.93
12	2022	Sole_heamorrha	15086	103.7	103.4	8.7	8.1	0.3	3.2	0.93
13	2019	Sole_ulcer1	26612	103.3	103.9	7.5	7.2	-0.6	3.6	0.88
14	2020	Sole_ulcer1	53271	103.8	104.2	7.1	7.1	-0.3	3.2	0.90
15	2021	Sole_ulcer1	58431	103.8	104.2	7.4	7.3	-0.3	3.1	0.91
16	2022	Sole_ulcer1	15086	104.0	104.0	7.3	7.1	0.0	3.0	0.91
17	2019	Cork_screw_cla	27535	102.1	103.8	10.1	9.4	-1.8	4.6	0.89
18	2020	Cork_screw_cla	53821	102.6	103.9	9.1	8.5	-1.3	4.1	0.89
19	2021	Cork_screw_cla	58431	103.5	103.8	8.9	8.3	-0.2	3.6	0.91
20	2022	Cork_screw_cla	15086	103.2	103.8	8.9	8.3	-0.5	3.5	0.92
21	2019	Skin_proferati	27607	103.2	102.5	8.7	8.6	0.7	4.0	0.89
22	2020	Skin_proferati	53534	103.5	102.7	8.7	8.7	0.8	3.9	0.90
23	2021	Skin_proferati	58431	104.6	104.3	8.3	8.3	0.3	3.2	0.92
24	2022	Skin_proferati	15086	104.8	104.1	8.0	7.9	0.7	3.3	0.91
25	2019	White_line_dou	26269	104.1	103.0	10.5	8.8	1.1	5.0	0.88
26	2020	White_line_dou	53177	104.5	103.7	9.5	8.3	0.8	4.5	0.88
27	2021	White_line_dou	58431	105.2	104.2	9.3	8.3	1.0	3.7	0.92
28	2022	White_line_dou	15086	105.3	104.2	9.0	8.1	1.1	3.6	0.92
29	2019	Dermatitis2	45261	102.0	101.4	11.2	9.7	0.6	5.0	0.90
30	2020	Dermatitis2	58453	102.9	102.3	10.5	9.2	0.6	4.6	0.90
31	2021	Dermatitis2	58431	103.9	103.7	9.7	8.8	0.2	3.8	0.92
32	2022	Dermatitis2	15086	104.6	104.0	9.5	8.6	0.6	3.6	0.93
33	2019	Heel_horn_eros	47524	103.7	103.7	8.7	8.4	0.0	3.7	0.91
34	2020	Heel_horn_eros	58453	103.8	103.7	8.5	8.2	0.2	3.5	0.91
35	2021	Heel_horn_eros	58431	105.4	105.2	8.4	8.1	0.2	2.9	0.94
36	2022	Heel_horn_eros	15086	105.7	105.3	8.3	8.0	0.3	2.9	0.94
37	2019	Sole_heamorrha	46124	104.3	104.4	9.0	8.2	-0.1	3.9	0.90

sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
38	2020	Sole_heamorrha	58453	104.0	104.2	8.5	8.0	-0.2	3.8	0.90
39	2021	Sole_heamorrha	58431	104.4	104.1	8.7	8.3	0.3	3.0	0.94
40	2022	Sole_heamorrha	15086	104.2	103.8	8.6	8.1	0.4	3.0	0.94
41	2019	Sole_ulcer2	45692	103.3	104.0	7.5	7.4	-0.7	3.3	0.90
42	2020	Sole_ulcer2	58453	103.9	104.2	7.1	7.1	-0.3	3.1	0.91
43	2021	Sole_ulcer2	58431	104.0	104.3	7.4	7.4	-0.3	2.8	0.93
44	2022	Sole_ulcer2	15086	104.0	104.1	7.2	7.1	-0.1	2.7	0.93
45	2019	Cork_screw_cla	46013	102.6	103.6	10.4	9.4	-1.0	4.5	0.90
46	2020	Cork_screw_cla	58453	102.5	103.4	9.3	8.5	-0.9	4.1	0.90
47	2021	Cork_screw_cla	58431	103.3	103.0	9.0	8.3	0.3	3.6	0.92
48	2022	Cork_screw_cla	15086	103.0	103.0	9.0	8.3	0.0	3.5	0.92
49	2019	Skin_proferati	45920	103.5	102.9	8.6	8.5	0.6	4.0	0.89
50	2020	Skin_proferati	58453	103.5	102.7	8.6	8.6	0.8	3.9	0.90
51	2021	Skin_proferati	58431	104.7	104.3	8.2	8.3	0.4	3.1	0.93
52	2022	Skin_proferati	15086	104.8	104.0	7.9	7.9	0.8	3.2	0.92
53	2019	White_line_dou	45720	104.3	103.4	9.9	8.7	0.9	4.3	0.90
54	2020	White_line_dou	58453	104.7	104.0	9.1	8.2	0.7	4.1	0.90
55	2021	White_line_dou	58431	105.3	104.4	8.9	8.2	0.9	3.2	0.93
56	2022	White_line_dou	15086	105.4	104.3	8.6	7.9	1.0	3.1	0.93
57	2019	Dermatitis3	49021	101.7	101.1	10.9	9.6	0.6	4.7	0.90
58	2020	Dermatitis3	58453	102.4	101.7	10.2	9.1	0.7	4.4	0.90
59	2021	Dermatitis3	58431	103.6	103.3	9.4	8.7	0.2	3.7	0.92
60	2022	Dermatitis3	15086	104.2	103.5	9.3	8.5	0.6	3.5	0.93
61	2019	Heel_horn_eros	49021	103.2	103.3	8.5	8.2	-0.1	3.6	0.91
62	2020	Heel_horn_eros	58453	103.2	103.1	8.3	8.1	0.1	3.5	0.91
63	2021	Heel_horn_eros	58431	104.7	104.6	8.3	8.0	0.0	3.0	0.93
64	2022	Heel_horn_eros	15086	104.9	104.8	8.0	7.8	0.2	2.9	0.93
65	2019	Sole_heamorrha	49021	104.3	104.2	9.1	8.2	0.1	3.9	0.90
66	2020	Sole_heamorrha	58453	103.9	104.1	8.5	8.0	-0.2	3.7	0.90
67	2021	Sole_heamorrha	58431	104.4	103.8	8.8	8.2	0.5	3.0	0.94
68	2022	Sole_heamorrha	15086	104.1	103.5	8.7	8.1	0.5	2.9	0.94
69	2019	Sole_ulcer3	49021	103.0	103.7	7.3	7.2	-0.7	3.3	0.90
70	2020	Sole_ulcer3	58453	103.2	103.7	6.9	7.0	-0.5	2.8	0.92
71	2021	Sole_ulcer3	58431	102.8	103.2	7.2	7.3	-0.4	2.7	0.93
72	2022	Sole_ulcer3	15086	102.8	103.0	7.0	7.0	-0.2	2.6	0.93
73	2019	Cork_screw_cla	49021	101.6	103.2	10.2	9.4	-1.5	4.7	0.89
74	2020	Cork_screw_cla	58453	101.5	102.8	9.2	8.5	-1.3	4.2	0.89

sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
75	2021	Cork_screw_cla	58431	102.3	102.3	8.9	8.3	0.0	3.6	0.92
76	2022	Cork_screw_cla	15086	101.7	102.2	8.8	8.3	-0.4	3.5	0.92
77	2019	Skin_proferati	49021	103.3	102.6	8.7	8.5	0.6	3.8	0.90
78	2020	Skin_proferati	58453	103.4	102.6	8.6	8.6	0.8	3.7	0.91
79	2021	Skin_proferati	58431	104.5	104.1	8.1	8.2	0.3	3.1	0.93
80	2022	Skin_proferati	15086	104.7	104.0	7.9	7.9	0.8	3.1	0.92
81	2019	White_line_dou	49021	104.2	103.7	9.8	8.8	0.5	4.0	0.91
82	2020	White_line_dou	58453	104.7	104.2	9.0	8.3	0.5	3.8	0.91
83	2021	White_line_dou	58431	105.3	104.7	8.9	8.3	0.6	3.0	0.94
84	2022	White_line_dou	15086	105.2	104.5	8.6	8.1	0.7	3.0	0.94
85	2019	Dermatitis	23910	102.2	101.5	11.0	9.6	0.7	4.7	0.91
86	2020	Dermatitis	52562	102.9	102.2	10.3	9.1	0.7	4.4	0.90
87	2021	Dermatitis	58431	104.1	103.8	9.5	8.7	0.3	3.7	0.92
88	2022	Dermatitis	15086	104.7	104.0	9.4	8.5	0.7	3.5	0.93
89	2019	Heel_horn_eros	37449	103.6	103.6	8.4	8.2	0.0	3.6	0.91
90	2020	Heel_horn_eros	55822	103.6	103.5	8.4	8.1	0.1	3.4	0.91
91	2021	Heel_horn_eros	58431	105.2	105.1	8.2	8.0	0.1	3.0	0.93
92	2022	Heel_horn_eros	15086	105.4	105.2	8.0	7.8	0.2	2.9	0.93
93	2019	Sole_heamorrha	29818	104.3	104.4	8.9	8.1	-0.1	3.8	0.90
94	2020	Sole_heamorrha	54083	103.8	104.0	8.4	8.0	-0.3	3.7	0.90
95	2021	Sole_heamorrha	58431	104.3	103.9	8.7	8.2	0.4	3.0	0.94
96	2022	Sole_heamorrha	15086	104.0	103.6	8.6	8.0	0.4	3.0	0.94
97	2019	Sole_ulcer	26612	103.1	103.8	7.3	7.1	-0.7	3.2	0.90
98	2020	Sole_ulcer	53271	103.5	103.9	6.9	7.0	-0.4	2.9	0.91
99	2021	Sole_ulcer	58431	103.4	103.8	7.2	7.2	-0.4	2.8	0.93
100	2022	Sole_ulcer	15086	103.5	103.6	7.0	6.9	-0.1	2.7	0.93
101	2019	Cork_screw_cla	27535	101.9	103.4	10.0	9.3	-1.5	4.5	0.90
102	2020	Cork_screw_cla	53821	102.0	103.2	9.0	8.3	-1.2	4.0	0.90
103	2021	Cork_screw_cla	58431	102.9	102.9	8.8	8.1	0.0	3.5	0.92
104	2022	Cork_screw_cla	15086	102.5	102.9	8.7	8.1	-0.4	3.4	0.92
105	2019	Skin_proferati	27607	103.2	102.6	8.6	8.5	0.6	3.9	0.90
106	2020	Skin_proferati	53534	103.5	102.7	8.6	8.6	0.8	3.7	0.90
107	2021	Skin_proferati	58431	104.6	104.2	8.2	8.2	0.4	3.1	0.93
108	2022	Skin_proferati	15086	104.8	104.0	7.9	7.9	0.8	3.1	0.92
109	2019	White_line_dou	26269	104.2	103.4	9.9	8.6	0.8	4.2	0.90
110	2020	White_line_dou	53177	104.6	104.0	9.0	8.1	0.6	4.0	0.90

sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
111	2021	White_line_dou	58431	105.3	104.5	8.9	8.2	0.8	3.2	0.94
112	2022	White_line_dou	15086	105.3	104.4	8.6	7.9	0.9	3.1	0.93

RDC summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2010	Dermatitis1	156	106	271	98.4	98.4	13.2	13.1	0.0	1.6	0.99
2	2011	Dermatitis1	163	143	340	98.5	98.3	12.1	12.0	0.2	1.6	0.99
3	2012	Dermatitis1	164	137	262	100.1	100.0	12.6	12.5	0.1	1.7	0.99
4	2013	Dermatitis1	118	216	377	102.0	101.5	11.8	11.5	0.4	1.6	0.99
5	2014	Dermatitis1	85	345	522	99.7	99.4	12.1	12.1	0.3	1.7	0.99
6	2015	Dermatitis1	71	386	506	102.2	102.3	11.5	9.0	-0.1	6.6	0.82
7	2016	Dermatitis1	70	371	552	101.7	102.4	10.6	8.9	-0.7	6.2	0.81
8	2017	Dermatitis1	60	207	279	102.6	103.0	10.6	8.3	-0.5	6.8	0.77
9	2010	Heel_horn_eros	112	114	248	96.3	96.4	12.2	12.4	0.0	1.1	1.00
10	2011	Heel_horn_eros	135	138	290	98.3	98.2	10.6	10.5	0.1	1.2	0.99
11	2012	Heel_horn_eros	132	123	207	97.9	98.0	10.4	10.5	-0.1	1.4	0.99
12	2013	Heel_horn_eros	105	172	286	99.7	99.8	10.0	9.8	0.0	1.4	0.99
13	2014	Heel_horn_eros	78	253	357	99.8	99.6	10.5	10.4	0.2	1.4	0.99
14	2015	Heel_horn_eros	71	239	318	101.0	101.7	9.8	7.8	-0.7	5.8	0.81
15	2016	Heel_horn_eros	69	229	342	99.7	101.1	10.7	8.1	-1.4	6.8	0.77
16	2017	Heel_horn_eros	49	130	160	104.1	103.4	9.2	8.4	0.6	4.2	0.89
17	2010	Sole_heamorrha	152	113	286	97.7	97.8	9.2	9.3	-0.1	1.4	0.99
18	2011	Sole_heamorrha	163	150	349	100.1	99.9	9.2	9.1	0.2	1.5	0.99
19	2012	Sole_heamorrha	161	142	266	101.0	101.0	10.7	10.8	0.0	1.6	0.99
20	2013	Sole_heamorrha	117	219	387	100.4	100.0	10.6	10.6	0.4	1.6	0.99
21	2014	Sole_heamorrha	82	349	515	99.9	99.8	11.0	10.6	0.1	1.6	0.99
22	2015	Sole_heamorrha	71	355	471	101.2	100.6	9.3	8.1	0.6	6.2	0.75
23	2016	Sole_heamorrha	69	326	479	100.3	100.9	12.3	8.9	-0.6	6.6	0.85
24	2017	Sole_heamorrha	57	174	226	102.9	102.5	10.0	7.7	0.4	7.2	0.70
25	2010	Sole_ulcer1	154	110	277	96.4	96.6	10.9	10.6	-0.3	1.4	0.99
26	2011	Sole_ulcer1	163	146	342	101.8	101.6	11.8	11.8	0.2	1.5	0.99
27	2012	Sole_ulcer1	161	142	269	99.6	99.8	12.5	12.3	-0.2	1.7	0.99
28	2013	Sole_ulcer1	117	221	384	102.1	102.1	11.7	11.6	0.0	1.8	0.99
29	2014	Sole_ulcer1	84	345	517	100.5	100.5	11.4	10.9	0.0	2.3	0.98
30	2015	Sole_ulcer1	71	378	494	101.4	100.5	12.9	9.7	0.9	7.4	0.82
31	2016	Sole_ulcer1	70	354	527	100.2	101.5	12.8	8.6	-1.2	7.7	0.81
32	2017	Sole_ulcer1	57	195	250	102.6	102.2	10.5	9.1	0.4	7.5	0.72
33	2010	Cork_screw_cla	134	108	254	94.1	94.0	12.4	12.1	0.1	1.8	0.99
34	2011	Cork_screw_cla	153	140	322	99.9	99.9	10.7	10.5	-0.1	1.9	0.98
35	2012	Cork_screw_cla	147	137	249	99.7	99.7	12.7	12.5	0.0	2.2	0.99
36	2013	Cork_screw_cla	114	205	353	96.4	96.0	11.7	11.8	0.4	2.0	0.99

RDC summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
37	2014	Cork_screw_cla	82	325	484	97.0	97.3	14.1	14.0	-0.3	2.3	0.99
38	2015	Cork_screw_cla	71	354	473	97.8	96.1	11.0	8.9	1.7	7.5	0.73
39	2016	Cork_screw_cla	70	346	515	100.7	99.5	12.0	9.1	1.3	7.2	0.80
40	2017	Cork_screw_cla	58	188	247	103.7	101.5	10.8	8.2	2.2	6.7	0.78
41	2010	Skin_proferati	132	113	267	97.3	97.2	14.2	14.1	0.2	1.4	1.00
42	2011	Skin_proferati	152	140	319	96.9	96.9	11.7	11.5	0.0	1.5	0.99
43	2012	Skin_proferati	146	138	252	98.1	98.1	12.8	12.9	0.0	1.6	0.99
44	2013	Skin_proferati	113	205	357	99.1	99.1	12.7	12.6	0.0	1.7	0.99
45	2014	Skin_proferati	81	319	477	101.0	101.5	11.0	10.9	-0.5	1.5	0.99
46	2015	Skin_proferati	71	340	457	102.7	102.4	12.1	10.2	0.3	7.0	0.82
47	2016	Skin_proferati	70	327	487	103.0	103.3	12.0	9.1	-0.3	8.0	0.74
48	2017	Skin_proferati	57	174	226	103.8	103.4	11.0	9.6	0.4	5.0	0.89
49	2010	White_line_dou	156	112	282	99.0	99.0	11.5	11.3	0.0	1.5	0.99
50	2011	White_line_dou	164	148	347	100.2	100.3	13.1	13.1	0.0	1.5	0.99
51	2012	White_line_dou	164	142	270	100.0	100.2	14.1	14.0	-0.2	1.7	0.99
52	2013	White_line_dou	118	223	390	101.2	100.7	13.7	13.6	0.5	1.6	0.99
53	2014	White_line_dou	83	355	528	97.0	96.4	15.0	14.4	0.7	2.2	0.99
54	2015	White_line_dou	71	384	502	100.9	100.9	11.9	9.7	0.0	6.2	0.85
55	2016	White_line_dou	70	359	534	100.2	100.4	13.4	9.4	-0.2	6.8	0.88
56	2017	White_line_dou	58	197	255	101.3	101.9	10.8	8.6	-0.6	7.0	0.77
57	2010	Dermatitis2	144	87	220	98.6	98.6	13.4	13.2	0.0	1.4	0.99
58	2011	Dermatitis2	158	111	258	98.1	97.9	11.7	11.5	0.2	1.4	0.99
59	2012	Dermatitis2	158	115	213	99.9	99.8	11.9	12.0	0.1	1.5	0.99
60	2013	Dermatitis2	115	179	306	101.7	101.4	11.3	11.1	0.3	1.6	0.99
61	2014	Dermatitis2	83	280	412	100.4	100.2	11.5	11.5	0.2	1.4	0.99
62	2015	Dermatitis2	71	290	368	102.2	102.4	10.7	8.7	-0.2	6.0	0.83
63	2016	Dermatitis2	53	182	270	100.9	101.4	10.7	8.2	-0.5	6.5	0.79
64	2010	Heel_horn_eros	97	92	192	95.2	95.2	11.9	12.1	-0.1	1.2	1.00
65	2011	Heel_horn_eros	125	102	208	98.8	98.6	10.6	10.5	0.2	1.2	0.99
66	2012	Heel_horn_eros	127	95	156	98.3	98.4	10.8	10.9	0.0	1.2	0.99
67	2013	Heel_horn_eros	91	145	221	99.7	99.7	10.3	10.1	0.0	1.4	0.99
68	2014	Heel_horn_eros	77	189	260	99.6	99.4	10.3	10.2	0.2	1.2	0.99
69	2015	Heel_horn_eros	69	177	218	100.7	101.3	9.8	8.0	-0.6	5.9	0.80
70	2016	Heel_horn_eros	46	112	154	98.6	99.7	10.8	7.4	-1.0	7.3	0.74
71	2010	Sole_heamorrha	144	93	232	97.0	97.1	9.9	10.0	-0.1	1.4	0.99
72	2011	Sole_heamorrha	158	119	276	100.3	100.2	9.5	9.5	0.2	1.4	0.99

RDC summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
73	2012	Sole_heamorrha	157	122	226	100.6	100.6	11.5	11.6	0.0	1.6	0.99
74	2013	Sole_heamorrha	113	192	327	99.9	99.6	10.9	11.0	0.3	1.6	0.99
75	2014	Sole_heamorrha	82	292	422	99.6	99.5	11.7	11.4	0.2	1.5	0.99
76	2015	Sole_heamorrha	71	285	360	101.1	100.4	9.9	8.6	0.6	6.6	0.76
77	2016	Sole_heamorrha	53	172	256	100.2	100.9	12.4	9.3	-0.7	6.9	0.83
78	2010	Sole_ulcer2	144	92	231	98.3	98.5	10.9	10.8	-0.3	1.3	0.99
79	2011	Sole_ulcer2	163	113	265	102.6	102.5	12.5	12.6	0.1	1.2	1.00
80	2012	Sole_ulcer2	159	119	217	100.7	100.7	13.3	13.2	0.0	1.7	0.99
81	2013	Sole_ulcer2	116	181	309	103.2	103.2	12.2	12.3	0.0	1.7	0.99
82	2014	Sole_ulcer2	83	283	414	100.5	100.4	11.8	11.4	0.1	1.8	0.99
83	2015	Sole_ulcer2	71	277	348	101.8	101.1	12.6	9.3	0.7	7.9	0.78
84	2016	Sole_ulcer2	53	168	251	101.5	101.9	12.5	9.2	-0.4	7.0	0.83
85	2010	Cork_screw_cla	115	91	208	93.4	93.6	12.6	12.3	-0.2	1.6	0.99
86	2011	Cork_screw_cla	141	111	248	101.1	101.2	11.0	10.9	-0.1	1.8	0.99
87	2012	Cork_screw_cla	149	107	191	100.2	100.2	13.2	13.0	0.0	1.9	0.99
88	2013	Cork_screw_cla	107	169	282	98.0	97.9	11.2	11.4	0.1	1.8	0.99
89	2014	Cork_screw_cla	82	260	385	97.7	98.3	13.7	13.5	-0.6	1.8	0.99
90	2015	Cork_screw_cla	71	261	339	98.2	96.3	10.9	9.4	1.9	7.7	0.72
91	2016	Cork_screw_cla	48	174	242	100.9	100.0	10.8	8.0	0.9	7.5	0.72
92	2010	Skin_proferati	109	49	65	97.3	97.1	14.7	14.8	0.1	1.3	1.00
93	2011	Skin_proferati	129	43	35	97.1	97.0	12.0	11.8	0.1	1.3	0.99
94	2012	Skin_proferati	125	51	61	97.6	97.7	13.7	13.8	-0.1	1.6	0.99
95	2013	Skin_proferati	94	63	81	99.0	98.9	14.2	14.1	0.1	1.5	0.99
96	2014	Skin_proferati	58	98	100	101.0	101.4	10.3	10.4	-0.4	1.3	0.99
97	2015	Skin_proferati	48	98	104	102.1	102.3	13.6	11.5	-0.3	6.5	0.88
98	2016	Skin_proferati	29	81	76	101.6	101.9	13.8	9.6	-0.3	9.6	0.72
99	2010	White_line_dou	140	47	63	97.0	96.9	11.5	11.4	0.1	1.4	0.99
100	2011	White_line_dou	143	45	33	99.7	99.6	11.3	11.3	0.0	1.4	0.99
101	2012	White_line_dou	138	52	57	99.9	99.9	13.7	13.6	0.0	1.6	0.99
102	2013	White_line_dou	104	63	76	99.7	99.3	13.0	12.9	0.4	1.5	0.99
103	2014	White_line_dou	60	99	98	96.2	95.8	13.7	13.7	0.4	1.4	1.00
104	2015	White_line_dou	48	100	101	101.5	101.6	10.3	9.0	-0.1	6.2	0.80
105	2016	White_line_dou	31	77	72	99.9	99.9	12.8	8.8	0.0	6.6	0.88
106	2010	Dermatitis3	106	36	50	97.7	97.8	13.8	13.7	-0.1	1.6	0.99
107	2011	Dermatitis3	119	34	21	98.8	98.6	12.0	11.9	0.2	1.6	0.99
108	2012	Dermatitis3	128	38	40	101.0	100.9	12.8	12.9	0.1	1.5	0.99

RDC summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
109	2013	Dermatitis3	86	51	60	101.7	101.3	11.6	11.3	0.4	1.6	0.99
110	2014	Dermatitis3	54	70	70	99.2	98.9	12.5	12.5	0.3	1.5	0.99
111	2015	Dermatitis3	36	55	49	100.9	102.2	13.4	10.5	-1.3	7.3	0.84
112	2010	Heel_horn_eros	63	32	31	94.8	94.9	12.9	13.0	-0.1	1.1	1.00
113	2011	Heel_horn_eros	86	28	11	99.4	99.4	10.7	10.7	0.1	1.2	0.99
114	2012	Heel_horn_eros	79	30	18	98.9	98.8	11.5	11.7	0.2	1.2	1.00
115	2013	Heel_horn_eros	60	33	24	100.1	100.0	10.7	10.6	0.1	1.4	0.99
116	2014	Heel_horn_eros	43	40	27	98.9	98.7	10.0	10.0	0.3	1.0	0.99
117	2015	Heel_horn_eros	18	36	20	102.9	104.6	8.4	7.5	-1.7	6.2	0.70
118	2010	Sole_heamorrha	103	36	46	97.6	97.8	10.1	10.2	-0.2	1.2	0.99
119	2011	Sole_heamorrha	110	34	18	101.4	101.1	10.3	10.3	0.3	1.3	0.99
120	2012	Sole_heamorrha	109	38	35	101.1	101.0	12.6	12.7	0.2	1.6	0.99
121	2013	Sole_heamorrha	75	49	51	100.8	100.7	12.4	12.5	0.1	1.6	0.99
122	2014	Sole_heamorrha	49	61	54	99.4	99.5	11.7	11.4	0.0	1.1	1.00
123	2015	Sole_heamorrha	24	56	39	101.5	100.3	10.7	8.2	1.3	6.7	0.78
124	2010	Sole_ulcer3	114	36	49	98.8	99.1	11.0	10.9	-0.3	1.1	0.99
125	2011	Sole_ulcer3	120	36	20	104.3	104.1	12.0	12.1	0.2	1.3	0.99
126	2012	Sole_ulcer3	125	39	39	101.0	100.9	13.4	13.3	0.1	1.5	0.99
127	2013	Sole_ulcer3	87	51	58	104.6	104.4	12.1	12.2	0.2	1.3	0.99
128	2014	Sole_ulcer3	54	67	64	101.3	101.3	10.1	9.8	0.0	1.5	0.99
129	2015	Sole_ulcer3	35	50	43	101.7	101.3	14.4	9.9	0.4	8.9	0.79
130	2010	Cork_screw_cla	81	36	43	95.0	95.0	12.5	12.3	0.0	1.4	0.99
131	2011	Cork_screw_cla	106	33	18	101.2	101.3	11.5	11.2	-0.1	1.7	0.99
132	2012	Cork_screw_cla	106	39	40	100.5	100.2	13.4	13.1	0.3	1.6	0.99
133	2013	Cork_screw_cla	78	51	60	97.7	97.5	11.9	11.8	0.3	1.6	0.99
134	2014	Cork_screw_cla	52	70	71	97.1	97.7	12.9	13.0	-0.6	1.5	0.99
135	2015	Cork_screw_cla	31	59	51	98.5	95.0	8.6	8.1	3.5	7.8	0.56
136	2010	Skin_proferati	82	39	53	97.5	97.4	14.7	14.7	0.0	1.3	1.00
137	2011	Skin_proferati	107	33	21	96.6	96.5	11.7	11.4	0.0	1.4	0.99
138	2012	Skin_proferati	102	40	44	98.0	97.9	13.9	14.1	0.1	1.5	0.99
139	2013	Skin_proferati	74	53	63	99.4	99.3	14.9	14.6	0.1	1.5	1.00
140	2014	Skin_proferati	50	69	67	101.5	101.8	11.4	11.4	-0.4	1.2	0.99
141	2015	Skin_proferati	29	56	46	102.7	104.0	16.2	12.3	-1.3	7.5	0.90
142	2010	White_line_dou	110	36	49	98.3	98.4	11.9	11.8	-0.1	1.2	0.99
143	2011	White_line_dou	119	35	20	100.1	100.1	11.7	11.7	0.0	1.3	0.99
144	2012	White_line_dou	126	38	39	99.6	99.7	13.6	13.6	0.0	1.5	0.99

RDC summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
145	2013	White_line_dou	82	52	59	100.0	99.8	14.0	13.9	0.3	1.4	1.00
146	2014	White_line_dou	53	68	64	96.4	95.9	14.3	14.1	0.6	1.5	0.99
147	2015	White_line_dou	35	50	43	101.5	101.3	11.4	9.0	0.1	5.6	0.87
148	2010	Dermatitis	156	106	271	98.9	98.8	12.9	12.7	0.0	1.5	0.99
149	2011	Dermatitis	163	143	340	98.8	98.6	11.7	11.5	0.2	1.5	0.99
150	2012	Dermatitis	164	137	262	100.3	100.1	12.2	12.3	0.1	1.6	0.99
151	2013	Dermatitis	118	216	377	101.9	101.4	11.4	11.1	0.4	1.6	0.99
152	2014	Dermatitis	85	345	522	99.8	99.6	11.7	11.7	0.2	1.5	0.99
153	2015	Dermatitis	71	386	506	102.0	102.1	11.2	9.0	0.0	6.4	0.82
154	2016	Dermatitis	70	371	552	101.7	102.1	10.2	8.6	-0.4	6.0	0.81
155	2017	Dermatitis	60	207	279	102.6	103.1	10.0	8.1	-0.5	6.4	0.77
156	2010	Heel_horn_eros	112	114	248	96.5	96.5	12.3	12.5	0.0	1.1	1.00
157	2011	Heel_horn_eros	135	138	290	98.6	98.5	10.5	10.5	0.1	1.2	0.99
158	2012	Heel_horn_eros	132	123	207	98.1	98.2	10.7	10.9	-0.1	1.3	0.99
159	2013	Heel_horn_eros	105	172	286	99.9	99.9	10.1	10.1	0.0	1.4	0.99
160	2014	Heel_horn_eros	78	253	357	99.6	99.4	10.4	10.3	0.2	1.2	0.99
161	2015	Heel_horn_eros	71	239	318	100.9	101.7	9.8	8.0	-0.8	6.0	0.80
162	2016	Heel_horn_eros	69	229	342	99.8	101.1	10.7	8.1	-1.3	6.8	0.77
163	2017	Heel_horn_eros	49	130	160	104.0	103.4	9.2	8.5	0.6	4.2	0.89
164	2010	Sole_heamorrha	152	113	286	97.5	97.6	9.7	9.7	-0.1	1.3	0.99
165	2011	Sole_heamorrha	163	150	349	100.3	100.2	9.6	9.5	0.1	1.4	0.99
166	2012	Sole_heamorrha	161	142	266	100.9	100.9	11.4	11.5	0.0	1.5	0.99
167	2013	Sole_heamorrha	117	219	387	100.5	100.2	11.1	11.1	0.3	1.6	0.99
168	2014	Sole_heamorrha	82	349	515	99.8	99.7	11.6	11.3	0.2	1.5	0.99
169	2015	Sole_heamorrha	71	355	471	101.3	100.5	9.6	8.5	0.7	6.4	0.76
170	2016	Sole_heamorrha	69	326	479	100.4	100.9	12.6	9.4	-0.5	6.5	0.86
171	2017	Sole_heamorrha	57	174	226	103.2	102.8	10.2	8.1	0.4	7.2	0.71
172	2010	Sole_ulcer	154	110	277	97.6	97.8	10.7	10.5	-0.2	1.3	0.99
173	2011	Sole_ulcer	163	146	342	102.4	102.3	12.3	12.3	0.1	1.2	0.99
174	2012	Sole_ulcer	161	142	269	100.3	100.3	13.1	13.1	0.0	1.5	0.99
175	2013	Sole_ulcer	117	221	384	102.9	102.8	11.7	11.9	0.0	1.5	0.99
176	2014	Sole_ulcer	84	345	517	100.6	100.7	11.5	11.1	0.0	1.8	0.99
177	2015	Sole_ulcer	71	378	494	101.5	100.7	12.6	9.5	0.8	7.4	0.81
178	2016	Sole_ulcer	70	354	527	100.4	101.1	12.2	9.0	-0.8	6.8	0.83
179	2017	Sole_ulcer	57	195	250	102.2	102.2	10.3	9.4	-0.1	6.8	0.77
180	2010	Cork_screw_cla	134	108	254	94.2	94.3	12.3	12.0	-0.1	1.6	0.99

RDC summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
181	2011	Cork_screw_cla	153	140	322	100.5	100.5	10.9	10.6	0.0	1.8	0.99
182	2012	Cork_screw_cla	147	137	249	100.2	100.2	12.5	12.3	0.0	1.8	0.99
183	2013	Cork_screw_cla	114	205	353	96.9	96.6	11.7	11.8	0.3	1.8	0.99
184	2014	Cork_screw_cla	82	325	484	97.6	98.2	13.2	13.0	-0.5	1.7	0.99
185	2015	Cork_screw_cla	71	354	473	97.8	96.0	10.3	9.0	1.8	7.1	0.73
186	2016	Cork_screw_cla	70	346	515	100.2	99.5	11.2	8.7	0.7	6.6	0.81
187	2017	Cork_screw_cla	58	188	247	102.9	100.9	9.9	7.8	2.0	6.5	0.75
188	2010	Skin_proferati	132	113	267	96.9	96.7	14.5	14.4	0.2	1.2	1.00
189	2011	Skin_proferati	152	140	319	96.9	96.9	11.8	11.5	0.0	1.4	0.99
190	2012	Skin_proferati	146	138	252	97.9	97.9	13.4	13.4	0.0	1.6	0.99
191	2013	Skin_proferati	113	205	357	99.0	98.9	13.4	13.2	0.1	1.6	0.99
192	2014	Skin_proferati	81	319	477	100.8	101.3	11.6	11.6	-0.4	1.5	0.99
193	2015	Skin_proferati	71	340	457	102.7	102.3	12.3	10.4	0.4	6.8	0.83
194	2016	Skin_proferati	70	327	487	103.2	103.4	11.9	9.4	-0.2	7.6	0.77
195	2017	Skin_proferati	57	174	226	103.6	103.2	11.1	9.9	0.5	4.6	0.91
196	2010	White_line_dou	156	112	282	98.0	98.0	11.0	11.0	0.0	1.3	0.99
197	2011	White_line_dou	164	148	347	99.4	99.4	12.3	12.3	0.0	1.3	0.99
198	2012	White_line_dou	164	142	270	99.5	99.6	13.6	13.7	0.0	1.5	0.99
199	2013	White_line_dou	118	223	390	100.0	99.6	13.2	13.1	0.4	1.4	0.99
200	2014	White_line_dou	83	355	528	97.0	96.5	13.8	13.6	0.5	1.6	0.99
201	2015	White_line_dou	71	384	502	101.2	101.0	10.4	8.8	0.3	6.0	0.82
202	2016	White_line_dou	70	359	534	99.9	100.2	12.6	9.0	-0.3	5.9	0.90
203	2017	White_line_dou	58	197	255	101.3	102.0	10.1	8.2	-0.7	6.0	0.80

RDC summery stastistics for SS and prev SS breeding value for nordic AI bulls with no offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2019	Dermatitis1	77	.	.	104.1	104.7	9.2	8.2	-0.7	3.9	0.90
2	2020	Dermatitis1	74	.	.	104.9	105.0	8.3	7.1	-0.2	3.5	0.91
3	2021	Dermatitis1	72	.	.	105.1	105.1	7.5	6.5	0.0	3.5	0.88
4	2022	Dermatitis1	29	.	.	104.4	104.1	6.3	5.7	0.3	2.9	0.89
5	2019	Heel_horn_eros	77	.	.	103.7	104.3	8.8	7.4	-0.7	3.7	0.91
6	2020	Heel_horn_eros	74	.	.	105.7	105.5	7.0	7.3	0.2	2.8	0.92
7	2021	Heel_horn_eros	72	.	.	106.2	106.2	6.6	6.4	0.0	2.5	0.93
8	2022	Heel_horn_eros	29	.	.	104.5	104.6	7.3	7.1	-0.1	2.7	0.93
9	2019	Sole_heamorrha	77	.	.	103.1	102.2	7.6	6.6	0.8	3.8	0.87
10	2020	Sole_heamorrha	74	.	.	105.5	104.6	7.5	6.3	0.9	3.7	0.87
11	2021	Sole_heamorrha	72	.	.	104.4	103.7	7.4	6.8	0.7	3.5	0.88
12	2022	Sole_heamorrha	29	.	.	105.7	105.2	5.5	5.8	0.4	3.1	0.85
13	2019	Sole_ulcer1	77	.	.	102.8	102.3	7.7	6.6	0.6	4.2	0.84
14	2020	Sole_ulcer1	74	.	.	106.4	106.0	7.5	6.8	0.4	3.9	0.86
15	2021	Sole_ulcer1	72	.	.	105.0	104.4	7.7	7.4	0.6	3.6	0.89
16	2022	Sole_ulcer1	29	.	.	106.2	105.8	7.0	7.0	0.4	4.3	0.81
17	2019	Cork_screw_cla	77	.	.	102.4	100.4	8.9	7.4	2.0	4.2	0.88
18	2020	Cork_screw_cla	74	.	.	103.2	100.6	8.3	8.5	2.6	3.5	0.91
19	2021	Cork_screw_cla	72	.	.	102.1	101.1	8.0	7.7	1.1	3.5	0.90
20	2022	Cork_screw_cla	29	.	.	102.7	101.6	10.3	8.9	1.1	4.2	0.91
21	2019	Skin_proferati	77	.	.	104.4	105.5	8.7	7.5	-1.1	4.1	0.88
22	2020	Skin_proferati	74	.	.	105.0	104.3	7.7	7.4	0.7	3.6	0.88
23	2021	Skin_proferati	72	.	.	106.8	105.8	6.8	6.7	0.9	3.1	0.90
24	2022	Skin_proferati	29	.	.	104.0	103.4	6.6	6.1	0.5	2.9	0.90
25	2019	White_line_dou	77	.	.	101.8	100.9	9.6	7.6	0.9	4.3	0.90
26	2020	White_line_dou	74	.	.	101.5	101.6	8.2	7.1	-0.1	3.6	0.90
27	2021	White_line_dou	72	.	.	102.2	100.9	7.8	7.3	1.3	3.2	0.91
28	2022	White_line_dou	29	.	.	102.0	102.4	6.9	6.2	-0.3	3.5	0.86
29	2019	Dermatitis2	77	.	.	104.0	104.8	8.7	7.6	-0.8	3.7	0.91
30	2020	Dermatitis2	74	.	.	104.6	104.9	7.9	6.9	-0.2	3.1	0.92
31	2021	Dermatitis2	72	.	.	105.3	105.3	7.0	6.2	0.0	3.2	0.89
32	2022	Dermatitis2	29	.	.	104.2	103.9	6.3	5.6	0.2	2.6	0.91
33	2019	Heel_horn_eros	77	.	.	103.8	104.4	8.7	7.3	-0.6	3.6	0.91
34	2020	Heel_horn_eros	74	.	.	105.7	105.3	7.2	7.3	0.4	2.8	0.92
35	2021	Heel_horn_eros	72	.	.	106.3	106.3	6.7	6.6	0.0	2.6	0.93
36	2022	Heel_horn_eros	29	.	.	104.5	104.6	7.4	7.1	-0.1	2.7	0.93

RDC summery stastistics for SS and prev SS breeding value for nordic AI bulls with no offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
37	2019	Sole_heamorrha	77	.	.	103.2	102.3	7.6	6.8	0.9	3.7	0.88
38	2020	Sole_heamorrha	74	.	.	105.9	104.8	7.7	6.6	1.1	3.8	0.87
39	2021	Sole_heamorrha	72	.	.	104.9	104.1	7.6	7.2	0.7	3.4	0.89
40	2022	Sole_heamorrha	29	.	.	105.9	105.4	6.2	6.4	0.5	3.4	0.85
41	2019	Sole_ulcer2	77	.	.	102.5	102.1	7.3	6.6	0.4	3.4	0.88
42	2020	Sole_ulcer2	74	.	.	106.1	105.7	7.5	6.8	0.4	3.7	0.87
43	2021	Sole_ulcer2	72	.	.	104.9	104.1	7.5	7.3	0.7	3.3	0.90
44	2022	Sole_ulcer2	29	.	.	105.8	105.9	6.8	7.0	-0.1	4.0	0.84
45	2019	Cork_screw_cla	77	.	.	102.1	100.4	8.9	7.8	1.7	4.0	0.89
46	2020	Cork_screw_cla	74	.	.	103.2	100.8	9.0	9.0	2.4	3.6	0.92
47	2021	Cork_screw_cla	72	.	.	102.6	101.7	8.6	8.4	0.8	3.4	0.92
48	2022	Cork_screw_cla	29	.	.	103.2	102.1	10.5	9.3	1.1	3.9	0.93
49	2019	Skin_proferati	77	.	.	104.8	105.5	8.6	7.8	-0.8	3.8	0.89
50	2020	Skin_proferati	74	.	.	104.8	104.1	7.6	7.5	0.7	3.6	0.89
51	2021	Skin_proferati	72	.	.	106.7	105.6	6.9	6.8	1.1	2.9	0.91
52	2022	Skin_proferati	29	.	.	103.8	103.1	6.9	6.4	0.7	2.7	0.92
53	2019	White_line_dou	77	.	.	102.2	101.3	8.7	7.5	0.9	3.4	0.92
54	2020	White_line_dou	74	.	.	101.7	101.4	8.3	7.1	0.4	3.3	0.92
55	2021	White_line_dou	72	.	.	102.0	101.1	7.7	7.2	0.9	3.0	0.92
56	2022	White_line_dou	29	.	.	102.4	102.3	7.2	6.5	0.1	3.0	0.91
57	2019	Dermatitis3	77	.	.	104.0	104.6	8.6	7.6	-0.6	3.6	0.91
58	2020	Dermatitis3	74	.	.	105.0	104.9	8.5	7.3	0.1	3.6	0.91
59	2021	Dermatitis3	72	.	.	105.3	105.3	7.1	6.2	0.1	3.5	0.87
60	2022	Dermatitis3	29	.	.	104.6	104.4	6.2	5.8	0.2	2.7	0.90
61	2019	Heel_horn_eros	77	.	.	103.8	104.5	8.7	7.4	-0.7	3.8	0.90
62	2020	Heel_horn_eros	74	.	.	105.9	105.5	7.2	7.5	0.4	2.9	0.92
63	2021	Heel_horn_eros	72	.	.	106.4	106.3	6.9	6.7	0.0	2.4	0.94
64	2022	Heel_horn_eros	29	.	.	104.6	104.9	7.5	7.3	-0.2	2.9	0.92
65	2019	Sole_heamorrha	77	.	.	103.5	102.6	8.0	7.1	0.9	3.7	0.89
66	2020	Sole_heamorrha	74	.	.	106.1	105.1	7.8	6.9	1.0	3.8	0.87
67	2021	Sole_heamorrha	72	.	.	105.2	104.3	7.9	7.5	0.9	3.6	0.89
68	2022	Sole_heamorrha	29	.	.	106.1	105.7	6.4	6.7	0.4	3.5	0.86
69	2019	Sole_ulcer3	77	.	.	102.6	102.1	7.8	6.9	0.5	3.7	0.88
70	2020	Sole_ulcer3	74	.	.	105.5	105.2	7.7	7.2	0.3	3.6	0.89
71	2021	Sole_ulcer3	72	.	.	104.8	104.3	8.0	7.7	0.6	3.3	0.91
72	2022	Sole_ulcer3	29	.	.	105.5	105.6	6.9	7.0	-0.1	4.0	0.83

RDC summery stastistics for SS and prev SS breeding value for nordic AI bulls with no offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
73	2019	Cork_screw_cla	77	.	.	100.9	99.1	9.0	8.1	1.8	3.8	0.91
74	2020	Cork_screw_cla	74	.	.	101.0	99.3	8.7	8.7	1.7	3.3	0.93
75	2021	Cork_screw_cla	72	.	.	101.1	100.3	8.4	8.3	0.8	3.3	0.92
76	2022	Cork_screw_cla	29	.	.	101.9	100.9	10.7	9.7	1.0	3.6	0.94
77	2019	Skin_proferati	77	.	.	104.7	105.5	8.7	8.0	-0.8	3.9	0.90
78	2020	Skin_proferati	74	.	.	104.5	104.0	7.7	7.6	0.5	3.3	0.90
79	2021	Skin_proferati	72	.	.	106.5	105.5	7.0	6.9	1.1	2.9	0.91
80	2022	Skin_proferati	29	.	.	103.7	103.1	6.8	5.9	0.6	2.9	0.91
81	2019	White_line_dou	77	.	.	101.5	101.1	8.7	7.3	0.5	3.6	0.91
82	2020	White_line_dou	74	.	.	100.9	100.8	8.2	7.1	0.1	3.2	0.93
83	2021	White_line_dou	72	.	.	101.7	100.6	7.7	7.3	1.1	2.9	0.93
84	2022	White_line_dou	29	.	.	101.6	101.9	7.2	6.4	-0.3	3.2	0.90
85	2019	Dermatitis	77	.	.	104.0	104.7	8.8	7.7	-0.7	3.8	0.90
86	2020	Dermatitis	74	.	.	104.8	104.9	8.2	7.1	-0.1	3.4	0.91
87	2021	Dermatitis	72	.	.	105.3	105.2	7.1	6.3	0.1	3.4	0.88
88	2022	Dermatitis	29	.	.	104.4	104.2	6.1	5.6	0.2	2.7	0.89
89	2019	Heel_horn_eros	77	.	.	103.8	104.4	8.7	7.4	-0.6	3.8	0.90
90	2020	Heel_horn_eros	74	.	.	105.9	105.5	7.2	7.3	0.4	2.8	0.93
91	2021	Heel_horn_eros	72	.	.	106.3	106.3	6.8	6.6	0.1	2.5	0.93
92	2022	Heel_horn_eros	29	.	.	104.5	104.8	7.4	7.0	-0.2	2.8	0.93
93	2019	Sole_heamorrha	77	.	.	103.3	102.4	7.7	6.8	0.9	3.6	0.88
94	2020	Sole_heamorrha	74	.	.	105.9	104.9	7.6	6.6	1.0	3.7	0.87
95	2021	Sole_heamorrha	72	.	.	104.9	104.1	7.7	7.1	0.8	3.5	0.89
96	2022	Sole_heamorrha	29	.	.	106.0	105.6	6.1	6.3	0.4	3.4	0.85
97	2019	Sole_ulcer	77	.	.	102.7	102.2	7.5	6.6	0.5	3.8	0.87
98	2020	Sole_ulcer	74	.	.	106.0	105.6	7.5	6.9	0.4	3.6	0.88
99	2021	Sole_ulcer	72	.	.	104.9	104.3	7.7	7.4	0.6	3.4	0.90
100	2022	Sole_ulcer	29	.	.	105.8	105.8	6.7	6.8	0.0	4.0	0.82
101	2019	Cork_screw_cla	77	.	.	101.6	99.8	8.7	7.7	1.9	3.9	0.89
102	2020	Cork_screw_cla	74	.	.	102.2	100.0	8.5	8.7	2.2	3.4	0.92
103	2021	Cork_screw_cla	72	.	.	101.8	100.9	8.3	8.1	0.9	3.3	0.92
104	2022	Cork_screw_cla	29	.	.	102.6	101.4	10.4	9.3	1.1	3.7	0.94
105	2019	Skin_proferati	77	.	.	104.6	105.5	8.7	7.7	-0.9	3.9	0.89
106	2020	Skin_proferati	74	.	.	104.8	104.1	7.6	7.5	0.6	3.6	0.89
107	2021	Skin_proferati	72	.	.	106.7	105.6	6.8	6.7	1.1	3.0	0.90
108	2022	Skin_proferati	29	.	.	103.7	103.1	6.6	6.0	0.6	2.8	0.91

RDC summery stastistics for SS and prev SS breeding value for nordic AI bulls with no offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
109	2019	White_line_dou	77	.	.	101.8	101.1	8.9	7.3	0.7	3.7	0.91
110	2020	White_line_dou	74	.	.	101.3	101.2	8.2	6.9	0.1	3.3	0.92
111	2021	White_line_dou	72	.	.	101.9	100.9	7.6	7.2	1.0	3.0	0.92
112	2022	White_line_dou	29	.	.	101.9	102.0	7.1	6.2	-0.2	3.3	0.88

RDC summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2015	Dermatitis1	19832	100.3	100.2	9.0	9.0	0.1	1.1	0.99
2	2016	Dermatitis1	18478	99.9	99.6	8.1	8.2	0.3	1.2	0.99
3	2017	Dermatitis1	16871	100.7	100.8	8.5	7.8	-0.1	3.2	0.93
4	2018	Dermatitis1	15630	100.0	100.3	8.0	6.3	-0.2	4.3	0.84
5	2019	Dermatitis1	11533	101.1	101.8	7.9	6.1	-0.7	4.5	0.82
6	2020	Dermatitis1	1559	100.3	101.8	7.0	5.7	-1.5	4.8	0.74
7	2015	Heel_horn_eros	16022	99.6	99.5	7.9	7.9	0.1	1.0	0.99
8	2016	Heel_horn_eros	14348	100.0	99.9	7.4	7.4	0.1	1.0	0.99
9	2017	Heel_horn_eros	12324	100.5	100.5	7.7	7.2	0.0	2.7	0.93
10	2018	Heel_horn_eros	10749	100.9	100.8	7.2	6.1	0.2	3.9	0.84
11	2019	Heel_horn_eros	7076	101.3	101.4	8.2	6.1	-0.1	4.5	0.84
12	2020	Heel_horn_eros	822	100.9	101.5	6.7	5.4	-0.6	3.7	0.83
13	2015	Sole_heamorrha	21294	100.6	100.5	7.3	7.3	0.1	1.0	0.99
14	2016	Sole_heamorrha	19348	100.4	100.3	7.2	7.1	0.2	1.1	0.99
15	2017	Sole_heamorrha	17798	100.6	100.4	6.8	6.3	0.2	2.7	0.92
16	2018	Sole_heamorrha	16014	100.6	100.2	7.0	5.8	0.4	3.8	0.84
17	2019	Sole_heamorrha	11378	101.4	101.3	7.5	5.6	0.2	4.4	0.81
18	2020	Sole_heamorrha	1446	102.7	102.3	6.0	5.2	0.4	3.9	0.77
19	2015	Sole_ulcer1	21170	98.9	98.9	9.2	9.1	0.0	1.1	0.99
20	2016	Sole_ulcer1	19079	99.5	99.5	8.2	8.0	0.0	1.1	0.99
21	2017	Sole_ulcer1	17257	99.5	99.6	8.1	7.3	-0.1	2.9	0.93
22	2018	Sole_ulcer1	15999	100.7	100.7	7.6	6.3	0.1	3.8	0.86
23	2019	Sole_ulcer1	11108	100.7	100.6	7.8	6.2	0.1	4.4	0.83
24	2020	Sole_ulcer1	1402	101.2	101.3	6.4	5.7	0.0	3.9	0.80
25	2015	Cork_screw_cla	19864	99.2	99.1	8.7	8.7	0.1	1.2	0.99
26	2016	Cork_screw_cla	18424	98.5	98.5	8.6	8.6	0.0	1.3	0.99
27	2017	Cork_screw_cla	17369	99.8	99.7	7.5	7.4	0.1	2.6	0.94
28	2018	Cork_screw_cla	17098	101.0	99.7	7.2	6.8	1.3	4.3	0.82
29	2019	Cork_screw_cla	12562	101.2	100.5	7.9	6.4	0.7	4.2	0.85
30	2020	Cork_screw_cla	1557	101.0	100.0	6.6	6.1	1.0	3.8	0.82
31	2015	Skin_proferati	20700	100.3	100.2	8.4	8.4	0.0	1.1	0.99
32	2016	Skin_proferati	18596	99.7	99.7	8.6	8.7	-0.1	1.1	0.99
33	2017	Skin_proferati	17088	100.9	101.2	8.4	8.0	-0.3	3.0	0.94
34	2018	Skin_proferati	16251	100.2	99.8	8.6	7.5	0.5	5.1	0.81
35	2019	Skin_proferati	11605	101.6	102.2	8.5	6.5	-0.6	4.9	0.82
36	2020	Skin_proferati	1466	101.4	101.9	7.1	6.0	-0.5	3.7	0.85

RDC summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
37	2015	White_line_dou	21273	101.1	101.1	9.4	9.3	0.0	1.1	0.99
38	2016	White_line_dou	19180	99.5	99.3	10.8	10.6	0.2	1.2	0.99
39	2017	White_line_dou	17458	100.5	100.3	9.3	8.9	0.2	2.4	0.97
40	2018	White_line_dou	16392	100.8	100.9	9.2	7.8	-0.1	3.8	0.91
41	2019	White_line_dou	11358	101.7	101.1	9.2	7.4	0.6	4.0	0.90
42	2020	White_line_dou	1429	99.7	100.2	7.6	6.3	-0.5	4.2	0.83
43	2015	Dermatitis2	14779	100.6	100.5	8.8	8.7	0.1	1.1	0.99
44	2016	Dermatitis2	13458	100.1	99.9	7.8	7.8	0.2	1.1	0.99
45	2017	Dermatitis2	12644	100.8	100.9	8.0	7.4	-0.1	3.1	0.92
46	2018	Dermatitis2	9009	100.1	100.3	7.8	6.3	-0.2	4.4	0.83
47	2019	Dermatitis2	948	101.1	101.1	7.9	5.6	-0.1	4.6	0.82
48	2015	Heel_horn_eros	11206	99.9	99.8	8.1	8.1	0.1	1.0	0.99
49	2016	Heel_horn_eros	9570	99.9	99.8	7.7	7.7	0.1	1.0	0.99
50	2017	Heel_horn_eros	8524	100.6	100.6	7.6	7.1	0.0	2.9	0.92
51	2018	Heel_horn_eros	5458	100.8	100.7	7.4	6.1	0.1	4.2	0.83
52	2019	Heel_horn_eros	517	100.8	100.9	8.6	5.9	0.0	5.2	0.80
53	2015	Sole_heamorrha	15371	100.7	100.7	7.6	7.7	0.1	1.1	0.99
54	2016	Sole_heamorrha	14018	100.4	100.2	7.7	7.6	0.2	1.1	0.99
55	2017	Sole_heamorrha	12755	100.8	100.5	7.1	6.6	0.3	2.8	0.92
56	2018	Sole_heamorrha	8917	101.1	100.4	7.1	6.0	0.7	4.0	0.83
57	2019	Sole_heamorrha	894	102.5	102.0	7.7	5.7	0.6	4.6	0.81
58	2015	Sole_ulcer2	15032	99.2	99.3	10.0	9.9	-0.1	1.1	0.99
59	2016	Sole_ulcer2	13850	99.7	99.7	8.7	8.7	0.0	1.1	0.99
60	2017	Sole_ulcer2	12862	99.5	99.7	8.2	7.5	-0.2	3.0	0.93
61	2018	Sole_ulcer2	8500	100.7	100.6	7.7	6.8	0.1	3.9	0.86
62	2019	Sole_ulcer2	854	100.9	101.0	7.5	6.2	-0.1	4.2	0.83
63	2015	Cork_screw_cla	14437	99.1	99.0	9.0	9.0	0.1	1.2	0.99
64	2016	Cork_screw_cla	13615	98.8	98.9	8.5	8.6	0.0	1.2	0.99
65	2017	Cork_screw_cla	13691	99.9	99.8	7.5	7.4	0.1	2.9	0.92
66	2018	Cork_screw_cla	9685	100.6	99.2	6.9	6.8	1.4	4.5	0.79
67	2019	Cork_screw_cla	975	102.0	101.2	7.3	6.0	0.8	4.4	0.80
68	2015	Skin_proferati	14783	100.7	100.6	8.9	9.0	0.0	1.0	0.99
69	2016	Skin_proferati	13699	99.6	99.7	9.1	9.2	0.0	1.0	0.99
70	2017	Skin_proferati	13112	101.1	101.3	8.8	8.4	-0.3	2.9	0.94
71	2018	Skin_proferati	8885	100.2	99.9	8.8	7.8	0.3	5.1	0.81
72	2019	Skin_proferati	890	101.9	102.0	8.7	6.4	-0.1	5.3	0.79

RDC summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
73	2015	White_line_dou	15081	101.0	100.8	8.3	8.3	0.1	1.0	0.99
74	2016	White_line_dou	14000	99.5	99.3	9.2	9.2	0.2	0.9	1.00
75	2017	White_line_dou	13117	101.0	100.8	7.9	7.7	0.1	2.1	0.96
76	2018	White_line_dou	8754	101.4	100.9	7.9	6.8	0.5	3.8	0.88
77	2019	White_line_dou	863	102.1	101.3	8.2	6.5	0.8	4.0	0.88
78	2015	Dermatitis3	9491	101.0	100.9	9.1	9.1	0.1	1.2	0.99
79	2016	Dermatitis3	8913	100.1	99.8	8.1	8.2	0.3	1.2	0.99
80	2017	Dermatitis3	6011	100.9	100.9	8.2	7.7	0.0	3.2	0.92
81	2018	Dermatitis3	654	100.1	100.3	8.6	7.0	-0.2	4.6	0.85
82	2015	Heel_horn_eros	6558	100.0	100.0	8.4	8.4	0.0	1.1	0.99
83	2016	Heel_horn_eros	5779	99.9	99.9	8.0	8.0	0.1	1.0	0.99
84	2017	Heel_horn_eros	3556	100.4	100.5	8.1	7.6	0.0	3.1	0.93
85	2018	Heel_horn_eros	337	101.0	101.2	7.8	6.5	-0.2	4.4	0.82
86	2015	Sole_heamorrha	9695	101.0	100.9	8.2	8.2	0.1	1.1	0.99
87	2016	Sole_heamorrha	8944	100.4	100.2	8.2	8.2	0.1	1.1	0.99
88	2017	Sole_heamorrha	5819	100.9	100.6	7.5	7.1	0.3	2.7	0.93
89	2018	Sole_heamorrha	636	100.4	99.5	7.6	7.0	0.9	3.7	0.87
90	2015	Sole_ulcer3	9681	99.6	99.6	10.2	10.2	0.0	1.0	0.99
91	2016	Sole_ulcer3	9107	99.6	99.6	8.8	8.8	0.0	1.0	0.99
92	2017	Sole_ulcer3	5641	99.8	99.7	8.4	7.8	0.1	2.9	0.94
93	2018	Sole_ulcer3	599	99.7	99.6	8.2	7.4	0.1	4.0	0.87
94	2015	Cork_screw_cla	9560	99.1	99.0	9.1	9.1	0.1	1.1	0.99
95	2016	Cork_screw_cla	9649	98.8	98.9	8.3	8.3	0.0	1.1	0.99
96	2017	Cork_screw_cla	6279	100.0	99.7	7.5	7.4	0.2	3.1	0.91
97	2018	Cork_screw_cla	666	99.6	97.8	6.8	7.0	1.8	4.8	0.76
98	2015	Skin_proferati	9630	100.8	100.7	9.0	9.0	0.0	1.1	0.99
99	2016	Skin_proferati	9305	99.6	99.7	9.2	9.2	-0.1	1.0	0.99
100	2017	Skin_proferati	5845	101.4	101.6	9.2	8.7	-0.2	2.9	0.95
101	2018	Skin_proferati	608	99.3	99.7	8.9	8.0	-0.4	5.0	0.83
102	2015	White_line_dou	9753	101.2	101.1	8.5	8.5	0.1	0.9	0.99
103	2016	White_line_dou	9246	99.4	99.2	9.9	9.8	0.2	0.9	1.00
104	2017	White_line_dou	5728	101.0	100.8	8.5	8.2	0.2	2.0	0.97
105	2018	White_line_dou	597	101.4	100.9	7.8	6.8	0.5	3.8	0.87
106	2015	Dermatitis	19832	100.4	100.3	8.9	8.9	0.1	1.1	0.99
107	2016	Dermatitis	18478	99.9	99.7	7.8	7.9	0.3	1.1	0.99
108	2017	Dermatitis	16871	100.7	100.8	8.1	7.5	-0.1	3.1	0.93

RDC summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
109	2018	Dermatitis	15630	100.1	100.2	7.8	6.2	-0.1	4.2	0.84
110	2019	Dermatitis	11533	101.1	101.7	7.7	5.9	-0.6	4.4	0.82
111	2020	Dermatitis	1559	100.3	101.8	6.8	5.5	-1.5	4.5	0.75
112	2015	Heel_horn_eros	16022	99.7	99.6	8.0	8.0	0.1	1.0	0.99
113	2016	Heel_horn_eros	14348	99.9	99.8	7.5	7.5	0.1	0.9	0.99
114	2017	Heel_horn_eros	12324	100.5	100.5	7.7	7.2	0.0	2.8	0.93
115	2018	Heel_horn_eros	10749	101.0	100.8	7.3	6.2	0.2	3.9	0.85
116	2019	Heel_horn_eros	7076	101.3	101.4	8.2	6.2	-0.1	4.5	0.84
117	2020	Heel_horn_eros	822	100.7	101.4	6.9	5.6	-0.7	3.7	0.84
118	2015	Sole_heamorrha	21294	100.6	100.6	7.7	7.7	0.1	1.0	0.99
119	2016	Sole_heamorrha	19348	100.3	100.1	7.6	7.6	0.1	1.0	0.99
120	2017	Sole_heamorrha	17798	100.6	100.4	7.1	6.5	0.2	2.7	0.92
121	2018	Sole_heamorrha	16014	100.7	100.2	7.1	6.1	0.5	3.8	0.84
122	2019	Sole_heamorrha	11378	101.5	101.3	7.6	5.8	0.2	4.4	0.82
123	2020	Sole_heamorrha	1446	102.6	102.2	6.0	5.3	0.3	3.8	0.78
124	2015	Sole_ulcer	21170	99.4	99.4	9.6	9.6	0.0	1.0	0.99
125	2016	Sole_ulcer	19079	99.6	99.6	8.4	8.4	0.0	1.0	0.99
126	2017	Sole_ulcer	17257	99.5	99.6	8.1	7.4	-0.1	2.9	0.93
127	2018	Sole_ulcer	15999	100.5	100.5	7.5	6.6	0.0	3.6	0.88
128	2019	Sole_ulcer	11108	100.5	100.5	7.5	6.3	0.0	3.9	0.86
129	2020	Sole_ulcer	1402	100.8	101.1	6.4	5.8	-0.3	3.7	0.82
130	2015	Cork_screw_cla	19864	99.2	99.1	8.9	8.9	0.1	1.1	0.99
131	2016	Cork_screw_cla	18424	98.7	98.8	8.3	8.3	0.0	1.1	0.99
132	2017	Cork_screw_cla	17369	99.9	99.7	7.4	7.3	0.1	2.7	0.93
133	2018	Cork_screw_cla	17098	100.6	99.5	6.8	6.7	1.1	4.0	0.82
134	2019	Cork_screw_cla	12562	100.9	100.4	7.5	6.3	0.6	3.9	0.85
135	2020	Cork_screw_cla	1557	100.8	99.8	6.2	5.9	1.0	3.6	0.83
136	2015	Skin_proferati	20700	100.3	100.3	8.8	8.9	0.0	1.0	0.99
137	2016	Skin_proferati	18596	99.6	99.6	9.0	9.0	0.0	1.0	0.99
138	2017	Skin_proferati	17088	101.0	101.3	8.8	8.3	-0.3	2.9	0.94
139	2018	Skin_proferati	16251	100.1	99.8	8.7	7.8	0.3	4.9	0.83
140	2019	Skin_proferati	11605	101.8	102.3	8.6	6.8	-0.5	4.6	0.85
141	2020	Skin_proferati	1466	101.3	101.8	7.3	6.3	-0.5	3.5	0.87
142	2015	White_line_dou	21273	101.2	101.1	8.6	8.6	0.1	0.9	0.99
143	2016	White_line_dou	19180	99.5	99.4	10.0	9.9	0.2	0.9	1.00
144	2017	White_line_dou	17458	100.8	100.6	8.6	8.3	0.1	2.0	0.97

RDC summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
145	2018	White_line_dou	16392	101.1	100.9	8.5	7.4	0.2	3.5	0.91
146	2019	White_line_dou	11358	101.7	101.2	8.6	7.3	0.5	3.4	0.92
147	2020	White_line_dou	1429	99.7	100.1	7.5	6.3	-0.5	3.6	0.88

sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2015	Dermatitis1	3899	100.7	100.6	10.9	10.8	0.1	2.1	0.98
2	2016	Dermatitis1	5168	100.2	100.0	10.1	10.0	0.3	2.0	0.98
3	2017	Dermatitis1	5729	101.0	101.3	10.3	9.4	-0.3	3.9	0.93
4	2018	Dermatitis1	6278	100.8	101.0	9.6	8.2	-0.2	4.5	0.88
5	2019	Dermatitis1	5771	101.8	102.6	10.0	8.6	-0.7	4.8	0.88
6	2020	Dermatitis1	1202	100.4	102.1	9.1	8.0	-1.8	5.1	0.83
7	2015	Heel_horn_eros	2902	99.9	99.8	9.2	9.1	0.1	1.7	0.98
8	2016	Heel_horn_eros	3538	100.4	100.3	9.0	8.9	0.1	1.7	0.98
9	2017	Heel_horn_eros	3510	100.8	101.0	8.6	8.3	-0.2	3.1	0.94
10	2018	Heel_horn_eros	3671	101.3	101.1	8.3	7.6	0.1	3.8	0.89
11	2019	Heel_horn_eros	3156	101.4	101.8	10.2	8.2	-0.4	4.9	0.88
12	2020	Heel_horn_eros	583	100.7	101.8	8.7	8.0	-1.0	3.2	0.93
13	2015	Sole_heamorrha	4070	100.7	100.7	8.7	8.5	0.1	2.0	0.97
14	2016	Sole_heamorrha	5255	100.7	100.6	8.6	8.3	0.1	1.9	0.97
15	2017	Sole_heamorrha	5550	100.8	100.7	8.3	7.6	0.1	3.4	0.91
16	2018	Sole_heamorrha	5977	101.1	100.7	8.4	7.3	0.4	4.2	0.87
17	2019	Sole_heamorrha	5305	102.4	101.9	8.7	7.0	0.5	4.9	0.83
18	2020	Sole_heamorrha	1034	103.5	102.7	7.7	6.8	0.7	4.4	0.83
19	2015	Sole_ulcer1	4000	98.3	98.3	10.7	10.5	0.1	2.0	0.98
20	2016	Sole_ulcer1	5030	99.7	99.7	9.7	9.3	-0.1	2.1	0.98
21	2017	Sole_ulcer1	5546	99.2	99.5	10.0	8.8	-0.3	3.7	0.93
22	2018	Sole_ulcer1	6047	100.8	100.9	9.1	7.7	-0.1	4.3	0.88
23	2019	Sole_ulcer1	5210	100.9	100.7	9.1	7.5	0.3	4.7	0.86
24	2020	Sole_ulcer1	1024	101.5	101.4	8.7	7.5	0.0	4.4	0.86
25	2015	Cork_screw_cla	3649	98.2	98.0	10.5	10.2	0.2	2.3	0.97
26	2016	Cork_screw_cla	4849	98.4	98.5	10.2	9.9	0.0	2.4	0.97
27	2017	Cork_screw_cla	5453	99.9	99.4	9.2	8.8	0.5	3.6	0.92
28	2018	Cork_screw_cla	6422	101.0	99.1	9.1	8.3	1.9	5.0	0.84
29	2019	Cork_screw_cla	5925	100.7	99.8	9.6	7.8	0.9	5.1	0.85
30	2020	Cork_screw_cla	1166	101.2	99.4	8.4	7.6	1.7	4.4	0.85
31	2015	Skin_proferati	3936	101.0	101.0	10.3	10.1	0.0	1.9	0.98
32	2016	Skin_proferati	5006	100.2	100.4	10.3	10.2	-0.1	1.9	0.98
33	2017	Skin_proferati	5542	101.6	102.1	10.0	9.4	-0.6	3.6	0.93
34	2018	Skin_proferati	6090	101.2	100.6	10.3	9.2	0.6	5.4	0.85
35	2019	Skin_proferati	5383	102.6	103.4	10.4	8.4	-0.8	5.2	0.87
36	2020	Skin_proferati	1046	102.2	102.8	9.0	8.0	-0.5	4.0	0.90
37	2015	White_line_dou	4015	100.6	100.6	11.1	10.8	0.1	1.9	0.99

sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
38	2016	White_line_dou	5121	98.7	98.3	12.3	12.0	0.3	1.9	0.99
39	2017	White_line_dou	5551	100.5	100.4	10.6	9.9	0.0	3.3	0.95
40	2018	White_line_dou	6082	100.1	100.2	10.6	8.9	0.0	4.5	0.91
41	2019	White_line_dou	5239	101.2	100.4	10.3	8.4	0.7	4.7	0.89
42	2020	White_line_dou	1032	99.5	100.2	9.1	7.8	-0.7	4.8	0.85
43	2015	Dermatitis2	3160	100.9	100.9	10.3	10.2	0.1	1.9	0.98
44	2016	Dermatitis2	4071	100.4	100.2	9.6	9.5	0.2	1.9	0.98
45	2017	Dermatitis2	4631	101.2	101.5	9.6	8.8	-0.3	3.6	0.92
46	2018	Dermatitis2	4603	101.0	101.2	9.2	8.0	-0.2	4.3	0.89
47	2019	Dermatitis2	722	101.9	102.0	9.9	8.4	-0.1	4.5	0.89
48	2015	Heel_horn_eros	2128	100.0	100.0	9.2	9.2	0.1	1.6	0.98
49	2016	Heel_horn_eros	2486	100.3	100.3	9.1	9.1	0.1	1.7	0.98
50	2017	Heel_horn_eros	2666	101.0	101.1	8.5	8.2	-0.1	3.1	0.93
51	2018	Heel_horn_eros	2396	101.3	101.1	8.4	7.6	0.2	3.9	0.89
52	2019	Heel_horn_eros	341	101.4	100.9	9.4	7.9	0.6	4.6	0.87
53	2015	Sole_heamorrha	3238	100.7	100.6	9.1	9.0	0.1	1.9	0.98
54	2016	Sole_heamorrha	4063	100.7	100.6	8.9	8.8	0.1	1.9	0.98
55	2017	Sole_heamorrha	4302	100.9	100.7	8.7	7.9	0.2	3.5	0.92
56	2018	Sole_heamorrha	4071	101.4	100.7	8.6	7.6	0.7	4.3	0.87
57	2019	Sole_heamorrha	608	102.5	101.7	8.8	7.1	0.8	4.9	0.83
58	2015	Sole_ulcer2	3099	98.7	98.8	11.4	11.2	-0.1	1.9	0.99
59	2016	Sole_ulcer2	3955	99.6	99.6	10.3	10.1	-0.1	1.9	0.98
60	2017	Sole_ulcer2	4412	99.0	99.4	10.0	9.1	-0.4	3.7	0.93
61	2018	Sole_ulcer2	4059	100.5	100.4	9.2	8.3	0.0	4.1	0.89
62	2019	Sole_ulcer2	579	100.4	100.0	8.7	7.8	0.4	4.0	0.89
63	2015	Cork_screw_cla	2900	98.3	98.1	10.6	10.5	0.2	2.2	0.98
64	2016	Cork_screw_cla	3917	99.0	99.2	10.2	10.0	-0.1	2.3	0.97
65	2017	Cork_screw_cla	4699	99.9	99.6	9.2	8.9	0.4	3.8	0.91
66	2018	Cork_screw_cla	4594	100.7	98.9	8.8	8.4	1.7	4.8	0.85
67	2019	Cork_screw_cla	695	101.1	100.5	9.4	7.9	0.6	5.0	0.85
68	2015	Skin_proferati	3079	101.2	101.2	10.6	10.5	0.0	1.8	0.99
69	2016	Skin_proferati	3918	100.1	100.3	10.6	10.5	-0.2	1.8	0.99
70	2017	Skin_proferati	4522	101.9	102.3	10.2	9.8	-0.4	3.5	0.94
71	2018	Skin_proferati	4227	101.0	100.6	10.4	9.6	0.4	5.1	0.87
72	2019	Skin_proferati	600	102.4	102.6	10.5	8.7	-0.2	5.4	0.86
73	2015	White_line_dou	3132	100.6	100.4	10.0	9.8	0.3	1.7	0.98
74	2016	White_line_dou	3983	98.7	98.4	10.9	10.7	0.2	1.7	0.99

sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
75	2017	White_line_dou	4487	101.0	101.0	9.8	9.3	0.1	2.9	0.95
76	2018	White_line_dou	4121	100.7	100.1	9.4	8.2	0.6	4.1	0.90
77	2019	White_line_dou	592	101.7	100.9	9.0	7.8	0.8	4.0	0.90
78	2015	Dermatitis3	2170	101.2	101.0	10.6	10.6	0.1	1.9	0.98
79	2016	Dermatitis3	2817	100.3	100.0	9.9	9.8	0.2	1.9	0.98
80	2017	Dermatitis3	2675	101.4	101.6	9.8	9.1	-0.2	3.8	0.92
81	2018	Dermatitis3	548	100.2	100.5	9.7	8.5	-0.4	4.4	0.89
82	2015	Heel_horn_eros	1323	100.3	100.2	9.5	9.5	0.0	1.7	0.98
83	2016	Heel_horn_eros	1642	100.7	100.6	9.4	9.3	0.1	1.7	0.98
84	2017	Heel_horn_eros	1439	101.0	101.2	8.9	8.5	-0.2	3.2	0.93
85	2018	Heel_horn_eros	272	100.6	100.9	8.4	7.5	-0.3	3.8	0.89
86	2015	Sole_heamorrha	2128	101.0	100.9	9.6	9.5	0.1	1.9	0.98
87	2016	Sole_heamorrha	2629	100.6	100.5	9.4	9.3	0.1	1.9	0.98
88	2017	Sole_heamorrha	2299	100.7	100.6	9.1	8.4	0.0	3.5	0.92
89	2018	Sole_heamorrha	449	100.3	99.9	9.5	8.6	0.4	4.1	0.90
90	2015	Sole_ulcer3	2091	99.2	99.1	11.7	11.5	0.0	1.8	0.99
91	2016	Sole_ulcer3	2629	99.6	99.6	10.3	10.3	0.0	1.8	0.98
92	2017	Sole_ulcer3	2350	98.9	99.0	10.3	9.3	-0.1	3.9	0.93
93	2018	Sole_ulcer3	446	98.8	99.2	10.0	9.2	-0.4	4.3	0.90
94	2015	Cork_screw_cla	2059	97.9	97.7	10.8	10.6	0.3	2.0	0.98
95	2016	Cork_screw_cla	2830	99.0	99.2	9.8	9.7	-0.2	2.1	0.98
96	2017	Cork_screw_cla	2667	100.0	99.4	9.0	8.8	0.6	3.8	0.91
97	2018	Cork_screw_cla	514	98.6	96.7	9.1	9.3	1.9	4.7	0.87
98	2015	Skin_proferati	2067	101.5	101.4	10.7	10.6	0.1	1.8	0.99
99	2016	Skin_proferati	2694	100.3	100.4	10.8	10.7	-0.1	1.8	0.99
100	2017	Skin_proferati	2439	102.1	102.4	10.4	9.8	-0.4	3.7	0.94
101	2018	Skin_proferati	453	99.0	99.9	10.8	9.9	-1.0	5.1	0.88
102	2015	White_line_dou	2087	100.8	100.7	10.1	9.9	0.2	1.6	0.99
103	2016	White_line_dou	2685	98.6	98.4	11.3	11.2	0.2	1.6	0.99
104	2017	White_line_dou	2392	100.8	100.7	10.1	9.5	0.0	2.9	0.96
105	2018	White_line_dou	451	101.3	100.6	9.4	8.6	0.7	3.8	0.91
106	2015	Dermatitis	3899	100.8	100.7	10.6	10.5	0.1	2.0	0.98
107	2016	Dermatitis	5168	100.2	100.0	9.7	9.6	0.3	1.9	0.98
108	2017	Dermatitis	5729	101.0	101.3	9.8	9.0	-0.3	3.7	0.92
109	2018	Dermatitis	6278	100.9	100.9	9.4	8.1	0.0	4.3	0.89
110	2019	Dermatitis	5771	101.7	102.4	9.7	8.4	-0.7	4.6	0.88
111	2020	Dermatitis	1202	100.3	102.0	8.8	7.9	-1.7	4.7	0.85

sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
112	2015	Heel_horn_eros	2902	99.9	99.8	9.3	9.2	0.1	1.7	0.98
113	2016	Heel_horn_eros	3538	100.2	100.2	9.0	8.9	0.1	1.7	0.98
114	2017	Heel_horn_eros	3510	100.8	100.9	8.6	8.3	-0.2	3.1	0.93
115	2018	Heel_horn_eros	3671	101.3	101.1	8.4	7.6	0.2	3.9	0.89
116	2019	Heel_horn_eros	3156	101.3	101.7	10.2	8.3	-0.4	4.8	0.88
117	2020	Heel_horn_eros	583	100.5	101.7	8.9	8.1	-1.1	3.2	0.93
118	2015	Sole_heamorrha	4070	100.6	100.5	9.1	9.0	0.1	1.9	0.98
119	2016	Sole_heamorrha	5255	100.4	100.3	9.0	8.8	0.1	1.9	0.98
120	2017	Sole_heamorrha	5550	100.8	100.7	8.6	7.9	0.1	3.4	0.92
121	2018	Sole_heamorrha	5977	101.2	100.7	8.6	7.6	0.5	4.2	0.87
122	2019	Sole_heamorrha	5305	102.4	101.9	8.9	7.1	0.5	4.8	0.84
123	2020	Sole_heamorrha	1034	103.4	102.7	7.8	7.0	0.7	4.3	0.84
124	2015	Sole_ulcer	4000	98.8	98.8	11.2	11.0	0.0	1.8	0.99
125	2016	Sole_ulcer	5030	99.6	99.6	9.9	9.7	0.0	1.9	0.98
126	2017	Sole_ulcer	5546	99.2	99.4	9.9	8.9	-0.3	3.7	0.93
127	2018	Sole_ulcer	6047	100.6	100.7	9.0	8.0	0.0	4.0	0.89
128	2019	Sole_ulcer	5210	100.7	100.5	8.9	7.6	0.2	4.2	0.88
129	2020	Sole_ulcer	1024	101.1	101.4	8.6	7.5	-0.3	4.2	0.87
130	2015	Cork_screw_cla	3649	98.2	98.0	10.5	10.3	0.2	2.1	0.98
131	2016	Cork_screw_cla	4849	98.8	98.9	9.9	9.7	-0.1	2.2	0.97
132	2017	Cork_screw_cla	5453	99.9	99.4	9.0	8.8	0.5	3.6	0.92
133	2018	Cork_screw_cla	6422	100.6	99.1	8.6	8.3	1.5	4.6	0.86
134	2019	Cork_screw_cla	5925	100.6	99.8	9.3	7.7	0.8	4.7	0.86
135	2020	Cork_screw_cla	1166	100.8	99.2	8.1	7.6	1.6	4.2	0.86
136	2015	Skin_proferati	3936	101.0	101.0	10.6	10.4	0.0	1.8	0.99
137	2016	Skin_proferati	5006	100.1	100.2	10.6	10.5	-0.1	1.8	0.99
138	2017	Skin_proferati	5542	101.7	102.2	10.2	9.6	-0.5	3.6	0.94
139	2018	Skin_proferati	6090	101.0	100.6	10.3	9.3	0.4	5.0	0.87
140	2019	Skin_proferati	5383	102.7	103.4	10.3	8.5	-0.7	4.8	0.88
141	2020	Skin_proferati	1046	102.1	102.6	9.1	8.1	-0.5	3.8	0.91
142	2015	White_line_dou	4015	100.7	100.5	10.2	10.0	0.1	1.6	0.99
143	2016	White_line_dou	5121	98.7	98.4	11.4	11.2	0.3	1.7	0.99
144	2017	White_line_dou	5551	100.8	100.8	9.9	9.4	0.0	2.9	0.96
145	2018	White_line_dou	6082	100.4	100.1	9.8	8.4	0.3	4.1	0.91
146	2019	White_line_dou	5239	101.1	100.6	9.5	8.0	0.5	3.9	0.91
147	2020	White_line_dou	1032	99.4	100.0	8.7	7.5	-0.6	4.2	0.88

sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2019	Dermatitis1	15541	101.4	102.0	9.3	8.3	-0.6	4.3	0.89
2	2020	Dermatitis1	22333	100.9	102.3	8.7	7.7	-1.4	4.2	0.87
3	2021	Dermatitis1	23058	102.4	102.7	8.2	7.4	-0.3	3.4	0.91
4	2022	Dermatitis1	6375	102.6	103.0	7.8	7.3	-0.4	3.2	0.91
5	2019	Heel_horn_eros	18156	100.5	101.0	9.5	7.8	-0.5	4.5	0.89
6	2020	Heel_horn_eros	22952	101.5	101.8	7.8	7.2	-0.3	3.0	0.92
7	2021	Heel_horn_eros	23058	102.7	102.5	7.5	7.1	0.2	2.8	0.93
8	2022	Heel_horn_eros	6375	102.6	103.0	7.5	7.1	-0.4	2.7	0.93
9	2019	Sole_heamorrha	16007	101.6	101.2	8.7	7.1	0.4	4.6	0.85
10	2020	Sole_heamorrha	22501	103.0	102.5	7.8	7.0	0.5	3.9	0.86
11	2021	Sole_heamorrha	23058	103.9	103.1	7.9	6.9	0.8	3.3	0.91
12	2022	Sole_heamorrha	6375	103.7	102.9	7.5	6.6	0.8	3.3	0.90
13	2019	Sole_ulcer1	16102	101.1	101.0	9.0	7.5	0.1	4.6	0.86
14	2020	Sole_ulcer1	22511	102.5	102.8	8.2	7.4	-0.3	4.2	0.86
15	2021	Sole_ulcer1	23058	103.8	103.0	8.0	7.4	0.8	3.4	0.90
16	2022	Sole_ulcer1	6375	103.4	103.0	7.5	6.9	0.4	3.4	0.89
17	2019	Cork_screw_cla	15387	100.4	99.5	9.5	7.9	0.9	4.7	0.87
18	2020	Cork_screw_cla	22369	101.1	99.3	8.2	7.7	1.8	3.9	0.88
19	2021	Cork_screw_cla	23058	101.3	99.9	8.1	7.5	1.4	3.6	0.90
20	2022	Cork_screw_cla	6375	101.2	100.0	8.0	7.4	1.1	3.5	0.90
21	2019	Skin_proferati	15929	101.7	102.5	10.0	8.4	-0.8	5.0	0.87
22	2020	Skin_proferati	22489	102.2	102.1	8.5	7.9	0.1	3.7	0.90
23	2021	Skin_proferati	23058	102.2	101.9	8.3	7.7	0.3	3.4	0.91
24	2022	Skin_proferati	6375	102.7	102.6	8.0	7.5	0.1	3.0	0.93
25	2019	White_line_dou	16073	100.6	100.2	10.4	8.3	0.4	4.8	0.89
26	2020	White_line_dou	22503	99.1	100.4	9.0	7.8	-1.3	4.5	0.86
27	2021	White_line_dou	23058	101.3	100.9	8.5	7.6	0.4	3.6	0.91
28	2022	White_line_dou	6375	100.9	100.6	8.2	7.2	0.4	3.5	0.90
29	2019	Dermatitis2	20590	101.4	102.1	9.3	8.1	-0.8	4.3	0.89
30	2020	Dermatitis2	23535	101.0	102.3	8.3	7.4	-1.2	3.9	0.89
31	2021	Dermatitis2	23058	102.2	102.5	7.9	7.3	-0.3	3.1	0.92
32	2022	Dermatitis2	6375	102.5	102.9	7.7	7.2	-0.4	3.0	0.92
33	2019	Heel_horn_eros	20971	100.5	101.1	9.5	7.8	-0.5	4.4	0.89
34	2020	Heel_horn_eros	23535	101.1	101.6	7.9	7.2	-0.5	3.0	0.93
35	2021	Heel_horn_eros	23058	102.6	102.3	7.5	7.0	0.2	2.8	0.93
36	2022	Heel_horn_eros	6375	102.5	102.9	7.5	7.1	-0.4	2.6	0.94
37	2019	Sole_heamorrha	20704	101.6	101.2	8.9	7.3	0.4	4.5	0.86

sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
38	2020	Sole_heamorrha	23535	102.9	102.3	7.9	7.1	0.6	4.0	0.86
39	2021	Sole_heamorrha	23058	104.0	103.1	8.1	7.2	0.9	3.3	0.91
40	2022	Sole_heamorrha	6375	103.7	102.9	7.6	6.9	0.8	3.3	0.90
41	2019	Sole_ulcer2	20733	100.9	101.0	8.9	7.7	0.0	4.0	0.89
42	2020	Sole_ulcer2	23535	102.3	102.8	8.2	7.4	-0.5	4.0	0.87
43	2021	Sole_ulcer2	23058	103.6	102.8	7.9	7.4	0.7	3.2	0.91
44	2022	Sole_ulcer2	6375	103.1	102.8	7.5	7.0	0.3	3.3	0.90
45	2019	Cork_screw_cla	20617	100.4	99.7	9.4	8.0	0.7	4.5	0.87
46	2020	Cork_screw_cla	23535	100.9	99.4	8.1	7.8	1.5	3.8	0.89
47	2021	Cork_screw_cla	23058	101.5	100.2	8.1	7.8	1.3	3.3	0.91
48	2022	Cork_screw_cla	6375	101.4	100.5	8.1	7.8	1.0	3.4	0.91
49	2019	Skin_proferati	20712	102.0	102.7	10.0	8.6	-0.7	4.6	0.89
50	2020	Skin_proferati	23535	102.1	102.0	8.7	8.1	0.1	3.4	0.92
51	2021	Skin_proferati	23058	102.1	101.7	8.4	7.9	0.3	3.1	0.93
52	2022	Skin_proferati	6375	102.6	102.4	8.1	7.6	0.3	2.8	0.94
53	2019	White_line_dou	20720	100.6	100.3	9.5	8.0	0.3	3.9	0.92
54	2020	White_line_dou	23535	99.2	99.8	8.7	7.5	-0.6	3.9	0.90
55	2021	White_line_dou	23058	101.4	100.8	8.5	7.6	0.6	3.1	0.93
56	2022	White_line_dou	6375	101.0	100.5	7.9	7.1	0.5	3.0	0.92
57	2019	Dermatitis3	21312	101.3	101.9	9.2	8.2	-0.6	4.3	0.88
58	2020	Dermatitis3	23535	100.9	102.1	8.5	7.5	-1.2	4.1	0.88
59	2021	Dermatitis3	23058	102.4	102.5	8.0	7.3	-0.2	3.2	0.91
60	2022	Dermatitis3	6375	102.5	102.9	7.7	7.2	-0.4	3.1	0.92
61	2019	Heel_horn_eros	21312	100.5	101.0	9.7	8.0	-0.5	4.6	0.88
62	2020	Heel_horn_eros	23535	101.3	101.8	8.0	7.4	-0.5	3.1	0.92
63	2021	Heel_horn_eros	23058	102.7	102.4	7.7	7.2	0.3	2.8	0.93
64	2022	Heel_horn_eros	6375	102.5	103.0	7.6	7.2	-0.5	2.7	0.93
65	2019	Sole_heamorrha	21312	101.8	101.5	9.1	7.4	0.4	4.6	0.86
66	2020	Sole_heamorrha	23535	103.0	102.6	8.0	7.3	0.4	4.0	0.87
67	2021	Sole_heamorrha	23058	104.1	103.2	8.2	7.3	0.9	3.3	0.91
68	2022	Sole_heamorrha	6375	103.8	103.0	7.8	7.0	0.8	3.3	0.91
69	2019	Sole_ulcer3	21312	101.0	100.8	8.9	7.9	0.2	4.0	0.89
70	2020	Sole_ulcer3	23535	101.9	102.6	8.2	7.6	-0.7	3.9	0.88
71	2021	Sole_ulcer3	23058	103.5	102.8	7.9	7.5	0.7	3.2	0.92
72	2022	Sole_ulcer3	6375	103.1	102.8	7.5	7.1	0.2	3.2	0.91
73	2019	Cork_screw_cla	21312	100.3	99.4	9.2	7.9	0.9	4.4	0.88
74	2020	Cork_screw_cla	23535	100.0	98.7	8.0	7.8	1.3	3.5	0.90

sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
75	2021	Cork_screw_cla	23058	100.8	99.6	8.1	7.9	1.2	3.1	0.93
76	2022	Cork_screw_cla	6375	100.7	99.8	8.0	7.9	0.9	3.1	0.92
77	2019	Skin_proferati	21312	102.0	102.7	10.0	8.6	-0.7	4.6	0.89
78	2020	Skin_proferati	23535	101.9	102.0	8.8	8.2	-0.2	3.5	0.92
79	2021	Skin_proferati	23058	102.0	101.8	8.5	7.9	0.2	3.1	0.93
80	2022	Skin_proferati	6375	102.6	102.4	8.2	7.7	0.2	2.8	0.94
81	2019	White_line_dou	21312	100.4	100.2	9.5	8.1	0.2	3.7	0.92
82	2020	White_line_dou	23535	98.6	99.6	8.9	7.6	-0.9	3.9	0.90
83	2021	White_line_dou	23058	100.9	100.3	8.5	7.5	0.5	3.2	0.93
84	2022	White_line_dou	6375	100.4	100.1	7.9	7.0	0.3	3.0	0.92
85	2019	Dermatitis	15541	101.3	101.9	9.1	8.1	-0.6	4.2	0.89
86	2020	Dermatitis	22333	100.9	102.2	8.5	7.5	-1.3	4.0	0.88
87	2021	Dermatitis	23058	102.3	102.6	7.9	7.3	-0.2	3.2	0.92
88	2022	Dermatitis	6375	102.5	102.9	7.7	7.2	-0.4	3.1	0.92
89	2019	Heel_horn_eros	18156	100.4	100.9	9.5	7.8	-0.5	4.5	0.89
90	2020	Heel_horn_eros	22952	101.3	101.7	7.9	7.2	-0.4	3.0	0.92
91	2021	Heel_horn_eros	23058	102.7	102.4	7.6	7.1	0.3	2.8	0.93
92	2022	Heel_horn_eros	6375	102.5	103.0	7.5	7.1	-0.4	2.7	0.93
93	2019	Sole_heamorrha	16007	101.6	101.2	8.9	7.2	0.4	4.5	0.86
94	2020	Sole_heamorrha	22501	103.0	102.5	7.8	7.1	0.5	4.0	0.86
95	2021	Sole_heamorrha	23058	104.0	103.1	8.0	7.1	0.9	3.3	0.91
96	2022	Sole_heamorrha	6375	103.8	102.9	7.6	6.8	0.8	3.3	0.90
97	2019	Sole_ulcer	16102	101.1	101.0	8.8	7.6	0.1	4.1	0.88
98	2020	Sole_ulcer	22511	102.2	102.8	8.1	7.4	-0.5	4.0	0.87
99	2021	Sole_ulcer	23058	103.6	102.9	7.8	7.4	0.7	3.2	0.91
100	2022	Sole_ulcer	6375	103.2	102.9	7.4	6.9	0.3	3.3	0.90
101	2019	Cork_screw_cla	15387	100.3	99.5	9.2	7.8	0.9	4.4	0.88
102	2020	Cork_screw_cla	22369	100.6	99.1	8.0	7.7	1.5	3.6	0.90
103	2021	Cork_screw_cla	23058	101.1	99.8	8.0	7.6	1.3	3.2	0.92
104	2022	Cork_screw_cla	6375	101.0	100.0	7.9	7.6	1.0	3.2	0.91
105	2019	Skin_proferati	15929	101.8	102.5	9.9	8.5	-0.7	4.7	0.88
106	2020	Skin_proferati	22489	102.0	102.0	8.6	8.1	0.0	3.5	0.92
107	2021	Skin_proferati	23058	102.1	101.8	8.4	7.8	0.3	3.2	0.93
108	2022	Skin_proferati	6375	102.6	102.5	8.1	7.6	0.2	2.8	0.94
109	2019	White_line_dou	16073	100.4	100.1	9.7	8.0	0.2	4.0	0.91
110	2020	White_line_dou	22503	98.9	99.9	8.8	7.5	-1.0	4.0	0.89

sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
111	2021	White_line_dou	23058	101.1	100.6	8.4	7.5	0.5	3.2	0.92
112	2022	White_line_dou	6375	100.7	100.4	7.9	7.0	0.4	3.1	0.92

JER summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2010	Dermatitis1	55	73	87	102.4	102.4	11.8	11.4	0.1	1.9	0.99
2	2011	Dermatitis1	47	65	65	100.6	100.8	13.3	12.9	-0.2	2.2	0.99
3	2012	Dermatitis1	47	152	278	103.4	103.0	13.9	13.9	0.4	2.2	0.99
4	2013	Dermatitis1	49	128	242	100.8	100.8	11.4	11.3	0.0	2.2	0.98
5	2014	Dermatitis1	36	220	270	96.2	97.3	14.0	13.4	-1.1	2.3	0.99
6	2015	Dermatitis1	30	521	504	100.6	100.8	11.7	10.9	-0.2	5.7	0.88
7	2016	Dermatitis1	26	396	409	97.2	98.5	14.8	10.2	-1.3	9.2	0.79
8	2017	Dermatitis1	29	357	297	99.2	97.7	13.5	9.7	1.5	9.2	0.73
9	2010	Heel_horn_eros	51	48	53	104.6	104.8	12.4	12.9	-0.2	2.1	0.99
10	2011	Heel_horn_eros	40	46	41	99.7	100.2	13.0	12.0	-0.5	2.4	0.99
11	2012	Heel_horn_eros	44	94	160	103.6	103.6	13.5	13.3	0.0	2.5	0.98
12	2013	Heel_horn_eros	45	87	168	99.1	99.3	15.0	14.5	-0.3	2.7	0.98
13	2014	Heel_horn_eros	35	139	173	97.3	99.4	12.5	11.8	-2.0	2.2	0.99
14	2015	Heel_horn_eros	30	301	284	101.5	101.7	11.1	8.9	-0.2	7.3	0.75
15	2016	Heel_horn_eros	24	212	206	97.9	98.9	15.2	11.9	-1.0	7.2	0.89
16	2017	Heel_horn_eros	29	151	128	102.9	102.3	13.6	10.6	0.6	8.7	0.77
17	2010	Sole_heamorrha	55	75	89	106.5	106.0	14.1	14.4	0.6	2.9	0.98
18	2011	Sole_heamorrha	47	68	64	102.7	103.1	11.6	11.4	-0.4	2.8	0.97
19	2012	Sole_heamorrha	46	150	264	99.1	99.8	15.3	15.6	-0.7	3.1	0.98
20	2013	Sole_heamorrha	49	126	234	100.9	100.9	16.3	16.1	-0.1	2.3	0.99
21	2014	Sole_heamorrha	36	216	265	104.6	104.6	19.5	19.0	0.0	2.7	0.99
22	2015	Sole_heamorrha	30	488	469	102.2	101.1	19.2	11.7	1.1	13.5	0.72
23	2016	Sole_heamorrha	26	350	364	101.4	101.8	15.6	12.7	-0.3	9.8	0.78
24	2017	Sole_heamorrha	29	283	239	104.8	104.6	14.9	10.1	0.2	9.6	0.77
25	2010	Sole_ulcer1	55	81	95	102.3	102.5	14.1	14.2	-0.2	2.7	0.98
26	2011	Sole_ulcer1	47	73	69	97.7	97.7	12.3	11.7	0.0	2.6	0.98
27	2012	Sole_ulcer1	47	168	303	100.4	100.2	14.2	13.7	0.2	3.6	0.97
28	2013	Sole_ulcer1	49	140	261	97.9	98.1	17.3	17.5	-0.2	2.8	0.99
29	2014	Sole_ulcer1	36	241	294	100.9	99.6	21.3	21.8	1.3	3.1	0.99
30	2015	Sole_ulcer1	30	556	533	101.9	100.2	18.0	12.2	1.7	11.9	0.76
31	2016	Sole_ulcer1	26	422	434	98.6	98.1	20.1	16.1	0.5	11.0	0.84
32	2017	Sole_ulcer1	29	375	309	104.4	102.2	13.1	10.4	2.2	11.7	0.52
33	2010	Cork_screw_cla	55	75	89	103.4	103.8	15.7	16.2	-0.4	3.1	0.98
34	2011	Cork_screw_cla	47	66	61	102.3	102.9	13.5	13.3	-0.6	2.8	0.98
35	2012	Cork_screw_cla	46	162	298	102.8	103.2	13.2	13.1	-0.4	3.3	0.97
36	2013	Cork_screw_cla	50	130	247	100.0	100.9	17.0	15.9	-0.9	3.4	0.98

JER summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
37	2014	Cork_screw_cla	36	228	275	102.8	104.4	16.7	16.0	-1.6	3.9	0.97
38	2015	Cork_screw_cla	30	548	536	102.9	102.1	21.4	10.4	0.8	15.2	0.75
39	2016	Cork_screw_cla	26	432	446	99.7	100.6	21.2	14.2	-0.8	11.7	0.85
40	2017	Cork_screw_cla	29	381	316	108.3	106.7	14.3	9.2	1.6	10.0	0.72
41	2010	Skin_proferati	55	81	94	101.4	101.3	12.2	11.7	0.1	2.8	0.97
42	2011	Skin_proferati	47	73	69	102.6	102.7	10.2	9.9	-0.2	2.0	0.98
43	2012	Skin_proferati	47	168	303	103.8	103.6	11.0	10.8	0.2	2.7	0.97
44	2013	Skin_proferati	49	140	260	101.0	100.8	11.2	10.3	0.2	2.4	0.98
45	2014	Skin_proferati	36	241	294	98.7	100.5	13.2	12.5	-1.8	2.3	0.99
46	2015	Skin_proferati	30	557	532	101.8	102.0	12.9	10.4	-0.2	9.2	0.71
47	2016	Skin_proferati	26	424	437	100.0	102.0	13.9	10.8	-2.0	7.6	0.84
48	2017	Skin_proferati	29	374	309	102.5	102.8	12.4	7.6	-0.3	9.0	0.69
49	2010	White_line_dou	55	81	95	103.6	104.3	17.7	19.0	-0.7	3.8	0.98
50	2011	White_line_dou	47	73	69	99.3	100.2	13.1	12.5	-0.9	3.1	0.97
51	2012	White_line_dou	47	168	303	100.5	100.0	19.8	19.6	0.5	4.3	0.98
52	2013	White_line_dou	49	141	262	96.2	98.7	21.4	19.9	-2.6	4.2	0.98
53	2014	White_line_dou	36	242	296	106.0	105.9	23.3	21.0	0.1	5.2	0.98
54	2015	White_line_dou	30	557	534	102.2	100.2	24.1	16.5	1.9	15.6	0.77
55	2016	White_line_dou	26	422	434	101.2	102.7	27.1	17.0	-1.6	15.9	0.84
56	2017	White_line_dou	29	377	311	106.5	103.1	18.1	15.4	3.4	12.2	0.75
57	2010	Dermatitis2	54	60	73	101.1	101.1	10.6	10.3	0.0	1.8	0.99
58	2011	Dermatitis2	46	55	52	99.8	99.7	12.7	12.5	0.2	1.9	0.99
59	2012	Dermatitis2	47	121	209	103.3	102.9	12.6	12.7	0.4	2.3	0.98
60	2013	Dermatitis2	49	109	198	101.2	101.2	10.2	10.4	0.0	2.4	0.97
61	2014	Dermatitis2	36	185	226	95.6	96.6	12.8	12.4	-1.0	2.1	0.99
62	2015	Dermatitis2	30	402	362	100.5	100.9	10.6	10.2	-0.4	6.0	0.84
63	2016	Dermatitis2	26	229	237	97.2	97.8	14.2	9.4	-0.6	8.8	0.79
64	2017	Dermatitis2	13	63	50	97.2	96.6	14.2	9.0	0.5	9.3	0.77
65	2010	Heel_horn_eros	42	43	44	104.0	104.1	10.3	11.1	-0.1	2.0	0.98
66	2011	Heel_horn_eros	36	40	36	100.0	100.3	12.3	11.6	-0.3	2.1	0.99
67	2012	Heel_horn_eros	41	77	120	103.0	103.5	12.8	12.8	-0.5	2.5	0.98
68	2013	Heel_horn_eros	38	82	138	98.2	98.6	14.0	13.8	-0.4	2.5	0.98
69	2014	Heel_horn_eros	32	121	138	97.1	98.8	11.8	11.7	-1.8	2.1	0.98
70	2015	Heel_horn_eros	30	204	176	101.3	101.8	10.7	8.7	-0.5	7.6	0.72
71	2016	Heel_horn_eros	20	122	101	96.8	97.0	14.0	11.4	-0.2	7.6	0.84
72	2010	Sole_heamorrha	55	62	74	105.8	105.8	14.2	14.5	0.1	3.0	0.98

JER summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
73	2011	Sole_heamorrha	46	54	50	102.3	102.9	11.7	11.3	-0.6	2.8	0.97
74	2012	Sole_heamorrha	47	112	187	99.3	99.6	15.2	15.5	-0.3	3.2	0.98
75	2013	Sole_heamorrha	49	104	187	100.0	100.5	17.5	17.1	-0.6	2.4	0.99
76	2014	Sole_heamorrha	36	174	215	104.8	104.6	20.3	19.8	0.3	2.8	0.99
77	2015	Sole_heamorrha	30	357	318	102.1	100.7	20.1	12.4	1.4	14.0	0.73
78	2016	Sole_heamorrha	23	194	185	99.4	100.0	17.7	13.4	-0.7	11.1	0.78
79	2017	Sole_heamorrha	10	57	37	105.1	105.2	9.0	9.9	-0.1	9.4	0.50
80	2010	Sole_ulcer2	55	67	81	103.1	103.2	15.7	15.7	-0.1	2.7	0.98
81	2011	Sole_ulcer2	46	61	56	98.9	99.2	13.0	12.1	-0.3	2.5	0.98
82	2012	Sole_ulcer2	47	131	222	101.1	100.5	16.2	15.6	0.6	3.6	0.98
83	2013	Sole_ulcer2	49	116	211	97.7	97.9	20.4	19.8	-0.2	2.7	0.99
84	2014	Sole_ulcer2	36	198	241	102.1	101.1	23.1	22.6	0.9	3.0	0.99
85	2015	Sole_ulcer2	30	430	384	102.4	100.0	21.3	14.2	2.3	12.7	0.82
86	2016	Sole_ulcer2	25	252	251	97.8	98.2	23.1	17.6	-0.4	11.9	0.87
87	2017	Sole_ulcer2	13	70	57	104.8	104.8	17.3	12.7	0.0	15.7	0.49
88	2010	Cork_screw_cla	53	64	76	103.0	103.3	15.3	15.8	-0.3	3.0	0.98
89	2011	Cork_screw_cla	45	56	50	102.0	102.5	14.5	14.5	-0.5	2.6	0.98
90	2012	Cork_screw_cla	47	124	215	101.0	101.7	13.8	13.5	-0.7	3.0	0.98
91	2013	Cork_screw_cla	48	113	205	99.8	101.1	16.0	15.3	-1.3	3.1	0.98
92	2014	Cork_screw_cla	36	196	236	103.9	104.9	17.4	16.9	-1.1	3.7	0.98
93	2015	Cork_screw_cla	30	440	393	102.3	101.7	20.2	10.4	0.6	14.7	0.72
94	2016	Cork_screw_cla	25	250	249	100.1	100.1	19.4	12.1	0.0	12.0	0.81
95	2017	Cork_screw_cla	13	64	51	109.7	110.7	16.1	10.6	-1.0	10.5	0.76
96	2010	Skin_proferati	55	66	79	101.2	101.1	12.3	11.9	0.1	2.7	0.98
97	2011	Skin_proferati	46	60	55	102.2	102.3	9.7	9.5	-0.1	2.0	0.98
98	2012	Skin_proferati	47	127	215	103.6	103.4	10.8	10.7	0.2	2.6	0.97
99	2013	Skin_proferati	49	113	202	101.1	100.6	11.5	10.7	0.5	2.3	0.98
100	2014	Skin_proferati	36	194	235	98.9	100.5	13.2	12.7	-1.6	2.1	0.99
101	2015	Skin_proferati	30	423	375	101.8	101.9	12.7	10.5	-0.1	9.4	0.69
102	2016	Skin_proferati	25	251	250	100.2	102.2	14.2	10.8	-2.0	7.8	0.84
103	2017	Skin_proferati	13	69	57	102.8	103.5	13.0	7.0	-0.7	9.1	0.74
104	2010	White_line_dou	55	66	79	104.2	104.8	17.9	19.1	-0.6	3.9	0.98
105	2011	White_line_dou	46	60	55	100.5	101.3	13.4	12.6	-0.8	3.2	0.97
106	2012	White_line_dou	47	127	216	101.0	100.2	21.0	20.8	0.8	4.4	0.98
107	2013	White_line_dou	49	113	201	95.9	98.0	24.0	22.2	-2.1	4.4	0.99
108	2014	White_line_dou	36	193	235	106.2	105.9	25.8	23.1	0.3	5.4	0.98

JER summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
109	2015	White_line_dou	30	420	372	102.2	99.8	26.8	18.1	2.5	16.1	0.81
110	2016	White_line_dou	25	251	251	99.8	101.8	28.3	18.0	-2.0	16.4	0.84
111	2017	White_line_dou	13	70	57	109.8	107.5	19.3	16.1	2.2	14.5	0.68
112	2010	Dermatitis3	50	48	56	100.8	100.7	11.3	10.8	0.1	1.8	0.99
113	2011	Dermatitis3	45	43	40	99.7	99.7	13.2	13.0	0.0	2.0	0.99
114	2012	Dermatitis3	46	75	116	102.7	102.3	13.2	13.0	0.3	2.1	0.99
115	2013	Dermatitis3	45	83	138	100.8	100.5	9.8	10.1	0.3	2.3	0.97
116	2014	Dermatitis3	35	135	163	96.5	97.3	12.6	12.3	-0.8	2.1	0.99
117	2015	Dermatitis3	30	191	160	100.5	100.8	11.3	10.7	-0.3	6.0	0.85
118	2010	Heel_horn_eros	29	41	36	104.4	104.8	10.5	11.2	-0.3	1.8	0.99
119	2011	Heel_horn_eros	25	36	29	100.6	101.0	14.9	13.9	-0.4	2.5	0.99
120	2012	Heel_horn_eros	29	61	80	104.2	104.6	14.1	14.0	-0.4	2.8	0.98
121	2013	Heel_horn_eros	27	70	92	95.5	95.4	14.9	14.7	0.1	2.6	0.99
122	2014	Heel_horn_eros	26	93	89	97.1	98.9	11.9	11.2	-1.8	2.1	0.99
123	2015	Heel_horn_eros	28	92	74	101.3	101.7	11.1	9.5	-0.4	7.8	0.72
124	2010	Sole_heamorrha	48	48	52	105.4	105.5	14.4	14.8	0.0	2.8	0.98
125	2011	Sole_heamorrha	45	41	37	102.4	102.9	12.7	12.2	-0.5	2.6	0.98
126	2012	Sole_heamorrha	43	73	112	99.2	99.5	13.9	14.4	-0.3	3.2	0.97
127	2013	Sole_heamorrha	44	76	125	98.7	99.3	16.8	16.4	-0.5	2.5	0.99
128	2014	Sole_heamorrha	35	121	148	105.4	105.3	21.0	20.4	0.1	2.7	0.99
129	2015	Sole_heamorrha	29	156	131	102.7	101.2	20.4	12.0	1.5	14.5	0.72
130	2010	Sole_ulcer3	51	52	60	102.6	102.7	13.4	13.3	-0.1	2.5	0.98
131	2011	Sole_ulcer3	46	47	42	99.0	98.9	14.0	13.3	0.1	2.6	0.98
132	2012	Sole_ulcer3	46	80	123	99.4	99.0	14.8	14.2	0.4	3.2	0.98
133	2013	Sole_ulcer3	48	83	142	97.3	96.8	19.4	18.9	0.4	2.8	0.99
134	2014	Sole_ulcer3	35	145	174	102.5	100.6	22.5	23.0	1.9	3.2	0.99
135	2015	Sole_ulcer3	30	204	169	101.6	99.6	20.1	13.8	2.0	11.6	0.83
136	2010	Cork_screw_cla	48	51	59	102.5	102.7	16.7	16.8	-0.2	3.0	0.98
137	2011	Cork_screw_cla	45	43	38	102.9	103.6	14.1	14.2	-0.7	2.6	0.98
138	2012	Cork_screw_cla	45	78	122	100.2	100.6	13.9	13.6	-0.4	3.4	0.97
139	2013	Cork_screw_cla	47	85	145	100.4	101.3	14.8	14.0	-1.0	2.9	0.98
140	2014	Cork_screw_cla	35	148	179	104.3	105.5	17.0	16.3	-1.3	3.8	0.98
141	2015	Cork_screw_cla	30	208	174	102.4	101.4	20.9	10.4	1.0	15.3	0.71
142	2010	Skin_proferati	51	52	61	100.7	100.7	12.4	12.2	-0.1	2.5	0.98
143	2011	Skin_proferati	46	47	42	101.6	101.5	10.1	9.9	0.1	1.9	0.98
144	2012	Skin_proferati	46	81	124	103.4	103.2	10.7	10.5	0.2	2.3	0.98

JER summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
145	2013	Skin_proferati	48	84	143	100.7	100.2	10.6	10.0	0.4	2.3	0.98
146	2014	Skin_proferati	35	146	176	98.7	99.9	12.2	12.2	-1.3	2.1	0.98
147	2015	Skin_proferati	30	205	171	101.7	102.0	11.9	10.6	-0.3	8.5	0.72
148	2010	White_line_dou	50	53	61	104.5	105.0	17.1	17.6	-0.5	4.2	0.97
149	2011	White_line_dou	46	47	42	101.3	102.2	12.7	11.9	-0.9	3.2	0.97
150	2012	White_line_dou	45	81	124	100.9	100.1	19.8	19.7	0.8	4.5	0.97
151	2013	White_line_dou	48	83	142	95.9	98.0	23.8	21.6	-2.2	4.5	0.98
152	2014	White_line_dou	35	145	175	106.7	106.7	24.9	22.0	0.0	5.5	0.98
153	2015	White_line_dou	30	204	170	102.7	100.2	26.6	17.6	2.4	16.7	0.79
154	2010	Dermatitis	55	73	87	101.2	101.1	11.2	10.8	0.1	1.8	0.99
155	2011	Dermatitis	47	65	65	100.3	100.4	12.9	12.7	0.0	2.1	0.99
156	2012	Dermatitis	47	152	278	103.1	102.8	13.1	13.1	0.3	2.3	0.98
157	2013	Dermatitis	49	128	242	101.3	101.2	10.2	10.5	0.1	2.2	0.98
158	2014	Dermatitis	36	220	270	95.8	96.8	13.3	12.9	-1.0	2.0	0.99
159	2015	Dermatitis	30	521	504	100.5	100.8	11.2	10.5	-0.3	5.8	0.86
160	2016	Dermatitis	26	396	409	97.3	98.2	14.6	9.8	-0.8	8.9	0.80
161	2017	Dermatitis	29	357	297	99.2	97.5	12.5	9.1	1.7	8.4	0.74
162	2010	Heel_horn_eros	51	48	53	104.4	104.5	11.7	12.3	-0.1	2.0	0.99
163	2011	Heel_horn_eros	40	46	41	99.9	100.3	12.7	11.7	-0.4	2.3	0.99
164	2012	Heel_horn_eros	44	94	160	103.4	103.6	13.0	12.8	-0.3	2.5	0.98
165	2013	Heel_horn_eros	45	87	168	99.3	99.2	14.2	14.0	0.1	2.7	0.98
166	2014	Heel_horn_eros	35	139	173	96.9	98.7	11.8	11.2	-1.8	2.0	0.99
167	2015	Heel_horn_eros	30	301	284	101.2	101.7	10.7	8.9	-0.5	7.2	0.74
168	2016	Heel_horn_eros	24	212	206	98.1	98.6	14.2	11.4	-0.5	6.7	0.89
169	2017	Heel_horn_eros	29	151	128	102.8	102.4	13.4	10.8	0.3	7.9	0.81
170	2010	Sole_heamorrha	55	75	89	105.6	105.5	14.2	14.6	0.1	2.8	0.98
171	2011	Sole_heamorrha	47	68	64	102.2	102.7	12.0	11.6	-0.5	2.6	0.98
172	2012	Sole_heamorrha	46	150	264	99.4	99.9	15.2	15.3	-0.5	3.1	0.98
173	2013	Sole_heamorrha	49	126	234	100.1	100.6	17.1	16.8	-0.5	2.4	0.99
174	2014	Sole_heamorrha	36	216	265	104.9	104.8	20.2	19.7	0.2	2.6	0.99
175	2015	Sole_heamorrha	30	488	469	102.2	100.9	19.7	11.9	1.3	13.9	0.72
176	2016	Sole_heamorrha	26	350	364	101.2	101.9	17.0	13.4	-0.7	10.1	0.81
177	2017	Sole_heamorrha	29	283	239	105.1	104.4	14.4	10.5	0.8	9.7	0.74
178	2010	Sole_ulcer	55	81	95	102.6	102.8	13.9	13.9	-0.3	2.7	0.98
179	2011	Sole_ulcer	47	73	69	98.6	98.6	12.9	12.2	0.0	2.7	0.98
180	2012	Sole_ulcer	47	168	303	100.4	100.0	15.0	14.4	0.4	3.3	0.97

JER summery stastistics for SS and previous breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
181	2013	Sole_ulcer	49	140	261	97.7	97.5	18.8	18.5	0.2	2.6	0.99
182	2014	Sole_ulcer	36	241	294	101.8	100.4	22.1	22.1	1.4	2.9	0.99
183	2015	Sole_ulcer	30	556	533	101.8	100.0	19.6	13.3	1.9	11.8	0.81
184	2016	Sole_ulcer	26	422	434	98.6	98.5	21.1	16.5	0.1	11.2	0.85
185	2017	Sole_ulcer	29	375	309	103.8	101.8	13.8	11.2	2.1	11.2	0.62
186	2010	Cork_screw_cla	55	75	89	103.3	103.6	15.6	16.0	-0.4	2.8	0.98
187	2011	Cork_screw_cla	47	66	61	102.3	103.0	13.6	13.6	-0.6	2.7	0.98
188	2012	Cork_screw_cla	46	162	298	101.5	102.0	13.6	13.3	-0.5	3.1	0.97
189	2013	Cork_screw_cla	50	130	247	100.2	101.2	15.6	14.7	-0.9	3.0	0.98
190	2014	Cork_screw_cla	36	228	275	103.8	105.1	16.7	16.0	-1.3	3.8	0.97
191	2015	Cork_screw_cla	30	548	536	102.6	101.7	20.7	10.2	0.9	15.0	0.73
192	2016	Cork_screw_cla	26	432	446	100.5	101.0	19.4	13.1	-0.5	11.1	0.84
193	2017	Cork_screw_cla	29	381	316	107.7	106.6	14.7	9.6	1.1	9.0	0.80
194	2010	Skin_proferati	55	81	94	101.0	100.9	12.2	11.8	0.0	2.6	0.98
195	2011	Skin_proferati	47	73	69	102.3	102.3	10.1	9.8	0.0	2.0	0.98
196	2012	Skin_proferati	47	168	303	103.8	103.5	10.8	10.6	0.3	2.3	0.98
197	2013	Skin_proferati	49	140	260	101.0	100.6	11.0	10.3	0.3	2.3	0.98
198	2014	Skin_proferati	36	241	294	98.4	100.0	12.9	12.6	-1.6	2.1	0.99
199	2015	Skin_proferati	30	557	532	101.7	102.0	12.3	10.4	-0.3	8.9	0.71
200	2016	Skin_proferati	26	424	437	99.9	101.8	13.7	10.8	-1.9	7.7	0.83
201	2017	Skin_proferati	29	374	309	102.6	102.7	11.8	7.4	-0.1	8.4	0.70
202	2010	White_line_dou	55	81	95	104.2	104.7	17.4	18.3	-0.5	3.8	0.98
203	2011	White_line_dou	47	73	69	100.4	101.2	12.8	12.1	-0.8	3.1	0.97
204	2012	White_line_dou	47	168	303	101.0	100.3	20.1	20.0	0.7	4.5	0.98
205	2013	White_line_dou	49	141	262	96.1	98.5	23.1	21.1	-2.3	4.3	0.99
206	2014	White_line_dou	36	242	296	106.1	106.0	24.4	21.8	0.1	5.2	0.98
207	2015	White_line_dou	30	557	534	102.4	100.1	25.7	17.3	2.3	16.1	0.79
208	2016	White_line_dou	26	422	434	100.7	102.8	27.2	17.4	-2.1	15.5	0.85
209	2017	White_line_dou	29	377	311	105.6	102.6	18.0	15.6	3.0	12.0	0.75

JER summery stastistics for SS and prev SS breeding value for nordic AI bulls with no offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2019	Dermatitis1	51	.	.	96.9	96.8	10.9	7.6	0.1	6.8	0.78
2	2020	Dermatitis1	32	.	.	101.3	102.4	9.8	6.6	-1.1	6.7	0.73
3	2021	Dermatitis1	40	.	.	102.0	100.2	7.9	6.6	1.8	4.2	0.85
4	2022	Dermatitis1	15	.	.	100.4	100.3	9.1	7.9	0.1	4.2	0.89
5	2019	Heel_horn_eros	51	.	.	99.7	100.9	9.0	6.6	-1.2	6.3	0.71
6	2020	Heel_horn_eros	32	.	.	99.7	102.1	6.6	5.4	-2.4	4.1	0.78
7	2021	Heel_horn_eros	40	.	.	102.6	102.4	5.7	4.4	0.2	3.7	0.75
8	2022	Heel_horn_eros	15	.	.	101.1	102.3	9.3	8.0	-1.2	3.3	0.94
9	2019	Sole_heamorrha	51	.	.	101.6	103.3	8.5	7.6	-1.7	5.4	0.78
10	2020	Sole_heamorrha	32	.	.	98.8	99.9	8.3	5.5	-1.1	5.7	0.74
11	2021	Sole_heamorrha	40	.	.	102.8	102.5	8.2	7.3	0.3	3.7	0.89
12	2022	Sole_heamorrha	15	.	.	103.5	104.0	12.0	9.0	-0.5	5.3	0.91
13	2019	Sole_ulcer1	51	.	.	100.5	101.5	10.8	7.8	-1.0	7.1	0.75
14	2020	Sole_ulcer1	32	.	.	98.4	98.5	10.4	8.9	-0.1	5.9	0.83
15	2021	Sole_ulcer1	40	.	.	102.0	100.6	8.1	7.3	1.4	3.6	0.89
16	2022	Sole_ulcer1	15	.	.	100.6	100.8	12.3	10.1	-0.2	5.2	0.91
17	2019	Cork_screw_cla	51	.	.	105.2	104.6	9.4	7.6	0.6	6.4	0.74
18	2020	Cork_screw_cla	32	.	.	99.2	99.7	11.1	6.6	-0.5	6.3	0.87
19	2021	Cork_screw_cla	40	.	.	104.1	102.6	7.9	6.9	1.5	4.1	0.86
20	2022	Cork_screw_cla	15	.	.	104.7	104.0	12.3	9.5	0.7	4.5	0.95
21	2019	Skin_proferati	51	.	.	100.5	101.3	8.7	5.7	-0.8	6.0	0.73
22	2020	Skin_proferati	32	.	.	99.6	102.4	7.4	5.8	-2.8	4.2	0.83
23	2021	Skin_proferati	40	.	.	104.1	103.3	6.6	5.3	0.8	3.6	0.84
24	2022	Skin_proferati	15	.	.	102.5	103.0	6.8	6.1	-0.5	3.2	0.88
25	2019	White_line_dou	51	.	.	105.6	104.8	12.1	10.2	0.7	6.8	0.83
26	2020	White_line_dou	32	.	.	98.0	99.9	13.9	9.6	-1.9	8.3	0.81
27	2021	White_line_dou	40	.	.	106.0	103.2	9.5	9.4	2.8	4.4	0.89
28	2022	White_line_dou	15	.	.	104.3	104.3	16.1	11.2	0.0	7.7	0.90
29	2019	Dermatitis2	51	.	.	97.6	96.5	9.8	7.3	1.1	6.0	0.79
30	2020	Dermatitis2	32	.	.	102.0	102.1	9.2	6.3	-0.1	6.3	0.72
31	2021	Dermatitis2	40	.	.	101.8	99.6	7.8	6.7	2.3	4.0	0.86
32	2022	Dermatitis2	15	.	.	100.5	99.5	8.1	7.1	1.0	4.0	0.87
33	2019	Heel_horn_eros	51	.	.	100.2	101.1	7.8	6.5	-0.9	5.4	0.72
34	2020	Heel_horn_eros	32	.	.	99.9	101.6	5.6	4.9	-1.7	3.7	0.76
35	2021	Heel_horn_eros	40	.	.	102.3	102.4	5.6	4.9	-0.1	3.4	0.80
36	2022	Heel_horn_eros	15	.	.	101.1	102.2	8.5	7.7	-1.1	3.0	0.93

JER summery stastistics for SS and prev SS breeding value for nordic AI bulls with no offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
37	2019	Sole_heamorrha	51	.	.	101.8	102.9	9.1	8.0	-1.1	5.8	0.78
38	2020	Sole_heamorrha	32	.	.	98.5	99.7	9.3	6.4	-1.3	5.9	0.78
39	2021	Sole_heamorrha	40	.	.	103.2	102.1	7.8	7.4	1.1	3.2	0.91
40	2022	Sole_heamorrha	15	.	.	103.4	103.9	12.5	9.4	-0.5	5.5	0.91
41	2019	Sole_ulcer2	51	.	.	100.5	101.8	11.5	8.5	-1.3	7.3	0.77
42	2020	Sole_ulcer2	32	.	.	97.3	98.3	11.8	9.1	-1.0	6.5	0.84
43	2021	Sole_ulcer2	40	.	.	102.4	100.9	8.6	7.8	1.6	3.7	0.91
44	2022	Sole_ulcer2	15	.	.	100.9	101.3	14.0	10.6	-0.4	5.9	0.92
45	2019	Cork_screw_cla	51	.	.	106.2	105.5	10.3	8.3	0.7	5.9	0.82
46	2020	Cork_screw_cla	32	.	.	99.4	99.3	11.2	6.5	0.1	6.9	0.83
47	2021	Cork_screw_cla	40	.	.	103.7	102.8	8.6	7.7	0.9	3.8	0.90
48	2022	Cork_screw_cla	15	.	.	104.7	104.0	11.6	8.9	0.7	4.7	0.93
49	2019	Skin_proferati	51	.	.	100.6	101.4	8.2	5.5	-0.8	5.6	0.73
50	2020	Skin_proferati	32	.	.	99.6	102.0	7.1	5.6	-2.4	4.1	0.82
51	2021	Skin_proferati	40	.	.	104.1	103.3	6.2	5.0	0.8	3.4	0.83
52	2022	Skin_proferati	15	.	.	102.5	102.6	7.0	6.1	-0.1	3.1	0.90
53	2019	White_line_dou	51	.	.	104.3	103.9	12.4	10.4	0.4	7.0	0.83
54	2020	White_line_dou	32	.	.	97.4	99.7	14.3	9.9	-2.3	8.7	0.80
55	2021	White_line_dou	40	.	.	105.5	102.7	9.9	9.5	2.9	4.3	0.90
56	2022	White_line_dou	15	.	.	103.9	104.0	16.8	11.7	-0.1	8.0	0.90
57	2019	Dermatitis3	51	.	.	97.2	96.7	10.3	7.7	0.5	5.9	0.82
58	2020	Dermatitis3	32	.	.	102.1	102.3	9.9	6.5	-0.2	6.7	0.74
59	2021	Dermatitis3	40	.	.	101.9	100.0	7.9	6.9	1.9	3.8	0.88
60	2022	Dermatitis3	15	.	.	100.1	99.6	7.7	6.8	0.5	3.8	0.87
61	2019	Heel_horn_eros	51	.	.	98.8	100.2	8.7	6.5	-1.5	5.7	0.76
62	2020	Heel_horn_eros	32	.	.	99.8	102.0	6.2	5.1	-2.2	4.1	0.75
63	2021	Heel_horn_eros	40	.	.	101.4	101.9	5.7	4.8	-0.5	3.6	0.78
64	2022	Heel_horn_eros	15	.	.	100.1	101.8	7.9	7.1	-1.7	2.9	0.93
65	2019	Sole_heamorrha	51	.	.	103.0	103.5	9.0	8.0	-0.5	5.4	0.81
66	2020	Sole_heamorrha	32	.	.	98.7	99.4	9.7	6.5	-0.8	5.9	0.80
67	2021	Sole_heamorrha	40	.	.	103.7	102.3	8.1	7.6	1.4	3.2	0.92
68	2022	Sole_heamorrha	15	.	.	103.8	103.9	12.5	9.2	-0.1	5.3	0.92
69	2019	Sole_ulcer3	51	.	.	99.4	100.9	12.1	8.4	-1.5	7.2	0.81
70	2020	Sole_ulcer3	32	.	.	97.3	98.0	10.3	9.1	-0.7	6.0	0.82
71	2021	Sole_ulcer3	40	.	.	100.8	100.0	8.8	7.8	0.9	3.5	0.92
72	2022	Sole_ulcer3	15	.	.	100.3	100.7	11.7	9.2	-0.3	5.0	0.91

JER summery stastistics for SS and prev SS breeding value for nordic AI bulls with no offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
73	2019	Cork_screw_cla	51	.	.	105.0	104.8	9.6	8.0	0.2	5.3	0.83
74	2020	Cork_screw_cla	32	.	.	99.1	99.1	10.3	6.0	0.0	6.5	0.80
75	2021	Cork_screw_cla	40	.	.	103.3	102.4	8.9	7.6	0.9	3.6	0.92
76	2022	Cork_screw_cla	15	.	.	104.3	103.6	11.4	8.7	0.7	4.4	0.94
77	2019	Skin_proferati	51	.	.	100.5	101.1	8.3	5.6	-0.6	5.7	0.73
78	2020	Skin_proferati	32	.	.	100.1	102.3	7.5	5.8	-2.2	4.2	0.83
79	2021	Skin_proferati	40	.	.	104.1	103.1	6.6	5.5	1.0	3.4	0.86
80	2022	Skin_proferati	15	.	.	102.3	102.3	6.4	6.0	-0.1	2.9	0.89
81	2019	White_line_dou	51	.	.	103.7	104.1	11.9	9.7	-0.4	7.0	0.81
82	2020	White_line_dou	32	.	.	97.2	100.0	13.5	9.1	-2.8	8.8	0.76
83	2021	White_line_dou	40	.	.	105.5	103.2	9.5	9.0	2.4	4.3	0.89
84	2022	White_line_dou	15	.	.	103.9	104.6	16.4	11.3	-0.7	7.9	0.90
85	2019	Dermatitis	51	.	.	97.2	96.7	10.3	7.5	0.5	6.3	0.80
86	2020	Dermatitis	32	.	.	101.8	102.2	9.7	6.4	-0.5	6.6	0.73
87	2021	Dermatitis	40	.	.	101.8	100.0	8.0	6.7	1.8	4.1	0.86
88	2022	Dermatitis	15	.	.	100.3	99.7	8.1	7.1	0.6	3.7	0.89
89	2019	Heel_horn_eros	51	.	.	99.4	100.7	8.4	6.4	-1.3	5.8	0.72
90	2020	Heel_horn_eros	32	.	.	99.8	101.9	6.1	5.1	-2.1	4.0	0.76
91	2021	Heel_horn_eros	40	.	.	101.9	102.2	5.4	4.6	-0.2	3.5	0.77
92	2022	Heel_horn_eros	15	.	.	100.8	101.9	8.5	7.4	-1.1	3.1	0.93
93	2019	Sole_heamorrha	51	.	.	102.2	103.4	8.8	7.9	-1.1	5.5	0.79
94	2020	Sole_heamorrha	32	.	.	98.6	99.7	9.1	6.1	-1.2	5.8	0.78
95	2021	Sole_heamorrha	40	.	.	103.3	102.3	8.0	7.4	1.0	3.4	0.90
96	2022	Sole_heamorrha	15	.	.	103.7	104.0	12.2	9.3	-0.3	5.2	0.92
97	2019	Sole_ulcer	51	.	.	100.1	101.3	11.4	8.1	-1.2	7.1	0.79
98	2020	Sole_ulcer	32	.	.	97.7	98.3	10.6	9.0	-0.6	6.0	0.82
99	2021	Sole_ulcer	40	.	.	101.6	100.4	8.4	7.5	1.2	3.5	0.91
100	2022	Sole_ulcer	15	.	.	100.5	100.8	12.5	9.7	-0.3	5.4	0.91
101	2019	Cork_screw_cla	51	.	.	105.4	104.9	9.5	7.9	0.5	5.7	0.80
102	2020	Cork_screw_cla	32	.	.	99.2	99.3	10.8	6.2	-0.1	6.6	0.83
103	2021	Cork_screw_cla	40	.	.	103.6	102.5	8.5	7.4	1.1	3.7	0.90
104	2022	Cork_screw_cla	15	.	.	104.4	103.9	11.7	8.9	0.5	4.4	0.94
105	2019	Skin_proferati	51	.	.	100.5	101.2	8.3	5.5	-0.6	5.7	0.73
106	2020	Skin_proferati	32	.	.	99.9	102.2	7.3	5.8	-2.3	4.1	0.82
107	2021	Skin_proferati	40	.	.	104.1	103.2	6.4	5.2	0.9	3.6	0.83
108	2022	Skin_proferati	15	.	.	102.3	102.7	6.8	5.9	-0.4	3.0	0.89

JER summery stastistics for SS and prev SS breeding value for nordic AI bulls with no offspring, by birth year

Obs	BYR	name	no	mean_noff	std_noff	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
109	2019	White_line_dou	51	.	.	104.4	104.4	12.0	10.0	0.0	6.9	0.82
110	2020	White_line_dou	32	.	.	97.4	100.0	13.7	9.4	-2.6	8.4	0.80
111	2021	White_line_dou	40	.	.	105.6	103.0	9.6	9.0	2.6	4.4	0.89
112	2022	White_line_dou	15	.	.	104.1	104.3	16.2	11.2	-0.2	7.9	0.90

JER summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2015	Dermatitis1	9661	100.8	100.6	8.9	8.9	0.2	1.9	0.98
2	2016	Dermatitis1	9818	100.5	100.7	8.9	8.7	-0.2	2.0	0.97
3	2017	Dermatitis1	9415	99.7	99.8	9.2	7.9	-0.1	4.8	0.85
4	2018	Dermatitis1	10190	100.9	101.1	8.3	6.8	-0.2	5.7	0.73
5	2019	Dermatitis1	10027	98.6	99.0	10.0	6.9	-0.3	6.3	0.78
6	2020	Dermatitis1	2757	100.7	99.3	9.7	6.1	1.4	6.7	0.73
7	2015	Heel_horn_eros	6088	101.6	101.4	8.4	8.4	0.1	1.7	0.98
8	2016	Heel_horn_eros	6162	99.7	100.1	9.1	8.9	-0.4	1.9	0.98
9	2017	Heel_horn_eros	5944	100.4	101.2	7.9	7.0	-0.7	4.0	0.86
10	2018	Heel_horn_eros	5451	100.6	101.2	8.5	6.8	-0.6	4.6	0.84
11	2019	Heel_horn_eros	4620	99.4	100.5	9.6	7.2	-1.1	5.2	0.85
12	2020	Heel_horn_eros	1157	101.0	101.0	8.9	6.4	0.0	5.3	0.81
13	2015	Sole_heamorrha	9599	101.7	101.8	11.9	12.2	-0.1	1.9	0.99
14	2016	Sole_heamorrha	9746	102.0	102.1	12.7	12.7	-0.1	1.8	0.99
15	2017	Sole_heamorrha	8933	103.4	103.4	11.6	9.8	0.0	5.7	0.87
16	2018	Sole_heamorrha	9126	100.1	101.6	12.7	9.4	-1.5	7.9	0.78
17	2019	Sole_heamorrha	8093	101.7	102.8	10.5	8.4	-1.1	5.9	0.83
18	2020	Sole_heamorrha	1951	104.2	103.8	10.4	7.5	0.4	6.0	0.82
19	2015	Sole_ulcer1	10524	100.6	100.3	10.8	10.8	0.2	2.0	0.98
20	2016	Sole_ulcer1	10641	99.9	99.3	13.9	14.0	0.6	2.0	0.99
21	2017	Sole_ulcer1	10227	101.2	101.0	11.2	9.5	0.2	5.6	0.87
22	2018	Sole_ulcer1	10854	100.4	100.0	12.0	9.7	0.4	6.0	0.87
23	2019	Sole_ulcer1	10374	100.2	100.1	11.2	9.0	0.1	6.6	0.81
24	2020	Sole_ulcer1	2784	101.2	100.5	10.0	7.9	0.7	7.1	0.71
25	2015	Cork_screw_cla	9859	103.4	103.0	9.9	9.9	0.4	2.1	0.98
26	2016	Cork_screw_cla	9968	99.8	100.7	13.3	12.3	-0.8	2.7	0.98
27	2017	Cork_screw_cla	9746	102.8	103.2	11.3	9.1	-0.4	5.8	0.86
28	2018	Cork_screw_cla	10986	99.7	101.3	15.4	9.2	-1.5	9.5	0.81
29	2019	Cork_screw_cla	10734	102.7	103.0	11.2	8.0	-0.3	6.3	0.83
30	2020	Cork_screw_cla	2750	104.9	104.5	10.6	7.0	0.4	6.5	0.80
31	2015	Skin_proferati	10527	102.1	101.9	7.6	7.6	0.3	1.8	0.97
32	2016	Skin_proferati	10633	101.2	101.9	8.7	8.5	-0.7	1.8	0.98
33	2017	Skin_proferati	10245	101.3	101.7	7.8	6.8	-0.4	3.9	0.86
34	2018	Skin_proferati	10921	101.0	102.4	7.8	6.5	-1.3	6.1	0.65
35	2019	Skin_proferati	10396	99.9	101.5	9.1	6.1	-1.7	5.9	0.76
36	2020	Skin_proferati	2771	101.6	102.0	8.1	5.3	-0.5	5.4	0.75

JER summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
37	2015	White_line_dou	10507	102.5	101.9	18.2	18.2	0.7	2.7	0.99
38	2016	White_line_dou	10642	102.0	102.5	18.5	17.0	-0.5	3.5	0.98
39	2017	White_line_dou	10232	103.6	103.3	14.6	12.8	0.2	6.3	0.90
40	2018	White_line_dou	10859	99.8	101.9	18.3	12.9	-2.1	9.9	0.85
41	2019	White_line_dou	10435	103.6	103.5	15.6	11.4	0.1	8.8	0.83
42	2020	White_line_dou	2793	104.6	104.0	14.7	10.8	0.6	8.1	0.84
43	2015	Dermatitis2	8217	100.7	100.5	8.5	8.5	0.2	2.0	0.97
44	2016	Dermatitis2	8336	100.1	100.3	8.3	8.2	-0.2	2.1	0.97
45	2017	Dermatitis2	7707	99.5	99.5	8.5	7.3	0.0	4.9	0.82
46	2018	Dermatitis2	7966	100.9	100.7	7.8	6.2	0.2	5.5	0.72
47	2019	Dermatitis2	2329	98.4	99.1	9.4	6.5	-0.7	6.0	0.78
48	2015	Heel_horn_eros	5066	101.5	101.5	8.6	8.6	-0.1	1.6	0.98
49	2016	Heel_horn_eros	5113	99.5	99.8	8.5	8.5	-0.3	1.8	0.98
50	2017	Heel_horn_eros	4237	100.5	101.1	7.8	6.9	-0.7	4.2	0.84
51	2018	Heel_horn_eros	3734	100.6	101.1	7.8	6.4	-0.5	4.6	0.81
52	2019	Heel_horn_eros	849	98.4	99.6	8.9	7.2	-1.2	4.5	0.86
53	2015	Sole_heamorrha	7953	102.1	102.0	12.9	13.2	0.1	2.1	0.99
54	2016	Sole_heamorrha	7754	102.2	102.3	14.2	13.9	-0.1	2.0	0.99
55	2017	Sole_heamorrha	6782	103.4	103.3	12.3	10.4	0.2	6.0	0.87
56	2018	Sole_heamorrha	6389	100.3	101.5	13.6	10.0	-1.2	8.3	0.80
57	2019	Sole_heamorrha	1444	100.6	102.0	11.8	9.6	-1.4	6.5	0.83
58	2015	Sole_ulcer2	8770	101.5	101.0	12.7	12.5	0.6	2.2	0.99
59	2016	Sole_ulcer2	8815	100.4	100.1	16.3	15.7	0.3	2.1	0.99
60	2017	Sole_ulcer2	8293	101.9	101.6	12.7	10.5	0.3	5.7	0.89
61	2018	Sole_ulcer2	8236	100.4	100.2	14.3	10.9	0.2	7.2	0.87
62	2019	Sole_ulcer2	2408	98.3	99.6	13.8	10.8	-1.4	6.8	0.87
63	2015	Cork_screw_cla	8072	103.0	102.8	10.4	10.4	0.1	1.9	0.98
64	2016	Cork_screw_cla	8486	100.4	101.0	12.8	12.1	-0.6	2.6	0.98
65	2017	Cork_screw_cla	8454	103.3	103.6	11.2	9.3	-0.2	5.9	0.85
66	2018	Cork_screw_cla	8479	99.6	101.1	14.8	9.2	-1.5	9.2	0.81
67	2019	Cork_screw_cla	2305	101.8	102.3	12.2	8.7	-0.5	6.6	0.85
68	2015	Skin_proferati	8787	102.3	102.0	7.8	7.8	0.3	1.8	0.97
69	2016	Skin_proferati	8838	101.2	101.7	9.1	8.8	-0.6	1.7	0.98
70	2017	Skin_proferati	8345	101.5	101.7	7.8	6.8	-0.2	3.8	0.87
71	2018	Skin_proferati	8302	101.0	102.0	7.6	6.6	-1.0	6.1	0.65
72	2019	Skin_proferati	2417	99.1	101.6	9.0	6.4	-2.5	5.7	0.78

JER summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
73	2015	White_line_dou	8773	102.9	102.0	19.3	19.1	0.9	3.0	0.99
74	2016	White_line_dou	8831	102.3	102.7	20.7	18.7	-0.4	3.8	0.99
75	2017	White_line_dou	8302	103.7	103.3	15.9	13.6	0.4	6.5	0.91
76	2018	White_line_dou	8279	100.1	101.7	19.2	13.6	-1.6	10.5	0.85
77	2019	White_line_dou	2418	100.5	102.4	18.0	13.1	-1.9	9.4	0.86
78	2015	Dermatitis3	6049	100.5	100.4	9.0	9.0	0.1	2.0	0.98
79	2016	Dermatitis3	6101	100.4	100.5	8.5	8.5	-0.2	2.1	0.97
80	2017	Dermatitis3	4974	99.6	99.6	9.0	7.7	-0.1	5.0	0.83
81	2018	Dermatitis3	1502	100.2	100.2	8.0	6.1	-0.1	6.0	0.67
82	2019	Dermatitis3	1	.	.	.	.	.	.	.
83	2015	Heel_horn_eros	3544	101.4	101.3	9.0	9.0	0.0	1.7	0.98
84	2016	Heel_horn_eros	3339	99.2	99.5	9.0	8.9	-0.3	2.0	0.98
85	2017	Heel_horn_eros	2374	100.0	100.8	8.2	7.3	-0.8	4.0	0.87
86	2018	Heel_horn_eros	604	100.3	100.7	7.7	6.0	-0.4	5.3	0.73
87	2019	Heel_horn_eros	1	.	.	.	.	.	.	.
88	2015	Sole_heamorrha	5590	102.6	102.5	13.3	13.6	0.1	2.1	0.99
89	2016	Sole_heamorrha	5471	102.3	102.5	14.6	14.3	-0.1	2.0	0.99
90	2017	Sole_heamorrha	4032	104.1	103.6	12.4	10.8	0.5	5.7	0.89
91	2018	Sole_heamorrha	941	101.4	101.3	14.3	9.8	0.0	8.9	0.79
92	2015	Sole_ulcer3	6386	101.0	100.6	12.1	11.8	0.4	2.1	0.99
93	2016	Sole_ulcer3	6499	100.4	99.7	15.3	15.0	0.7	2.1	0.99
94	2017	Sole_ulcer3	5196	101.6	101.1	12.3	10.4	0.6	5.6	0.89
95	2018	Sole_ulcer3	1551	101.5	100.1	12.3	9.9	1.3	6.3	0.86
96	2019	Sole_ulcer3	1	.	.	.	.	.	.	.
97	2015	Cork_screw_cla	6115	103.0	102.9	10.5	10.5	0.2	2.1	0.98
98	2016	Cork_screw_cla	6541	100.8	101.5	12.7	12.0	-0.7	2.5	0.98
99	2017	Cork_screw_cla	5517	103.5	103.6	11.0	9.3	-0.1	5.5	0.87
100	2018	Cork_screw_cla	1489	100.9	101.6	15.4	8.7	-0.7	10.4	0.76
101	2019	Cork_screw_cla	1	.	.	.	.	.	.	.
102	2015	Skin_proferati	6440	102.1	101.9	7.5	7.4	0.2	1.8	0.97
103	2016	Skin_proferati	6553	100.8	101.2	8.5	8.4	-0.5	1.7	0.98
104	2017	Skin_proferati	5253	101.2	101.5	7.5	6.7	-0.3	3.9	0.86
105	2018	Skin_proferati	1558	100.1	101.1	7.3	6.5	-1.1	6.0	0.62
106	2019	Skin_proferati	1	.	.	.	.	.	.	.
107	2015	White_line_dou	6395	103.2	102.4	18.8	18.6	0.8	3.1	0.99
108	2016	White_line_dou	6517	102.7	103.2	20.1	18.1	-0.5	3.9	0.98

JER summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
109	2017	White_line_dou	5234	104.2	103.7	15.3	13.2	0.5	6.5	0.90
110	2018	White_line_dou	1554	101.5	102.3	18.1	12.1	-0.8	11.0	0.80
111	2019	White_line_dou	1	.	.	.	.	.	.	.
112	2015	Dermatitis	9661	100.5	100.4	8.6	8.7	0.1	1.8	0.98
113	2016	Dermatitis	9818	100.3	100.5	8.5	8.4	-0.2	2.0	0.97
114	2017	Dermatitis	9415	99.6	99.6	8.7	7.5	-0.1	4.7	0.84
115	2018	Dermatitis	10190	100.9	100.8	8.0	6.4	0.1	5.4	0.74
116	2019	Dermatitis	10027	98.8	98.9	9.4	6.5	-0.1	6.0	0.77
117	2020	Dermatitis	2757	100.7	99.2	9.0	5.7	1.5	6.2	0.73
118	2015	Heel_horn_eros	6088	101.3	101.3	8.5	8.4	0.0	1.6	0.98
119	2016	Heel_horn_eros	6162	99.4	99.7	8.8	8.6	-0.3	1.8	0.98
120	2017	Heel_horn_eros	5944	100.2	100.9	7.8	6.9	-0.7	3.9	0.86
121	2018	Heel_horn_eros	5451	100.5	100.9	7.9	6.5	-0.4	4.3	0.84
122	2019	Heel_horn_eros	4620	99.2	100.2	9.2	7.1	-1.0	4.7	0.86
123	2020	Heel_horn_eros	1157	100.7	100.7	8.5	6.4	0.0	4.9	0.82
124	2015	Sole_heamorrha	9599	101.9	101.8	12.5	12.8	0.1	1.9	0.99
125	2016	Sole_heamorrha	9746	101.9	102.1	13.7	13.5	-0.2	1.9	0.99
126	2017	Sole_heamorrha	8933	103.5	103.3	11.9	10.1	0.1	5.7	0.88
127	2018	Sole_heamorrha	9126	100.0	101.5	13.5	9.7	-1.5	8.2	0.80
128	2019	Sole_heamorrha	8093	102.0	102.8	11.0	8.7	-0.8	6.0	0.84
129	2020	Sole_heamorrha	1951	104.4	103.8	10.7	7.8	0.6	6.2	0.82
130	2015	Sole_ulcer	10524	100.8	100.4	11.6	11.5	0.4	1.9	0.99
131	2016	Sole_ulcer	10641	100.0	99.5	15.0	14.8	0.5	1.9	0.99
132	2017	Sole_ulcer	10227	101.2	101.0	12.0	10.2	0.3	5.4	0.89
133	2018	Sole_ulcer	10854	100.3	100.0	12.7	10.1	0.4	6.2	0.88
134	2019	Sole_ulcer	10374	99.9	100.0	11.7	9.3	-0.1	6.5	0.83
135	2020	Sole_ulcer	2784	101.0	100.5	10.5	8.1	0.5	6.9	0.75
136	2015	Cork_screw_cla	9859	103.0	102.7	10.2	10.2	0.3	1.9	0.98
137	2016	Cork_screw_cla	9968	100.2	100.9	12.9	12.0	-0.7	2.5	0.98
138	2017	Cork_screw_cla	9746	103.1	103.3	11.4	9.4	-0.3	5.8	0.86
139	2018	Cork_screw_cla	10986	99.5	101.0	15.2	9.4	-1.6	9.3	0.81
140	2019	Cork_screw_cla	10734	103.1	103.4	11.0	8.2	-0.3	6.0	0.85
141	2020	Cork_screw_cla	2750	105.0	104.7	10.6	7.3	0.3	6.2	0.82
142	2015	Skin_proferati	10527	102.0	101.8	7.6	7.6	0.3	1.7	0.97
143	2016	Skin_proferati	10633	101.0	101.6	8.8	8.6	-0.6	1.7	0.98
144	2017	Skin_proferati	10245	101.3	101.6	7.7	6.9	-0.3	3.8	0.87

JER summery stastistics for SS and previous breeding value for nongenotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
145	2018	Skin_proferati	10921	101.1	102.1	7.6	6.7	-1.1	5.8	0.68
146	2019	Skin_proferati	10396	99.8	101.4	9.1	6.4	-1.5	5.7	0.78
147	2020	Skin_proferati	2771	101.6	101.9	7.9	5.5	-0.3	5.1	0.77
148	2015	White_line_dou	10507	102.7	101.9	18.6	18.5	0.8	2.9	0.99
149	2016	White_line_dou	10642	102.1	102.6	19.7	18.0	-0.5	3.7	0.99
150	2017	White_line_dou	10232	103.4	103.2	15.3	13.2	0.2	6.3	0.91
151	2018	White_line_dou	10859	99.9	102.0	18.7	13.2	-2.0	10.3	0.84
152	2019	White_line_dou	10435	102.9	103.2	15.7	11.8	-0.3	8.6	0.84
153	2020	White_line_dou	2793	104.4	103.8	14.8	11.0	0.5	8.0	0.85

sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2015	Dermatitis1	1782	100.7	100.6	10.6	10.4	0.1	3.1	0.96
2	2016	Dermatitis1	2101	100.2	100.5	10.3	9.8	-0.3	3.1	0.95
3	2017	Dermatitis1	3181	99.6	99.8	10.6	9.4	-0.2	4.8	0.89
4	2018	Dermatitis1	4089	100.9	101.0	9.9	8.9	-0.1	5.2	0.85
5	2019	Dermatitis1	4445	97.6	98.3	12.1	9.2	-0.7	6.4	0.85
6	2020	Dermatitis1	1394	100.8	99.4	11.6	8.9	1.3	6.5	0.83
7	2015	Heel_horn_eros	989	101.5	101.5	10.0	9.8	0.0	2.7	0.96
8	2016	Heel_horn_eros	1121	99.5	100.0	10.2	9.7	-0.6	2.8	0.96
9	2017	Heel_horn_eros	1848	100.1	101.3	9.7	8.5	-1.2	4.8	0.87
10	2018	Heel_horn_eros	2161	100.0	100.9	9.9	8.5	-1.0	4.7	0.88
11	2019	Heel_horn_eros	2113	97.9	99.4	11.0	8.6	-1.5	5.6	0.87
12	2020	Heel_horn_eros	657	100.7	100.6	10.8	8.5	0.1	5.6	0.85
13	2015	Sole_heamorrha	1761	100.9	101.0	13.9	13.8	-0.1	3.3	0.97
14	2016	Sole_heamorrha	2025	102.1	102.2	14.6	14.2	-0.1	3.1	0.98
15	2017	Sole_heamorrha	3038	103.3	103.5	13.2	10.8	-0.3	6.9	0.85
16	2018	Sole_heamorrha	3785	99.0	100.9	14.6	10.7	-2.0	8.8	0.80
17	2019	Sole_heamorrha	3953	101.2	102.4	12.2	9.8	-1.2	6.4	0.85
18	2020	Sole_heamorrha	1227	102.9	103.4	12.7	9.2	-0.5	7.2	0.83
19	2015	Sole_ulcer1	2151	99.3	99.1	13.2	12.8	0.2	3.3	0.97
20	2016	Sole_ulcer1	2316	99.7	99.0	15.8	15.6	0.7	3.1	0.98
21	2017	Sole_ulcer1	3318	101.1	101.1	13.3	11.2	0.0	6.3	0.88
22	2018	Sole_ulcer1	4326	99.4	98.9	14.4	12.2	0.5	6.4	0.90
23	2019	Sole_ulcer1	4767	99.9	99.7	13.2	11.0	0.2	7.2	0.84
24	2020	Sole_ulcer1	1518	99.9	100.1	12.5	10.3	-0.2	8.2	0.76
25	2015	Cork_screw_cla	1912	102.8	102.5	11.7	11.3	0.3	3.4	0.96
26	2016	Cork_screw_cla	2231	99.3	100.3	14.9	13.5	-1.0	3.8	0.97
27	2017	Cork_screw_cla	3268	102.5	103.3	12.6	9.5	-0.8	7.3	0.82
28	2018	Cork_screw_cla	4455	98.6	100.7	16.9	9.9	-2.2	10.4	0.82
29	2019	Cork_screw_cla	4938	102.4	102.9	12.3	8.9	-0.5	7.0	0.83
30	2020	Cork_screw_cla	1434	103.5	104.0	11.9	8.5	-0.5	6.9	0.83
31	2015	Skin_proferati	2136	101.9	101.7	9.3	9.1	0.2	2.8	0.95
32	2016	Skin_proferati	2315	100.7	101.7	9.9	9.3	-1.0	2.6	0.96
33	2017	Skin_proferati	3334	100.9	101.6	9.3	8.0	-0.8	4.5	0.87
34	2018	Skin_proferati	4342	100.6	102.5	9.2	7.9	-1.8	6.5	0.72
35	2019	Skin_proferati	4721	99.0	101.4	10.5	7.3	-2.4	6.5	0.79
36	2020	Skin_proferati	1502	101.2	101.9	9.3	6.7	-0.7	5.6	0.80
37	2015	White_line_dou	2150	101.4	100.5	20.6	20.3	0.9	3.9	0.98

sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
38	2016	White_line_dou	2336	101.8	102.2	20.8	18.8	-0.4	4.5	0.98
39	2017	White_line_dou	3340	103.7	103.5	16.1	14.0	0.2	7.2	0.90
40	2018	White_line_dou	4326	98.4	101.1	20.6	14.4	-2.7	10.9	0.86
41	2019	White_line_dou	4778	103.5	103.0	16.9	12.5	0.5	9.4	0.84
42	2020	White_line_dou	1526	103.0	103.5	15.7	11.9	-0.5	8.7	0.84
43	2015	Dermatitis2	1515	100.7	100.6	10.0	9.8	0.1	2.9	0.96
44	2016	Dermatitis2	1858	99.8	100.1	9.6	9.2	-0.3	2.9	0.95
45	2017	Dermatitis2	2723	99.1	99.2	9.6	8.6	-0.1	4.7	0.87
46	2018	Dermatitis2	3192	100.9	100.7	9.2	8.3	0.2	4.8	0.86
47	2019	Dermatitis2	909	97.2	98.4	10.8	8.7	-1.2	5.4	0.87
48	2015	Heel_horn_eros	760	101.5	101.6	9.9	9.6	-0.1	2.5	0.97
49	2016	Heel_horn_eros	964	99.5	99.9	9.4	9.3	-0.4	2.6	0.96
50	2017	Heel_horn_eros	1446	100.1	101.2	9.2	8.2	-1.1	5.1	0.84
51	2018	Heel_horn_eros	1516	99.9	100.7	9.1	8.1	-0.8	4.7	0.86
52	2019	Heel_horn_eros	381	96.7	98.5	10.3	8.9	-1.8	4.6	0.89
53	2015	Sole_heamorrha	1549	101.0	100.8	15.4	15.3	0.2	3.3	0.98
54	2016	Sole_heamorrha	1817	101.8	101.9	16.0	15.4	-0.1	3.2	0.98
55	2017	Sole_heamorrha	2621	103.4	103.3	13.8	11.5	0.2	6.9	0.87
56	2018	Sole_heamorrha	2853	98.9	100.8	15.7	11.7	-1.9	9.0	0.82
57	2019	Sole_heamorrha	774	99.3	101.2	13.2	10.9	-1.9	6.7	0.86
58	2015	Sole_ulcer2	1780	99.7	99.0	15.4	14.8	0.7	3.4	0.97
59	2016	Sole_ulcer2	2001	99.8	99.4	18.5	17.6	0.4	3.1	0.99
60	2017	Sole_ulcer2	2867	101.8	101.5	15.0	12.5	0.4	6.4	0.91
61	2018	Sole_ulcer2	3471	99.5	99.5	16.5	13.1	-0.1	7.5	0.90
62	2019	Sole_ulcer2	1039	98.6	99.9	16.2	13.1	-1.3	7.6	0.89
63	2015	Cork_screw_cla	1783	102.3	102.1	12.2	11.8	0.1	3.2	0.96
64	2016	Cork_screw_cla	2005	99.7	100.5	14.3	13.1	-0.7	3.7	0.97
65	2017	Cork_screw_cla	2929	103.1	103.5	12.7	9.9	-0.4	7.4	0.81
66	2018	Cork_screw_cla	3534	98.4	100.6	16.2	10.0	-2.2	9.9	0.82
67	2019	Cork_screw_cla	912	101.1	101.9	13.0	9.3	-0.8	7.1	0.85
68	2015	Skin_proferati	1778	101.8	101.6	9.3	9.2	0.3	2.8	0.96
69	2016	Skin_proferati	2009	100.8	101.7	10.1	9.6	-0.8	2.5	0.97
70	2017	Skin_proferati	2872	100.9	101.3	9.1	8.0	-0.4	4.3	0.88
71	2018	Skin_proferati	3461	100.5	102.1	8.8	7.8	-1.6	6.4	0.71
72	2019	Skin_proferati	1035	97.9	100.9	10.1	7.4	-3.0	5.9	0.81
73	2015	White_line_dou	1785	101.2	100.0	22.3	21.7	1.2	4.1	0.98
74	2016	White_line_dou	2008	101.4	101.6	23.3	20.8	-0.2	4.8	0.98

sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
75	2017	White_line_dou	2868	103.8	103.0	18.0	15.1	0.8	7.4	0.91
76	2018	White_line_dou	3491	98.9	101.2	21.5	15.2	-2.3	11.3	0.86
77	2019	White_line_dou	1050	101.1	102.3	19.6	14.4	-1.2	10.2	0.86
78	2015	Dermatitis3	1189	100.7	100.6	10.5	10.2	0.1	2.8	0.96
79	2016	Dermatitis3	1442	100.5	100.8	10.0	9.6	-0.3	2.9	0.96
80	2017	Dermatitis3	1828	99.2	99.2	9.9	8.8	0.0	4.9	0.87
81	2018	Dermatitis3	527	100.3	100.2	9.8	8.8	0.1	4.9	0.86
82	2015	Heel_horn_eros	656	101.1	101.0	10.5	10.3	0.1	2.5	0.97
83	2016	Heel_horn_eros	750	99.4	99.8	10.0	9.6	-0.4	2.7	0.96
84	2017	Heel_horn_eros	929	98.8	100.3	9.2	8.2	-1.5	4.7	0.86
85	2018	Heel_horn_eros	213	.	.	.	.	.	.	0.85
86	2015	Sole_heamorrha	1224	101.6	101.4	15.5	15.5	0.2	3.2	0.98
87	2016	Sole_heamorrha	1391	101.8	101.9	16.5	15.8	-0.1	3.0	0.98
88	2017	Sole_heamorrha	1655	104.0	103.5	13.6	11.4	0.5	6.7	0.87
89	2018	Sole_heamorrha	440	98.5	100.5	15.8	10.7	-2.0	10.4	0.76
90	2015	Sole_ulcer3	1343	99.3	99.0	14.7	14.0	0.3	3.2	0.98
91	2016	Sole_ulcer3	1532	99.6	98.8	17.5	17.0	0.8	3.0	0.98
92	2017	Sole_ulcer3	1996	101.5	101.0	14.2	12.0	0.5	6.0	0.91
93	2018	Sole_ulcer3	570	101.1	99.3	13.7	11.8	1.8	6.3	0.89
94	2015	Cork_screw_cla	1433	102.5	102.2	12.0	11.7	0.3	3.3	0.96
95	2016	Cork_screw_cla	1627	100.2	100.9	14.0	12.9	-0.7	3.6	0.97
96	2017	Cork_screw_cla	2038	103.5	103.7	12.5	9.8	-0.2	7.1	0.82
97	2018	Cork_screw_cla	546	98.4	100.7	17.5	9.3	-2.4	12.0	0.76
98	2015	Skin_proferati	1365	101.6	101.6	9.1	8.8	0.1	2.7	0.95
99	2016	Skin_proferati	1545	100.7	101.5	9.5	9.1	-0.8	2.4	0.97
100	2017	Skin_proferati	1993	100.4	101.0	8.8	7.9	-0.6	4.2	0.88
101	2018	Skin_proferati	565	99.6	101.1	8.5	8.0	-1.6	6.6	0.69
102	2015	White_line_dou	1338	101.8	100.8	21.1	20.6	1.1	4.3	0.98
103	2016	White_line_dou	1540	101.7	102.1	22.8	20.4	-0.4	4.8	0.98
104	2017	White_line_dou	2016	103.8	103.5	17.0	14.4	0.4	7.2	0.91
105	2018	White_line_dou	574	100.1	101.6	19.4	13.5	-1.5	11.7	0.80
106	2015	Dermatitis	1782	100.6	100.5	10.3	10.1	0.1	2.9	0.96
107	2016	Dermatitis	2101	100.0	100.2	9.8	9.4	-0.3	3.0	0.95
108	2017	Dermatitis	3181	99.5	99.5	10.0	8.9	-0.1	4.7	0.88
109	2018	Dermatitis	4089	100.9	100.8	9.5	8.5	0.2	4.9	0.86
110	2019	Dermatitis	4445	97.8	98.3	11.5	8.8	-0.5	6.1	0.85
111	2020	Dermatitis	1394	100.8	99.3	10.9	8.5	1.5	6.0	0.84

sum sta for SS and previous breeding value for genotyped females with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
112	2015	Heel_horn_eros	989	101.4	101.5	9.9	9.7	-0.1	2.6	0.97
113	2016	Heel_horn_eros	1121	99.2	99.7	9.7	9.3	-0.5	2.7	0.96
114	2017	Heel_horn_eros	1848	99.8	101.0	9.3	8.3	-1.2	4.7	0.86
115	2018	Heel_horn_eros	2161	100.0	100.6	9.2	8.2	-0.6	4.4	0.88
116	2019	Heel_horn_eros	2113	97.7	99.1	10.5	8.3	-1.4	5.1	0.88
117	2020	Heel_horn_eros	657	100.3	100.1	10.3	8.3	0.1	5.2	0.86
118	2015	Sole_heamorrha	1761	100.9	100.8	14.7	14.6	0.1	3.2	0.98
119	2016	Sole_heamorrha	2025	102.0	102.1	15.7	15.1	-0.1	3.1	0.98
120	2017	Sole_heamorrha	3038	103.4	103.4	13.5	11.1	0.0	6.8	0.86
121	2018	Sole_heamorrha	3785	98.8	100.8	15.5	11.2	-2.0	9.0	0.82
122	2019	Sole_heamorrha	3953	101.6	102.4	12.6	10.1	-0.8	6.5	0.86
123	2020	Sole_heamorrha	1227	103.0	103.3	12.9	9.5	-0.3	7.3	0.83
124	2015	Sole_ulcer	2151	99.4	99.0	14.1	13.6	0.4	3.2	0.97
125	2016	Sole_ulcer	2316	100.0	99.3	17.1	16.6	0.6	3.0	0.98
126	2017	Sole_ulcer	3318	101.2	101.1	14.0	11.7	0.1	6.1	0.90
127	2018	Sole_ulcer	4326	99.4	98.9	15.1	12.4	0.4	6.6	0.90
128	2019	Sole_ulcer	4767	99.6	99.6	13.6	11.2	0.0	7.2	0.85
129	2020	Sole_ulcer	1518	99.8	100.1	13.0	10.4	-0.3	8.1	0.78
130	2015	Cork_screw_cla	1912	102.5	102.3	11.8	11.4	0.3	3.3	0.96
131	2016	Cork_screw_cla	2231	99.8	100.6	14.4	13.1	-0.9	3.6	0.97
132	2017	Cork_screw_cla	3268	102.9	103.4	12.4	9.5	-0.5	7.2	0.81
133	2018	Cork_screw_cla	4455	98.4	100.5	16.4	9.6	-2.2	10.3	0.81
134	2019	Cork_screw_cla	4938	102.8	103.2	12.2	8.8	-0.3	6.8	0.84
135	2020	Cork_screw_cla	1434	103.7	104.2	12.0	8.4	-0.5	6.7	0.84
136	2015	Skin_proferati	2136	101.7	101.6	9.1	8.9	0.2	2.7	0.95
137	2016	Skin_proferati	2315	100.5	101.4	9.7	9.3	-0.9	2.5	0.97
138	2017	Skin_proferati	3334	100.8	101.5	9.0	7.9	-0.7	4.3	0.88
139	2018	Skin_proferati	4342	100.6	102.2	8.9	7.9	-1.6	6.2	0.74
140	2019	Skin_proferati	4721	99.1	101.3	10.3	7.2	-2.2	6.3	0.80
141	2020	Skin_proferati	1502	101.2	101.7	9.0	6.7	-0.6	5.3	0.81
142	2015	White_line_dou	2150	101.5	100.5	21.0	20.6	1.1	4.1	0.98
143	2016	White_line_dou	2336	101.9	102.3	22.2	19.9	-0.4	4.6	0.98
144	2017	White_line_dou	3340	103.6	103.4	16.8	14.3	0.2	7.2	0.91
145	2018	White_line_dou	4326	98.6	101.2	20.8	14.5	-2.5	11.3	0.85
146	2019	White_line_dou	4778	102.7	102.7	16.9	12.7	0.0	9.1	0.85
147	2020	White_line_dou	1526	102.9	103.4	15.8	12.0	-0.5	8.6	0.84

sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
1	2019	Dermatitis1	8580	98.6	98.9	11.3	8.9	-0.4	5.7	0.87
2	2020	Dermatitis1	14168	100.4	99.7	10.8	8.8	0.7	6.0	0.83
3	2021	Dermatitis1	14226	98.7	99.4	10.0	8.1	-0.7	5.3	0.85
4	2022	Dermatitis1	3282	99.5	98.8	9.9	7.9	0.8	5.1	0.86
5	2019	Heel_horn_eros	10912	99.1	100.2	10.6	8.4	-1.1	5.3	0.87
6	2020	Heel_horn_eros	14905	99.9	100.4	9.8	8.2	-0.6	4.9	0.87
7	2021	Heel_horn_eros	14226	100.1	101.4	8.7	7.2	-1.3	4.5	0.86
8	2022	Heel_horn_eros	3282	101.4	101.4	8.5	6.8	0.0	4.7	0.83
9	2019	Sole_heamorrha	9072	101.5	102.7	12.4	9.8	-1.2	6.6	0.85
10	2020	Sole_heamorrha	14335	100.5	101.7	11.5	9.1	-1.2	6.0	0.86
11	2021	Sole_heamorrha	14226	102.9	103.3	9.8	8.4	-0.5	4.7	0.88
12	2022	Sole_heamorrha	3282	102.9	103.3	9.2	8.1	-0.3	4.8	0.86
13	2019	Sole_ulcer1	8258	100.4	99.9	12.5	10.6	0.5	6.6	0.85
14	2020	Sole_ulcer1	14044	98.5	99.3	12.5	10.8	-0.8	7.2	0.82
15	2021	Sole_ulcer1	14226	102.1	101.7	11.1	9.7	0.4	5.3	0.88
16	2022	Sole_ulcer1	3282	101.8	101.5	10.0	8.9	0.2	5.4	0.84
17	2019	Cork_screw_cla	8087	102.0	102.9	12.7	9.1	-0.9	7.2	0.83
18	2020	Cork_screw_cla	14128	101.7	102.3	11.8	8.6	-0.6	6.5	0.84
19	2021	Cork_screw_cla	14226	104.3	103.5	10.1	8.0	0.8	5.3	0.85
20	2022	Cork_screw_cla	3282	106.2	104.5	9.1	7.2	1.7	5.3	0.81
21	2019	Skin_proferati	8304	99.5	101.9	10.1	7.1	-2.4	6.3	0.79
22	2020	Skin_proferati	14060	101.4	102.1	8.8	6.9	-0.7	4.9	0.83
23	2021	Skin_proferati	14226	99.5	101.3	8.6	6.3	-1.9	5.2	0.80
24	2022	Skin_proferati	3282	101.9	101.8	8.1	6.0	0.1	4.6	0.83
25	2019	White_line_dou	8247	103.0	102.6	16.7	12.5	0.4	9.2	0.84
26	2020	White_line_dou	14036	99.5	101.3	15.5	11.7	-1.9	8.2	0.85
27	2021	White_line_dou	14226	105.9	104.2	13.2	10.5	1.7	6.6	0.87
28	2022	White_line_dou	3282	106.1	104.9	11.6	9.6	1.2	6.0	0.86
29	2019	Dermatitis2	12116	98.6	98.6	10.5	8.3	0.1	5.4	0.86
30	2020	Dermatitis2	15562	100.7	99.5	10.0	8.2	1.2	5.5	0.84
31	2021	Dermatitis2	14226	99.0	99.0	9.2	7.6	0.0	4.8	0.85
32	2022	Dermatitis2	3282	99.8	98.4	9.1	7.4	1.4	4.6	0.86
33	2019	Heel_horn_eros	12644	99.2	100.2	9.7	8.1	-1.0	4.7	0.88
34	2020	Heel_horn_eros	15562	99.9	100.3	9.1	8.0	-0.3	4.4	0.87
35	2021	Heel_horn_eros	14226	100.3	101.4	8.0	6.9	-1.1	4.1	0.86
36	2022	Heel_horn_eros	3282	101.4	101.3	7.7	6.5	0.1	4.2	0.83
37	2019	Sole_heamorrha	12251	101.7	102.3	12.9	10.3	-0.6	6.7	0.86

sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
38	2020	Sole_heamorrha	15562	100.4	101.6	12.3	9.7	-1.2	6.4	0.85
39	2021	Sole_heamorrha	14226	103.3	103.2	10.4	8.9	0.1	4.9	0.88
40	2022	Sole_heamorrha	3282	103.3	103.2	9.6	8.5	0.1	4.9	0.86
41	2019	Sole_ulcer2	11986	100.2	100.1	14.0	11.3	0.1	7.2	0.86
42	2020	Sole_ulcer2	15562	98.7	99.8	13.7	11.3	-1.0	7.4	0.84
43	2021	Sole_ulcer2	14226	102.2	101.9	12.0	10.3	0.3	5.5	0.89
44	2022	Sole_ulcer2	3282	102.0	101.8	10.8	9.4	0.2	5.6	0.85
45	2019	Cork_screw_cla	12113	103.0	103.3	12.8	9.2	-0.3	7.0	0.84
46	2020	Cork_screw_cla	15562	101.5	102.3	11.8	8.5	-0.7	6.6	0.84
47	2021	Cork_screw_cla	14226	105.0	103.8	10.2	8.1	1.2	5.3	0.86
48	2022	Cork_screw_cla	3282	106.2	104.8	9.3	7.4	1.4	5.1	0.84
49	2019	Skin_proferati	11990	99.6	101.7	9.9	7.0	-2.1	6.2	0.79
50	2020	Skin_proferati	15562	101.3	101.8	8.5	6.8	-0.5	4.7	0.83
51	2021	Skin_proferati	14226	99.7	101.3	8.2	6.1	-1.6	5.0	0.80
52	2022	Skin_proferati	3282	101.8	101.7	7.7	5.9	0.2	4.3	0.83
53	2019	White_line_dou	11975	102.6	102.2	17.1	13.1	0.5	9.0	0.86
54	2020	White_line_dou	15562	99.6	101.2	16.3	12.5	-1.6	8.4	0.86
55	2021	White_line_dou	14226	105.1	103.6	13.8	11.2	1.5	6.6	0.88
56	2022	White_line_dou	3282	105.3	104.3	12.2	10.2	1.0	6.1	0.87
57	2019	Dermatitis3	13025	98.4	98.7	11.0	8.6	-0.3	5.6	0.87
58	2020	Dermatitis3	15562	100.8	99.6	10.4	8.3	1.2	5.6	0.84
59	2021	Dermatitis3	14226	98.6	99.0	9.6	7.7	-0.4	5.0	0.86
60	2022	Dermatitis3	3282	99.2	98.3	9.4	7.6	0.9	4.7	0.87
61	2019	Heel_horn_eros	13025	98.2	99.4	10.4	8.3	-1.2	5.0	0.88
62	2020	Heel_horn_eros	15562	99.7	99.9	9.6	8.1	-0.2	4.8	0.87
63	2021	Heel_horn_eros	14226	99.0	100.7	8.6	7.0	-1.7	4.3	0.87
64	2022	Heel_horn_eros	3282	100.1	100.5	8.3	6.6	-0.4	4.4	0.85
65	2019	Sole_heamorrha	13025	102.1	102.6	13.1	10.3	-0.5	6.7	0.86
66	2020	Sole_heamorrha	15562	100.6	101.7	12.4	9.6	-1.0	6.3	0.86
67	2021	Sole_heamorrha	14226	103.9	103.4	10.4	8.8	0.5	4.8	0.89
68	2022	Sole_heamorrha	3282	104.1	103.6	9.6	8.4	0.5	4.8	0.87
69	2019	Sole_ulcer3	13025	99.7	99.6	13.1	10.9	0.2	6.7	0.86
70	2020	Sole_ulcer3	15562	98.3	99.3	13.0	10.8	-1.0	7.2	0.83
71	2021	Sole_ulcer3	14226	101.2	101.2	11.6	10.1	0.0	5.1	0.90
72	2022	Sole_ulcer3	3282	100.8	101.2	10.4	9.2	-0.3	5.2	0.87
73	2019	Cork_screw_cla	13025	102.5	103.2	12.6	9.1	-0.6	6.8	0.85
74	2020	Cork_screw_cla	15562	101.9	102.4	11.5	8.4	-0.6	6.3	0.84

sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
75	2021	Cork_screw_cla	14226	104.4	103.4	10.0	8.0	0.9	5.0	0.87
76	2022	Cork_screw_cla	3282	105.3	104.2	9.1	7.4	1.2	4.9	0.84
77	2019	Skin_proferati	13025	99.3	101.4	9.9	7.2	-2.1	6.0	0.80
78	2020	Skin_proferati	15562	101.3	101.7	8.5	7.0	-0.4	4.6	0.84
79	2021	Skin_proferati	14226	99.5	101.1	8.4	6.3	-1.6	5.0	0.81
80	2022	Skin_proferati	3282	101.7	101.5	7.9	6.0	0.2	4.3	0.84
81	2019	White_line_dou	13025	102.1	102.6	16.6	12.6	-0.5	8.9	0.85
82	2020	White_line_dou	15562	99.8	101.8	15.5	11.8	-2.0	8.3	0.85
83	2021	White_line_dou	14226	104.4	103.8	13.2	10.7	0.7	6.5	0.87
84	2022	White_line_dou	3282	105.0	104.5	11.7	9.8	0.5	6.2	0.85
85	2019	Dermatitis	8580	98.7	98.9	10.7	8.5	-0.2	5.3	0.87
86	2020	Dermatitis	14168	100.6	99.6	10.3	8.4	1.0	5.6	0.84
87	2021	Dermatitis	14226	98.7	99.1	9.6	7.7	-0.4	5.0	0.85
88	2022	Dermatitis	3282	99.5	98.4	9.4	7.6	1.0	4.8	0.86
89	2019	Heel_horn_eros	10912	98.8	99.9	10.2	8.2	-1.1	4.9	0.88
90	2020	Heel_horn_eros	14905	99.8	100.2	9.4	8.0	-0.4	4.6	0.87
91	2021	Heel_horn_eros	14226	99.6	101.1	8.4	7.0	-1.4	4.2	0.86
92	2022	Heel_horn_eros	3282	100.8	101.0	8.1	6.6	-0.2	4.4	0.84
93	2019	Sole_heamorrha	9072	101.8	102.6	12.8	10.1	-0.7	6.6	0.86
94	2020	Sole_heamorrha	14335	100.4	101.6	11.9	9.4	-1.2	6.1	0.86
95	2021	Sole_heamorrha	14226	103.5	103.3	10.1	8.7	0.1	4.7	0.88
96	2022	Sole_heamorrha	3282	103.6	103.4	9.4	8.3	0.2	4.8	0.86
97	2019	Sole_ulcer	8258	100.2	99.9	12.9	10.7	0.3	6.5	0.86
98	2020	Sole_ulcer	14044	98.4	99.4	12.9	10.8	-1.0	7.1	0.83
99	2021	Sole_ulcer	14226	101.7	101.5	11.4	9.9	0.2	5.2	0.89
100	2022	Sole_ulcer	3282	101.4	101.4	10.3	9.0	0.0	5.3	0.86
101	2019	Cork_screw_cla	8087	102.3	103.0	12.6	9.1	-0.7	6.9	0.85
102	2020	Cork_screw_cla	14128	101.6	102.2	11.5	8.3	-0.6	6.4	0.84
103	2021	Cork_screw_cla	14226	104.5	103.5	9.9	7.9	1.0	5.1	0.86
104	2022	Cork_screw_cla	3282	105.8	104.4	9.0	7.2	1.4	5.0	0.83
105	2019	Skin_proferati	8304	99.5	101.7	9.8	7.0	-2.2	6.0	0.79
106	2020	Skin_proferati	14060	101.3	101.8	8.5	6.9	-0.5	4.7	0.84
107	2021	Skin_proferati	14226	99.5	101.2	8.4	6.3	-1.7	5.0	0.80
108	2022	Skin_proferati	3282	101.8	101.6	7.9	6.0	0.2	4.4	0.83
109	2019	White_line_dou	8247	102.4	102.4	16.6	12.6	0.0	8.9	0.85
110	2020	White_line_dou	14036	99.4	101.4	15.5	11.9	-2.0	8.2	0.86

sum sta for SS and prev SS breeding value for genotyped females without phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_oss	std_ss	std_oss	mean_dif	std_dif	corr_SS
111	2021	White_line_dou	14226	105.0	103.9	13.2	10.7	1.2	6.5	0.88
112	2022	White_line_dou	3282	105.4	104.6	11.7	9.8	0.8	6.0	0.86

Claw

SS mendelian sampling term

Mendelian sampling is calculated as difference between of own singlestep GEBV for May23 and parent averages based on singlestep GEBV for May23. Standardized to base, which is 3-5 years old cows.

Calculated for animals born ≥ 2010

Column description:

BYR = birth year

m_Cownongeno = Mean mendelian sampling for cows without genotype and without phenotype

m_Cowgeno = Mean mendelian sampling for cows with genotype

m_bull = Mean mendelian sampling for bulls with genotype

N_Cownongeno = number of cows without genotype and without phenotype

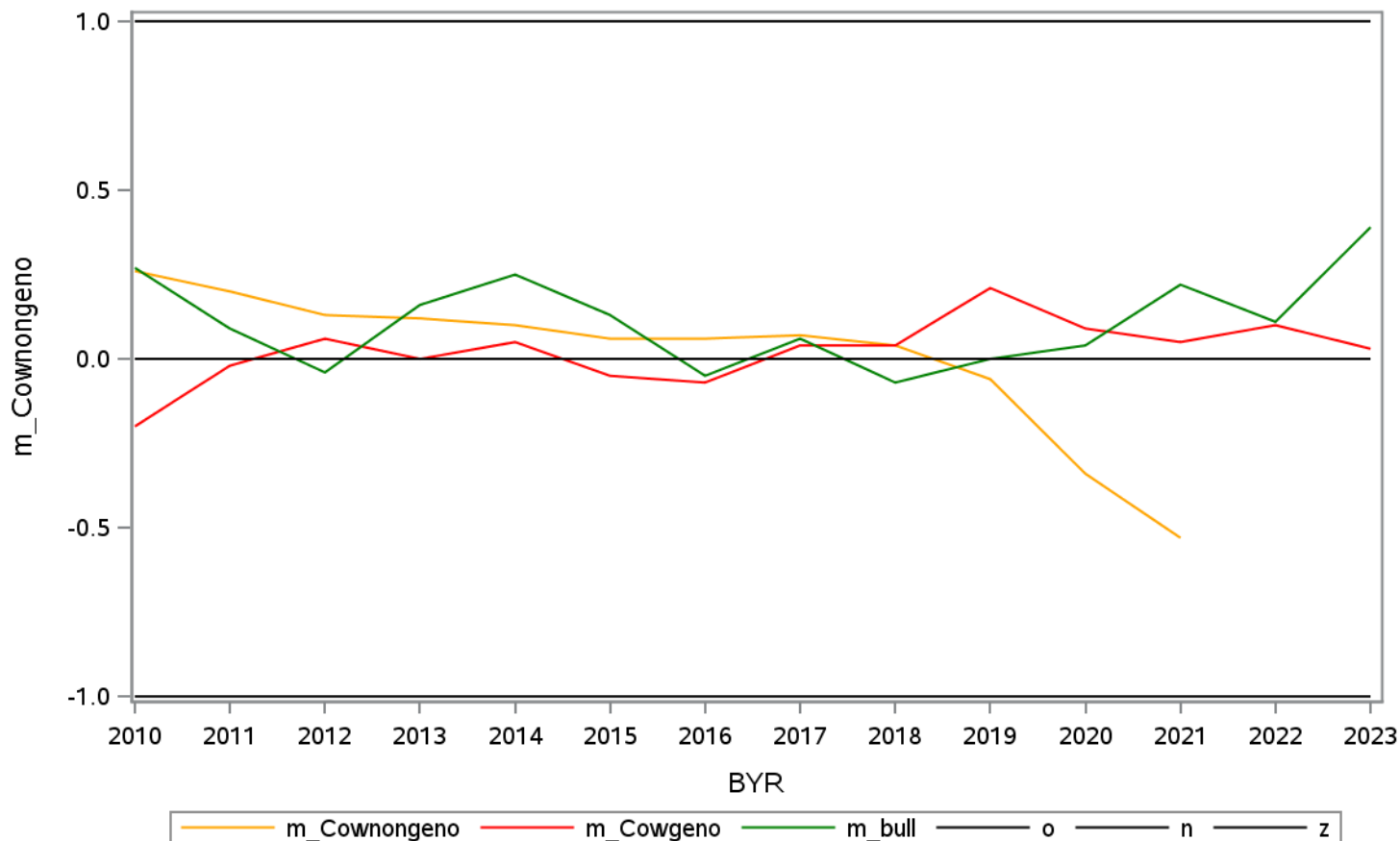
N_Cowgeno = number of cows with genotype

N_bull = number of bulls with genotype

Page no	Breed	Content
148		Description
149	HOL	Mendelian sampling
177	RDC	Mendelian sampling
205	JER	Mendelian sampling

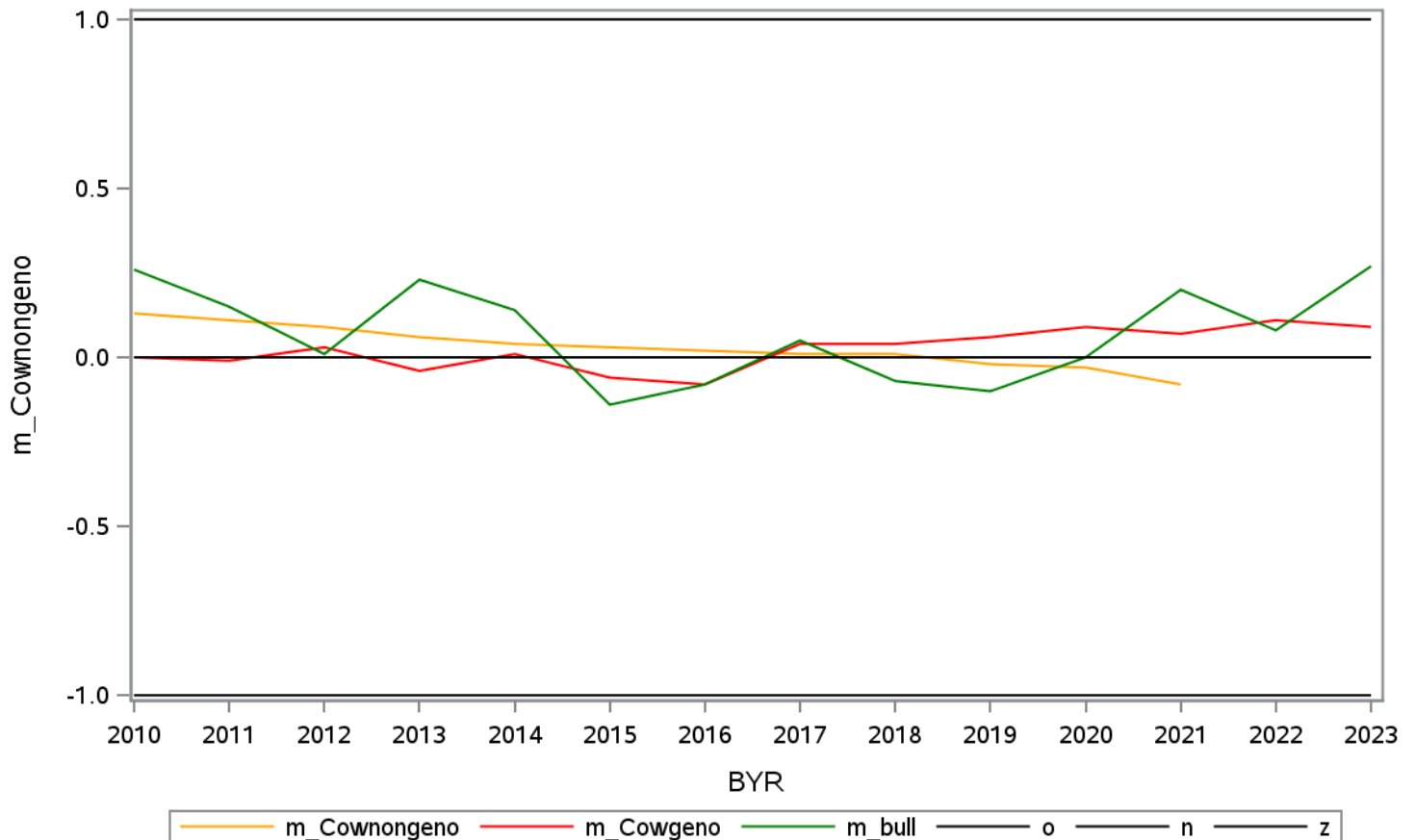
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.26	-0.20	0.27	61053	1589	1015
2	2011	0.20	-0.02	0.09	57637	3147	1464
3	2012	0.13	0.06	-0.04	54444	4898	1811
4	2013	0.12	0.00	0.16	47870	8221	2035
5	2014	0.10	0.05	0.25	44661	9833	2736
6	2015	0.06	-0.05	0.13	39737	12478	2513
7	2016	0.06	-0.07	-0.05	35130	19149	2701
8	2017	0.07	0.04	0.06	27051	28124	2920
9	2018	0.04	0.04	-0.07	20098	39008	2727
10	2019	-0.06	0.21	0.00	13247	44092	2931
11	2020	-0.34	0.09	0.04	8234	53247	2824
12	2021	-0.53	0.05	0.22	377	55722	2921
13	2022	.	0.10	0.11	.	56325	2906
14	2023	.	0.03	0.39	.	7760	679

Mendelian sampling for 'Dermatitis1' ' 1



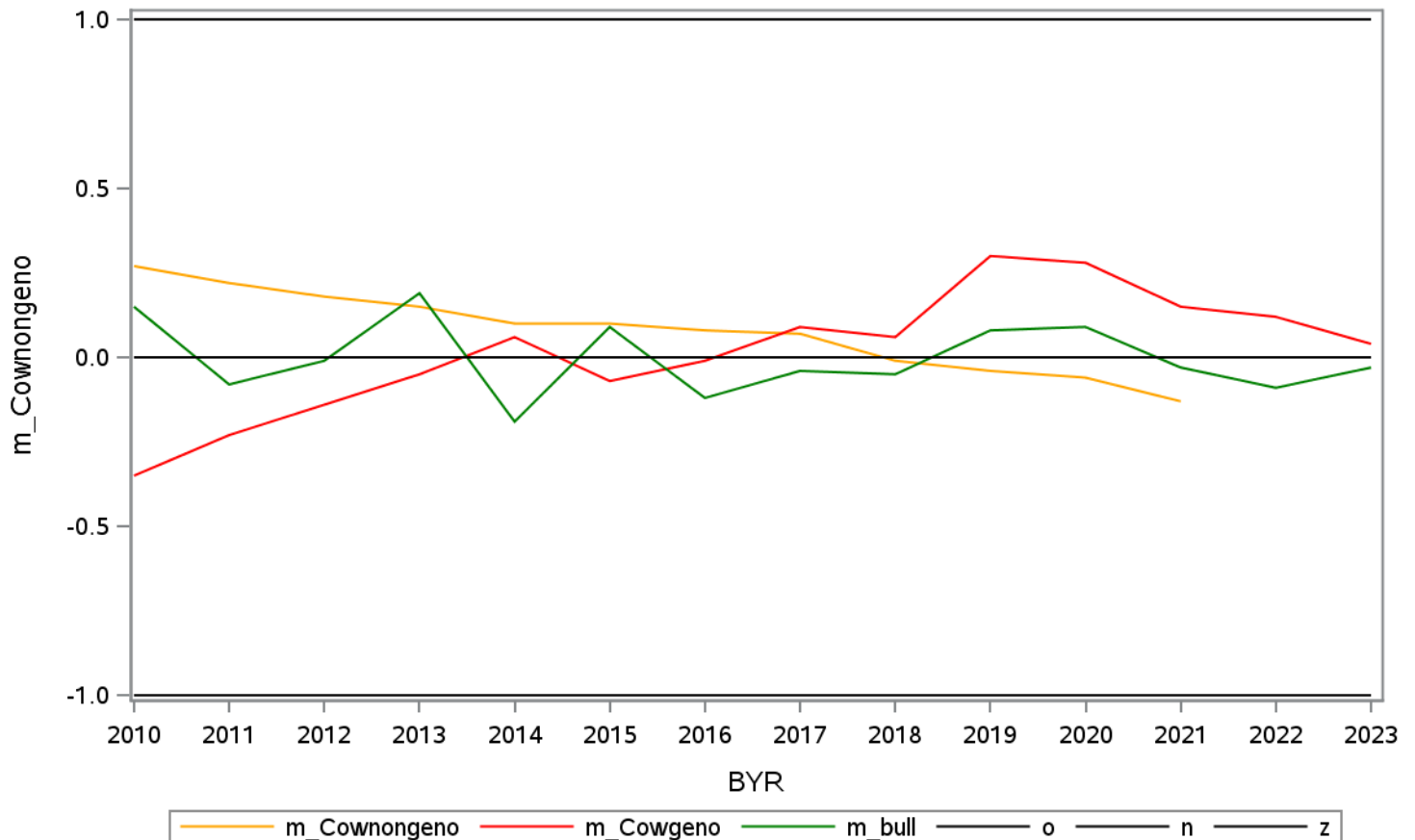
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.13	0.00	0.26	85799	1589	1015
2	2011	0.11	-0.01	0.15	85282	3147	1464
3	2012	0.09	0.03	0.01	85313	4898	1811
4	2013	0.06	-0.04	0.23	82063	8221	2035
5	2014	0.04	0.01	0.14	82711	9833	2736
6	2015	0.03	-0.06	-0.14	79563	12478	2513
7	2016	0.02	-0.08	-0.08	76629	19149	2701
8	2017	0.01	0.04	0.05	70487	28124	2920
9	2018	0.01	0.04	-0.07	64446	39008	2727
10	2019	-0.02	0.06	-0.10	55855	44092	2931
11	2020	-0.03	0.09	0.00	45438	53247	2824
12	2021	-0.08	0.07	0.20	2906	55722	2921
13	2022	.	0.11	0.08	.	56325	2906
14	2023	.	0.09	0.27	.	7760	679

Mendelian sampling for 'Heel_horn_erosion1' 2



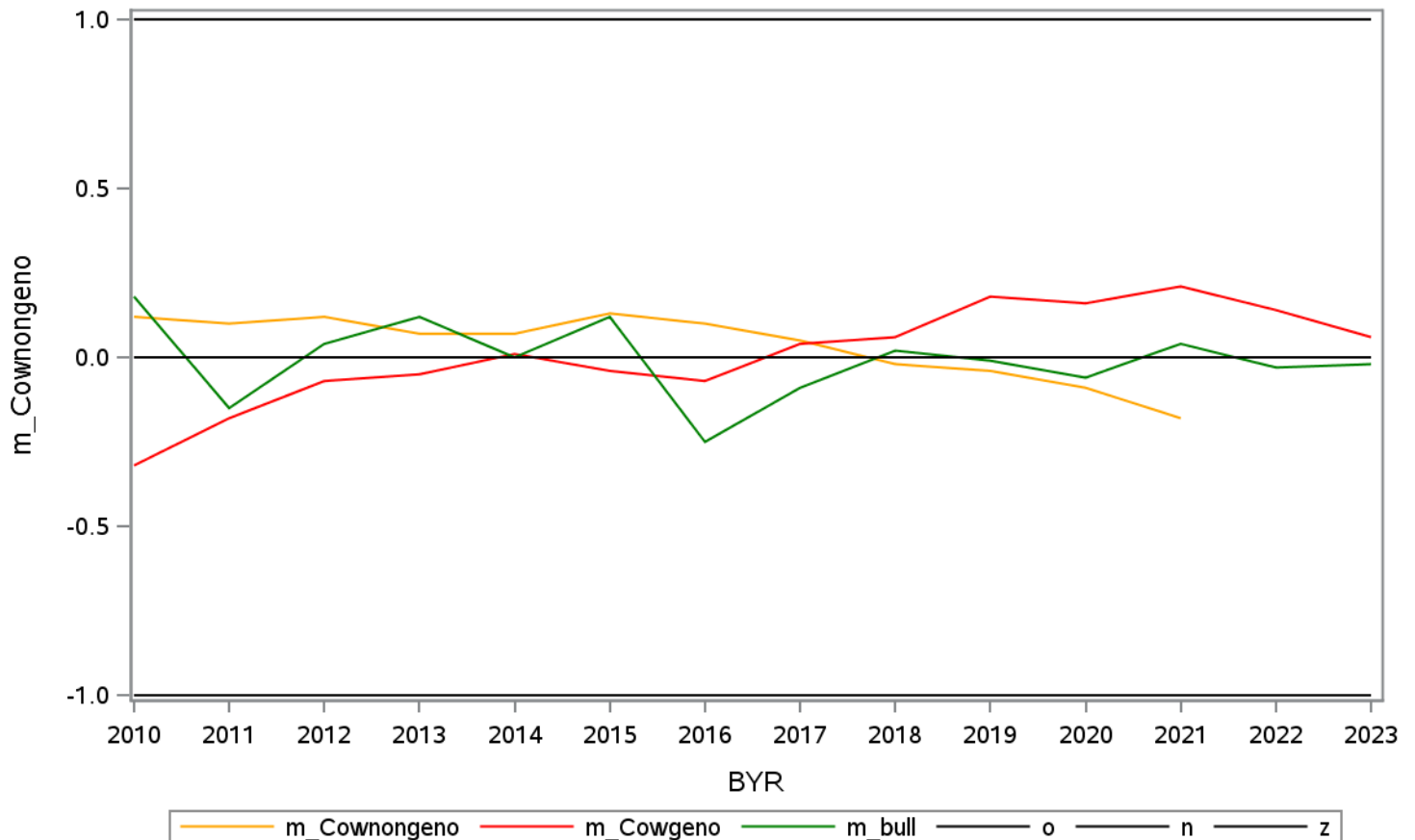
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.27	-0.35	0.15	64244	1589	1015
2	2011	0.22	-0.23	-0.08	61085	3147	1464
3	2012	0.18	-0.14	-0.01	59144	4898	1811
4	2013	0.15	-0.05	0.19	51864	8221	2035
5	2014	0.10	0.06	-0.19	51380	9833	2736
6	2015	0.10	-0.07	0.09	46633	12478	2513
7	2016	0.08	-0.01	-0.12	42625	19149	2701
8	2017	0.07	0.09	-0.04	36352	28124	2920
9	2018	-0.01	0.06	-0.05	31232	39008	2727
10	2019	-0.04	0.30	0.08	25731	44092	2931
11	2020	-0.06	0.28	0.09	21171	53247	2824
12	2021	-0.13	0.15	-0.03	1464	55722	2921
13	2022	.	0.12	-0.09	.	56325	2906
14	2023	.	0.04	-0.03	.	7760	679

Mendelian sampling for 'Sole_heamorrhage1' ' 3



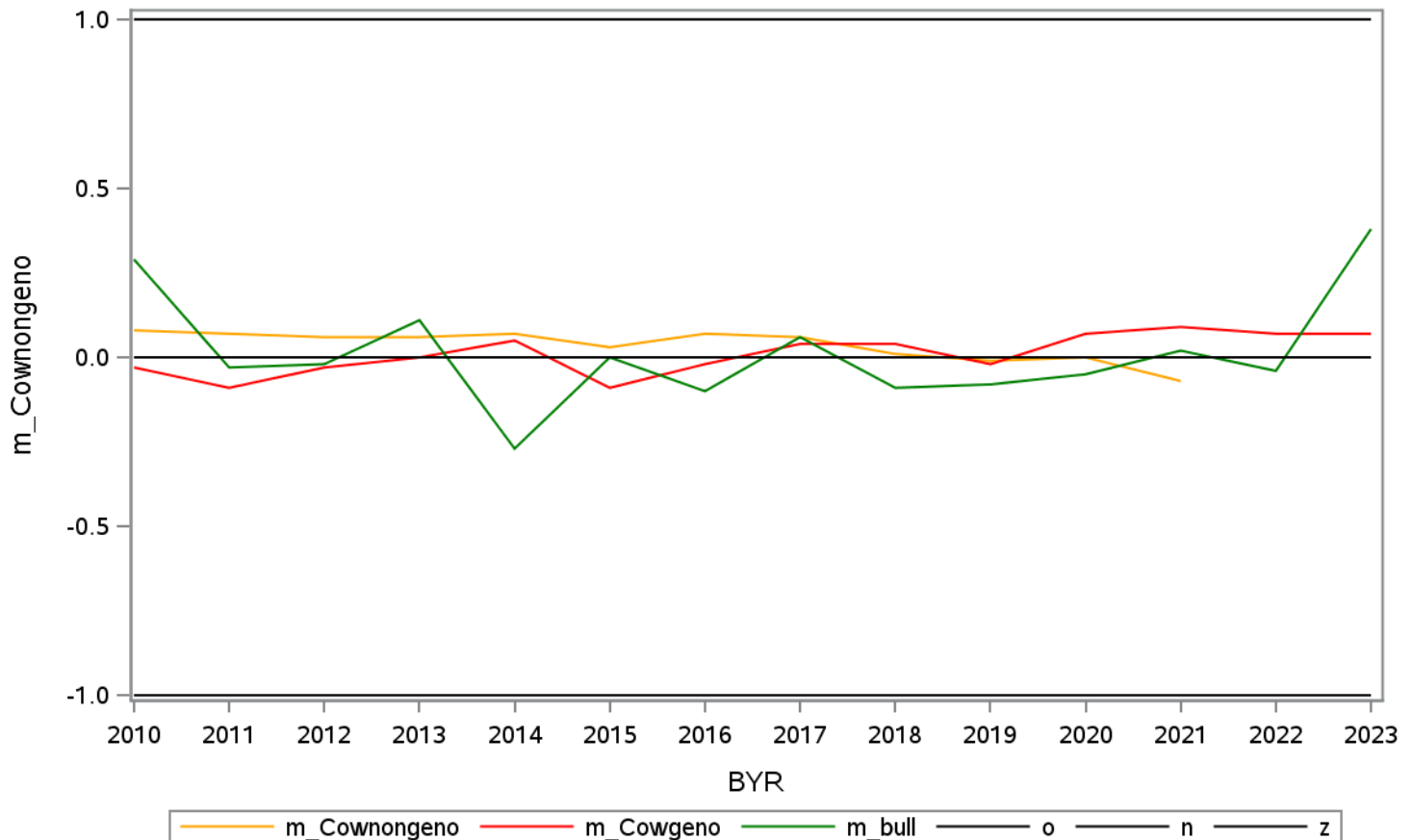
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.12	-0.32	0.18	63160	1589	1015
2	2011	0.10	-0.18	-0.15	59705	3147	1464
3	2012	0.12	-0.07	0.04	57005	4898	1811
4	2013	0.07	-0.05	0.12	49212	8221	2035
5	2014	0.07	0.01	0.00	47201	9833	2736
6	2015	0.13	-0.04	0.12	41973	12478	2513
7	2016	0.10	-0.07	-0.25	38116	19149	2701
8	2017	0.05	0.04	-0.09	30543	28124	2920
9	2018	-0.02	0.06	0.02	23385	39008	2727
10	2019	-0.04	0.18	-0.01	15382	44092	2931
11	2020	-0.09	0.16	-0.06	11796	53247	2824
12	2021	-0.18	0.21	0.04	941	55722	2921
13	2022	.	0.14	-0.03	.	56325	2906
14	2023	.	0.06	-0.02	.	7760	679

Mendelian sampling for 'Sole_ulcer1' ' 4



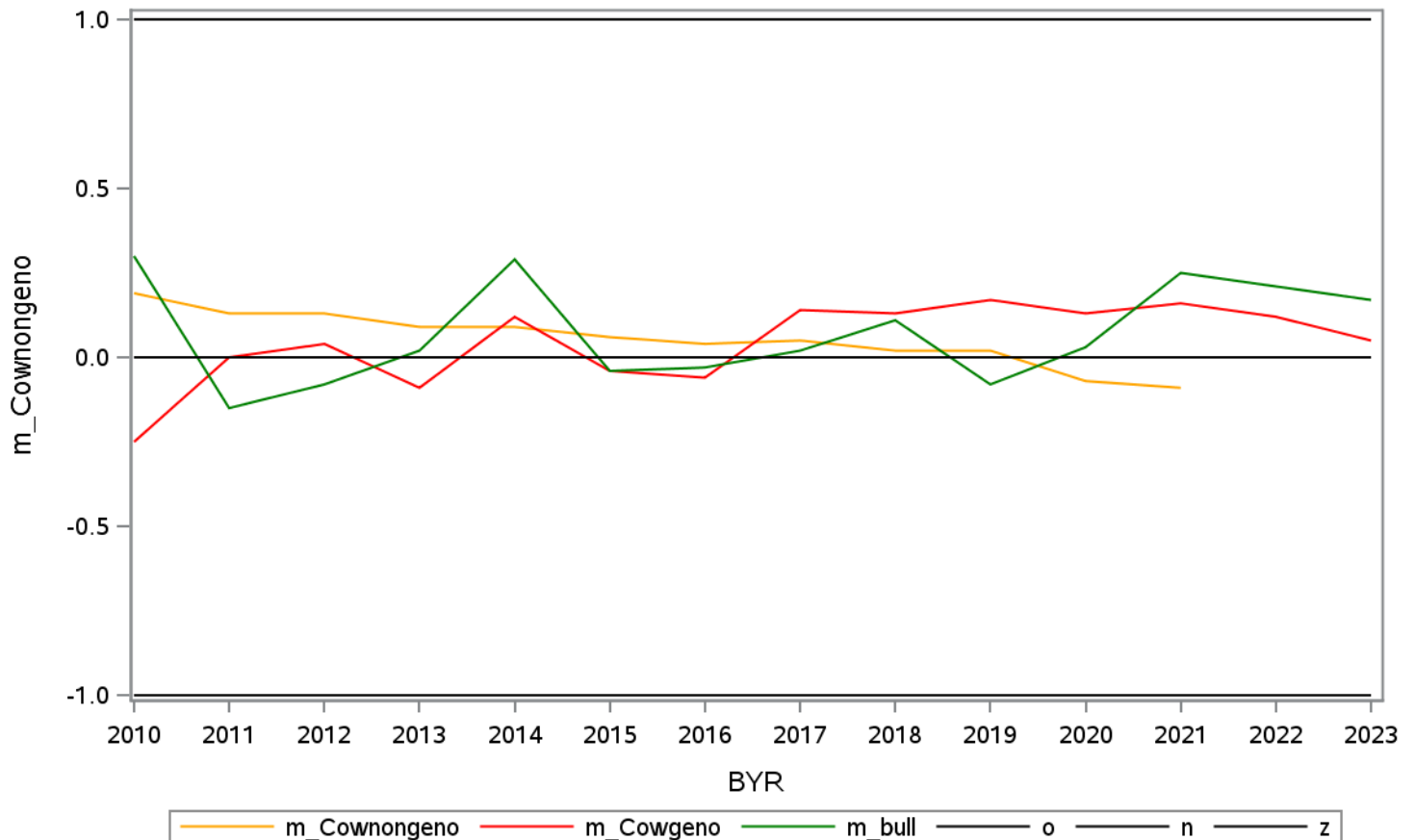
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.08	-0.03	0.29	77338	1589	1015
2	2011	0.07	-0.09	-0.03	75297	3147	1464
3	2012	0.06	-0.03	-0.02	72967	4898	1811
4	2013	0.06	0.00	0.11	66385	8221	2035
5	2014	0.07	0.05	-0.27	64250	9833	2736
6	2015	0.03	-0.09	0.00	57605	12478	2513
7	2016	0.07	-0.02	-0.10	52482	19149	2701
8	2017	0.06	0.04	0.06	40937	28124	2920
9	2018	0.01	0.04	-0.09	29026	39008	2727
10	2019	-0.01	-0.02	-0.08	19850	44092	2931
11	2020	0.00	0.07	-0.05	18197	53247	2824
12	2021	-0.07	0.09	0.02	1330	55722	2921
13	2022	.	0.07	-0.04	.	56325	2906
14	2023	.	0.07	0.38	.	7760	679

Mendelian sampling for 'Cork_screw_claws1' 5



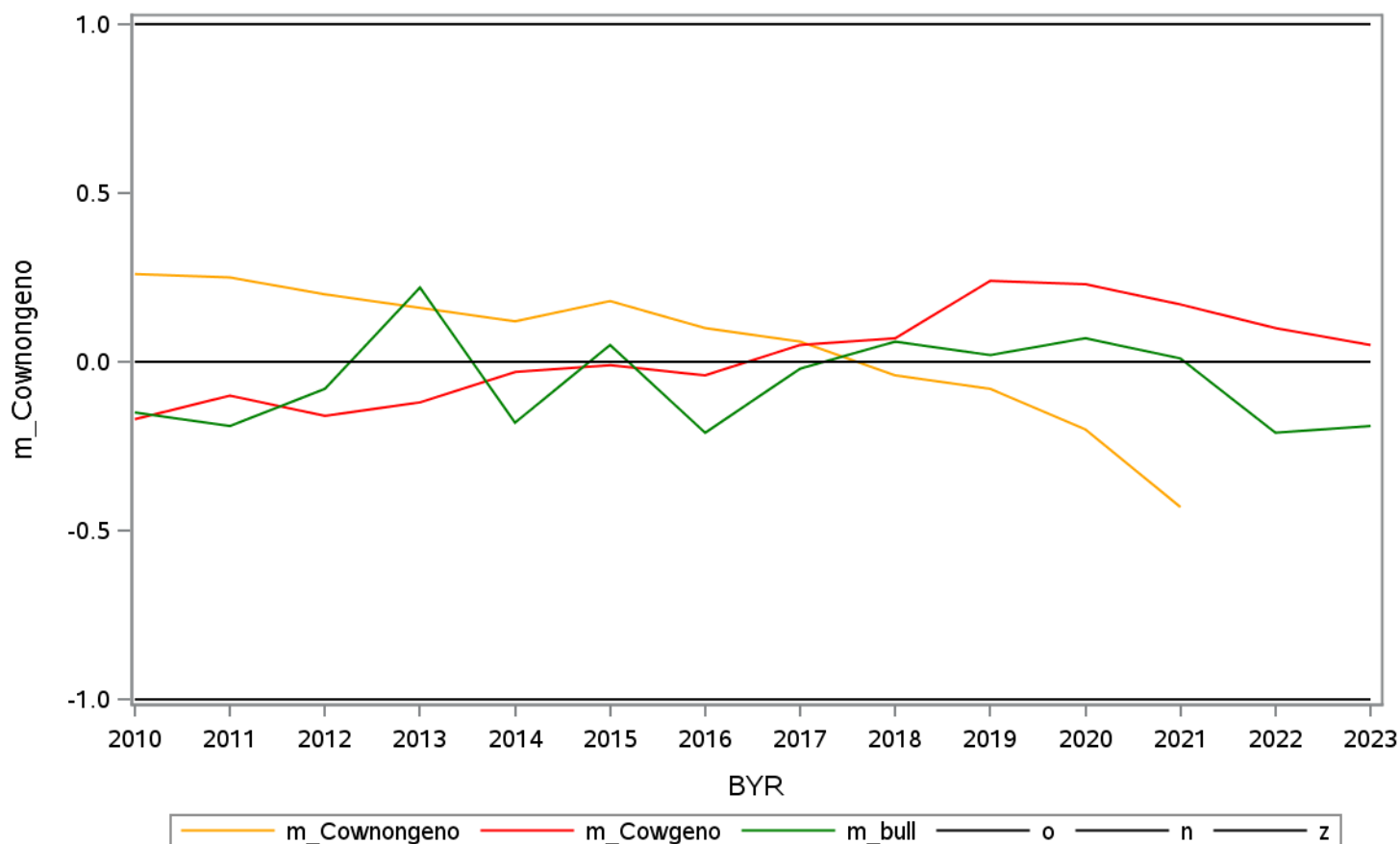
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.19	-0.25	0.30	64574	1589	1015
2	2011	0.13	0.00	-0.15	61801	3147	1464
3	2012	0.13	0.04	-0.08	58886	4898	1811
4	2013	0.09	-0.09	0.02	51261	8221	2035
5	2014	0.09	0.12	0.29	49635	9833	2736
6	2015	0.06	-0.04	-0.04	44117	12478	2513
7	2016	0.04	-0.06	-0.03	40591	19149	2701
8	2017	0.05	0.14	0.02	32850	28124	2920
9	2018	0.02	0.13	0.11	24920	39008	2727
10	2019	0.02	0.17	-0.08	16625	44092	2931
11	2020	-0.07	0.13	0.03	13387	53247	2824
12	2021	-0.09	0.16	0.25	997	55722	2921
13	2022	.	0.12	0.21	.	56325	2906
14	2023	.	0.05	0.17	.	7760	679

Mendelian sampling for 'Skin_proferation1' ' 6



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.26	-0.17	-0.15	62716	1589	1015
2	2011	0.25	-0.10	-0.19	59326	3147	1464
3	2012	0.20	-0.16	-0.08	56493	4898	1811
4	2013	0.16	-0.12	0.22	48946	8221	2035
5	2014	0.12	-0.03	-0.18	47078	9833	2736
6	2015	0.18	-0.01	0.05	41363	12478	2513
7	2016	0.10	-0.04	-0.21	37472	19149	2701
8	2017	0.06	0.05	-0.02	29901	28124	2920
9	2018	-0.04	0.07	0.06	22934	39008	2727
10	2019	-0.08	0.24	0.02	14897	44092	2931
11	2020	-0.20	0.23	0.07	10911	53247	2824
12	2021	-0.43	0.17	0.01	907	55722	2921
13	2022	.	0.10	-0.21	.	56325	2906
14	2023	.	0.05	-0.19	.	7760	679

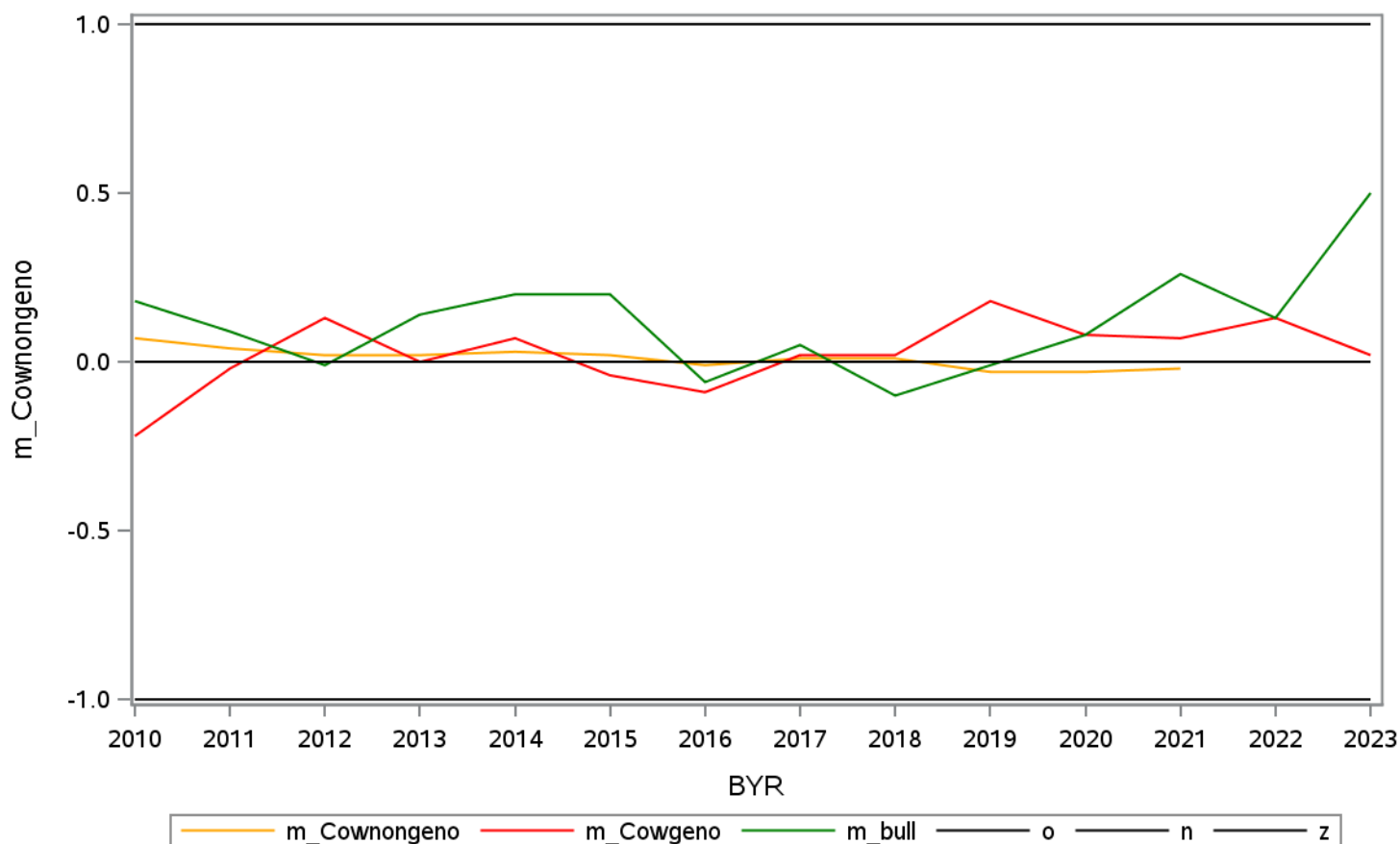
Mendelian sampling for 'White_line_double_sole1' 7



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.07	-0.22	0.18	78930	1589	1015
2	2011	0.04	-0.02	0.09	77775	3147	1464
3	2012	0.02	0.13	-0.01	74277	4898	1811
4	2013	0.02	0.00	0.14	69988	8221	2035
5	2014	0.03	0.07	0.20	66895	9833	2736
6	2015	0.02	-0.04	0.20	60947	12478	2513
7	2016	-0.01	-0.09	-0.06	54984	19149	2701
8	2017	0.01	0.02	0.05	44366	28124	2920
9	2018	0.01	0.02	-0.10	39827	39008	2727
10	2019	-0.03	0.18	-0.01	53070	44092	2931
11	2020	-0.03	0.08	0.08	76892	53247	2824
12	2021	-0.02	0.07	0.26	4597	55722	2921
13	2022	.	0.13	0.13	.	56325	2906
14	2023	.	0.02	0.50	.	7760	679

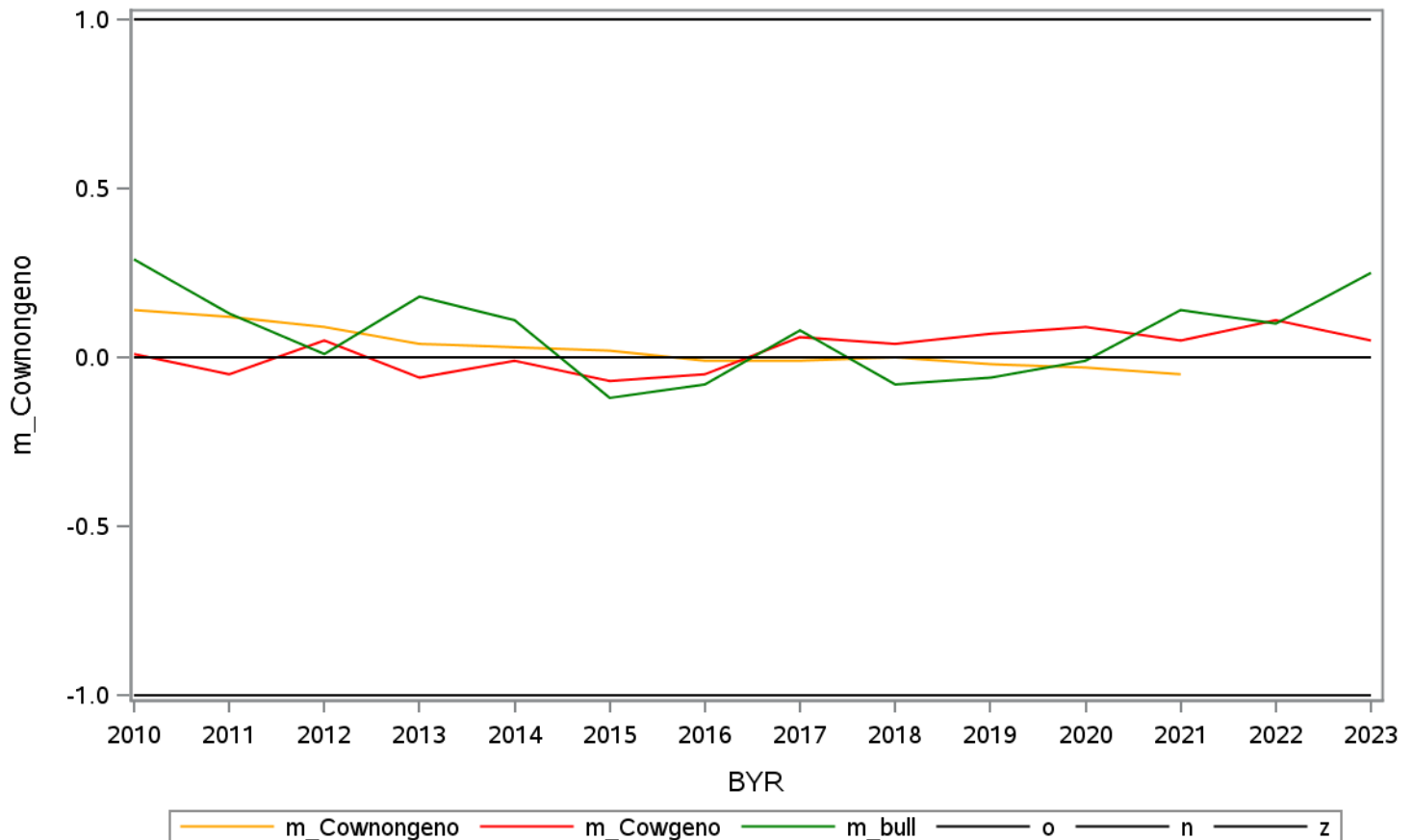
Mendelian sampling for 'Dermatitis2

' 8



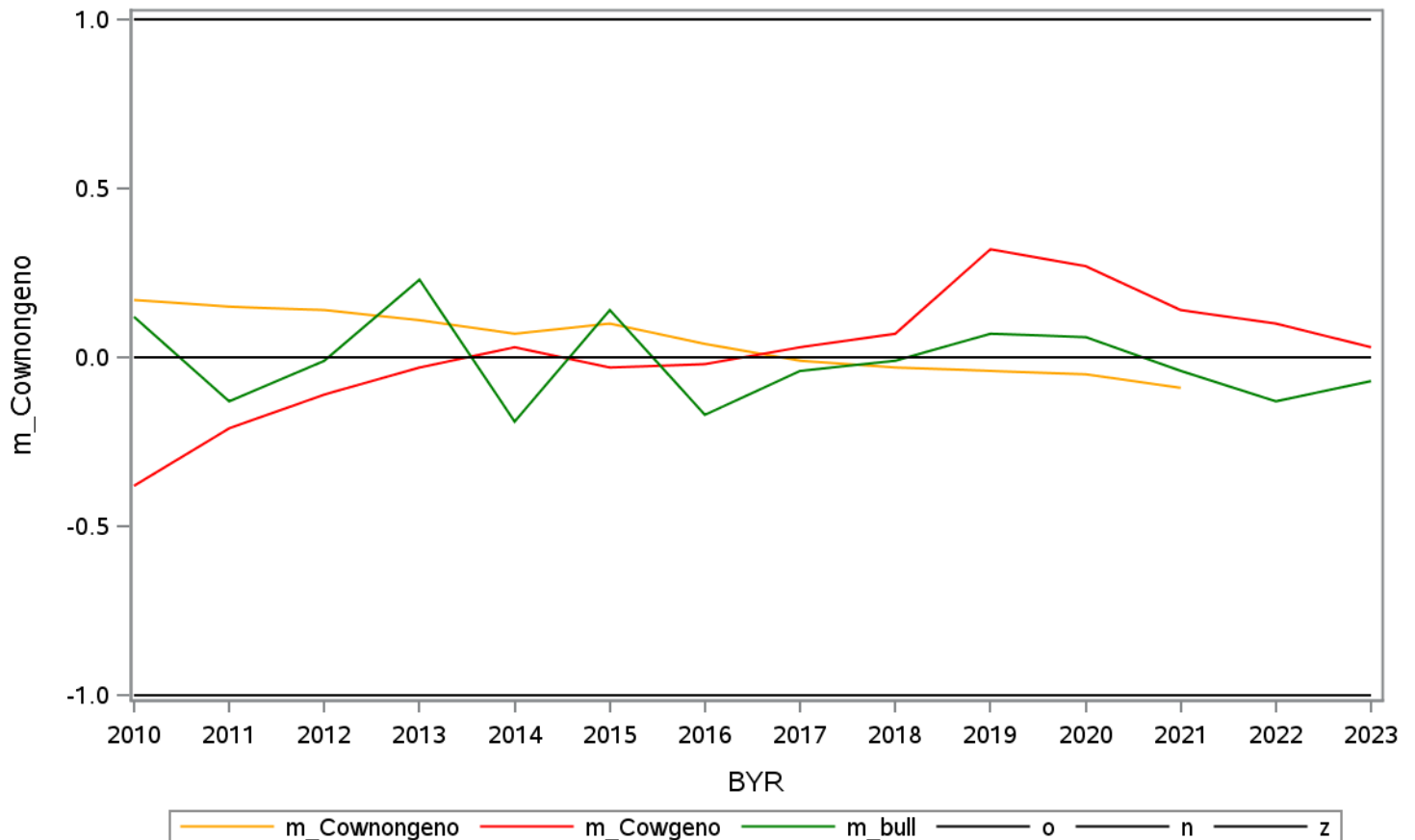
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.14	0.01	0.29	100900	1589	1015
2	2011	0.12	-0.05	0.13	101710	3147	1464
3	2012	0.09	0.05	0.01	100969	4898	1811
4	2013	0.04	-0.06	0.18	99614	8221	2035
5	2014	0.03	-0.01	0.11	99180	9833	2736
6	2015	0.02	-0.07	-0.12	94690	12478	2513
7	2016	-0.01	-0.05	-0.08	93554	19149	2701
8	2017	-0.01	0.06	0.08	82139	28124	2920
9	2018	0.00	0.04	-0.08	76355	39008	2727
10	2019	-0.02	0.07	-0.06	82164	44092	2931
11	2020	-0.03	0.09	-0.01	78867	53247	2824
12	2021	-0.05	0.05	0.14	4597	55722	2921
13	2022	.	0.11	0.10	.	56325	2906
14	2023	.	0.05	0.25	.	7760	679

Mendelian sampling for 'Heel_horn_erosion2 ' 9



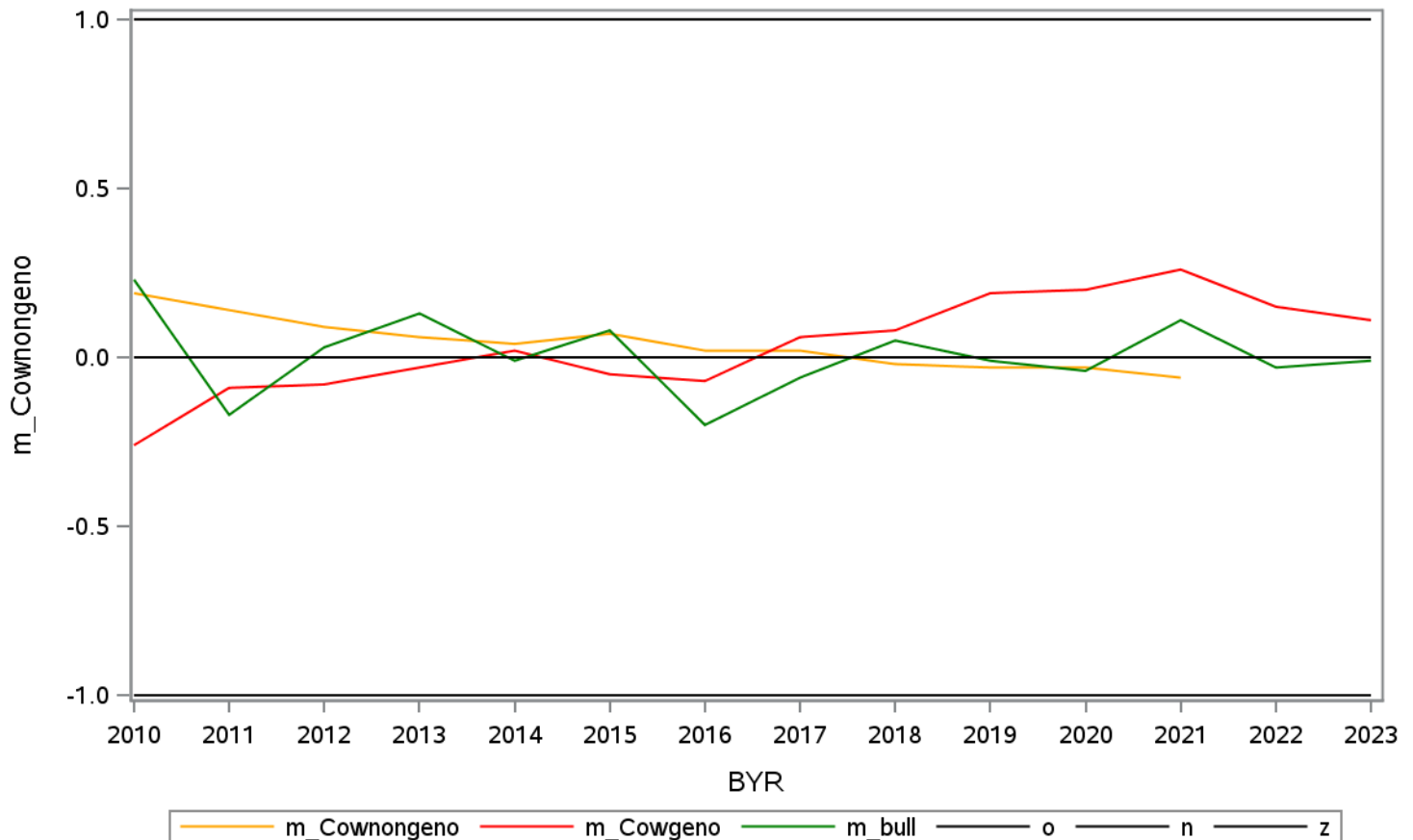
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.17	-0.38	0.12	81231	1589	1015
2	2011	0.15	-0.21	-0.13	80945	3147	1464
3	2012	0.14	-0.11	-0.01	77259	4898	1811
4	2013	0.11	-0.03	0.23	74749	8221	2035
5	2014	0.07	0.03	-0.19	71303	9833	2736
6	2015	0.10	-0.03	0.14	65635	12478	2513
7	2016	0.04	-0.02	-0.17	61537	19149	2701
8	2017	-0.01	0.03	-0.04	50603	28124	2920
9	2018	-0.03	0.07	-0.01	46930	39008	2727
10	2019	-0.04	0.32	0.07	60831	44092	2931
11	2020	-0.05	0.27	0.06	77510	53247	2824
12	2021	-0.09	0.14	-0.04	4597	55722	2921
13	2022	.	0.10	-0.13	.	56325	2906
14	2023	.	0.03	-0.07	.	7760	679

Mendelian sampling for 'Sole_heamorrhage2 ' 10



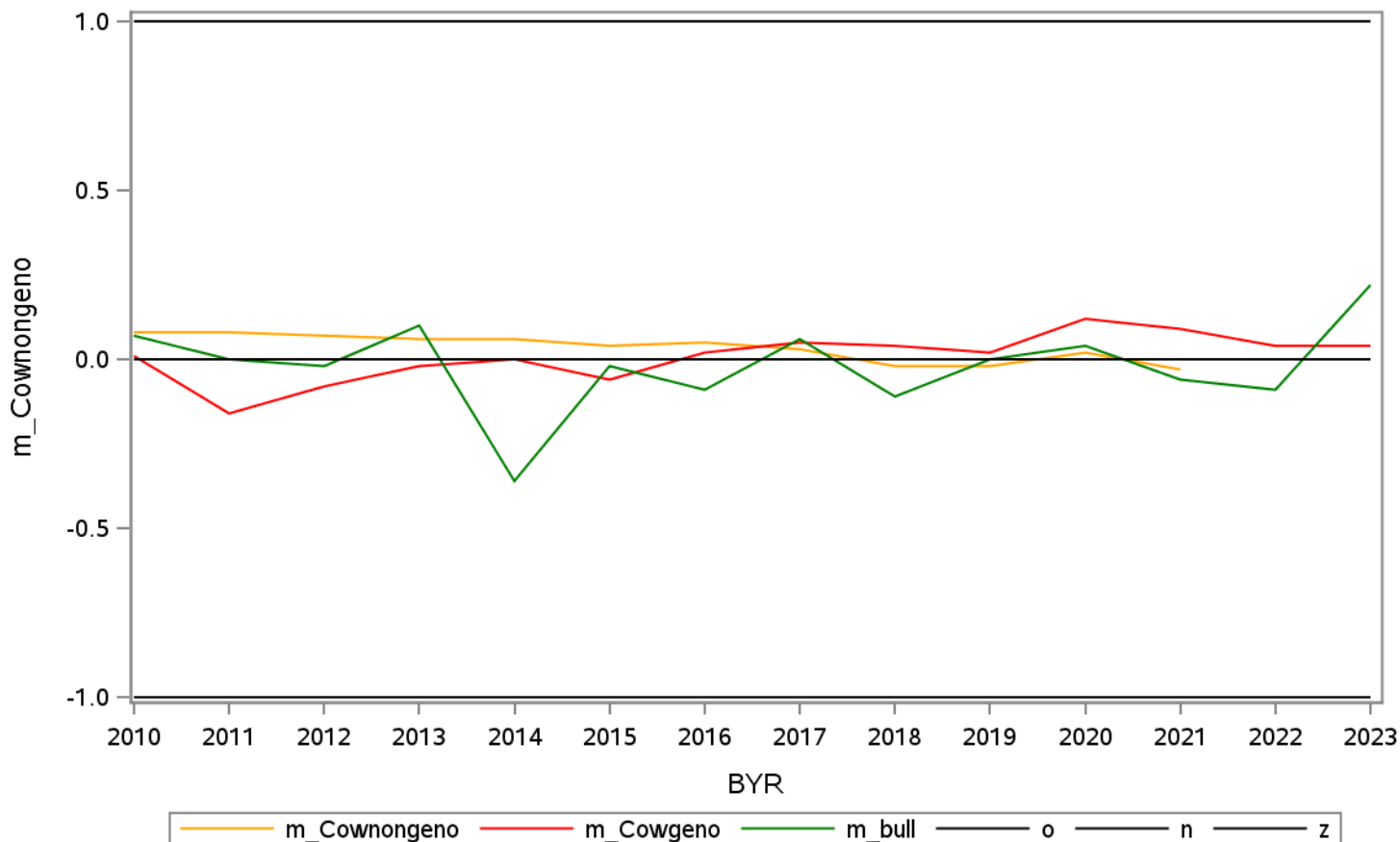
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.19	-0.26	0.23	80532	1589	1015
2	2011	0.14	-0.09	-0.17	79555	3147	1464
3	2012	0.09	-0.08	0.03	75324	4898	1811
4	2013	0.06	-0.03	0.13	71462	8221	2035
5	2014	0.04	0.02	-0.01	68201	9833	2736
6	2015	0.07	-0.05	0.08	62782	12478	2513
7	2016	0.02	-0.07	-0.20	57526	19149	2701
8	2017	0.02	0.06	-0.06	46883	28124	2920
9	2018	-0.02	0.08	0.05	41314	39008	2727
10	2019	-0.03	0.19	-0.01	55893	44092	2931
11	2020	-0.03	0.20	-0.04	77271	53247	2824
12	2021	-0.06	0.26	0.11	4597	55722	2921
13	2022	.	0.15	-0.03	.	56325	2906
14	2023	.	0.11	-0.01	.	7760	679

Mendelian sampling for 'Sole_ulcer2' ' 11



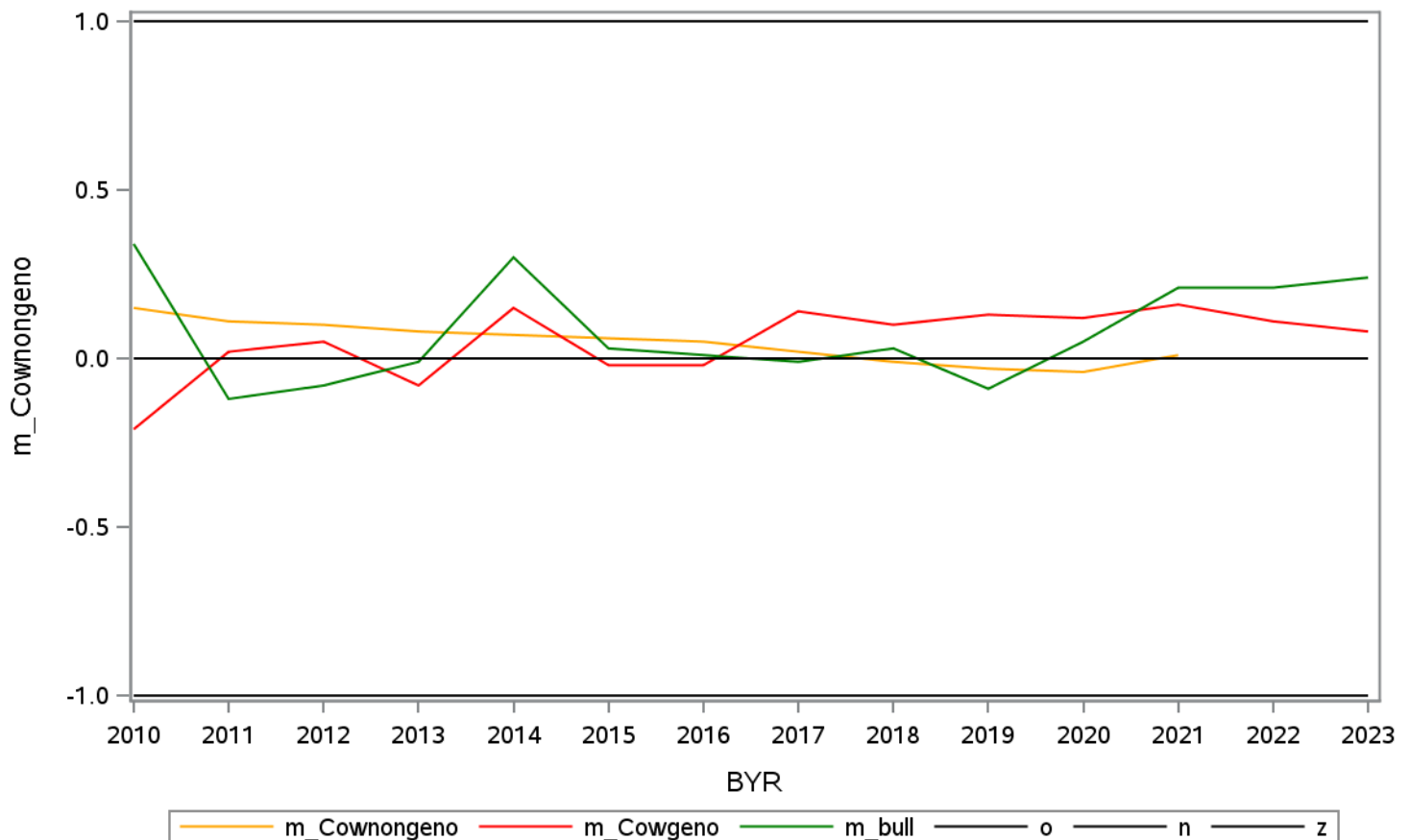
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.08	0.01	0.07	92817	1589	1015
2	2011	0.08	-0.16	0.00	91977	3147	1464
3	2012	0.07	-0.08	-0.02	88761	4898	1811
4	2013	0.06	-0.02	0.10	85055	8221	2035
5	2014	0.06	0.00	-0.36	81988	9833	2736
6	2015	0.04	-0.06	-0.02	75853	12478	2513
7	2016	0.05	0.02	-0.09	67958	19149	2701
8	2017	0.03	0.05	0.06	52692	28124	2920
9	2018	-0.02	0.04	-0.11	46244	39008	2727
10	2019	-0.02	0.02	0.00	61183	44092	2931
11	2020	0.02	0.12	0.04	77625	53247	2824
12	2021	-0.03	0.09	-0.06	4597	55722	2921
13	2022	.	0.04	-0.09	.	56325	2906
14	2023	.	0.04	0.22	.	7760	679

Mendelian sampling for 'Cork_screw_claws2 ' 12



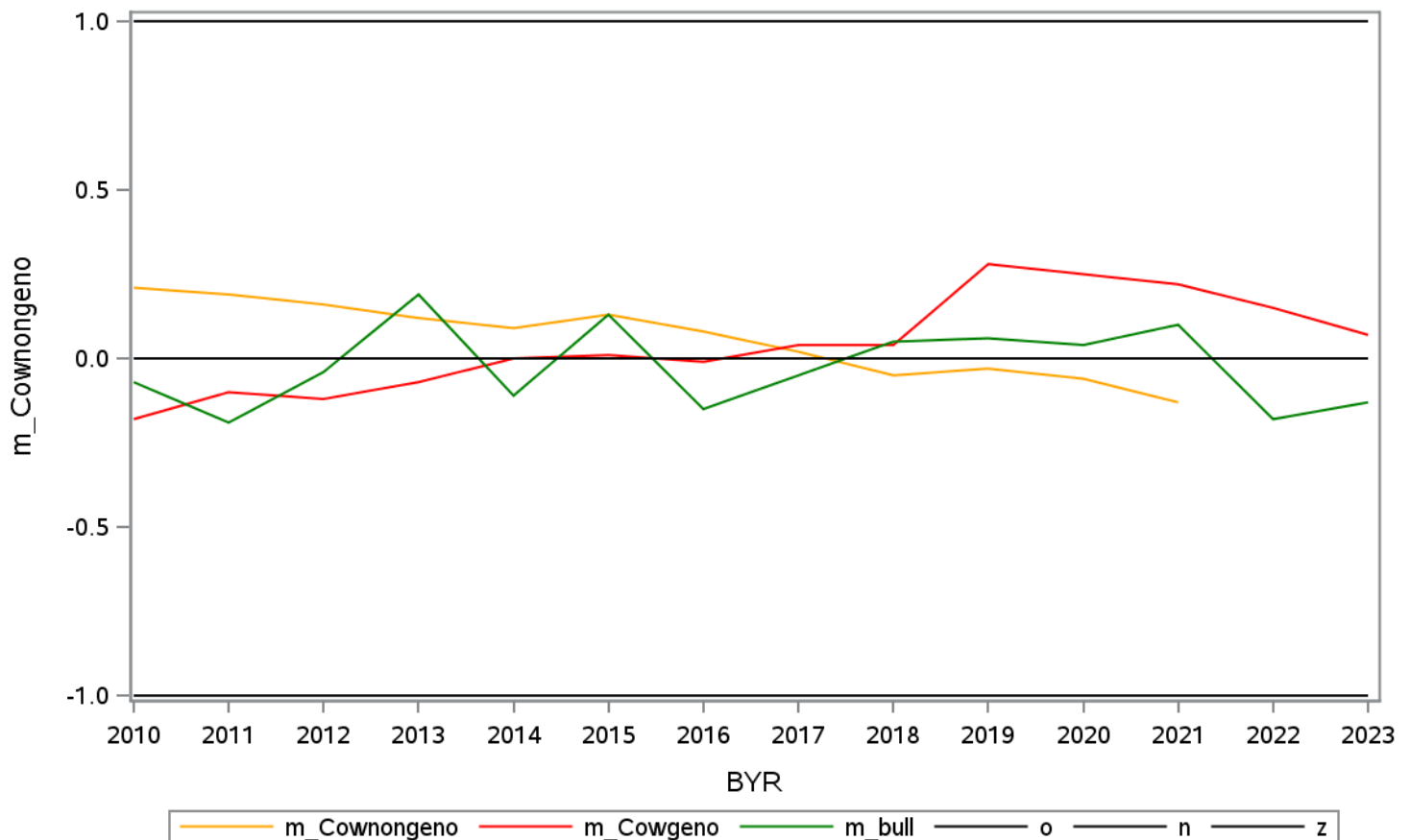
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.15	-0.21	0.34	82701	1589	1015
2	2011	0.11	0.02	-0.12	81511	3147	1464
3	2012	0.10	0.05	-0.08	77466	4898	1811
4	2013	0.08	-0.08	-0.01	73955	8221	2035
5	2014	0.07	0.15	0.30	70955	9833	2736
6	2015	0.06	-0.02	0.03	65752	12478	2513
7	2016	0.05	-0.02	0.01	60473	19149	2701
8	2017	0.02	0.14	-0.01	48998	28124	2920
9	2018	-0.01	0.10	0.03	43294	39008	2727
10	2019	-0.03	0.13	-0.09	57630	44092	2931
11	2020	-0.04	0.12	0.05	77327	53247	2824
12	2021	0.01	0.16	0.21	4597	55722	2921
13	2022	.	0.11	0.21	.	56325	2906
14	2023	.	0.08	0.24	.	7760	679

Mendelian sampling for 'Skin_proferation2 ' 13



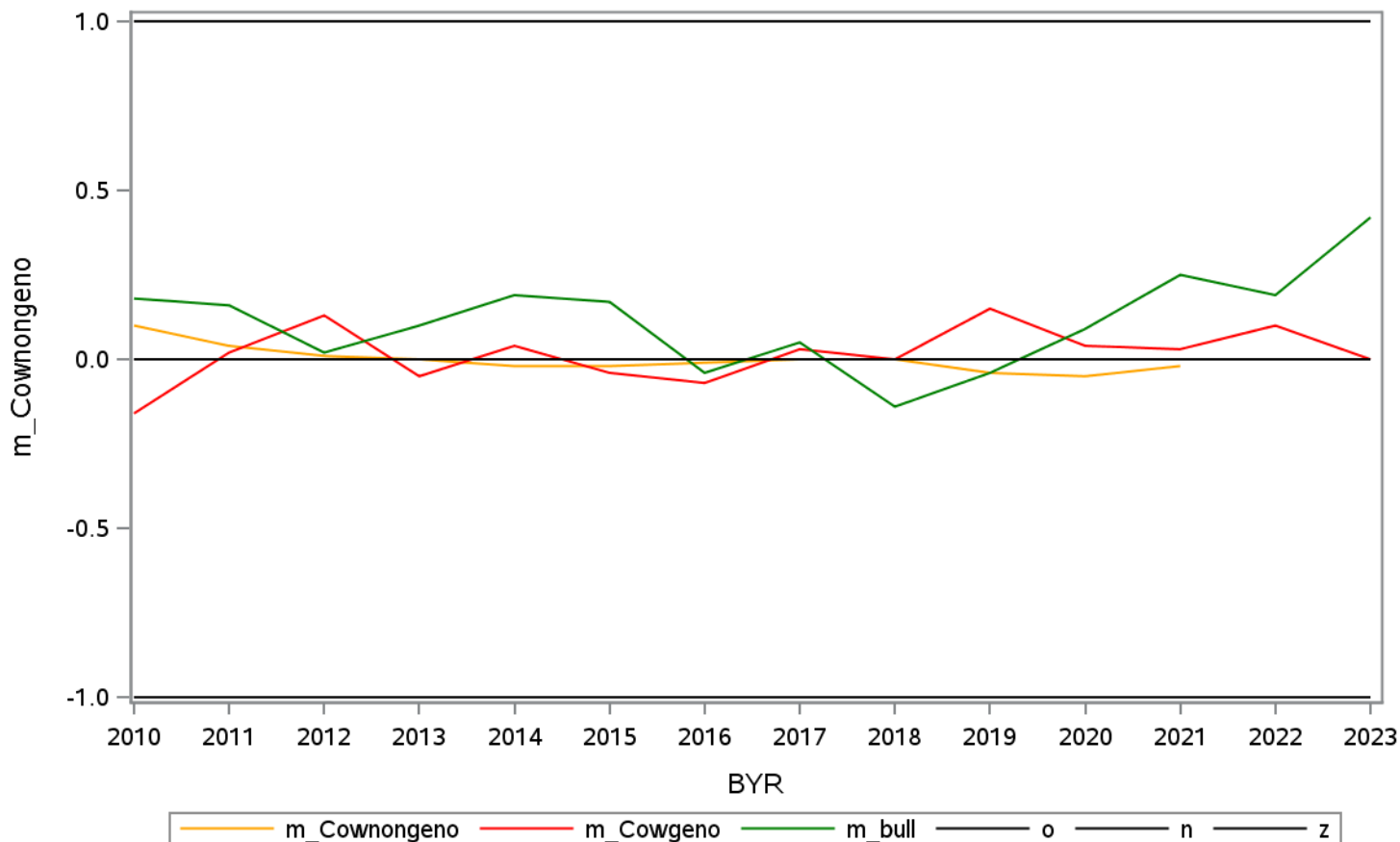
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.21	-0.18	-0.07	80737	1589	1015
2	2011	0.19	-0.10	-0.19	79613	3147	1464
3	2012	0.16	-0.12	-0.04	75526	4898	1811
4	2013	0.12	-0.07	0.19	71924	8221	2035
5	2014	0.09	0.00	-0.11	68555	9833	2736
6	2015	0.13	0.01	0.13	63108	12478	2513
7	2016	0.08	-0.01	-0.15	58032	19149	2701
8	2017	0.02	0.04	-0.05	47145	28124	2920
9	2018	-0.05	0.04	0.05	41471	39008	2727
10	2019	-0.03	0.28	0.06	55715	44092	2931
11	2020	-0.06	0.25	0.04	77249	53247	2824
12	2021	-0.13	0.22	0.10	4597	55722	2921
13	2022	.	0.15	-0.18	.	56325	2906
14	2023	.	0.07	-0.13	.	7760	679

Mendelian sampling for 'White_line_double_sole2' 14



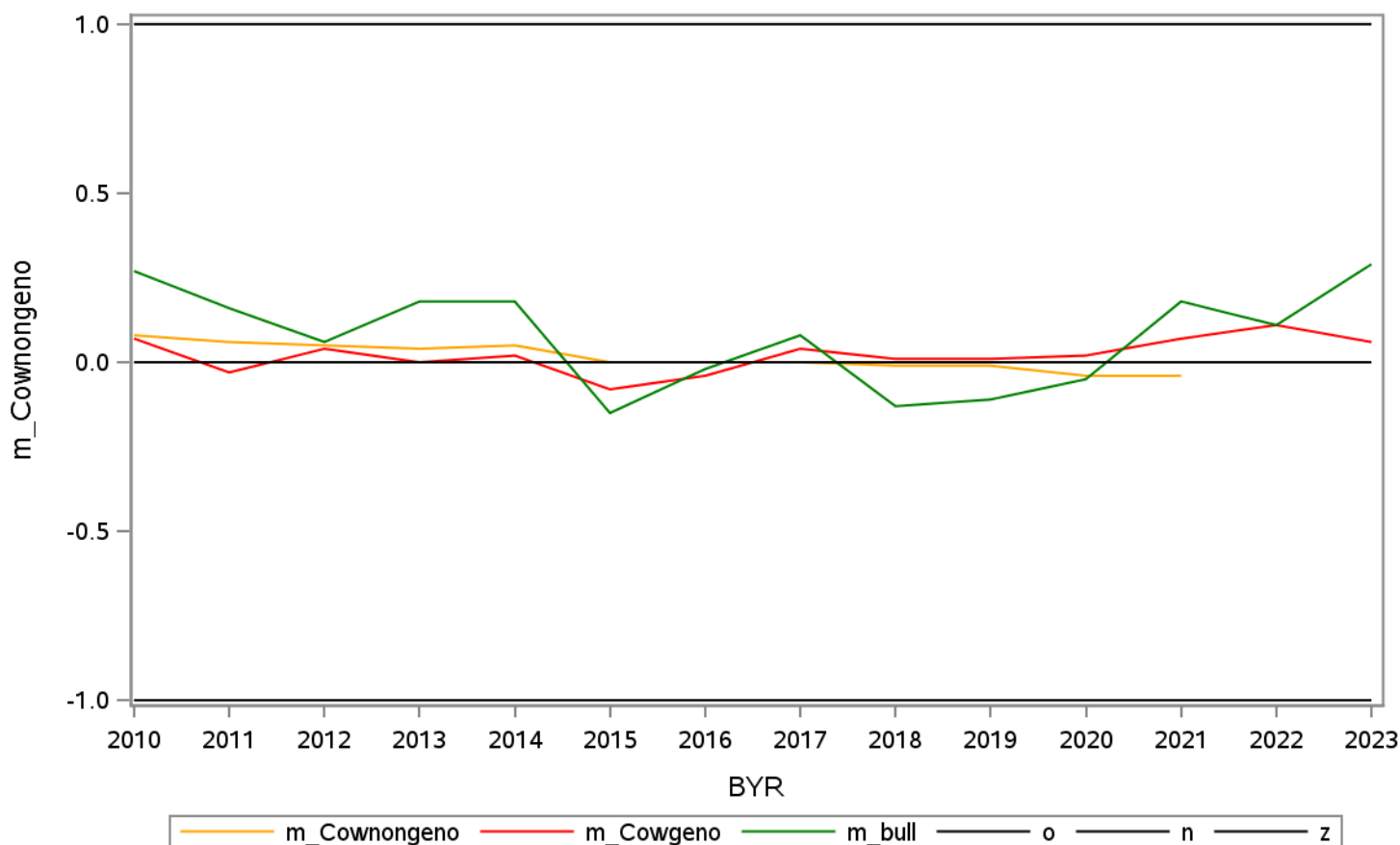
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.10	-0.16	0.18	101554	1589	1015
2	2011	0.04	0.02	0.16	99247	3147	1464
3	2012	0.01	0.13	0.02	98388	4898	1811
4	2013	0.00	-0.05	0.10	94957	8221	2035
5	2014	-0.02	0.04	0.19	92574	9833	2736
6	2015	-0.02	-0.04	0.17	85581	12478	2513
7	2016	-0.01	-0.07	-0.04	78495	19149	2701
8	2017	0.00	0.03	0.05	68846	28124	2920
9	2018	0.00	0.00	-0.14	79776	39008	2727
10	2019	-0.04	0.15	-0.04	105352	44092	2931
11	2020	-0.05	0.04	0.09	80054	53247	2824
12	2021	-0.02	0.03	0.25	4597	55722	2921
13	2022	.	0.10	0.19	.	56325	2906
14	2023	.	0.00	0.42	.	7760	679

Mendelian sampling for 'Dermatitis3' ' 15



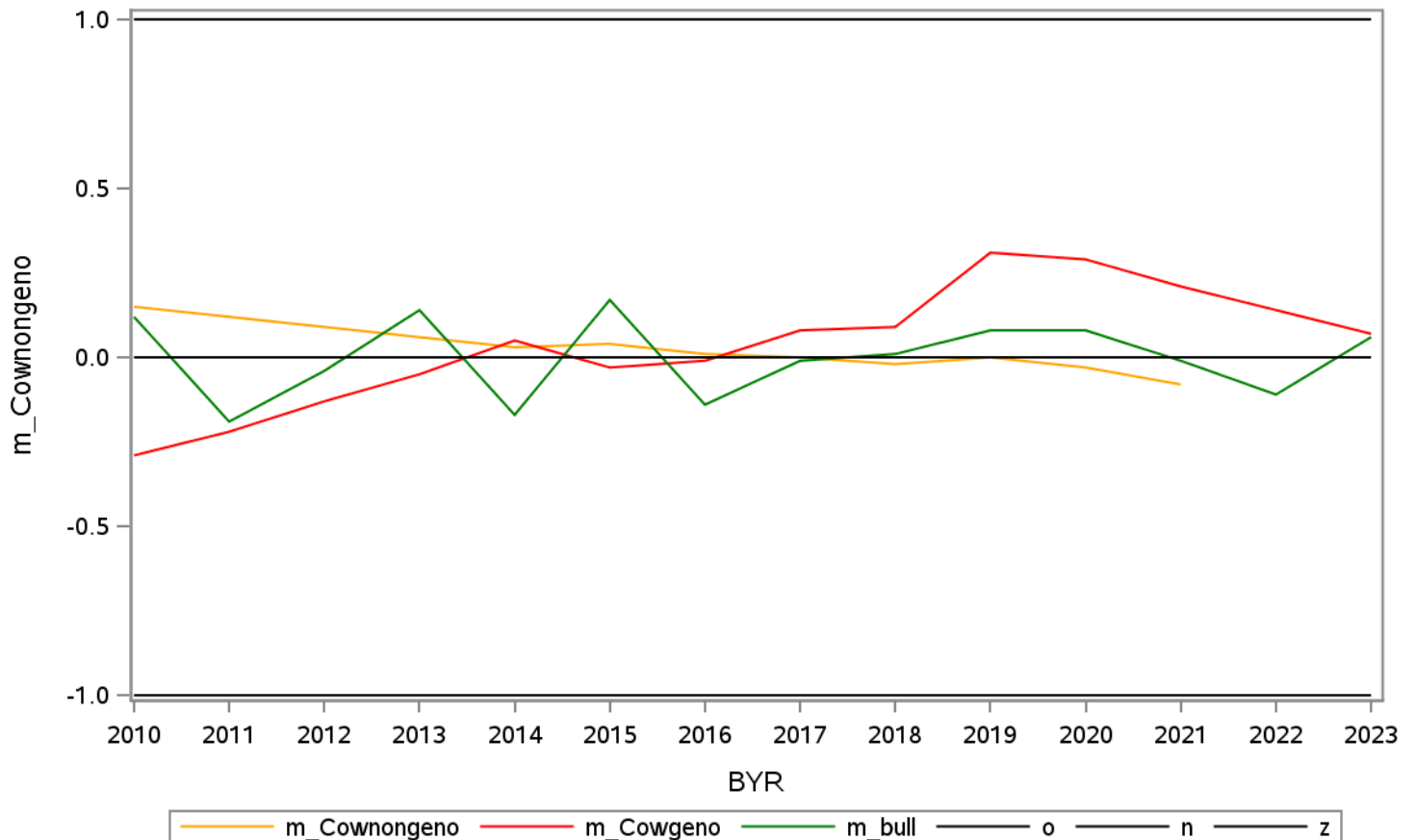
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.08	0.07	0.27	117401	1589	1015
2	2011	0.06	-0.03	0.16	116786	3147	1464
3	2012	0.05	0.04	0.06	118090	4898	1811
4	2013	0.04	0.00	0.18	116668	8221	2035
5	2014	0.05	0.02	0.18	116318	9833	2736
6	2015	0.00	-0.08	-0.15	113489	12478	2513
7	2016	0.00	-0.04	-0.02	108360	19149	2701
8	2017	0.00	0.04	0.08	96564	28124	2920
9	2018	-0.01	0.01	-0.13	100990	39008	2727
10	2019	-0.01	0.01	-0.11	106887	44092	2931
11	2020	-0.04	0.02	-0.05	80054	53247	2824
12	2021	-0.04	0.07	0.18	4597	55722	2921
13	2022	.	0.11	0.11	.	56325	2906
14	2023	.	0.06	0.29	.	7760	679

Mendelian sampling for 'Heel_horn_erosion3 ' 16



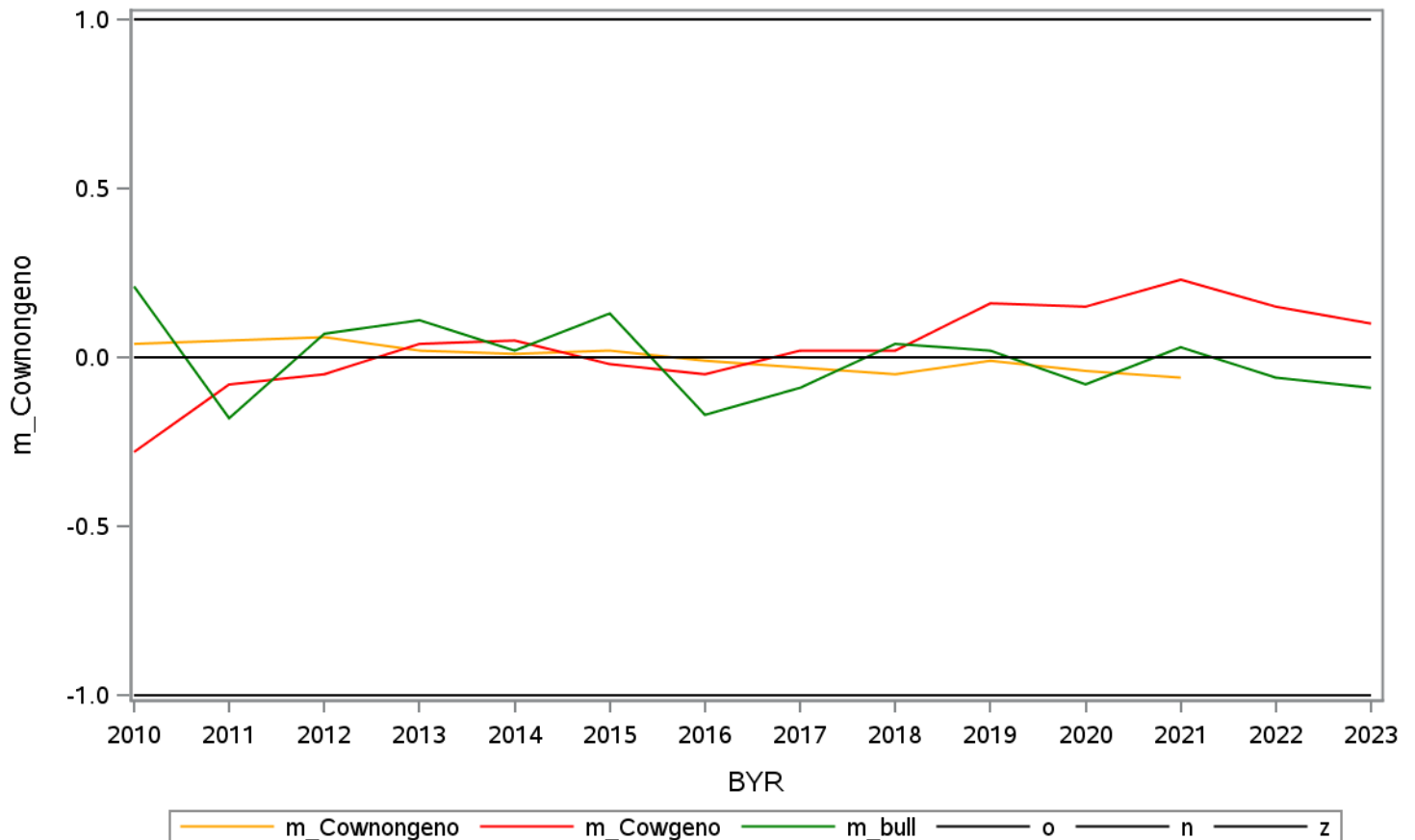
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.15	-0.29	0.12	104117	1589	1015
2	2011	0.12	-0.22	-0.19	101614	3147	1464
3	2012	0.09	-0.13	-0.04	101873	4898	1811
4	2013	0.06	-0.05	0.14	98934	8221	2035
5	2014	0.03	0.05	-0.17	97546	9833	2736
6	2015	0.04	-0.03	0.17	92844	12478	2513
7	2016	0.01	-0.01	-0.14	87748	19149	2701
8	2017	0.00	0.08	-0.01	78161	28124	2920
9	2018	-0.02	0.09	0.01	87727	39008	2727
10	2019	0.00	0.31	0.08	106034	44092	2931
11	2020	-0.03	0.29	0.08	80054	53247	2824
12	2021	-0.08	0.21	-0.01	4597	55722	2921
13	2022	.	0.14	-0.11	.	56325	2906
14	2023	.	0.07	0.06	.	7760	679

Mendelian sampling for 'Sole_heamorrhage3 ' 17



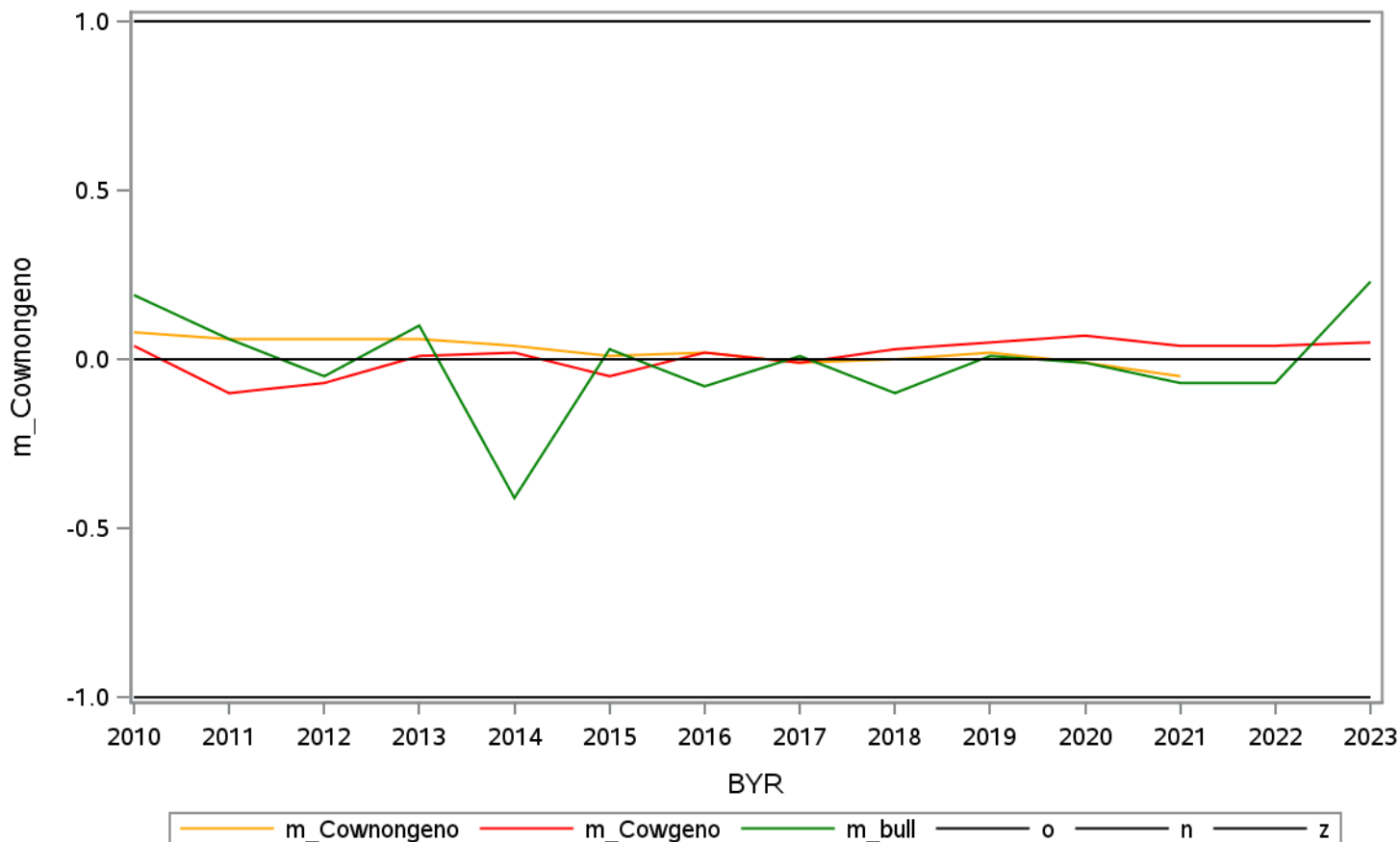
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.04	-0.28	0.21	102886	1589	1015
2	2011	0.05	-0.08	-0.18	99973	3147	1464
3	2012	0.06	-0.05	0.07	99431	4898	1811
4	2013	0.02	0.04	0.11	95739	8221	2035
5	2014	0.01	0.05	0.02	93801	9833	2736
6	2015	0.02	-0.02	0.13	87167	12478	2513
7	2016	-0.01	-0.05	-0.17	80585	19149	2701
8	2017	-0.03	0.02	-0.09	70079	28124	2920
9	2018	-0.05	0.02	0.04	81788	39008	2727
10	2019	-0.01	0.16	0.02	105671	44092	2931
11	2020	-0.04	0.15	-0.08	80054	53247	2824
12	2021	-0.06	0.23	0.03	4597	55722	2921
13	2022	.	0.15	-0.06	.	56325	2906
14	2023	.	0.10	-0.09	.	7760	679

Mendelian sampling for 'Sole_ulcer3' ' 18



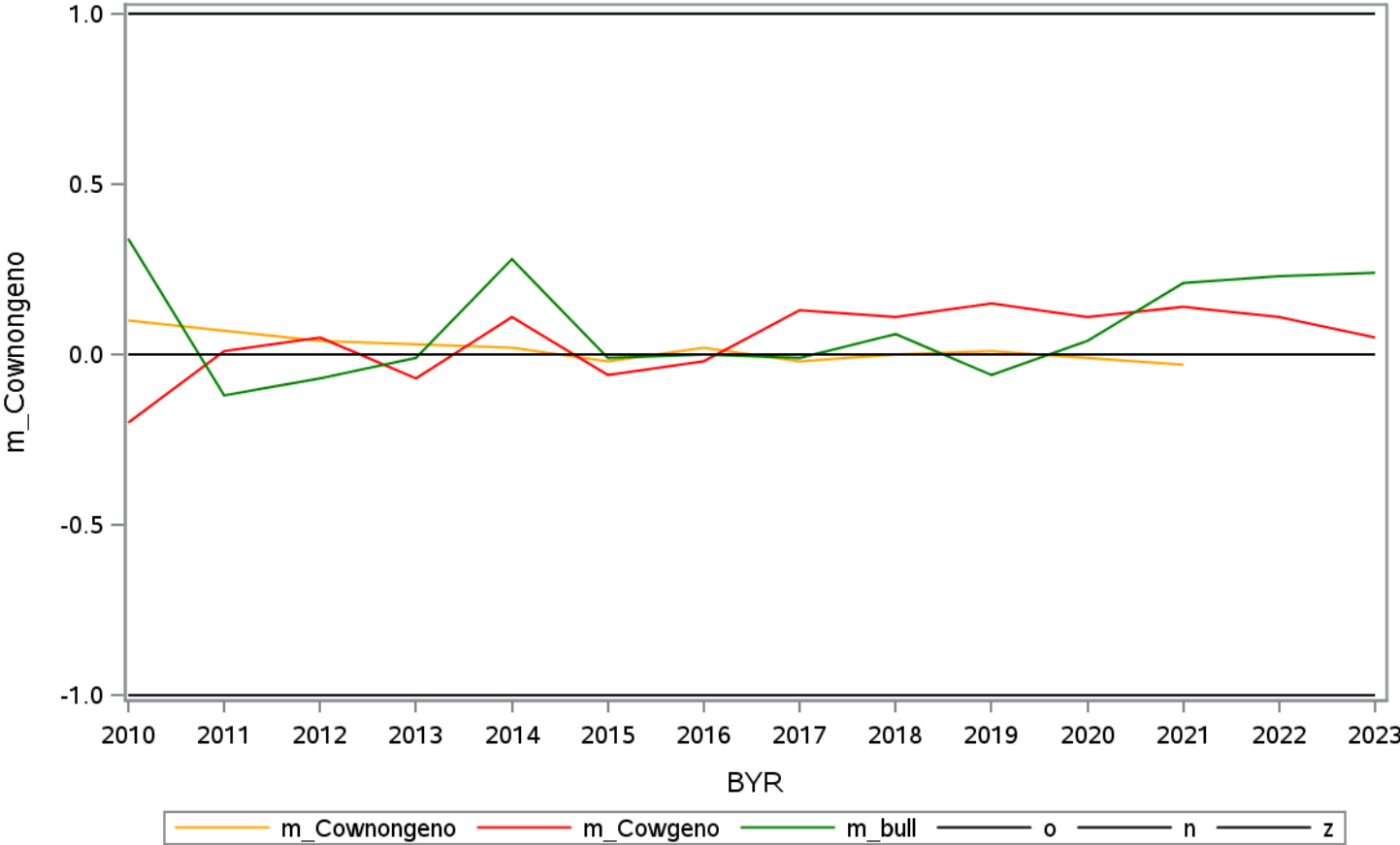
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.08	0.04	0.19	110623	1589	1015
2	2011	0.06	-0.10	0.06	108258	3147	1464
3	2012	0.06	-0.07	-0.05	108423	4898	1811
4	2013	0.06	0.01	0.10	104734	8221	2035
5	2014	0.04	0.02	-0.41	103095	9833	2736
6	2015	0.01	-0.05	0.03	94697	12478	2513
7	2016	0.02	0.02	-0.08	84914	19149	2701
8	2017	-0.01	-0.01	0.01	73797	28124	2920
9	2018	0.00	0.03	-0.10	85721	39008	2727
10	2019	0.02	0.05	0.01	105955	44092	2931
11	2020	-0.01	0.07	-0.01	80054	53247	2824
12	2021	-0.05	0.04	-0.07	4597	55722	2921
13	2022	.	0.04	-0.07	.	56325	2906
14	2023	.	0.05	0.23	.	7760	679

Mendelian sampling for 'Cork_screw_claws3 ' 19



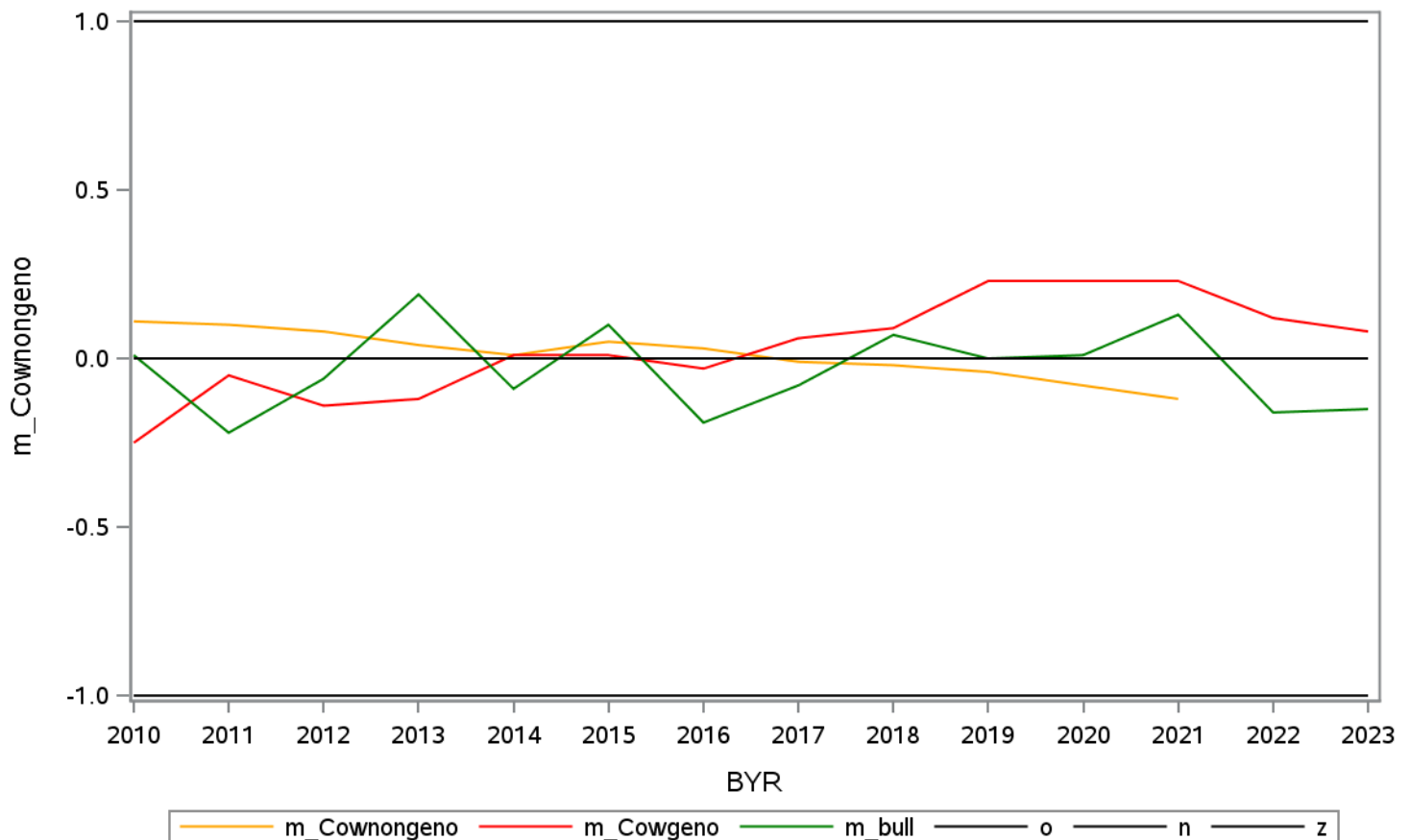
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.10	-0.20	0.34	103936	1589	1015
2	2011	0.07	0.01	-0.12	101353	3147	1464
3	2012	0.04	0.05	-0.07	101044	4898	1811
4	2013	0.03	-0.07	-0.01	97469	8221	2035
5	2014	0.02	0.11	0.28	95810	9833	2736
6	2015	-0.02	-0.06	-0.01	89136	12478	2513
7	2016	0.02	-0.02	0.00	82038	19149	2701
8	2017	-0.02	0.13	-0.01	71446	28124	2920
9	2018	0.00	0.11	0.06	83024	39008	2727
10	2019	0.01	0.15	-0.06	105716	44092	2931
11	2020	-0.01	0.11	0.04	80054	53247	2824
12	2021	-0.03	0.14	0.21	4597	55722	2921
13	2022	.	0.11	0.23	.	56325	2906
14	2023	.	0.05	0.24	.	7760	679

Mendelian sampling for 'Skin_proferation3 ' 20



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.11	-0.25	0.01	102953	1589	1015
2	2011	0.10	-0.05	-0.22	100129	3147	1464
3	2012	0.08	-0.14	-0.06	99639	4898	1811
4	2013	0.04	-0.12	0.19	95945	8221	2035
5	2014	0.01	0.01	-0.09	94047	9833	2736
6	2015	0.05	0.01	0.10	87394	12478	2513
7	2016	0.03	-0.03	-0.19	80797	19149	2701
8	2017	-0.01	0.06	-0.08	70197	28124	2920
9	2018	-0.02	0.09	0.07	81650	39008	2727
10	2019	-0.04	0.23	0.00	105668	44092	2931
11	2020	-0.08	0.23	0.01	80054	53247	2824
12	2021	-0.12	0.23	0.13	4597	55722	2921
13	2022	.	0.12	-0.16	.	56325	2906
14	2023	.	0.08	-0.15	.	7760	679

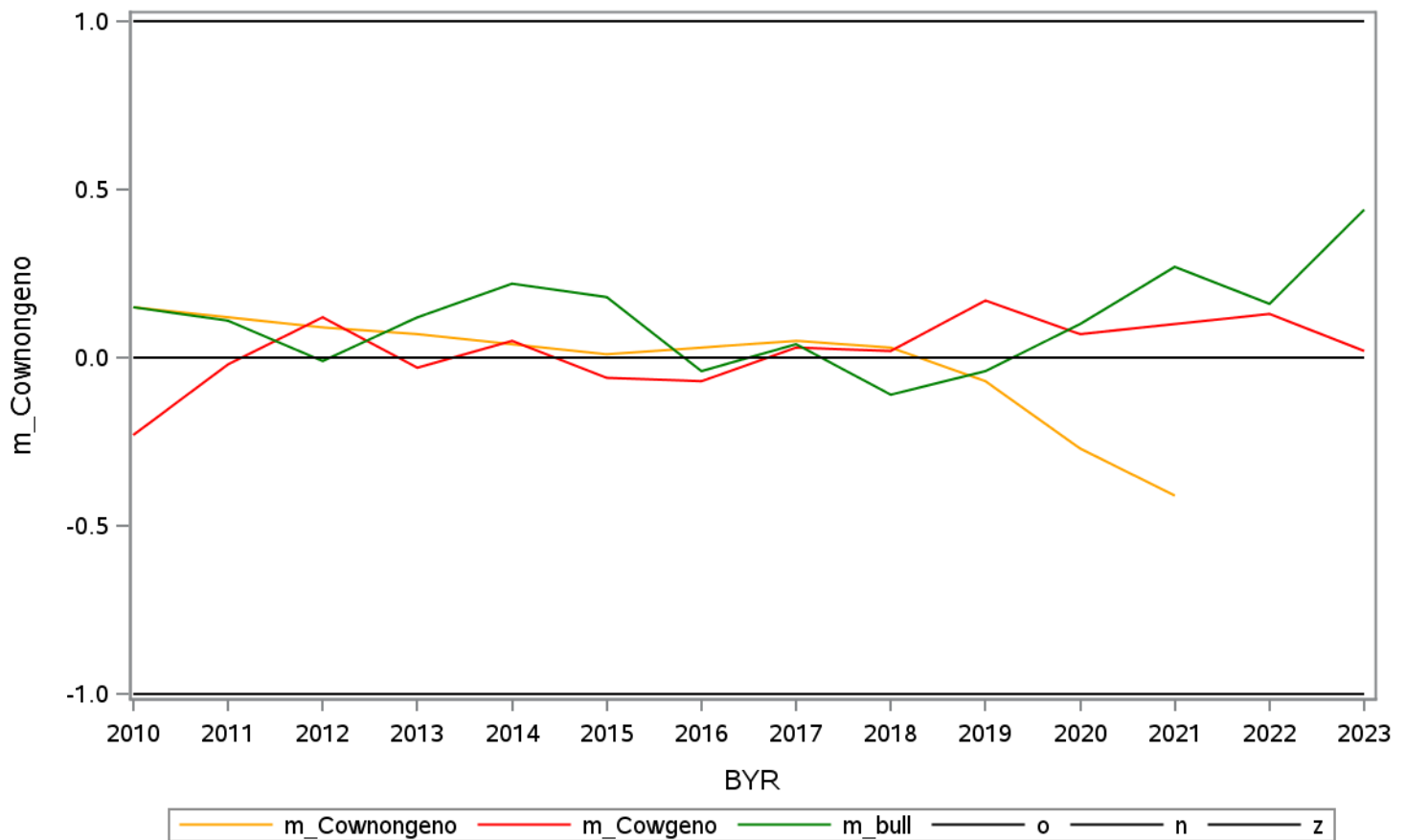
Mendelian sampling for 'White_line_double_sole3' 21



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.15	-0.23	0.15	61053	1589	1015
2	2011	0.12	-0.02	0.11	57637	3147	1464
3	2012	0.09	0.12	-0.01	54444	4898	1811
4	2013	0.07	-0.03	0.12	47870	8221	2035
5	2014	0.04	0.05	0.22	44661	9833	2736
6	2015	0.01	-0.06	0.18	39737	12478	2513
7	2016	0.03	-0.07	-0.04	35130	19149	2701
8	2017	0.05	0.03	0.04	27051	28124	2920
9	2018	0.03	0.02	-0.11	20098	39008	2727
10	2019	-0.07	0.17	-0.04	13247	44092	2931
11	2020	-0.27	0.07	0.10	8234	53247	2824
12	2021	-0.41	0.10	0.27	377	55722	2921
13	2022	.	0.13	0.16	.	56325	2906
14	2023	.	0.02	0.44	.	7760	679

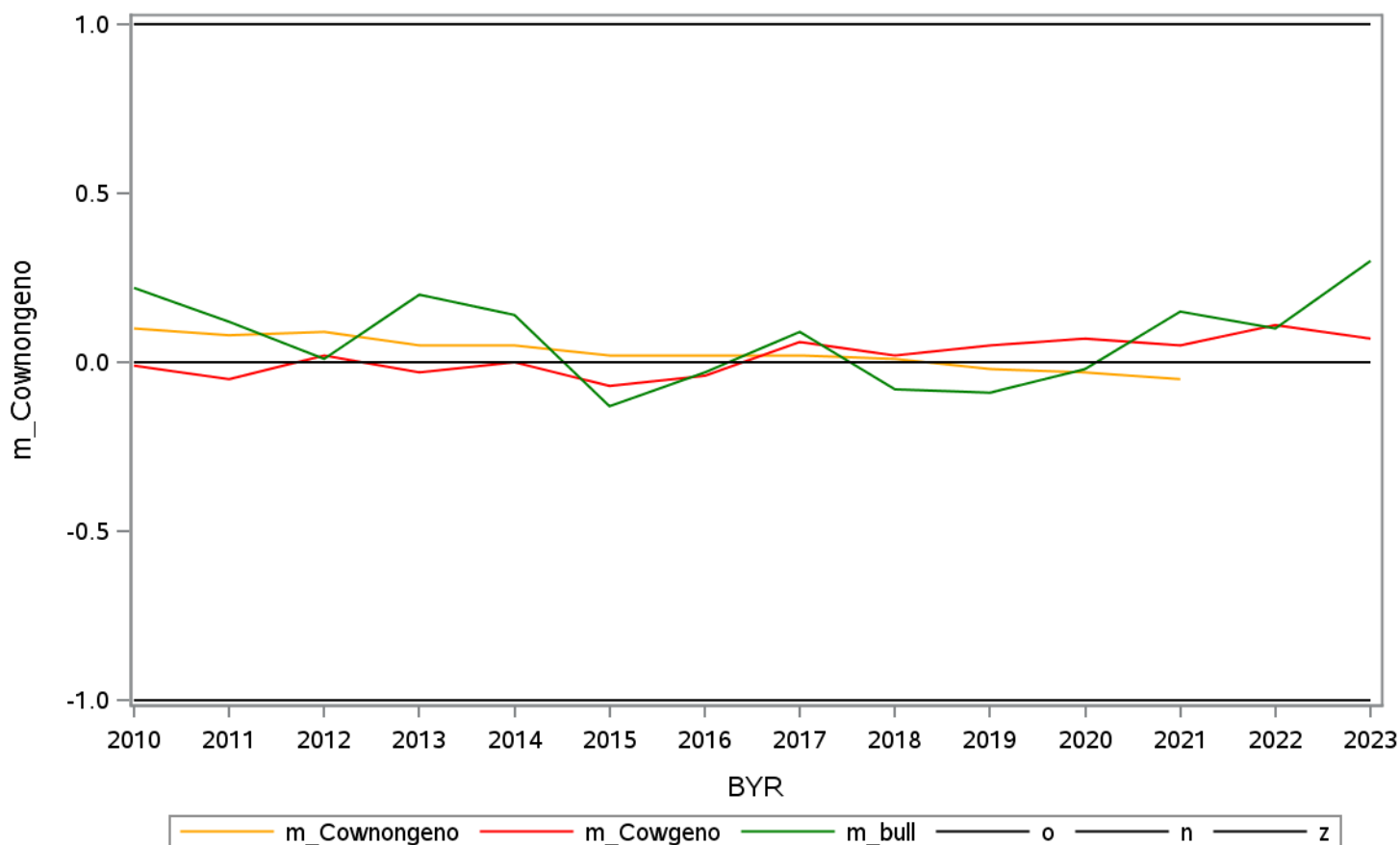
Mendelian sampling for 'Dermatitis'

' 22



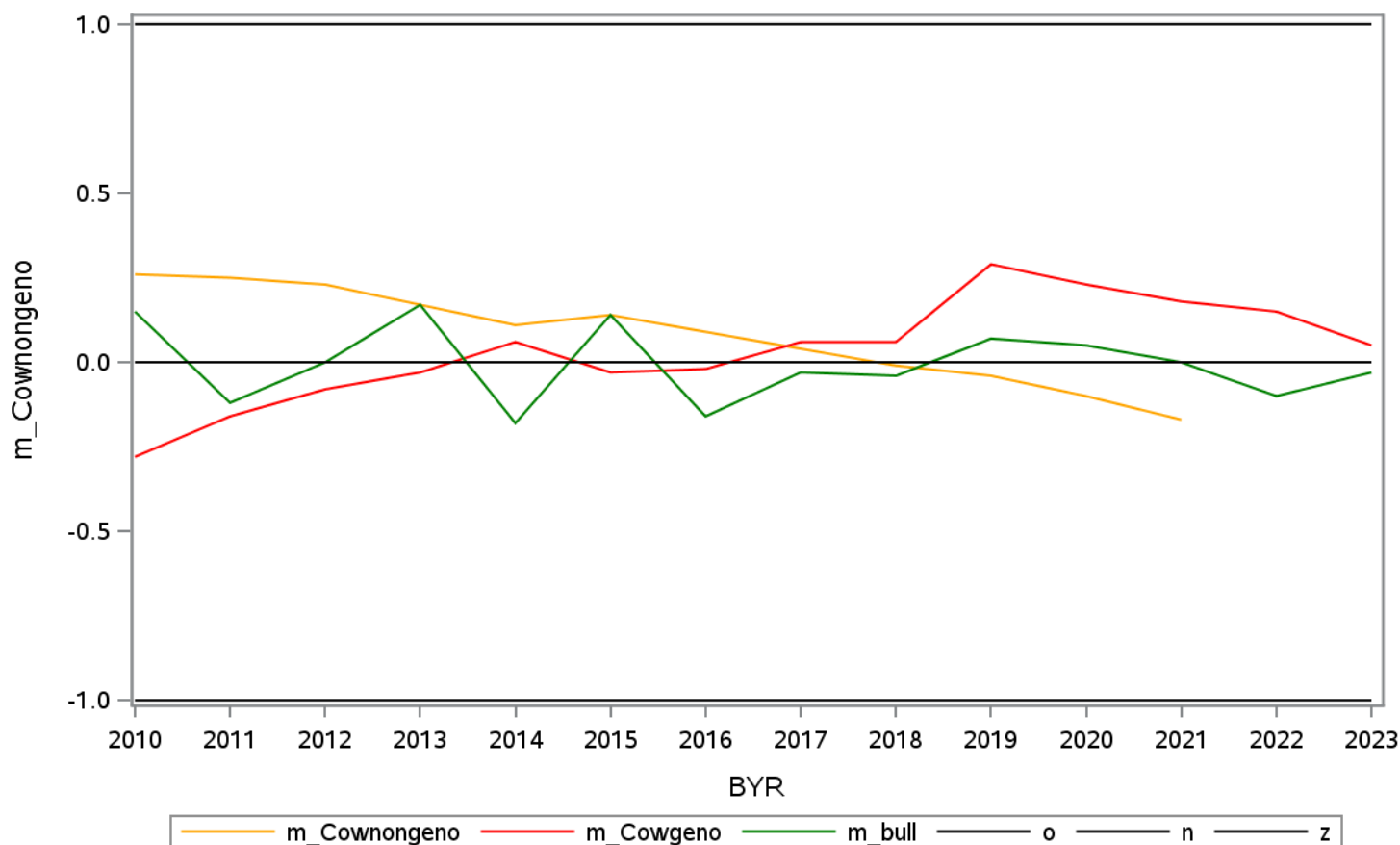
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.10	-0.01	0.22	85799	1589	1015
2	2011	0.08	-0.05	0.12	85282	3147	1464
3	2012	0.09	0.02	0.01	85313	4898	1811
4	2013	0.05	-0.03	0.20	82063	8221	2035
5	2014	0.05	0.00	0.14	82711	9833	2736
6	2015	0.02	-0.07	-0.13	79563	12478	2513
7	2016	0.02	-0.04	-0.03	76629	19149	2701
8	2017	0.02	0.06	0.09	70487	28124	2920
9	2018	0.01	0.02	-0.08	64446	39008	2727
10	2019	-0.02	0.05	-0.09	55855	44092	2931
11	2020	-0.03	0.07	-0.02	45438	53247	2824
12	2021	-0.05	0.05	0.15	2906	55722	2921
13	2022	.	0.11	0.10	.	56325	2906
14	2023	.	0.07	0.30	.	7760	679

Mendelian sampling for 'Heel_horn_erosion ' 23



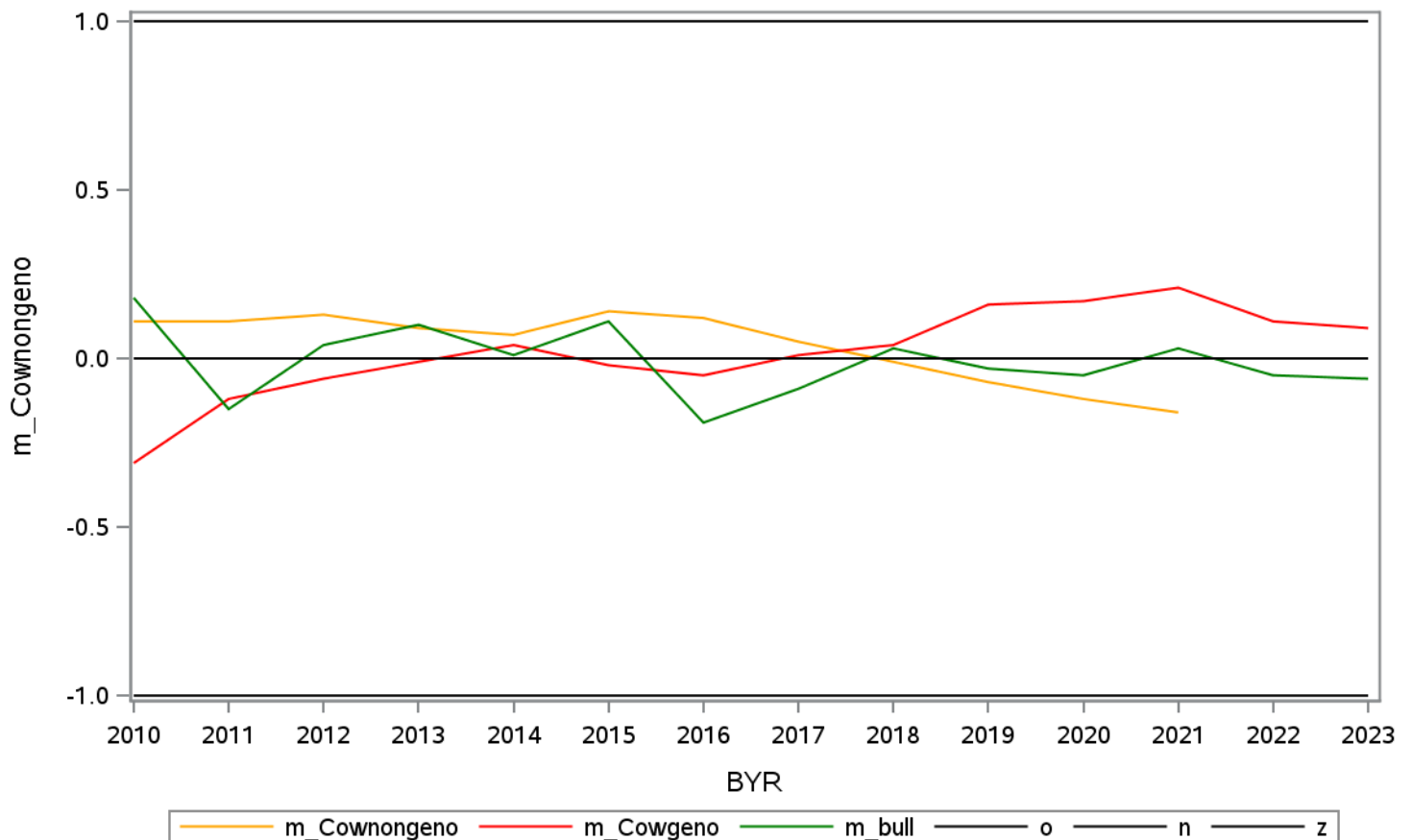
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.26	-0.28	0.15	64244	1589	1015
2	2011	0.25	-0.16	-0.12	61085	3147	1464
3	2012	0.23	-0.08	0.00	59144	4898	1811
4	2013	0.17	-0.03	0.17	51864	8221	2035
5	2014	0.11	0.06	-0.18	51380	9833	2736
6	2015	0.14	-0.03	0.14	46633	12478	2513
7	2016	0.09	-0.02	-0.16	42625	19149	2701
8	2017	0.04	0.06	-0.03	36352	28124	2920
9	2018	-0.01	0.06	-0.04	31232	39008	2727
10	2019	-0.04	0.29	0.07	25731	44092	2931
11	2020	-0.10	0.23	0.05	21171	53247	2824
12	2021	-0.17	0.18	0.00	1464	55722	2921
13	2022	.	0.15	-0.10	.	56325	2906
14	2023	.	0.05	-0.03	.	7760	679

Mendelian sampling for 'Sole_heamorrhage' ' 24



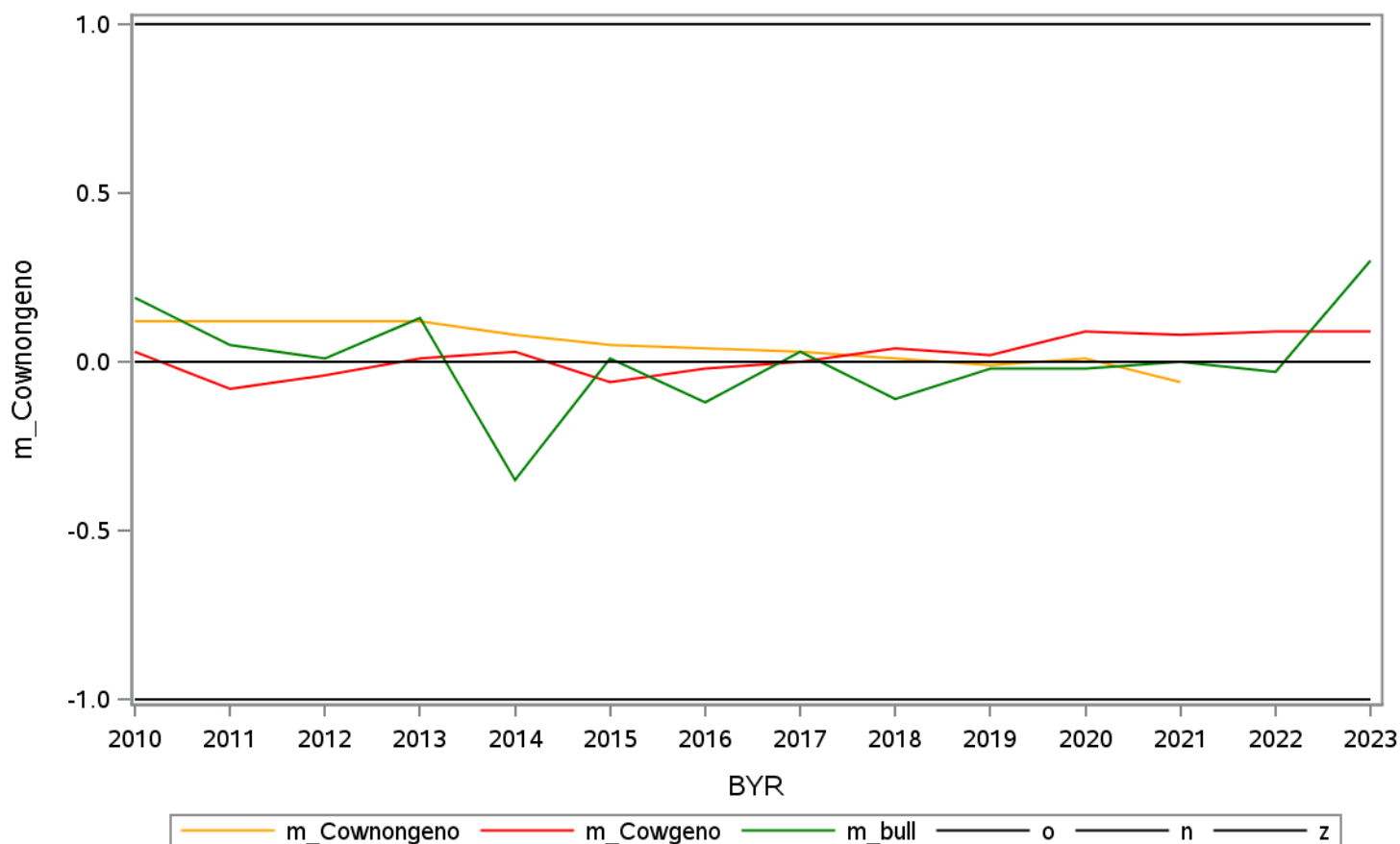
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.11	-0.31	0.18	63160	1589	1015
2	2011	0.11	-0.12	-0.15	59705	3147	1464
3	2012	0.13	-0.06	0.04	57005	4898	1811
4	2013	0.09	-0.01	0.10	49212	8221	2035
5	2014	0.07	0.04	0.01	47201	9833	2736
6	2015	0.14	-0.02	0.11	41973	12478	2513
7	2016	0.12	-0.05	-0.19	38116	19149	2701
8	2017	0.05	0.01	-0.09	30543	28124	2920
9	2018	-0.01	0.04	0.03	23385	39008	2727
10	2019	-0.07	0.16	-0.03	15382	44092	2931
11	2020	-0.12	0.17	-0.05	11796	53247	2824
12	2021	-0.16	0.21	0.03	941	55722	2921
13	2022	.	0.11	-0.05	.	56325	2906
14	2023	.	0.09	-0.06	.	7760	679

Mendelian sampling for 'Sole_ulcer' ' 25



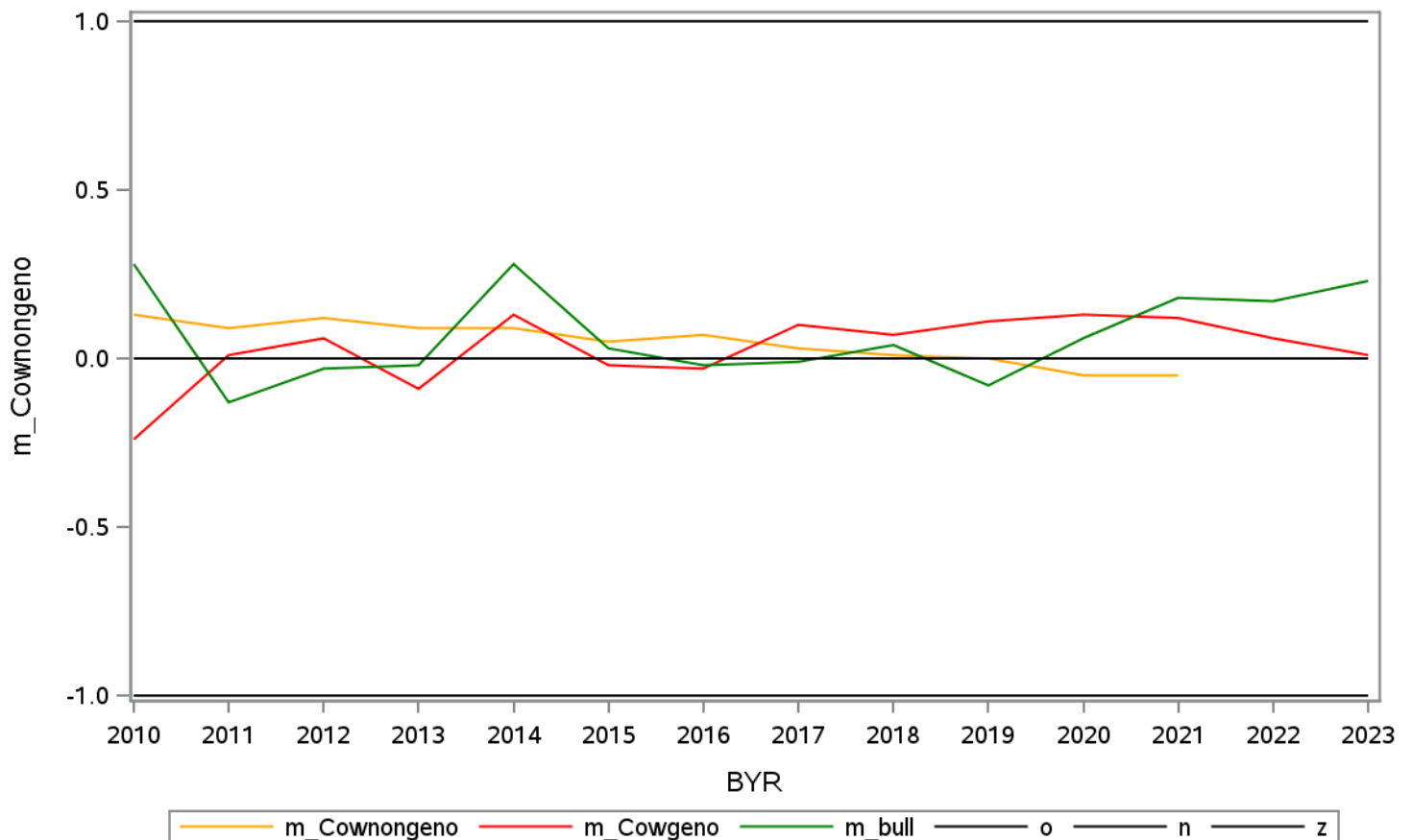
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.12	0.03	0.19	77338	1589	1015
2	2011	0.12	-0.08	0.05	75297	3147	1464
3	2012	0.12	-0.04	0.01	72967	4898	1811
4	2013	0.12	0.01	0.13	66385	8221	2035
5	2014	0.08	0.03	-0.35	64250	9833	2736
6	2015	0.05	-0.06	0.01	57605	12478	2513
7	2016	0.04	-0.02	-0.12	52482	19149	2701
8	2017	0.03	0.00	0.03	40937	28124	2920
9	2018	0.01	0.04	-0.11	29026	39008	2727
10	2019	-0.01	0.02	-0.02	19850	44092	2931
11	2020	0.01	0.09	-0.02	18197	53247	2824
12	2021	-0.06	0.08	0.00	1330	55722	2921
13	2022	.	0.09	-0.03	.	56325	2906
14	2023	.	0.09	0.30	.	7760	679

Mendelian sampling for 'Cork_screw_claws' ' 26



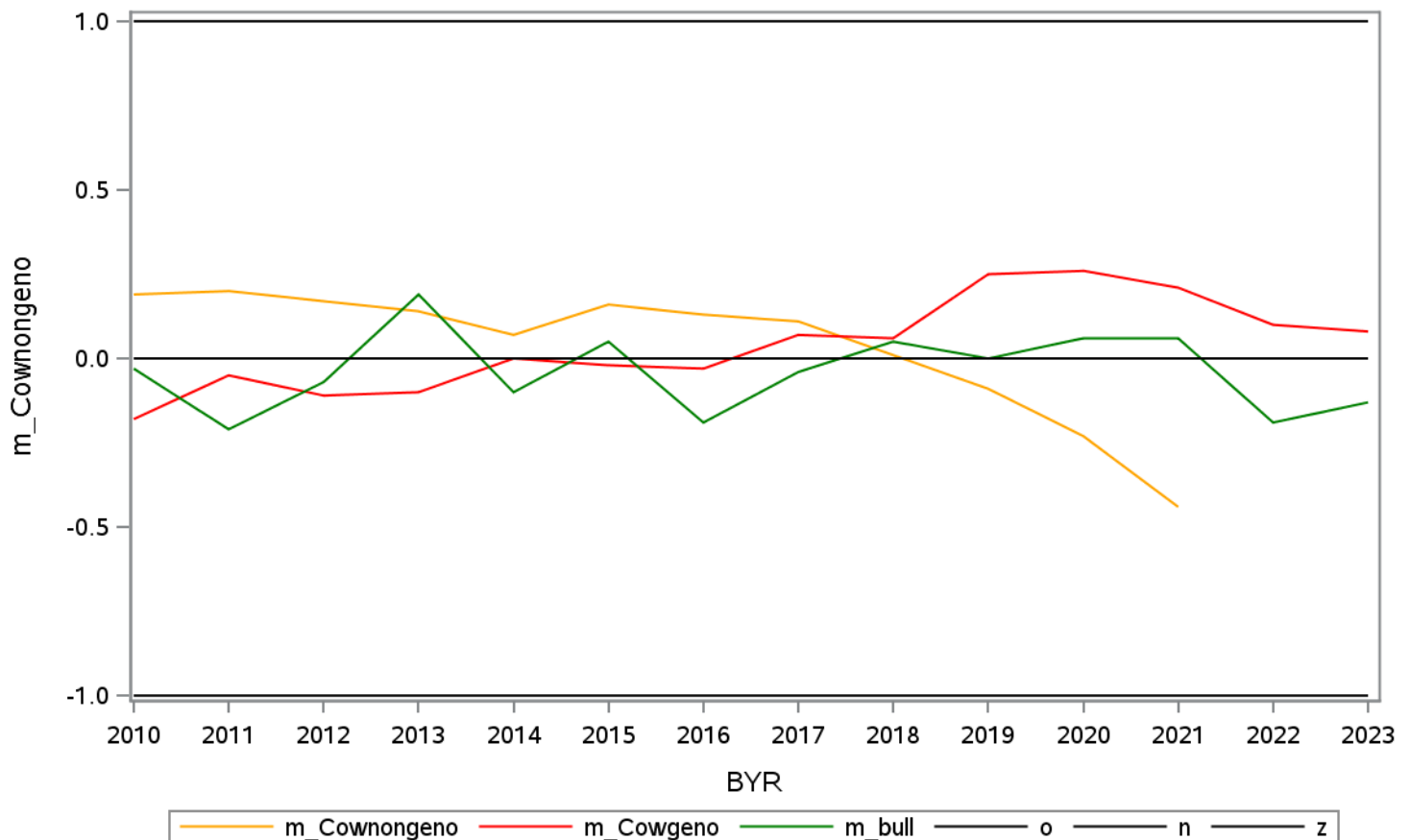
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.13	-0.24	0.28	64574	1589	1015
2	2011	0.09	0.01	-0.13	61801	3147	1464
3	2012	0.12	0.06	-0.03	58886	4898	1811
4	2013	0.09	-0.09	-0.02	51261	8221	2035
5	2014	0.09	0.13	0.28	49635	9833	2736
6	2015	0.05	-0.02	0.03	44117	12478	2513
7	2016	0.07	-0.03	-0.02	40591	19149	2701
8	2017	0.03	0.10	-0.01	32850	28124	2920
9	2018	0.01	0.07	0.04	24920	39008	2727
10	2019	0.00	0.11	-0.08	16625	44092	2931
11	2020	-0.05	0.13	0.06	13387	53247	2824
12	2021	-0.05	0.12	0.18	997	55722	2921
13	2022	.	0.06	0.17	.	56325	2906
14	2023	.	0.01	0.23	.	7760	679

Mendelian sampling for 'Skin_proferation' ' 27



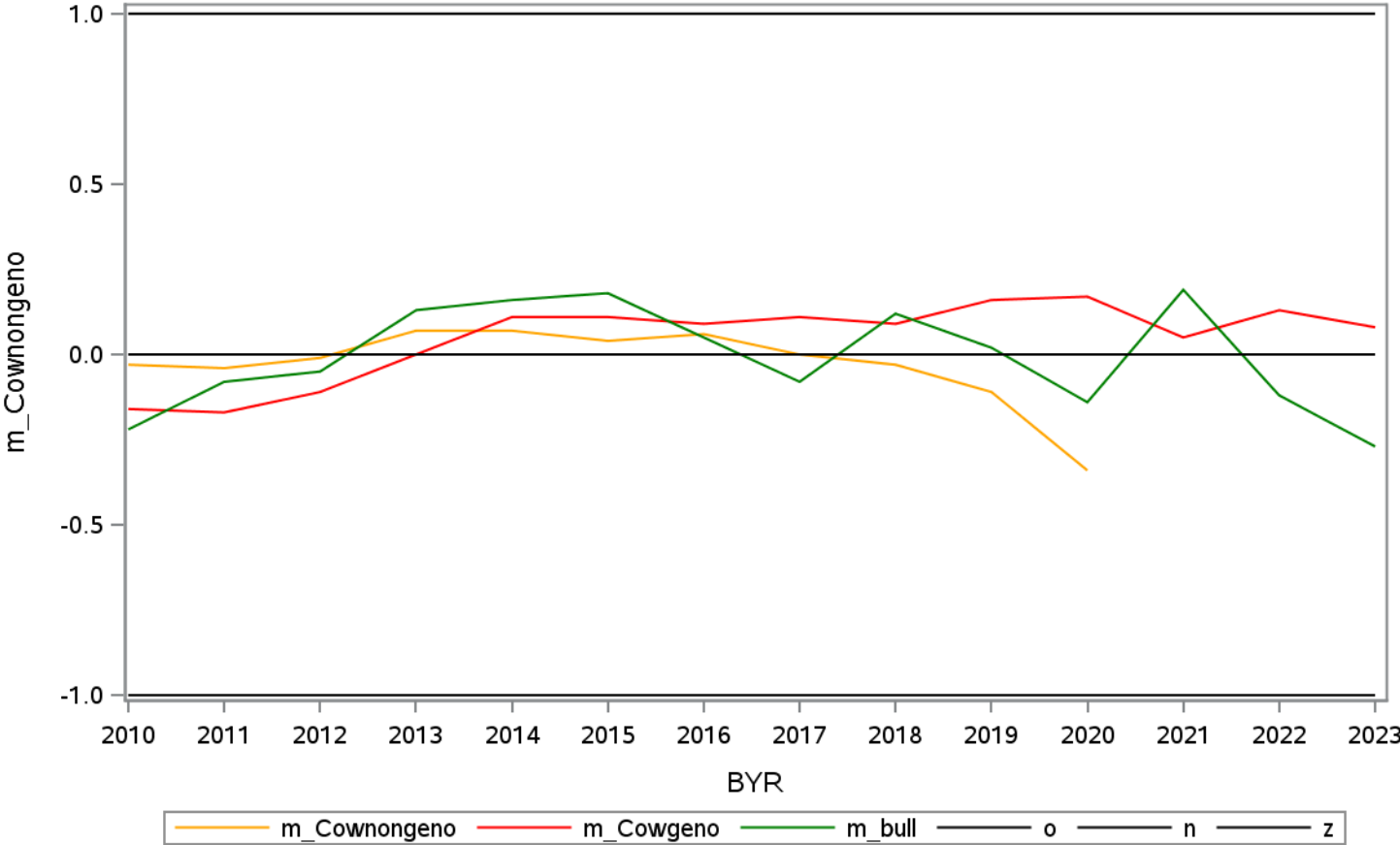
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.19	-0.18	-0.03	62716	1589	1015
2	2011	0.20	-0.05	-0.21	59326	3147	1464
3	2012	0.17	-0.11	-0.07	56493	4898	1811
4	2013	0.14	-0.10	0.19	48946	8221	2035
5	2014	0.07	0.00	-0.10	47078	9833	2736
6	2015	0.16	-0.02	0.05	41363	12478	2513
7	2016	0.13	-0.03	-0.19	37472	19149	2701
8	2017	0.11	0.07	-0.04	29901	28124	2920
9	2018	0.01	0.06	0.05	22934	39008	2727
10	2019	-0.09	0.25	0.00	14897	44092	2931
11	2020	-0.23	0.26	0.06	10911	53247	2824
12	2021	-0.44	0.21	0.06	907	55722	2921
13	2022	.	0.10	-0.19	.	56325	2906
14	2023	.	0.08	-0.13	.	7760	679

Mendelian sampling for 'White_line_double_sole ' 28



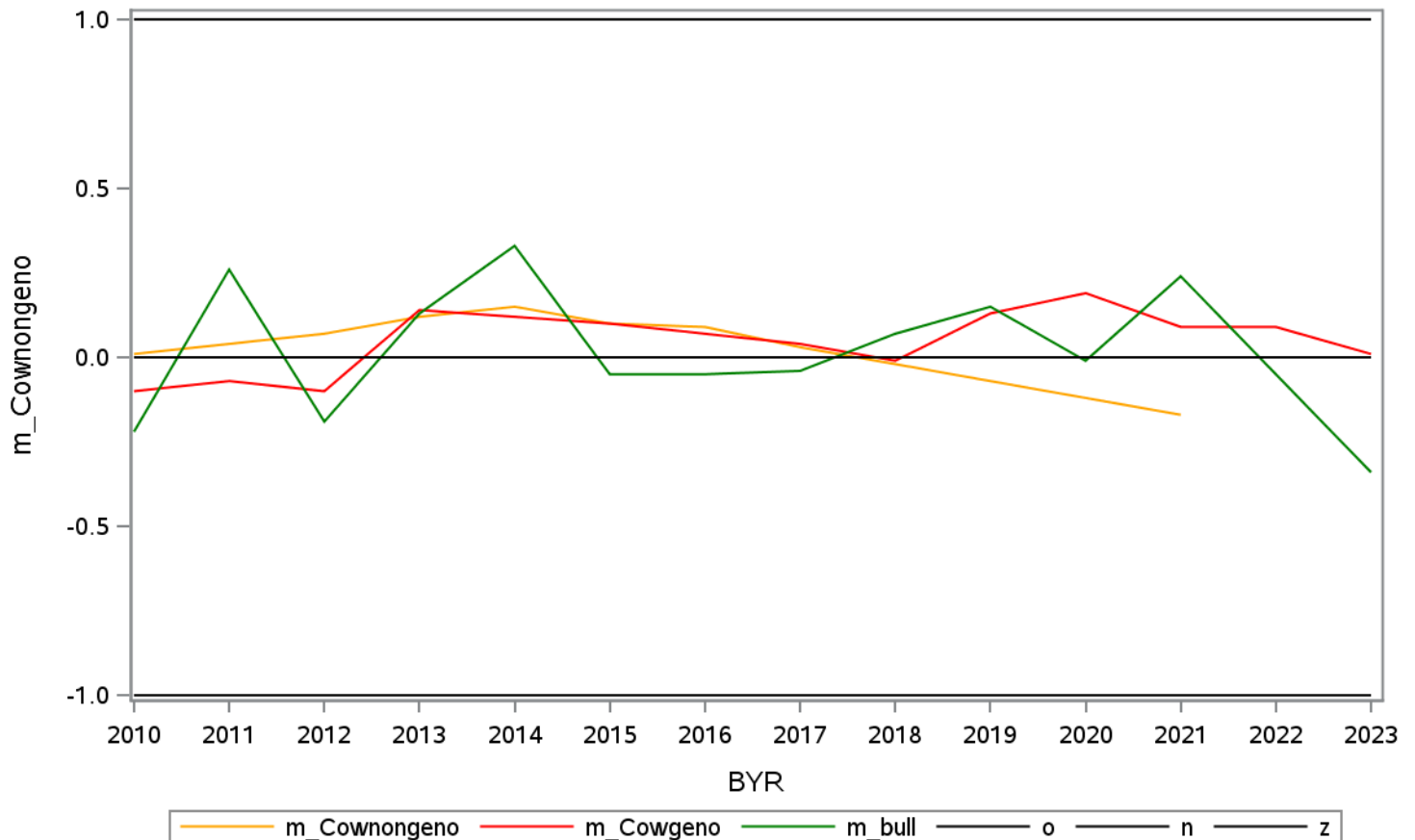
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.03	-0.16	-0.22	26323	3319	867
2	2011	-0.04	-0.17	-0.08	23839	5753	1431
3	2012	-0.01	-0.11	-0.05	20965	6578	1814
4	2013	0.07	0.00	0.13	19356	7081	1899
5	2014	0.07	0.11	0.16	17821	7910	1938
6	2015	0.04	0.11	0.18	14909	10278	2100
7	2016	0.06	0.09	0.05	11282	14041	2108
8	2017	0.00	0.11	-0.08	8417	16668	2265
9	2018	-0.03	0.09	0.12	5686	19097	2230
10	2019	-0.11	0.16	0.02	4190	19521	2190
11	2020	-0.34	0.17	-0.14	2473	21383	2569
12	2021	.	0.05	0.19	39	21465	2580
13	2022	.	0.13	-0.12	.	21295	2352
14	2023	.	0.08	-0.27	.	3162	439

Mendelian sampling for 'Dermatitis1' ' 1



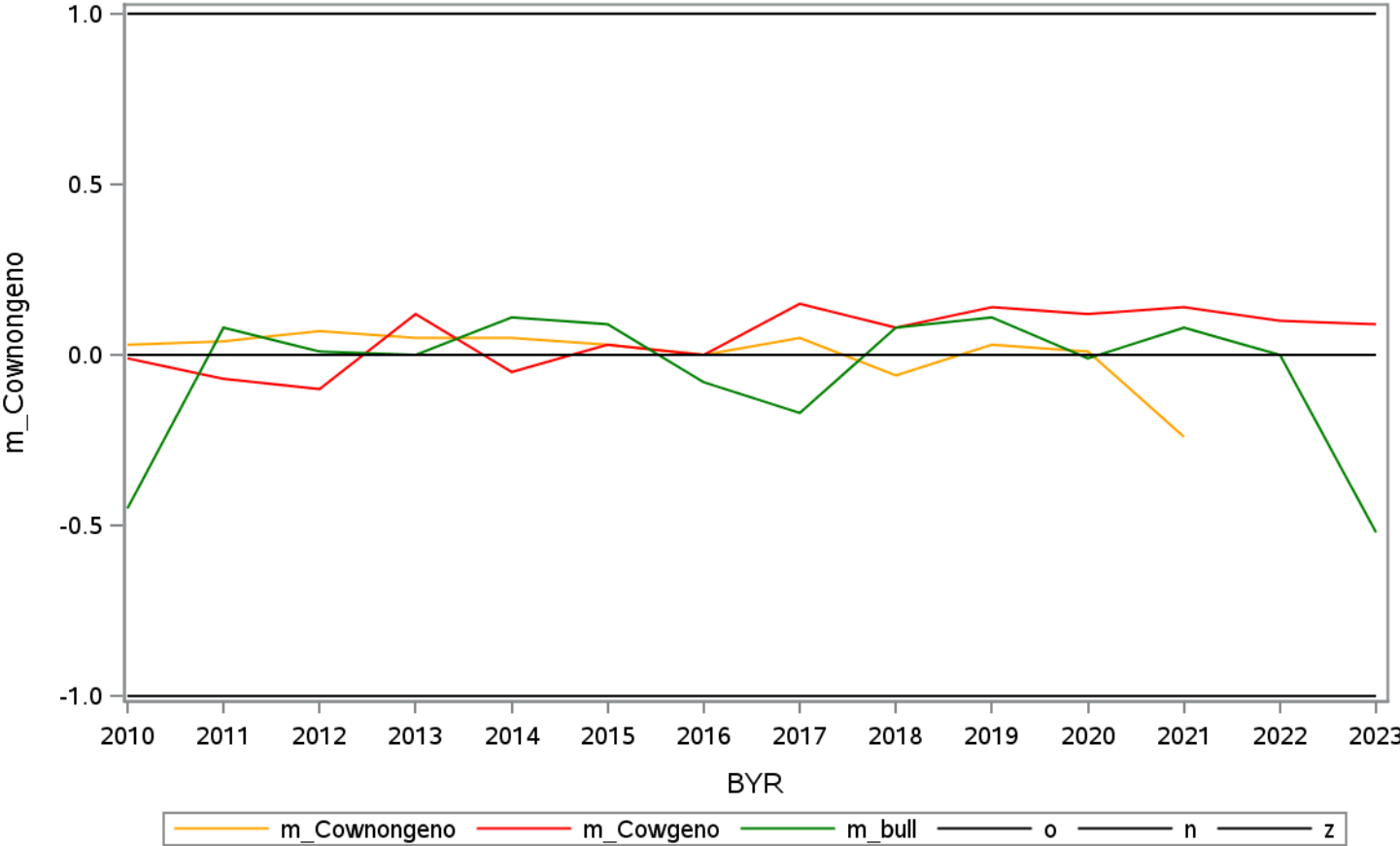
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	-0.10	-0.22	28819	3319	867
2	2011	0.04	-0.07	0.26	27726	5753	1431
3	2012	0.07	-0.10	-0.19	25432	6578	1814
4	2013	0.12	0.14	0.13	24445	7081	1899
5	2014	0.15	0.12	0.33	23228	7910	1938
6	2015	0.10	0.10	-0.05	21573	10278	2100
7	2016	0.09	0.07	-0.05	18787	14041	2108
8	2017	0.03	0.04	-0.04	16337	16668	2265
9	2018	-0.02	-0.01	0.07	13502	19097	2230
10	2019	-0.07	0.13	0.15	11845	19521	2190
11	2020	-0.12	0.19	-0.01	7861	21383	2569
12	2021	-0.17	0.09	0.24	157	21465	2580
13	2022	.	0.09	-0.05	.	21295	2352
14	2023	.	0.01	-0.34	.	3162	439

Mendelian sampling for 'Heel_horn_erosion1' 2



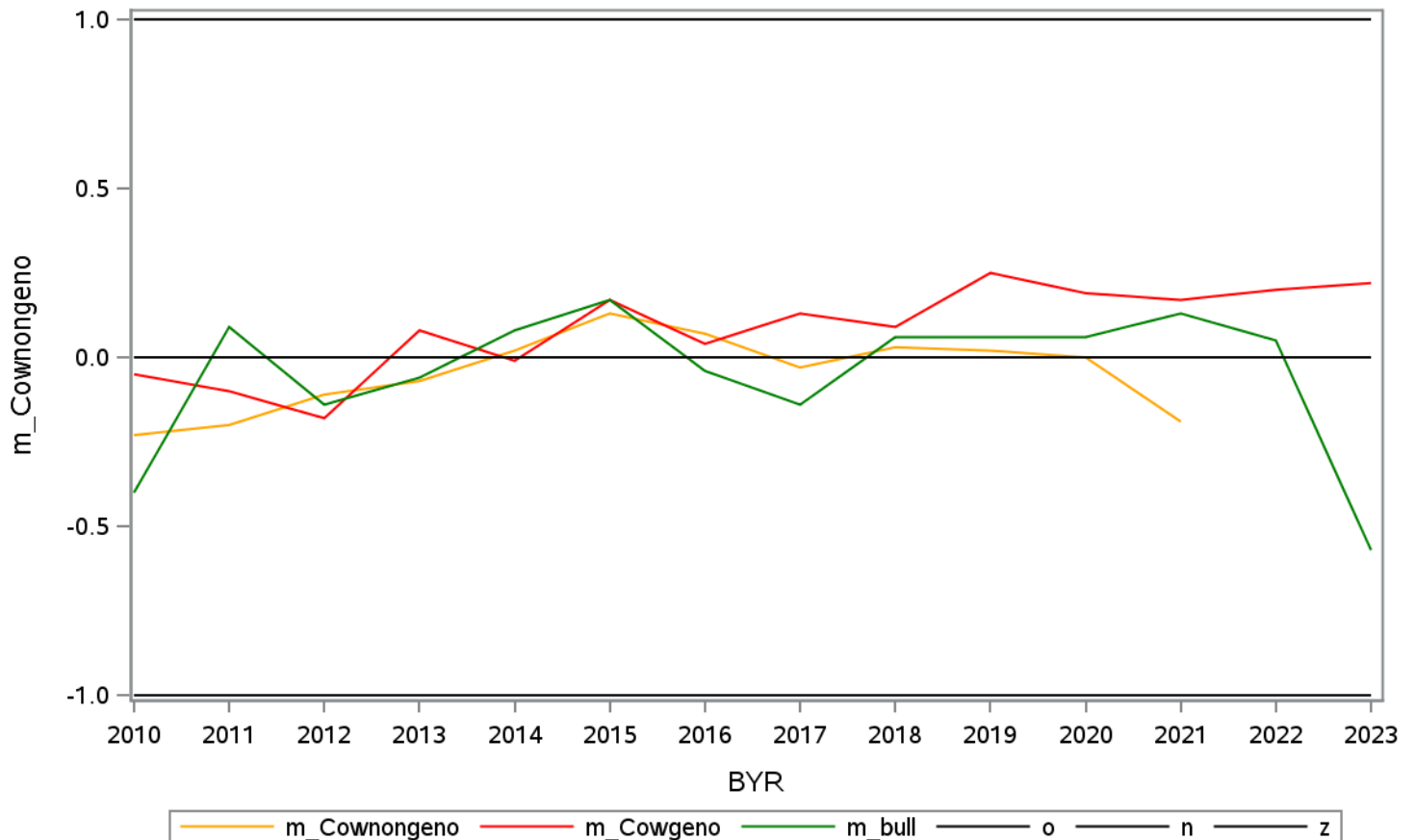
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.03	-0.01	-0.45	24233	3319	867
2	2011	0.04	-0.07	0.08	22216	5753	1431
3	2012	0.07	-0.10	0.01	19669	6578	1814
4	2013	0.05	0.12	0.00	17261	7081	1899
5	2014	0.05	-0.05	0.11	16234	7910	1938
6	2015	0.03	0.03	0.09	14399	10278	2100
7	2016	0.00	0.00	-0.08	12011	14041	2108
8	2017	0.05	0.15	-0.17	9277	16668	2265
9	2018	-0.06	0.08	0.08	7452	19097	2230
10	2019	0.03	0.14	0.11	6335	19521	2190
11	2020	0.01	0.12	-0.01	3963	21383	2569
12	2021	-0.24	0.14	0.08	75	21465	2580
13	2022	.	0.10	0.00	.	21295	2352
14	2023	.	0.09	-0.52	.	3162	439

Mendelian sampling for 'Sole_heamorrhage1' ' 3



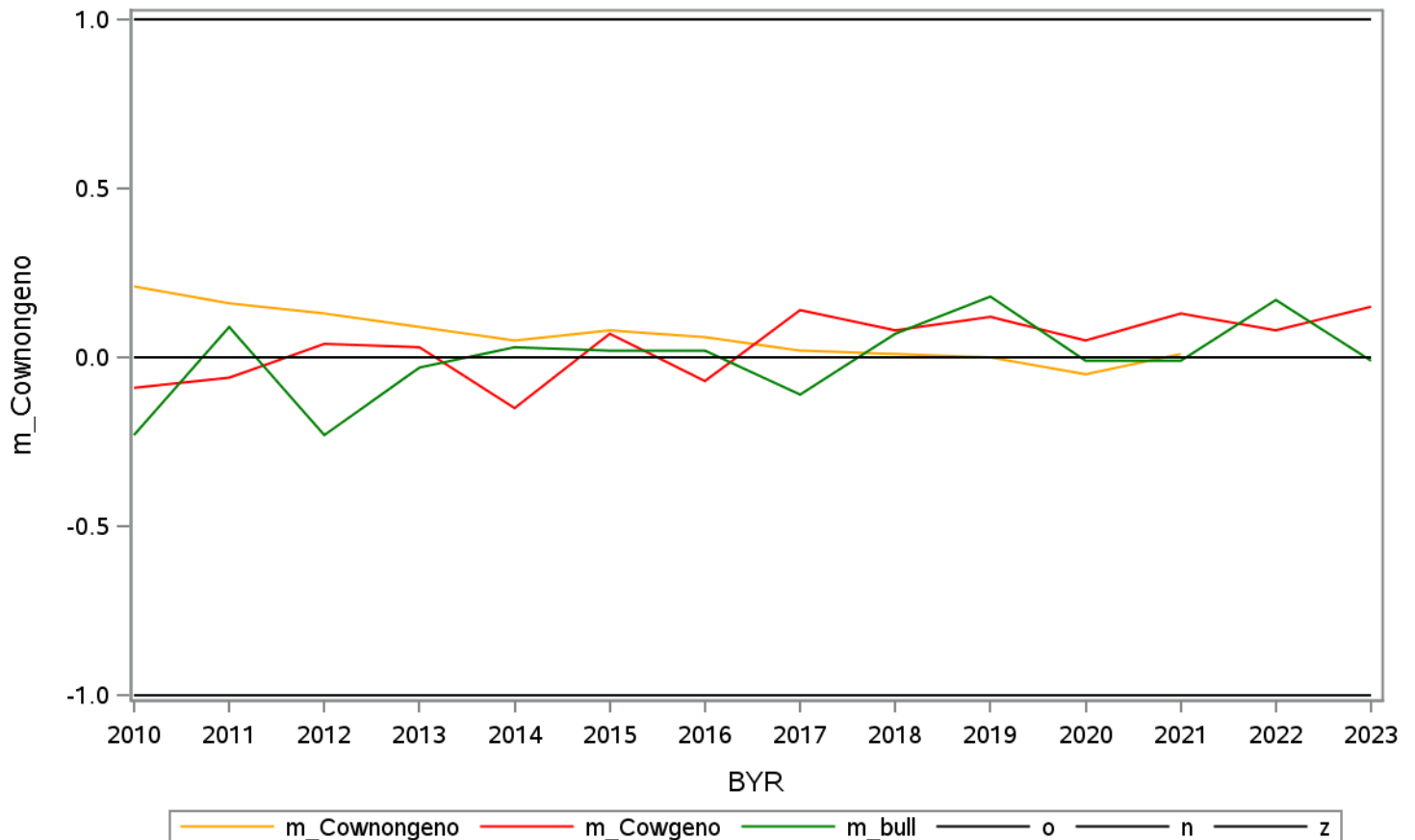
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.23	-0.05	-0.40	24032	3319	867
2	2011	-0.20	-0.10	0.09	22175	5753	1431
3	2012	-0.11	-0.18	-0.14	19620	6578	1814
4	2013	-0.07	0.08	-0.06	18172	7081	1899
5	2014	0.02	-0.01	0.08	17317	7910	1938
6	2015	0.13	0.17	0.17	14061	10278	2100
7	2016	0.07	0.04	-0.04	11171	14041	2108
8	2017	-0.03	0.13	-0.14	8386	16668	2265
9	2018	0.03	0.09	0.06	5769	19097	2230
10	2019	0.02	0.25	0.06	4214	19521	2190
11	2020	0.00	0.19	0.06	2566	21383	2569
12	2021	-0.19	0.17	0.13	60	21465	2580
13	2022	.	0.20	0.05	.	21295	2352
14	2023	.	0.22	-0.57	.	3162	439

Mendelian sampling for 'Sole_ulcer1' ' 4



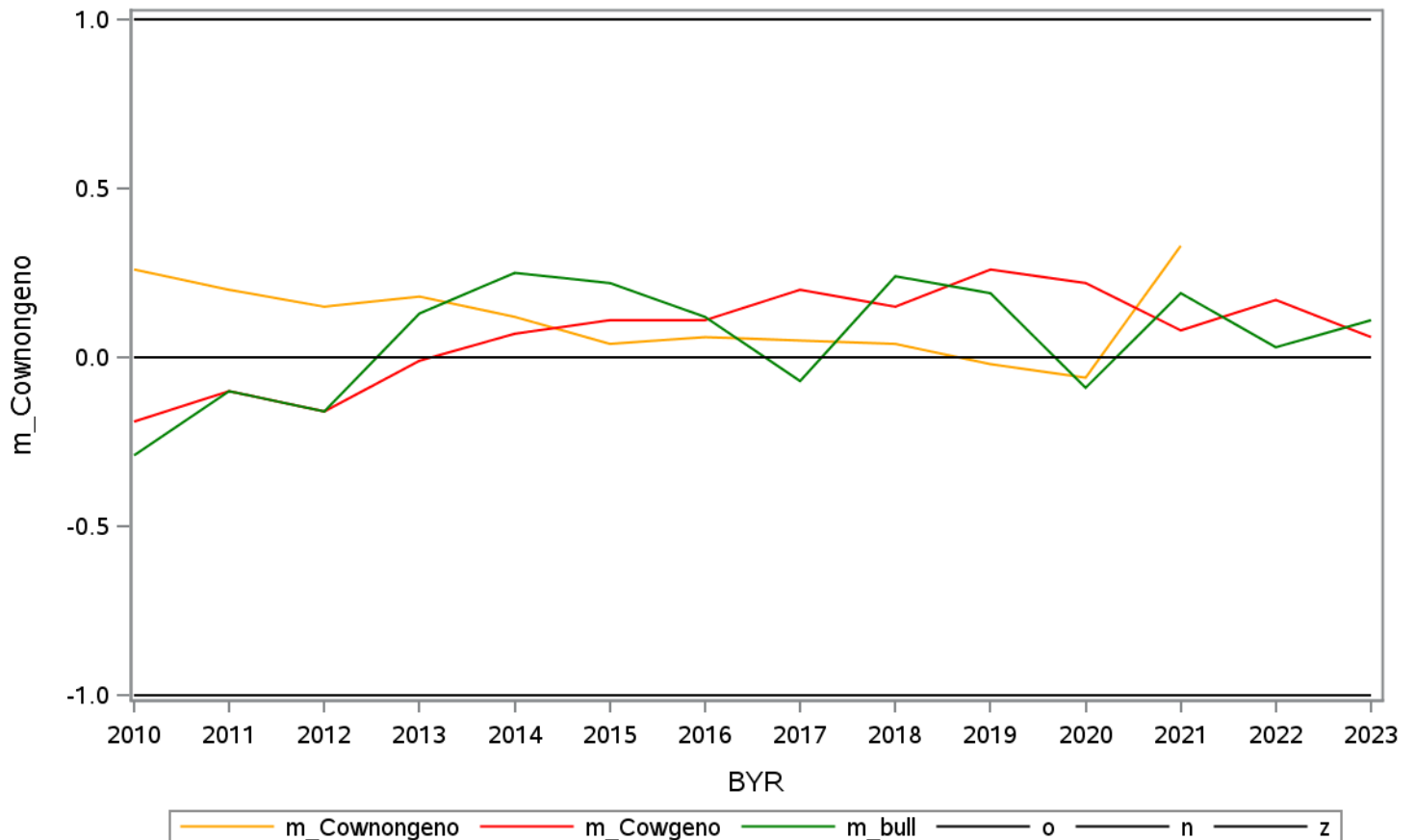
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.21	-0.09	-0.23	27647	3319	867
2	2011	0.16	-0.06	0.09	26121	5753	1431
3	2012	0.13	0.04	-0.23	23347	6578	1814
4	2013	0.09	0.03	-0.03	21737	7081	1899
5	2014	0.05	-0.15	0.03	20493	7910	1938
6	2015	0.08	0.07	0.02	17331	10278	2100
7	2016	0.06	-0.07	0.02	13789	14041	2108
8	2017	0.02	0.14	-0.11	10425	16668	2265
9	2018	0.01	0.08	0.07	7514	19097	2230
10	2019	0.00	0.12	0.18	5387	19521	2190
11	2020	-0.05	0.05	-0.01	3745	21383	2569
12	2021	0.01	0.13	-0.01	71	21465	2580
13	2022	.	0.08	0.17	.	21295	2352
14	2023	.	0.15	-0.01	.	3162	439

Mendelian sampling for 'Cork_screw_claws1' 5



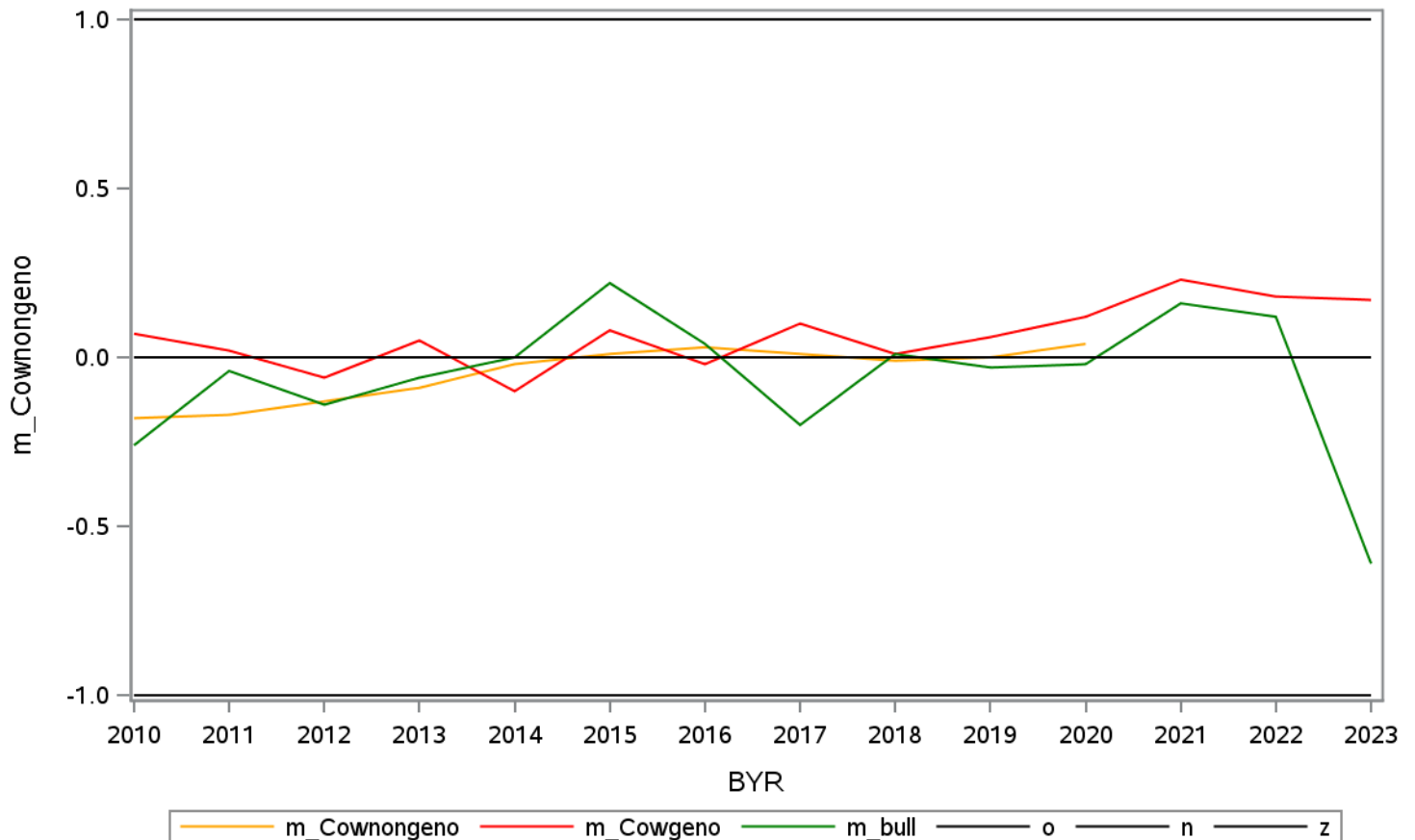
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.26	-0.19	-0.29	27537	3319	867
2	2011	0.20	-0.10	-0.10	26046	5753	1431
3	2012	0.15	-0.16	-0.16	22508	6578	1814
4	2013	0.18	-0.01	0.13	20973	7081	1899
5	2014	0.12	0.07	0.25	20236	7910	1938
6	2015	0.04	0.11	0.22	17254	10278	2100
7	2016	0.06	0.11	0.12	14366	14041	2108
8	2017	0.05	0.20	-0.07	11258	16668	2265
9	2018	0.04	0.15	0.24	7774	19097	2230
10	2019	-0.02	0.26	0.19	5797	19521	2190
11	2020	-0.06	0.22	-0.09	3708	21383	2569
12	2021	0.33	0.08	0.19	70	21465	2580
13	2022	.	0.17	0.03	.	21295	2352
14	2023	.	0.06	0.11	.	3162	439

Mendelian sampling for 'Skin_proferation1' ' 6



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.18	0.07	-0.26	23663	3319	867
2	2011	-0.17	0.02	-0.04	21626	5753	1431
3	2012	-0.13	-0.06	-0.14	18867	6578	1814
4	2013	-0.09	0.05	-0.06	17545	7081	1899
5	2014	-0.02	-0.10	0.00	16707	7910	1938
6	2015	0.01	0.08	0.22	13671	10278	2100
7	2016	0.03	-0.02	0.04	10736	14041	2108
8	2017	0.01	0.10	-0.20	7977	16668	2265
9	2018	-0.01	0.01	0.01	5353	19097	2230
10	2019	0.00	0.06	-0.03	3967	19521	2190
11	2020	0.04	0.12	-0.02	2127	21383	2569
12	2021	.	0.23	0.16	38	21465	2580
13	2022	.	0.18	0.12	.	21295	2352
14	2023	.	0.17	-0.61	.	3162	439

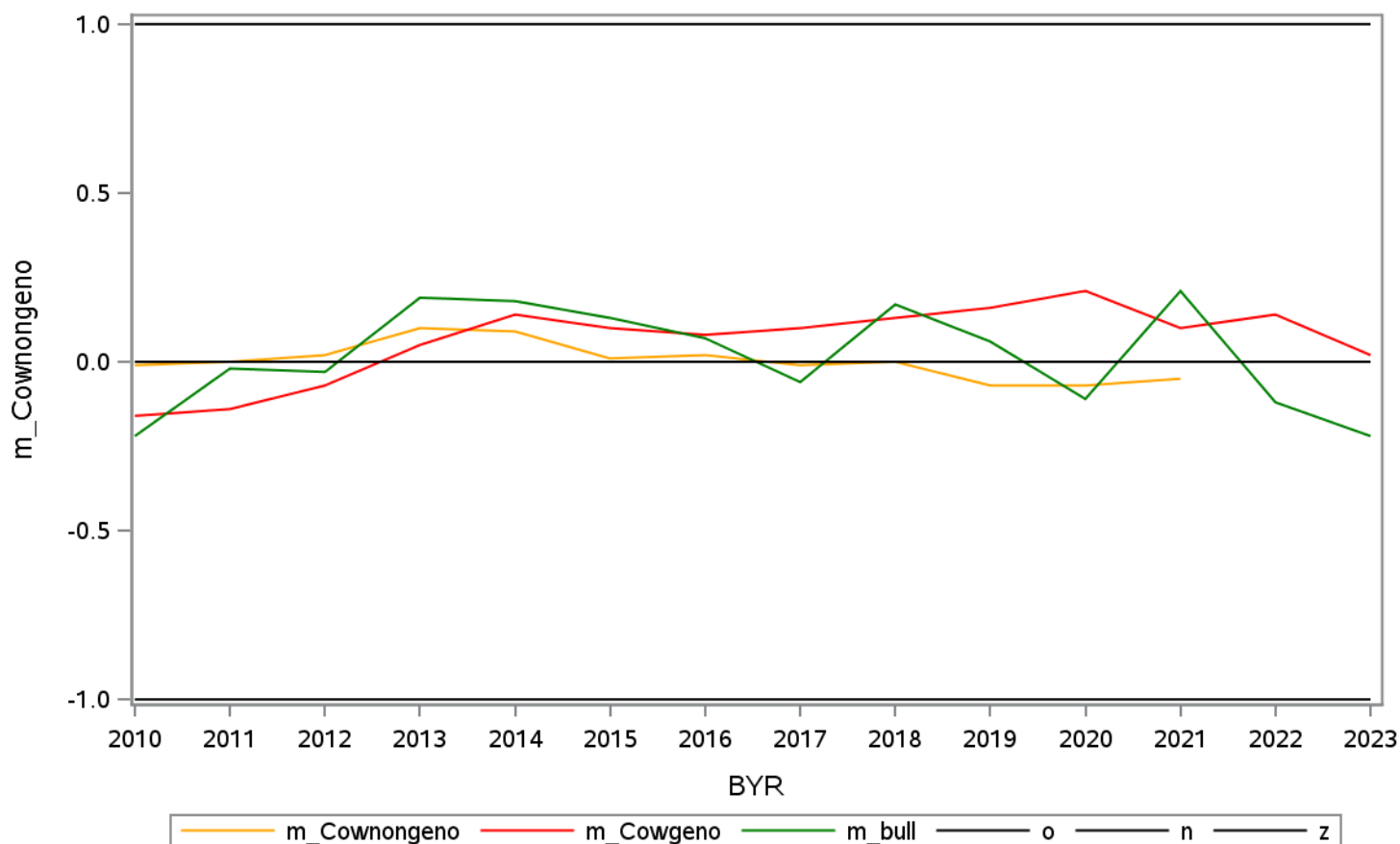
Mendelian sampling for 'White_line_double_sole1' 7



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	-0.16	-0.22	31429	3319	867
2	2011	0.00	-0.14	-0.02	30939	5753	1431
3	2012	0.02	-0.07	-0.03	27982	6578	1814
4	2013	0.10	0.05	0.19	27288	7081	1899
5	2014	0.09	0.14	0.18	23965	7910	1938
6	2015	0.01	0.10	0.13	20152	10278	2100
7	2016	0.02	0.08	0.07	16679	14041	2108
8	2017	-0.01	0.10	-0.06	13384	16668	2265
9	2018	0.00	0.13	0.17	11434	19097	2230
10	2019	-0.07	0.16	0.06	15550	19521	2190
11	2020	-0.07	0.21	-0.11	13551	21383	2569
12	2021	-0.05	0.10	0.21	271	21465	2580
13	2022	.	0.14	-0.12	.	21295	2352
14	2023	.	0.02	-0.22	.	3162	439

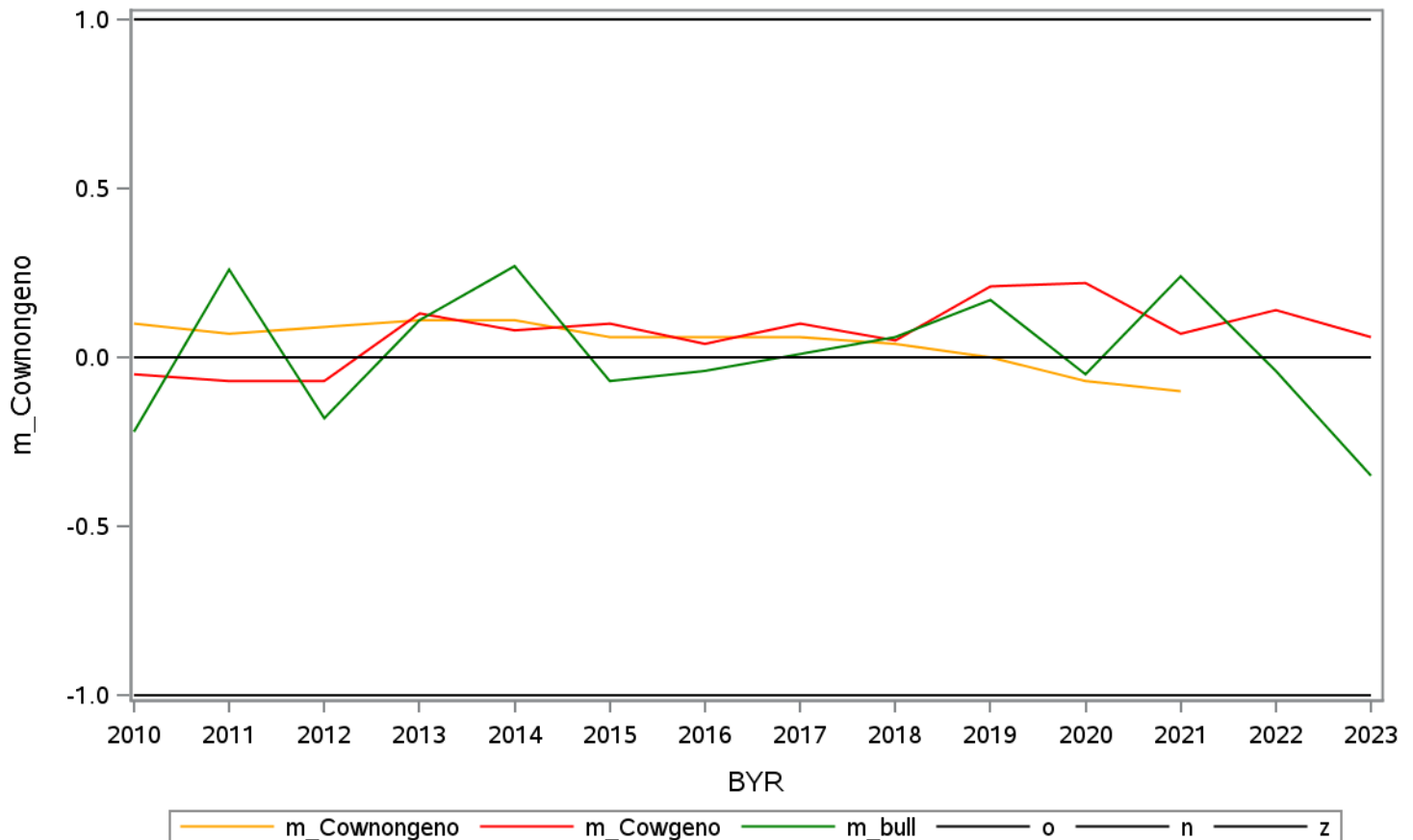
Mendelian sampling for 'Dermatitis2

' 8



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.10	-0.05	-0.22	34749	3319	867
2	2011	0.07	-0.07	0.26	34988	5753	1431
3	2012	0.09	-0.07	-0.18	32369	6578	1814
4	2013	0.11	0.13	0.11	32287	7081	1899
5	2014	0.11	0.08	0.27	29937	7910	1938
6	2015	0.06	0.10	-0.07	27025	10278	2100
7	2016	0.06	0.04	-0.04	23980	14041	2108
8	2017	0.06	0.10	0.01	20393	16668	2265
9	2018	0.04	0.05	0.06	18155	19097	2230
10	2019	0.00	0.21	0.17	19278	19521	2190
11	2020	-0.07	0.22	-0.05	13661	21383	2569
12	2021	-0.10	0.07	0.24	271	21465	2580
13	2022	.	0.14	-0.04	.	21295	2352
14	2023	.	0.06	-0.35	.	3162	439

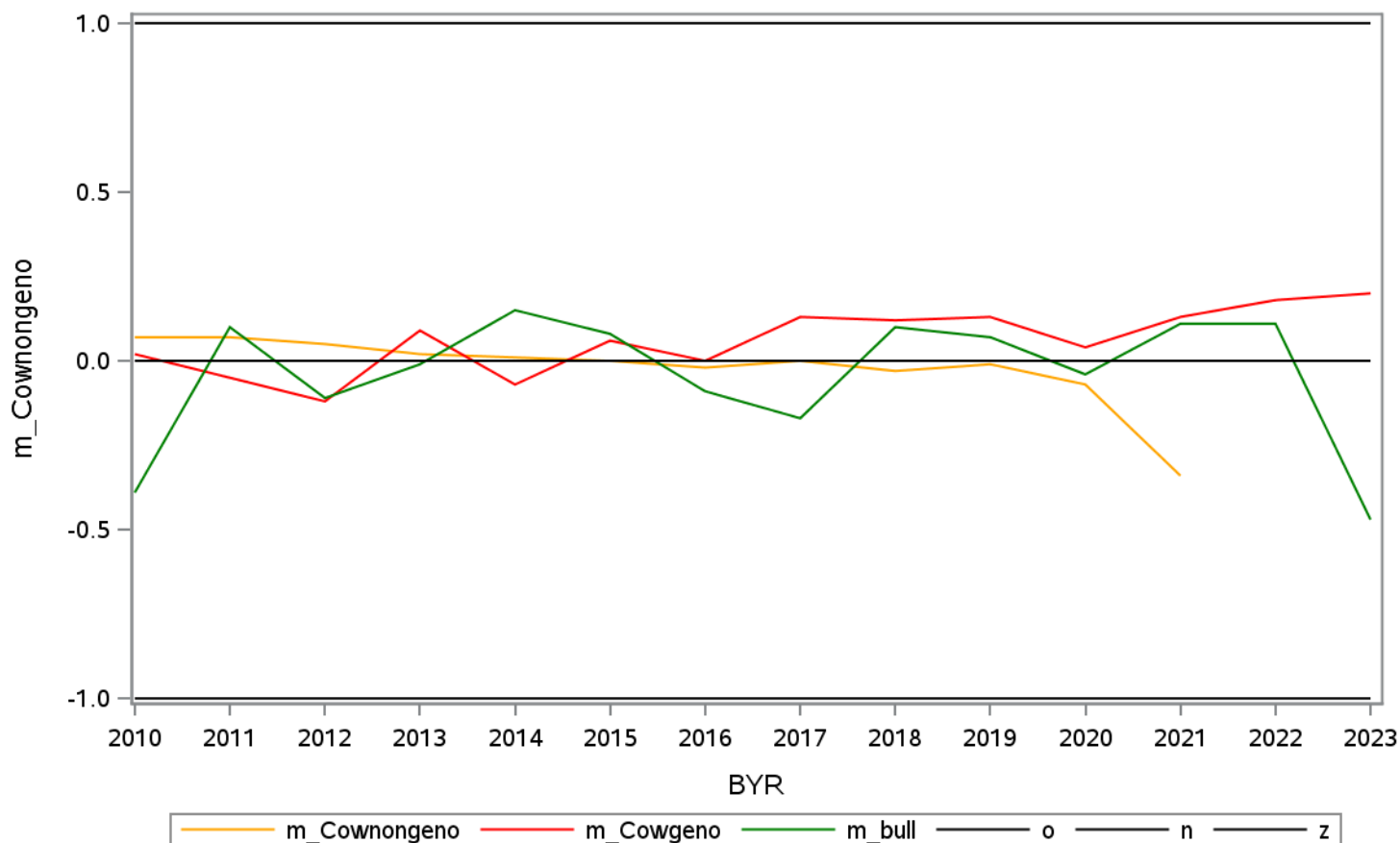
Mendelian sampling for 'Heel_horn_erosion2' 9



Mendelian sampling for 'Sole_heamorrhage2 ' 10

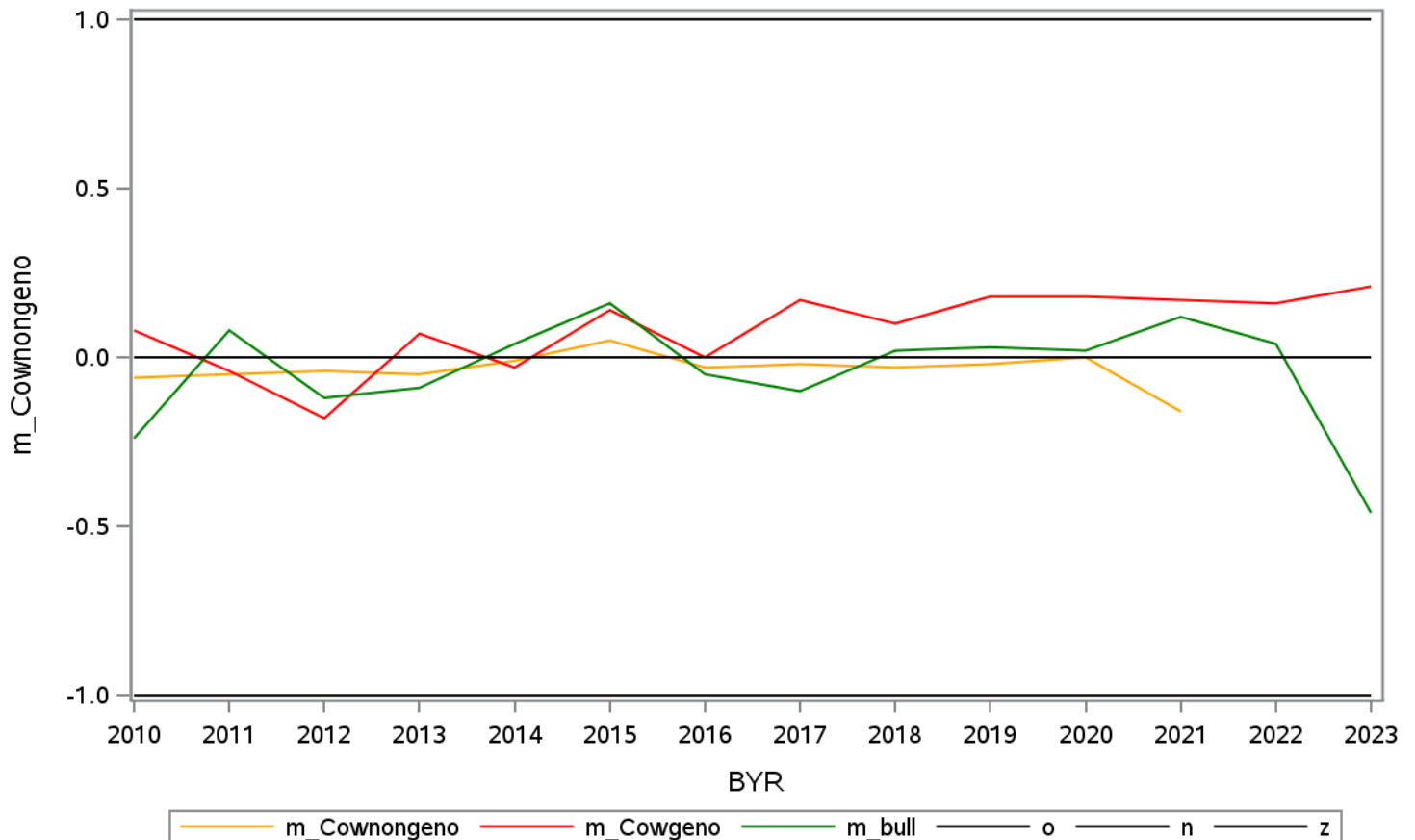
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.07	0.02	-0.39	29588	3319	867
2	2011	0.07	-0.05	0.10	29469	5753	1431
3	2012	0.05	-0.12	-0.11	26139	6578	1814
4	2013	0.02	0.09	-0.01	25579	7081	1899
5	2014	0.01	-0.07	0.15	22514	7910	1938
6	2015	0.00	0.06	0.08	18828	10278	2100
7	2016	-0.02	0.00	-0.09	15578	14041	2108
8	2017	0.00	0.13	-0.17	12777	16668	2265
9	2018	-0.03	0.12	0.10	11267	19097	2230
10	2019	-0.01	0.13	0.07	15671	19521	2190
11	2020	-0.07	0.04	-0.04	13550	21383	2569
12	2021	-0.34	0.13	0.11	271	21465	2580
13	2022	.	0.18	0.11	.	21295	2352
14	2023	.	0.20	-0.47	.	3162	439

Mendelian sampling for 'Sole_heamorrhage2 ' 10



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.06	0.08	-0.24	29555	3319	867
2	2011	-0.05	-0.04	0.08	29562	5753	1431
3	2012	-0.04	-0.18	-0.12	26674	6578	1814
4	2013	-0.05	0.07	-0.09	26199	7081	1899
5	2014	-0.01	-0.03	0.04	22679	7910	1938
6	2015	0.05	0.14	0.16	19271	10278	2100
7	2016	-0.03	0.00	-0.05	15838	14041	2108
8	2017	-0.02	0.17	-0.10	12958	16668	2265
9	2018	-0.03	0.10	0.02	11305	19097	2230
10	2019	-0.02	0.18	0.03	15152	19521	2190
11	2020	0.00	0.18	0.02	13552	21383	2569
12	2021	-0.16	0.17	0.12	271	21465	2580
13	2022	.	0.16	0.04	.	21295	2352
14	2023	.	0.21	-0.46	.	3162	439

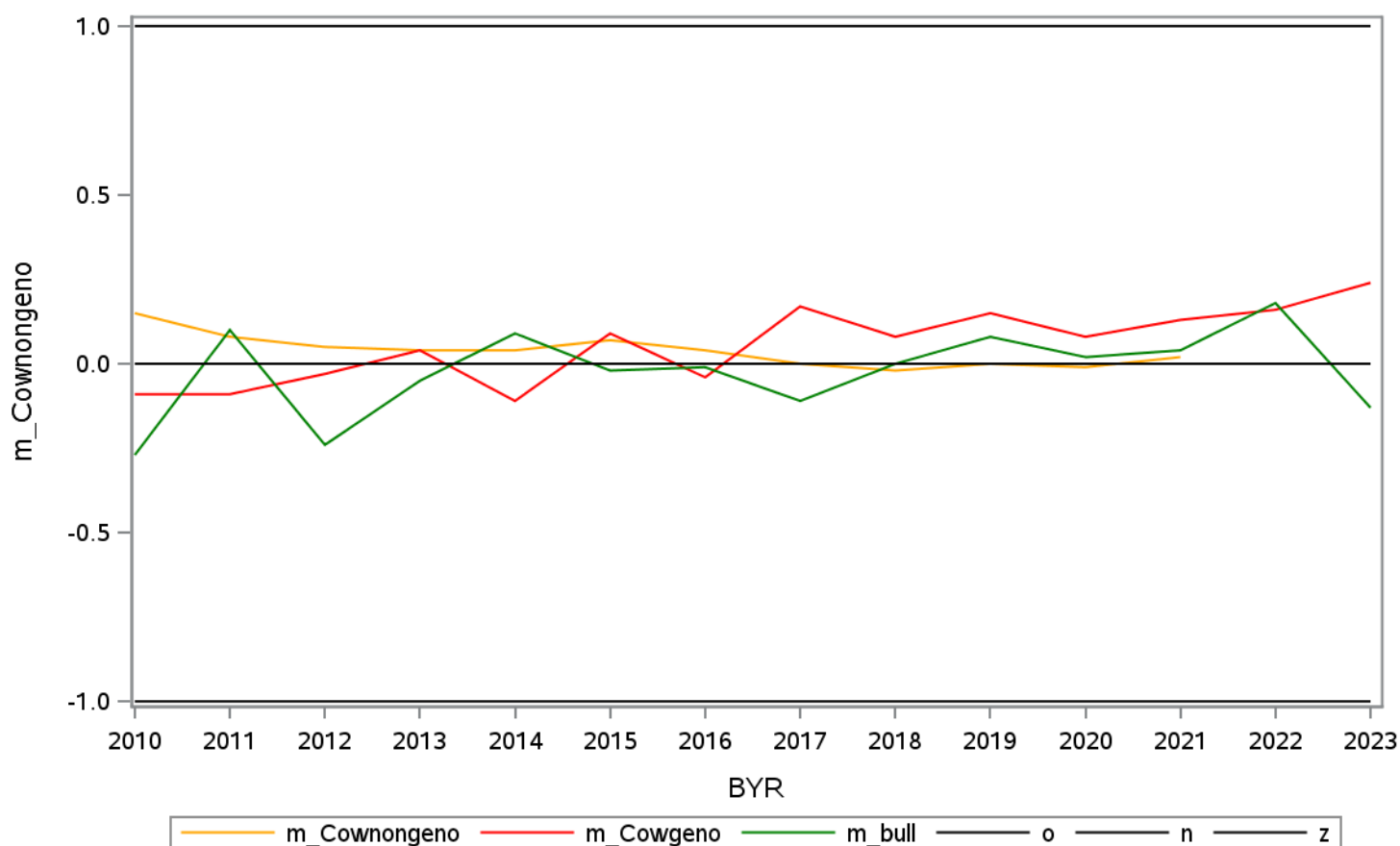
Mendelian sampling for 'Sole_ulcer2' ' 11



Mendelian sampling for 'Cork_screw_claws2 ' 12

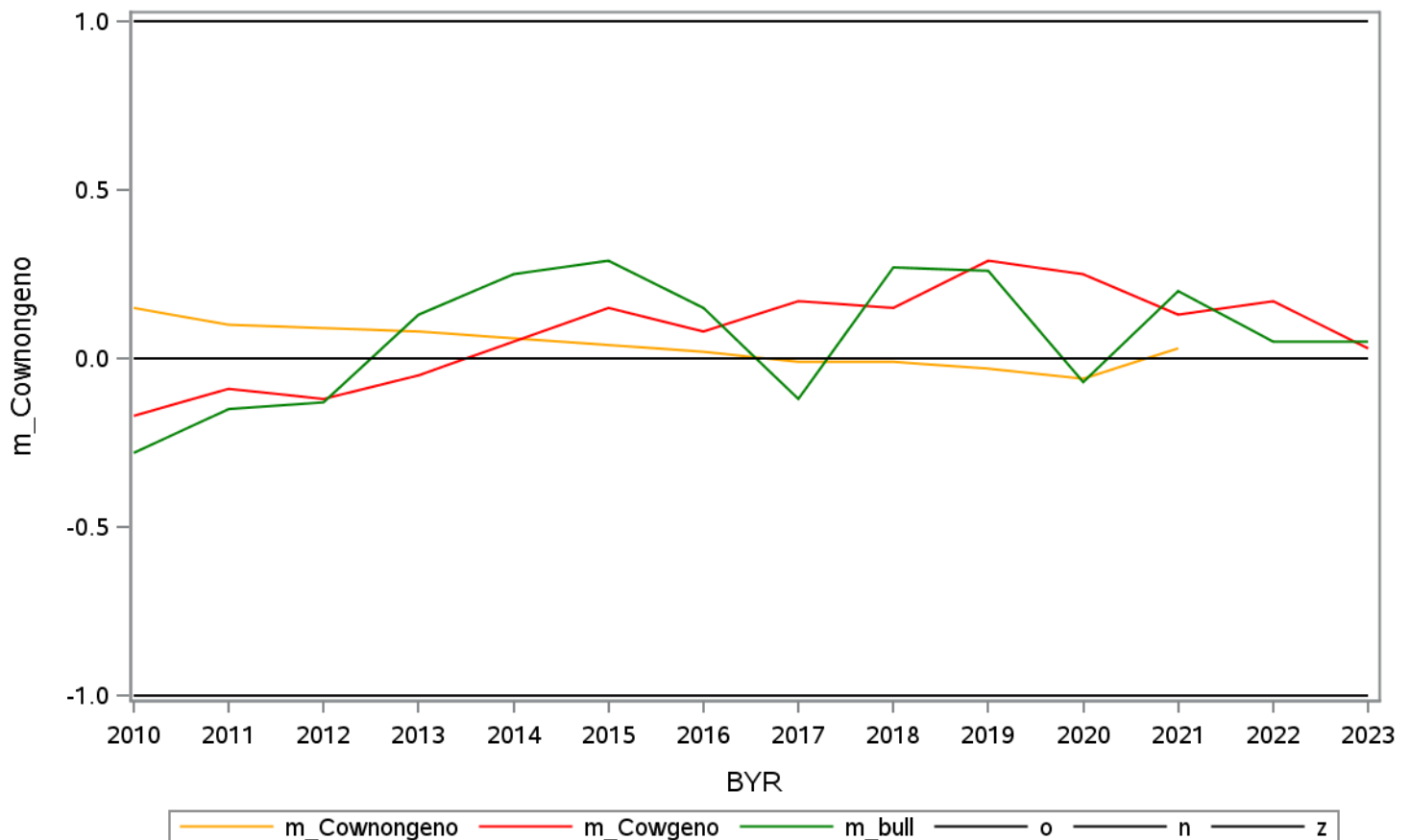
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.15	-0.09	-0.27	33631	3319	867
2	2011	0.08	-0.09	0.10	33364	5753	1431
3	2012	0.05	-0.03	-0.24	30364	6578	1814
4	2013	0.04	0.04	-0.05	29945	7081	1899
5	2014	0.04	-0.11	0.09	26499	7910	1938
6	2015	0.07	0.09	-0.02	22851	10278	2100
7	2016	0.04	-0.04	-0.01	19135	14041	2108
8	2017	0.00	0.17	-0.11	15256	16668	2265
9	2018	-0.02	0.08	0.00	13066	19097	2230
10	2019	0.00	0.15	0.08	16577	19521	2190
11	2020	-0.01	0.08	0.02	13587	21383	2569
12	2021	0.02	0.13	0.04	271	21465	2580
13	2022	.	0.16	0.18	.	21295	2352
14	2023	.	0.24	-0.13	.	3162	439

Mendelian sampling for 'Cork_screw_claws2 ' 12



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.15	-0.17	-0.28	33476	3319	867
2	2011	0.10	-0.09	-0.15	32926	5753	1431
3	2012	0.09	-0.12	-0.13	30015	6578	1814
4	2013	0.08	-0.05	0.13	29773	7081	1899
5	2014	0.06	0.05	0.25	26507	7910	1938
6	2015	0.04	0.15	0.29	23193	10278	2100
7	2016	0.02	0.08	0.15	19415	14041	2108
8	2017	-0.01	0.17	-0.12	15387	16668	2265
9	2018	-0.01	0.15	0.27	13349	19097	2230
10	2019	-0.03	0.29	0.26	16551	19521	2190
11	2020	-0.06	0.25	-0.07	13585	21383	2569
12	2021	0.03	0.13	0.20	271	21465	2580
13	2022	.	0.17	0.05	.	21295	2352
14	2023	.	0.03	0.05	.	3162	439

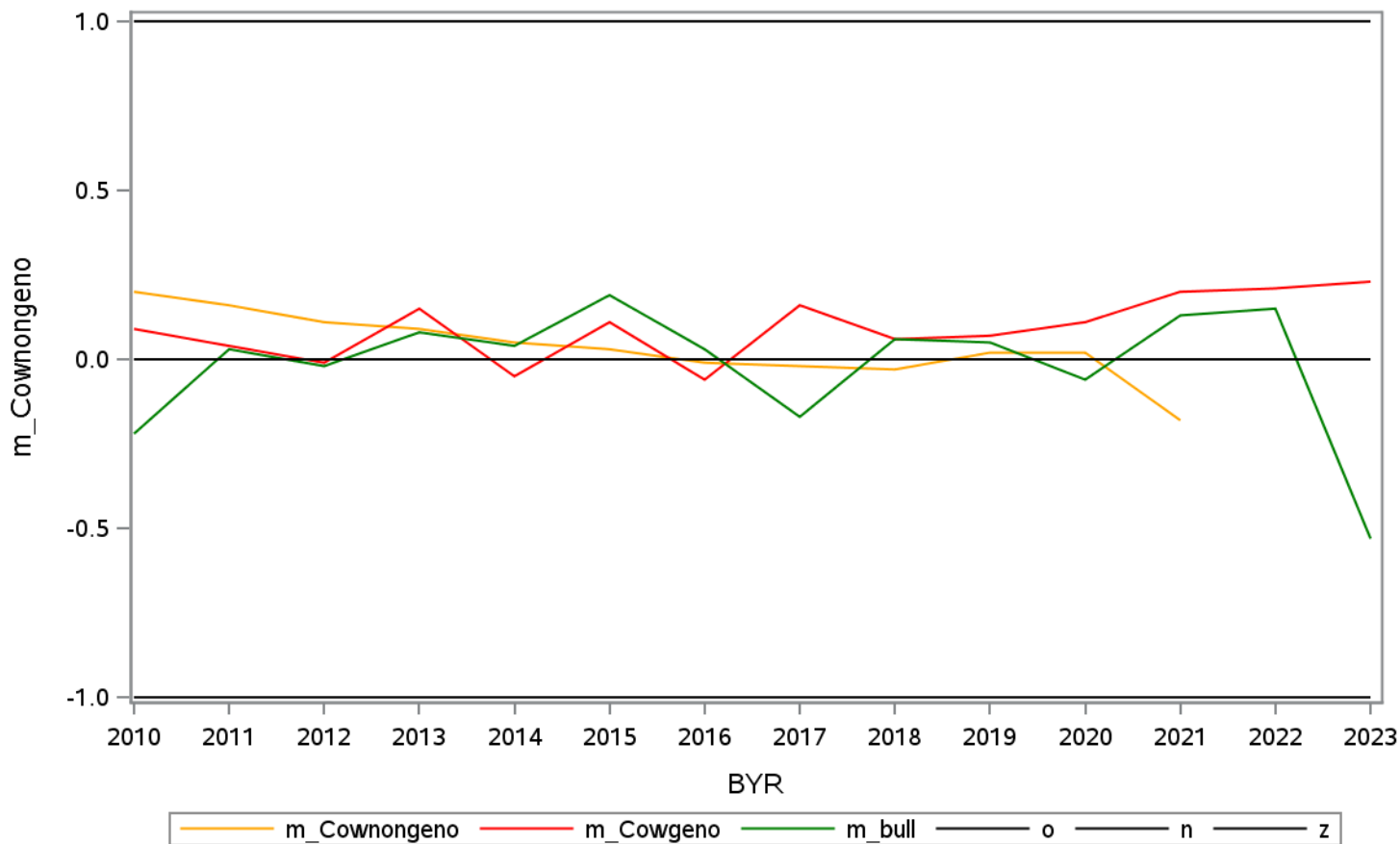
Mendelian sampling for 'Skin_proferation2 ' 13



Mendelian sampling for 'White_line_double_sole2' 14

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.20	0.09	-0.22	29930	3319	867
2	2011	0.16	0.04	0.03	29774	5753	1431
3	2012	0.11	-0.01	-0.02	26965	6578	1814
4	2013	0.09	0.15	0.08	26708	7081	1899
5	2014	0.05	-0.05	0.04	23227	7910	1938
6	2015	0.03	0.11	0.19	19887	10278	2100
7	2016	-0.01	-0.06	0.03	16404	14041	2108
8	2017	-0.02	0.16	-0.17	13223	16668	2265
9	2018	-0.03	0.06	0.06	11576	19097	2230
10	2019	0.02	0.07	0.05	15279	19521	2190
11	2020	0.02	0.11	-0.06	13553	21383	2569
12	2021	-0.18	0.20	0.13	271	21465	2580
13	2022	.	0.21	0.15	.	21295	2352
14	2023	.	0.23	-0.53	.	3162	439

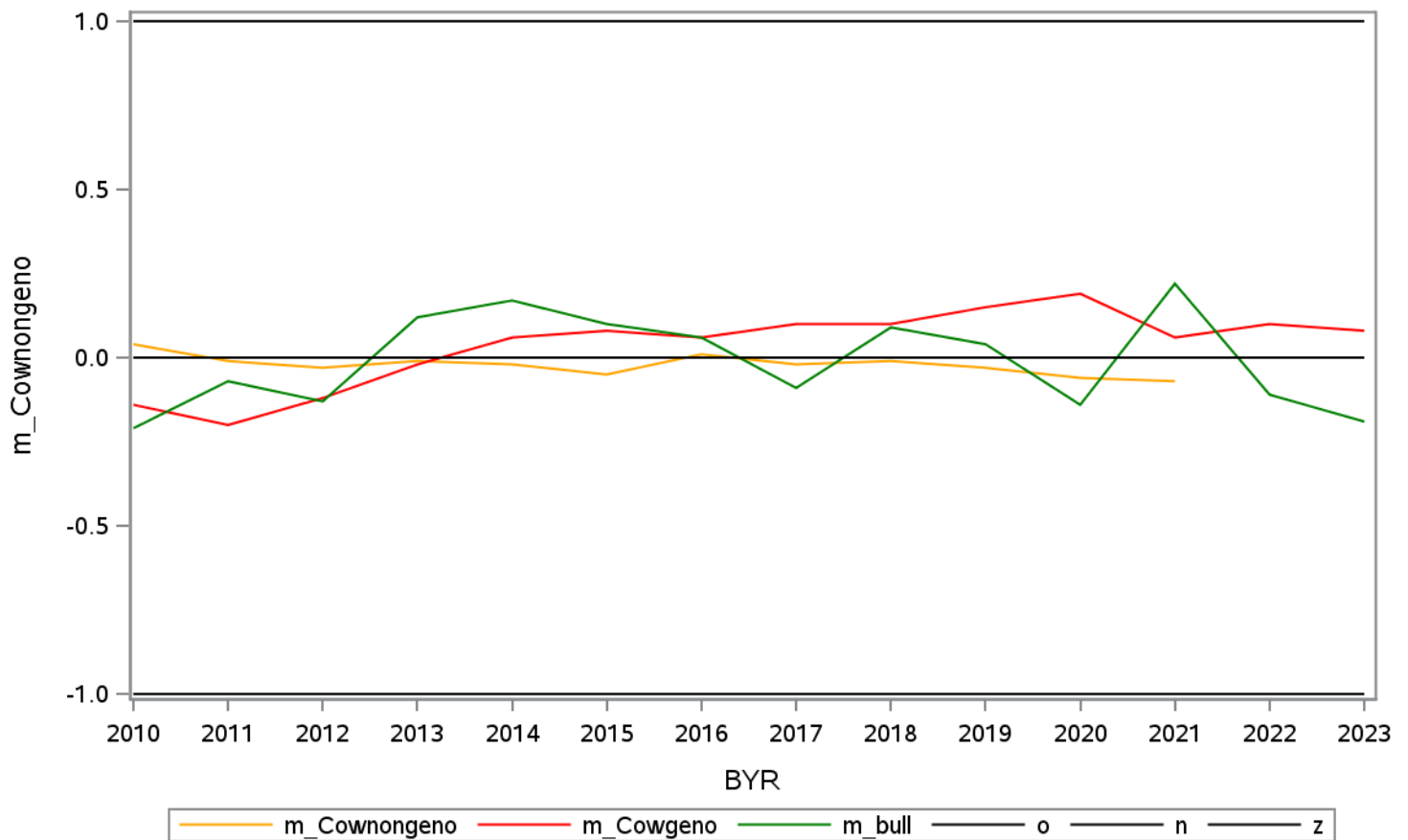
Mendelian sampling for 'White_line_double_sole2' 14



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.04	-0.14	-0.21	39228	3319	867
2	2011	-0.01	-0.20	-0.07	38386	5753	1431
3	2012	-0.03	-0.12	-0.13	35488	6578	1814
4	2013	-0.01	-0.02	0.12	34132	7081	1899
5	2014	-0.02	0.06	0.17	30404	7910	1938
6	2015	-0.05	0.08	0.10	26876	10278	2100
7	2016	0.01	0.06	0.06	22937	14041	2108
8	2017	-0.02	0.10	-0.09	20537	16668	2265
9	2018	-0.01	0.10	0.09	22311	19097	2230
10	2019	-0.03	0.15	0.04	23588	19521	2190
11	2020	-0.06	0.19	-0.14	13788	21383	2569
12	2021	-0.07	0.06	0.22	271	21465	2580
13	2022	.	0.10	-0.11	.	21295	2352
14	2023	.	0.08	-0.19	.	3162	439

Mendelian sampling for 'Dermatitis3

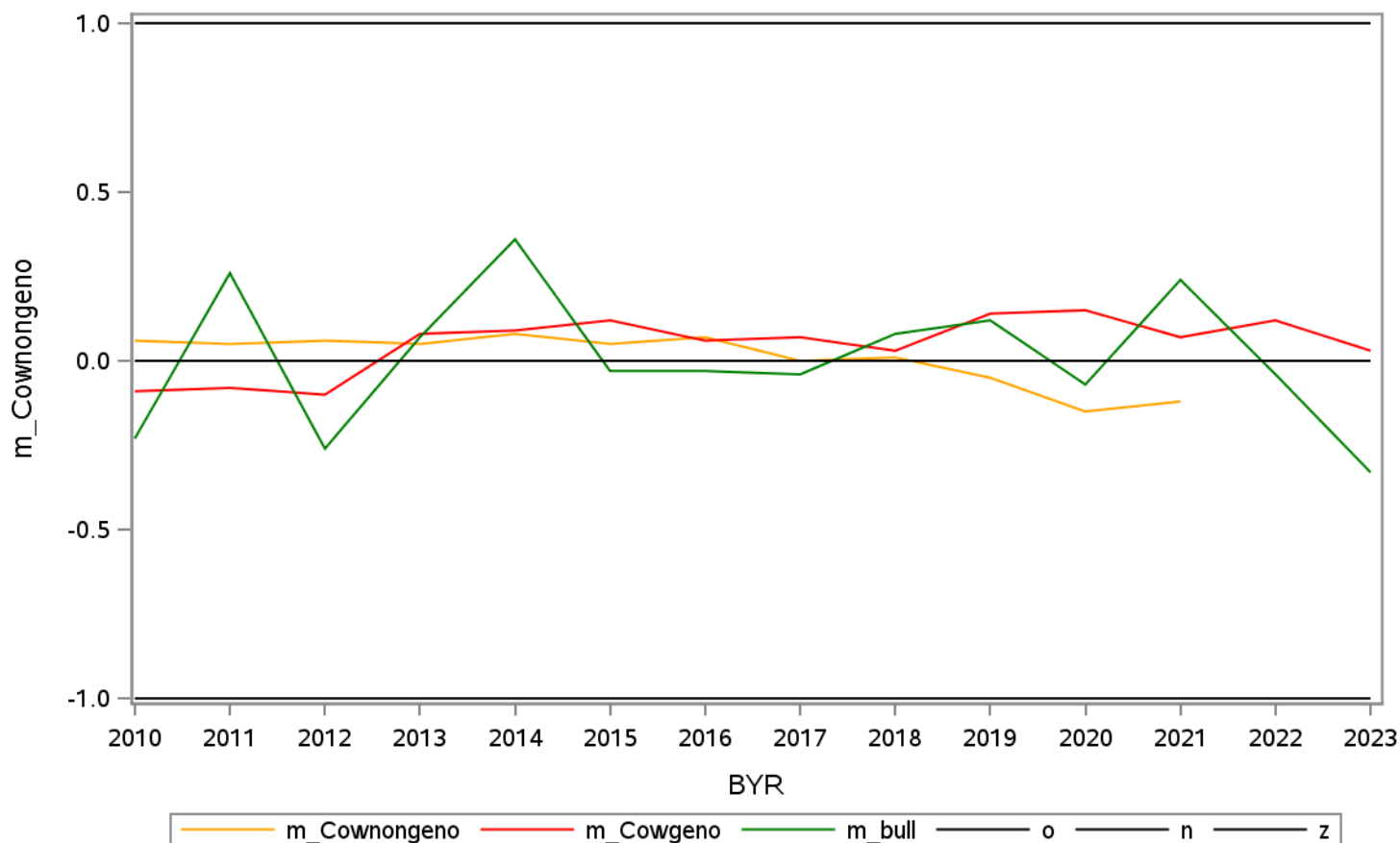
' 15



Mendelian sampling for 'Heel_horn_erosion3 ' 16

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.06	-0.09	-0.23	42156	3319	867
2	2011	0.05	-0.08	0.26	41840	5753	1431
3	2012	0.06	-0.10	-0.26	39218	6578	1814
4	2013	0.05	0.08	0.07	38802	7081	1899
5	2014	0.08	0.09	0.36	35766	7910	1938
6	2015	0.05	0.12	-0.03	32762	10278	2100
7	2016	0.07	0.06	-0.03	28598	14041	2108
8	2017	0.00	0.07	-0.04	25667	16668	2265
9	2018	0.01	0.03	0.08	25232	19097	2230
10	2019	-0.05	0.14	0.12	23656	19521	2190
11	2020	-0.15	0.15	-0.07	13788	21383	2569
12	2021	-0.12	0.07	0.24	271	21465	2580
13	2022	.	0.12	-0.04	.	21295	2352
14	2023	.	0.03	-0.33	.	3162	439

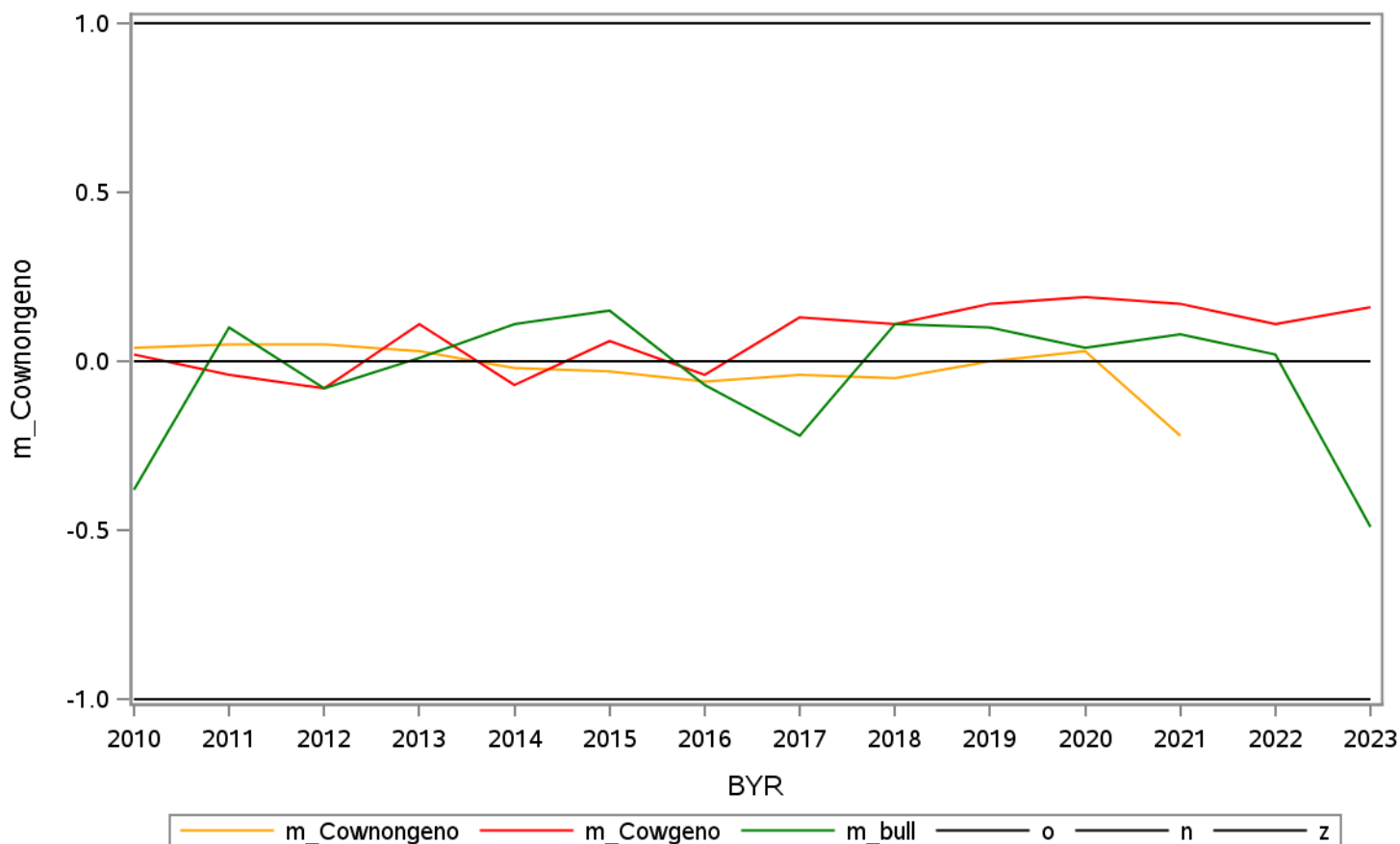
Mendelian sampling for 'Heel_horn_erosion3 ' 16



Mendelian sampling for 'Sole_heamorrhage3 ' 17

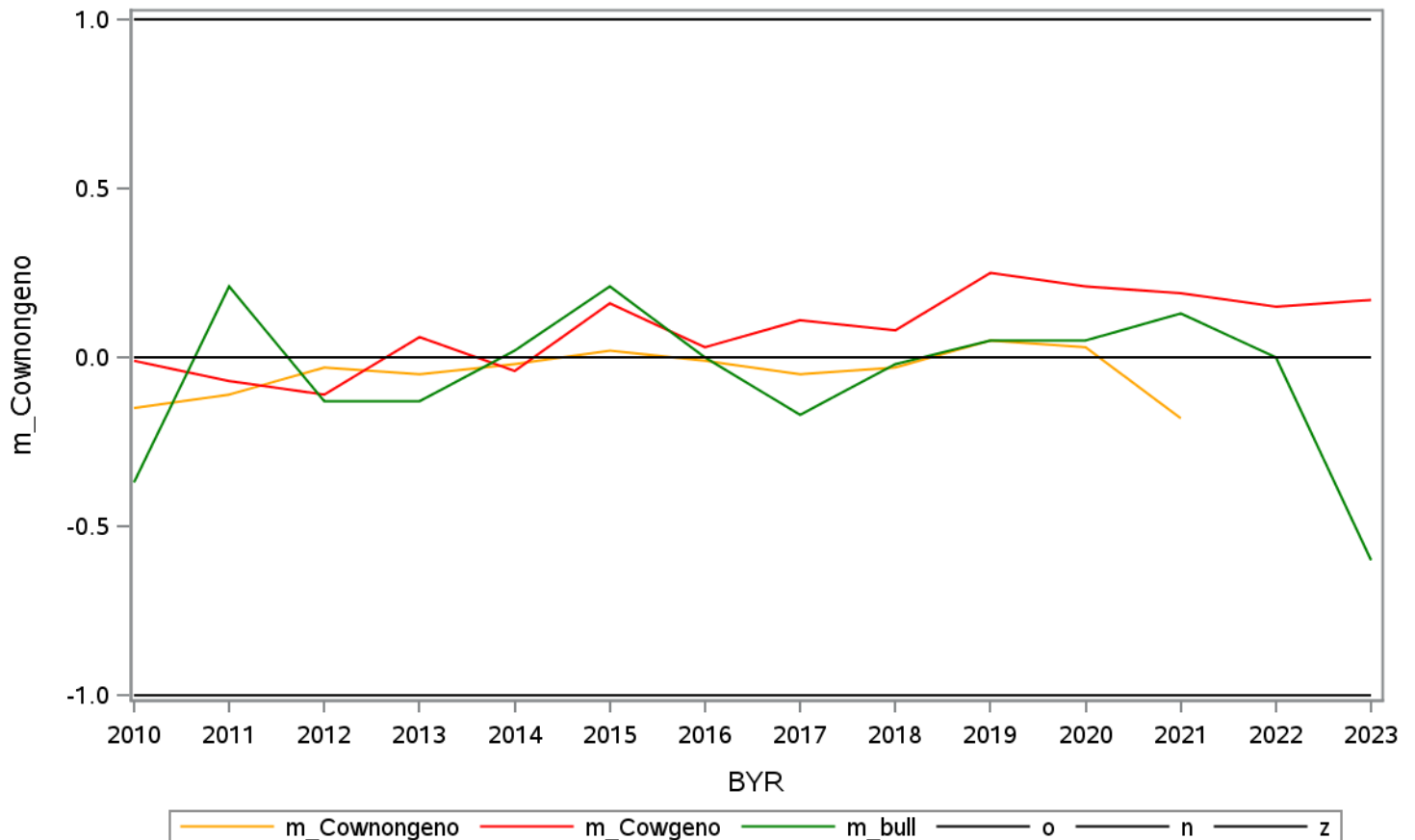
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.04	0.02	-0.38	38821	3319	867
2	2011	0.05	-0.04	0.10	37804	5753	1431
3	2012	0.05	-0.08	-0.08	35160	6578	1814
4	2013	0.03	0.11	0.01	34397	7081	1899
5	2014	-0.02	-0.07	0.11	31391	7910	1938
6	2015	-0.03	0.06	0.15	28164	10278	2100
7	2016	-0.06	-0.04	-0.07	24640	14041	2108
8	2017	-0.04	0.13	-0.22	22476	16668	2265
9	2018	-0.05	0.11	0.11	23177	19097	2230
10	2019	0.00	0.17	0.10	23609	19521	2190
11	2020	0.03	0.19	0.04	13788	21383	2569
12	2021	-0.22	0.17	0.08	271	21465	2580
13	2022	.	0.11	0.02	.	21295	2352
14	2023	.	0.16	-0.49	.	3162	439

Mendelian sampling for 'Sole_heamorrhage3 ' 17



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.15	-0.01	-0.37	38270	3319	867
2	2011	-0.11	-0.07	0.21	37489	5753	1431
3	2012	-0.03	-0.11	-0.13	34787	6578	1814
4	2013	-0.05	0.06	-0.13	33012	7081	1899
5	2014	-0.02	-0.04	0.02	29701	7910	1938
6	2015	0.02	0.16	0.21	26290	10278	2100
7	2016	-0.01	0.03	0.00	22531	14041	2108
8	2017	-0.05	0.11	-0.17	20288	16668	2265
9	2018	-0.03	0.08	-0.02	22076	19097	2230
10	2019	0.05	0.25	0.05	23585	19521	2190
11	2020	0.03	0.21	0.05	13788	21383	2569
12	2021	-0.18	0.19	0.13	271	21465	2580
13	2022	.	0.15	0.00	.	21295	2352
14	2023	.	0.17	-0.60	.	3162	439

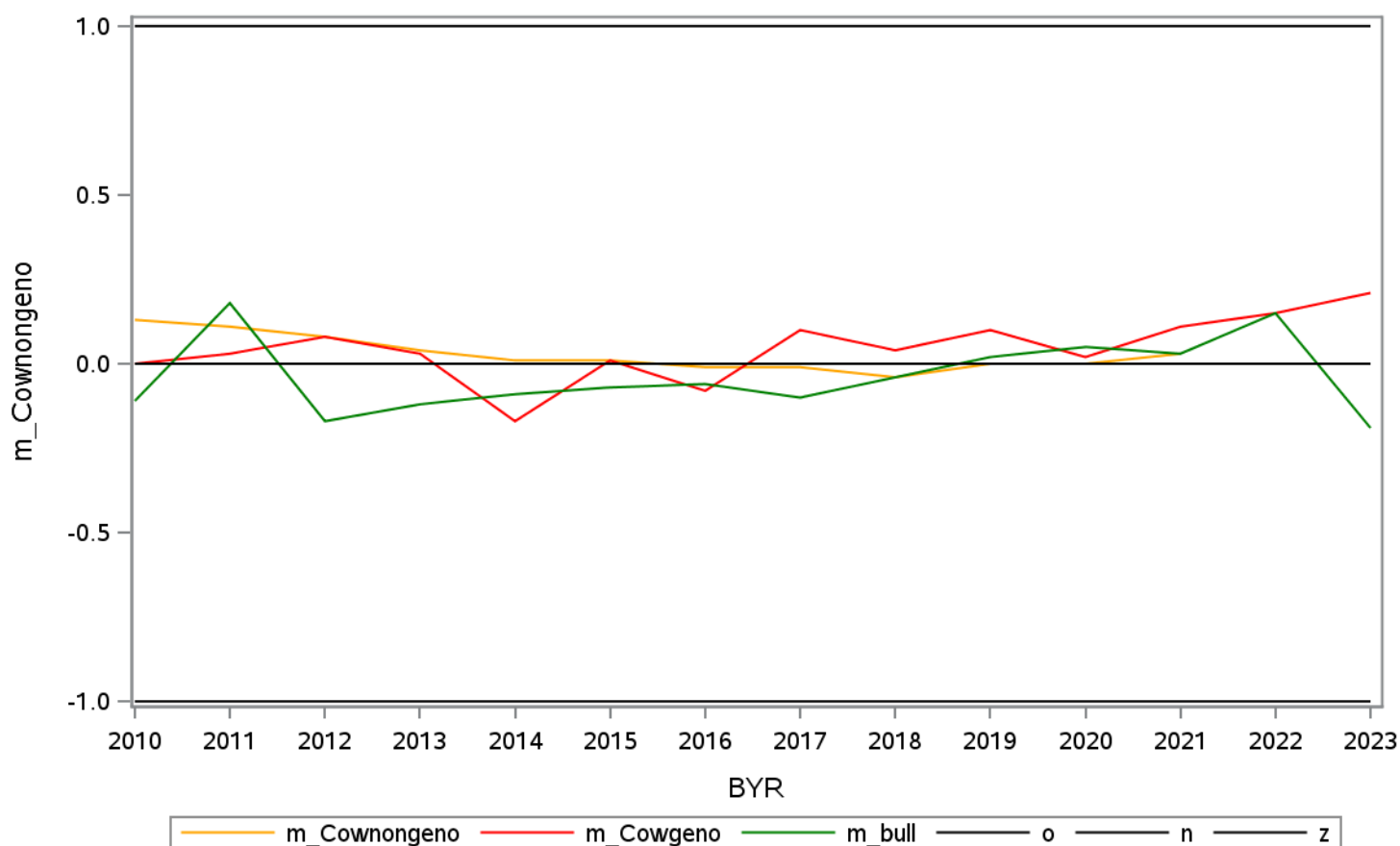
Mendelian sampling for 'Sole_ulcer3' ' 18



Mendelian sampling for 'Cork_screw_claws3 ' 19

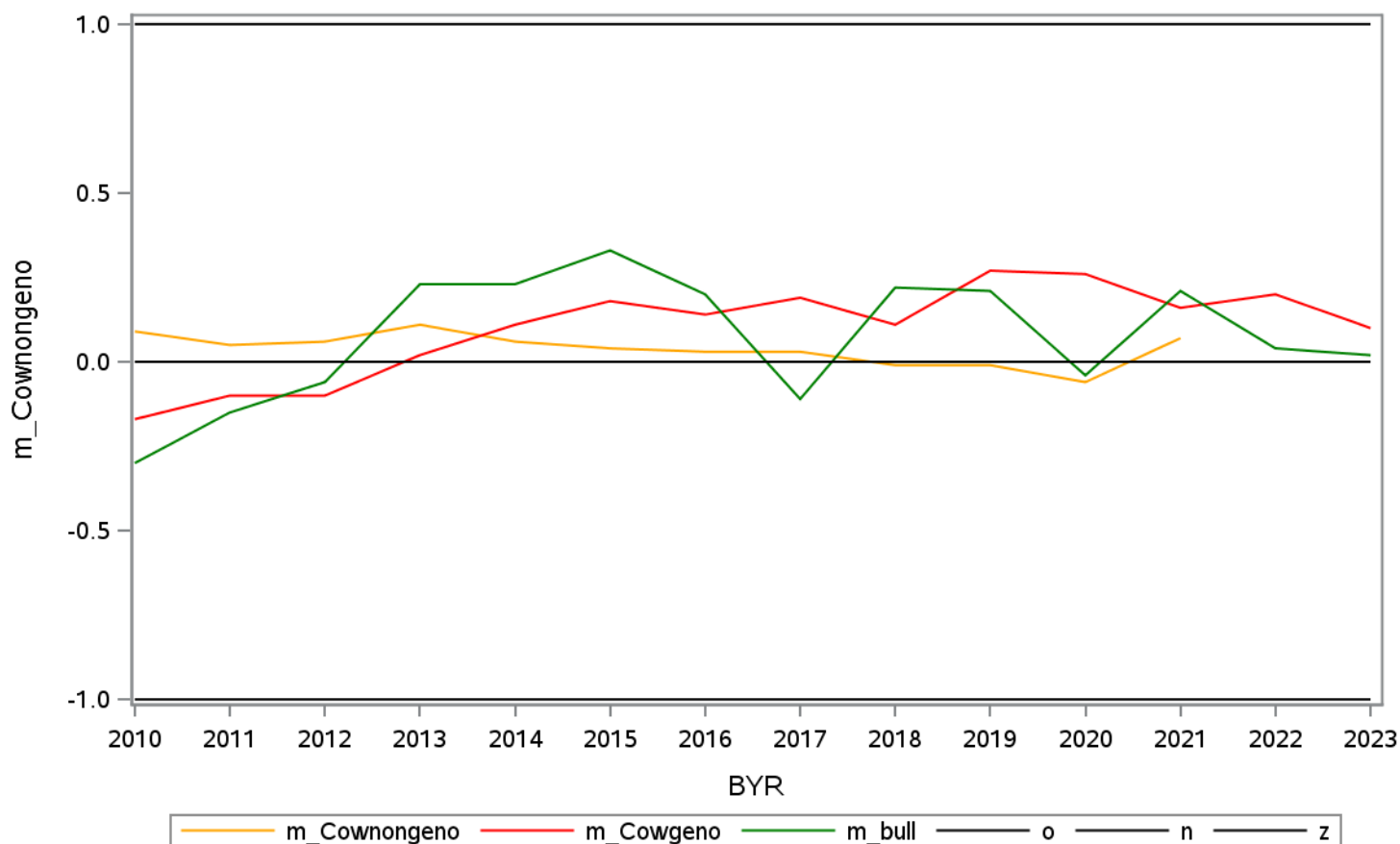
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.13	0.00	-0.11	40725	3319	867
2	2011	0.11	0.03	0.18	40249	5753	1431
3	2012	0.08	0.08	-0.17	37469	6578	1814
4	2013	0.04	0.03	-0.12	35768	7081	1899
5	2014	0.01	-0.17	-0.09	32518	7910	1938
6	2015	0.01	0.01	-0.07	28798	10278	2100
7	2016	-0.01	-0.08	-0.06	24490	14041	2108
8	2017	-0.01	0.10	-0.10	21894	16668	2265
9	2018	-0.04	0.04	-0.04	23122	19097	2230
10	2019	0.00	0.10	0.02	23611	19521	2190
11	2020	0.00	0.02	0.05	13788	21383	2569
12	2021	0.03	0.11	0.03	271	21465	2580
13	2022	.	0.15	0.15	.	21295	2352
14	2023	.	0.21	-0.19	.	3162	439

Mendelian sampling for 'Cork_screw_claws3 ' 19



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.09	-0.17	-0.30	40502	3319	867
2	2011	0.05	-0.10	-0.15	39916	5753	1431
3	2012	0.06	-0.10	-0.06	37344	6578	1814
4	2013	0.11	0.02	0.23	35826	7081	1899
5	2014	0.06	0.11	0.23	32776	7910	1938
6	2015	0.04	0.18	0.33	29062	10278	2100
7	2016	0.03	0.14	0.20	24521	14041	2108
8	2017	0.03	0.19	-0.11	21950	16668	2265
9	2018	-0.01	0.11	0.22	23039	19097	2230
10	2019	-0.01	0.27	0.21	23605	19521	2190
11	2020	-0.06	0.26	-0.04	13788	21383	2569
12	2021	0.07	0.16	0.21	271	21465	2580
13	2022	.	0.20	0.04	.	21295	2352
14	2023	.	0.10	0.02	.	3162	439

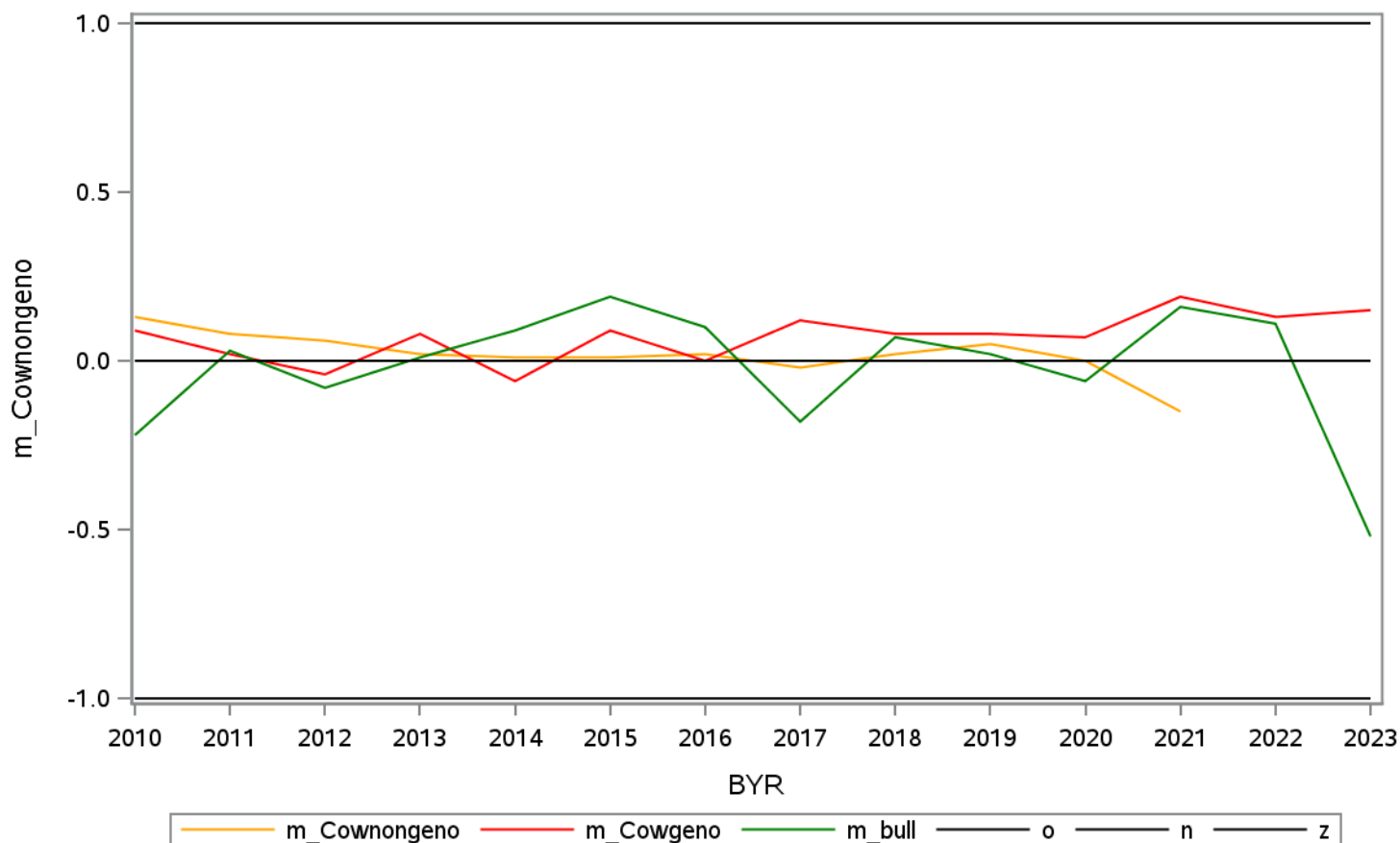
Mendelian sampling for 'Skin_proferation3 ' 20



Mendelian sampling for 'White_line_double_sole3' 21

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.13	0.09	-0.22	38495	3319	867
2	2011	0.08	0.02	0.03	37744	5753	1431
3	2012	0.06	-0.04	-0.08	35142	6578	1814
4	2013	0.02	0.08	0.01	33480	7081	1899
5	2014	0.01	-0.06	0.09	30243	7910	1938
6	2015	0.01	0.09	0.19	26796	10278	2100
7	2016	0.02	0.00	0.10	22804	14041	2108
8	2017	-0.02	0.12	-0.18	20536	16668	2265
9	2018	0.02	0.08	0.07	22127	19097	2230
10	2019	0.05	0.08	0.02	23583	19521	2190
11	2020	0.00	0.07	-0.06	13788	21383	2569
12	2021	-0.15	0.19	0.16	271	21465	2580
13	2022	.	0.13	0.11	.	21295	2352
14	2023	.	0.15	-0.52	.	3162	439

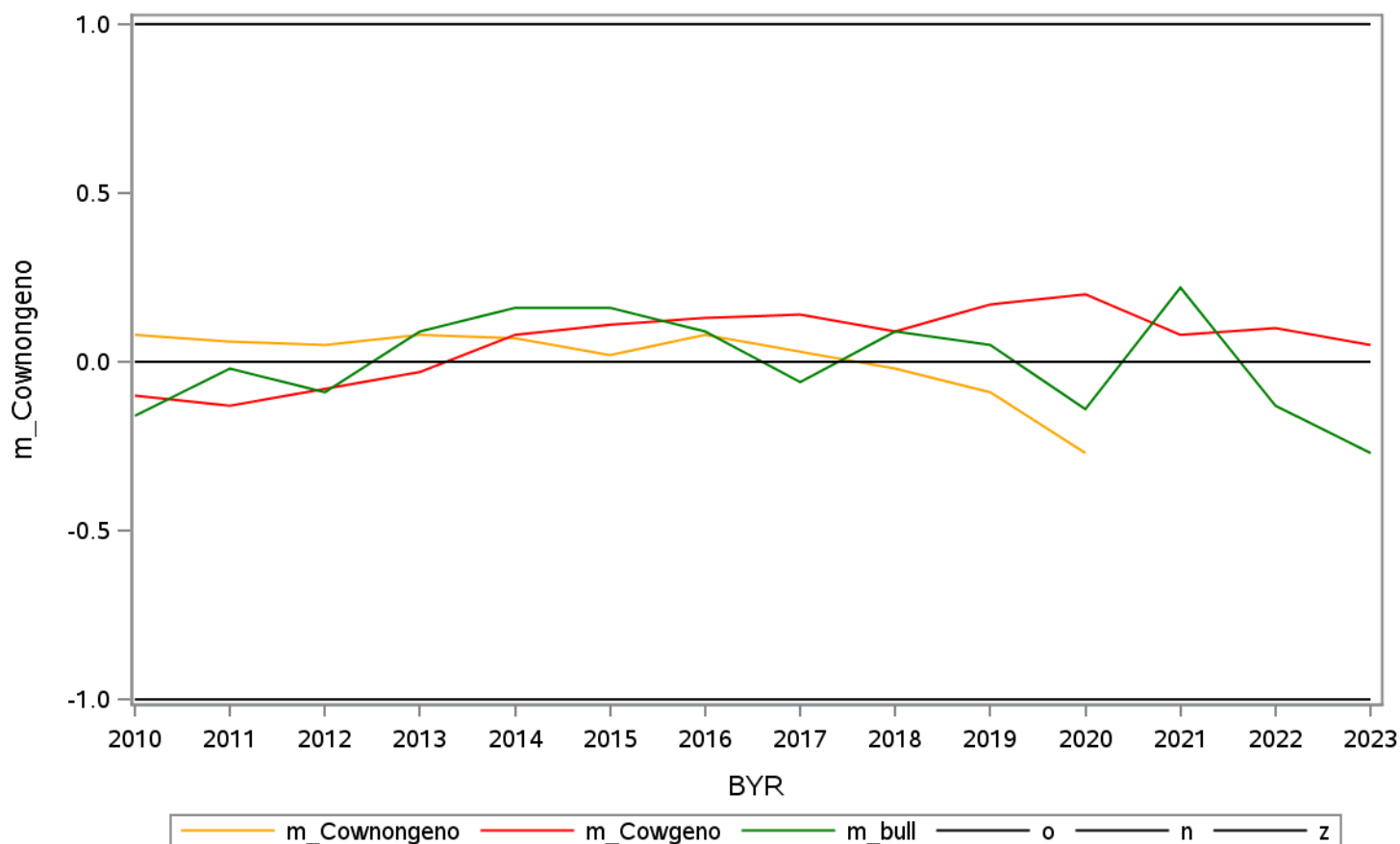
Mendelian sampling for 'White_line_double_sole3' 21



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.08	-0.10	-0.16	26323	3319	867
2	2011	0.06	-0.13	-0.02	23839	5753	1431
3	2012	0.05	-0.08	-0.09	20965	6578	1814
4	2013	0.08	-0.03	0.09	19356	7081	1899
5	2014	0.07	0.08	0.16	17821	7910	1938
6	2015	0.02	0.11	0.16	14909	10278	2100
7	2016	0.08	0.13	0.09	11282	14041	2108
8	2017	0.03	0.14	-0.06	8417	16668	2265
9	2018	-0.02	0.09	0.09	5686	19097	2230
10	2019	-0.09	0.17	0.05	4190	19521	2190
11	2020	-0.27	0.20	-0.14	2473	21383	2569
12	2021	.	0.08	0.22	39	21465	2580
13	2022	.	0.10	-0.13	.	21295	2352
14	2023	.	0.05	-0.27	.	3162	439

Mendelian sampling for 'Dermatitis'

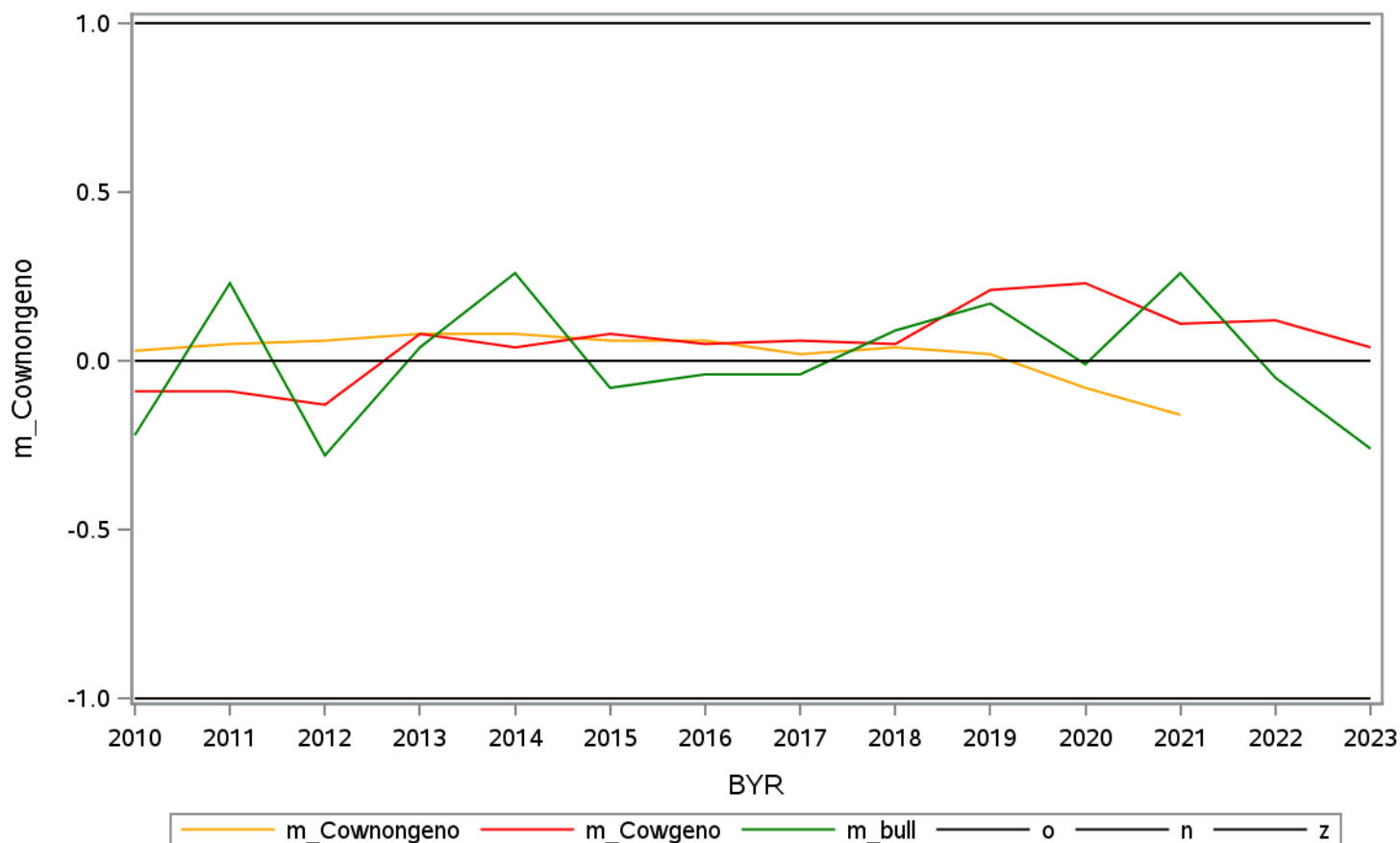
' 22



Mendelian sampling for 'Heel_horn_erosion ' 23

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.03	-0.09	-0.22	28819	3319	867
2	2011	0.05	-0.09	0.23	27726	5753	1431
3	2012	0.06	-0.13	-0.28	25432	6578	1814
4	2013	0.08	0.08	0.04	24445	7081	1899
5	2014	0.08	0.04	0.26	23228	7910	1938
6	2015	0.06	0.08	-0.08	21573	10278	2100
7	2016	0.06	0.05	-0.04	18787	14041	2108
8	2017	0.02	0.06	-0.04	16337	16668	2265
9	2018	0.04	0.05	0.09	13502	19097	2230
10	2019	0.02	0.21	0.17	11845	19521	2190
11	2020	-0.08	0.23	-0.01	7861	21383	2569
12	2021	-0.16	0.11	0.26	157	21465	2580
13	2022	.	0.12	-0.05	.	21295	2352
14	2023	.	0.04	-0.26	.	3162	439

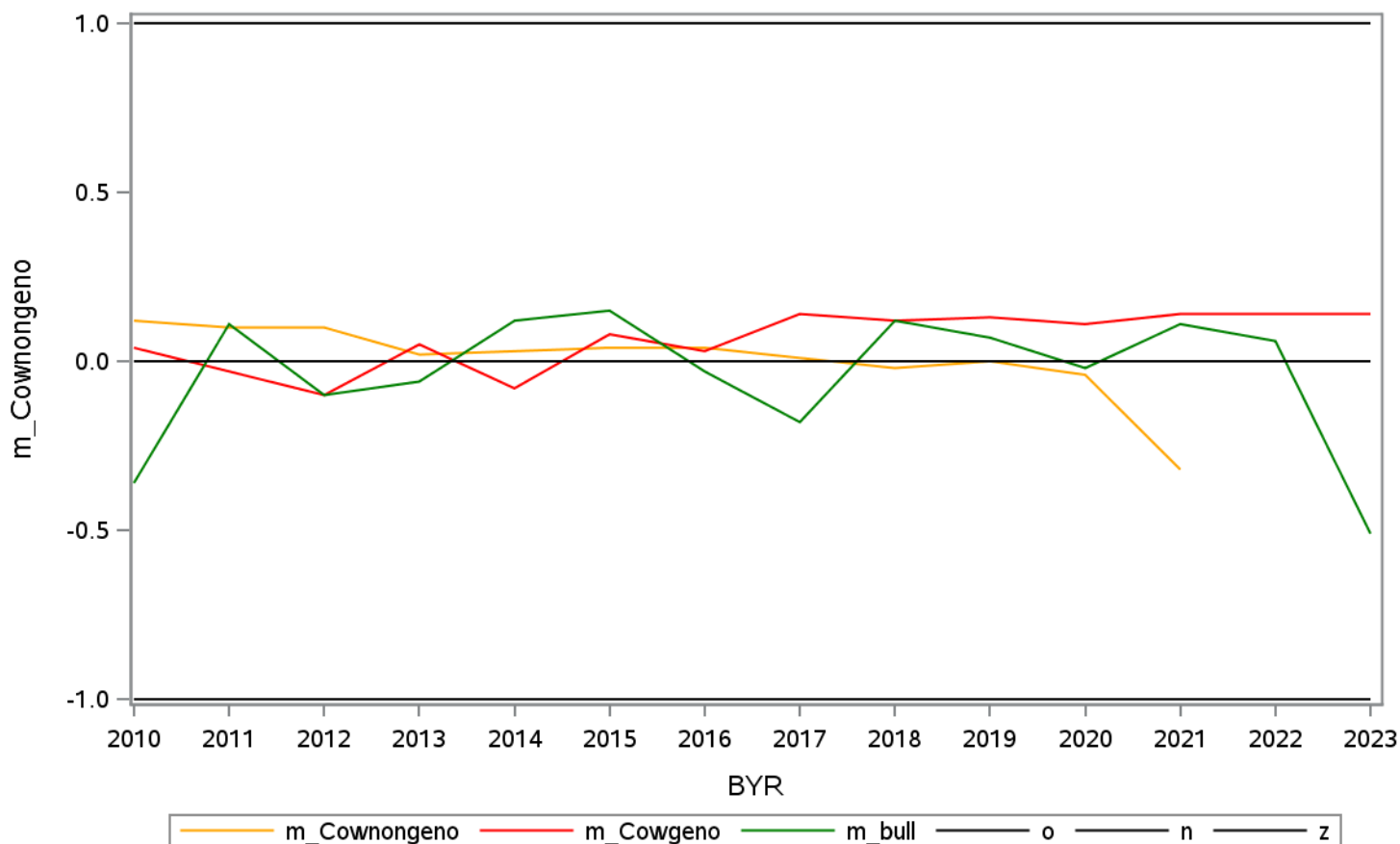
Mendelian sampling for 'Heel_horn_erosion ' 23



Mendelian sampling for 'Sole_heamorrhage' ' 24

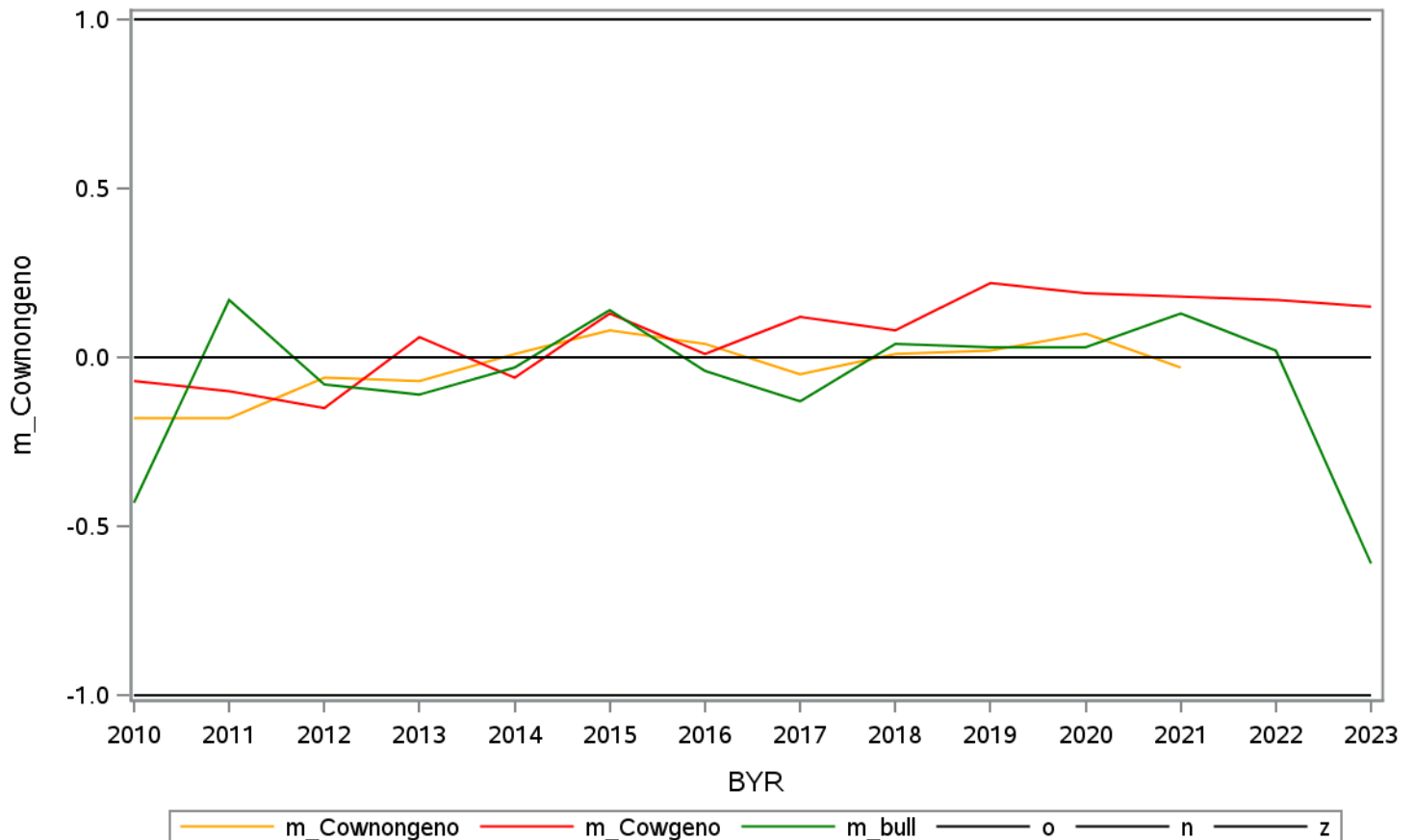
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.12	0.04	-0.36	24233	3319	867
2	2011	0.10	-0.03	0.11	22216	5753	1431
3	2012	0.10	-0.10	-0.10	19669	6578	1814
4	2013	0.02	0.05	-0.06	17261	7081	1899
5	2014	0.03	-0.08	0.12	16234	7910	1938
6	2015	0.04	0.08	0.15	14399	10278	2100
7	2016	0.04	0.03	-0.03	12011	14041	2108
8	2017	0.01	0.14	-0.18	9277	16668	2265
9	2018	-0.02	0.12	0.12	7452	19097	2230
10	2019	0.00	0.13	0.07	6335	19521	2190
11	2020	-0.04	0.11	-0.02	3963	21383	2569
12	2021	-0.32	0.14	0.11	75	21465	2580
13	2022	.	0.14	0.06	.	21295	2352
14	2023	.	0.14	-0.51	.	3162	439

Mendelian sampling for 'Sole_heamorrhage' ' 24



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.18	-0.07	-0.43	24032	3319	867
2	2011	-0.18	-0.10	0.17	22175	5753	1431
3	2012	-0.06	-0.15	-0.08	19620	6578	1814
4	2013	-0.07	0.06	-0.11	18172	7081	1899
5	2014	0.01	-0.06	-0.03	17317	7910	1938
6	2015	0.08	0.13	0.14	14061	10278	2100
7	2016	0.04	0.01	-0.04	11171	14041	2108
8	2017	-0.05	0.12	-0.13	8386	16668	2265
9	2018	0.01	0.08	0.04	5769	19097	2230
10	2019	0.02	0.22	0.03	4214	19521	2190
11	2020	0.07	0.19	0.03	2566	21383	2569
12	2021	-0.03	0.18	0.13	60	21465	2580
13	2022	.	0.17	0.02	.	21295	2352
14	2023	.	0.15	-0.61	.	3162	439

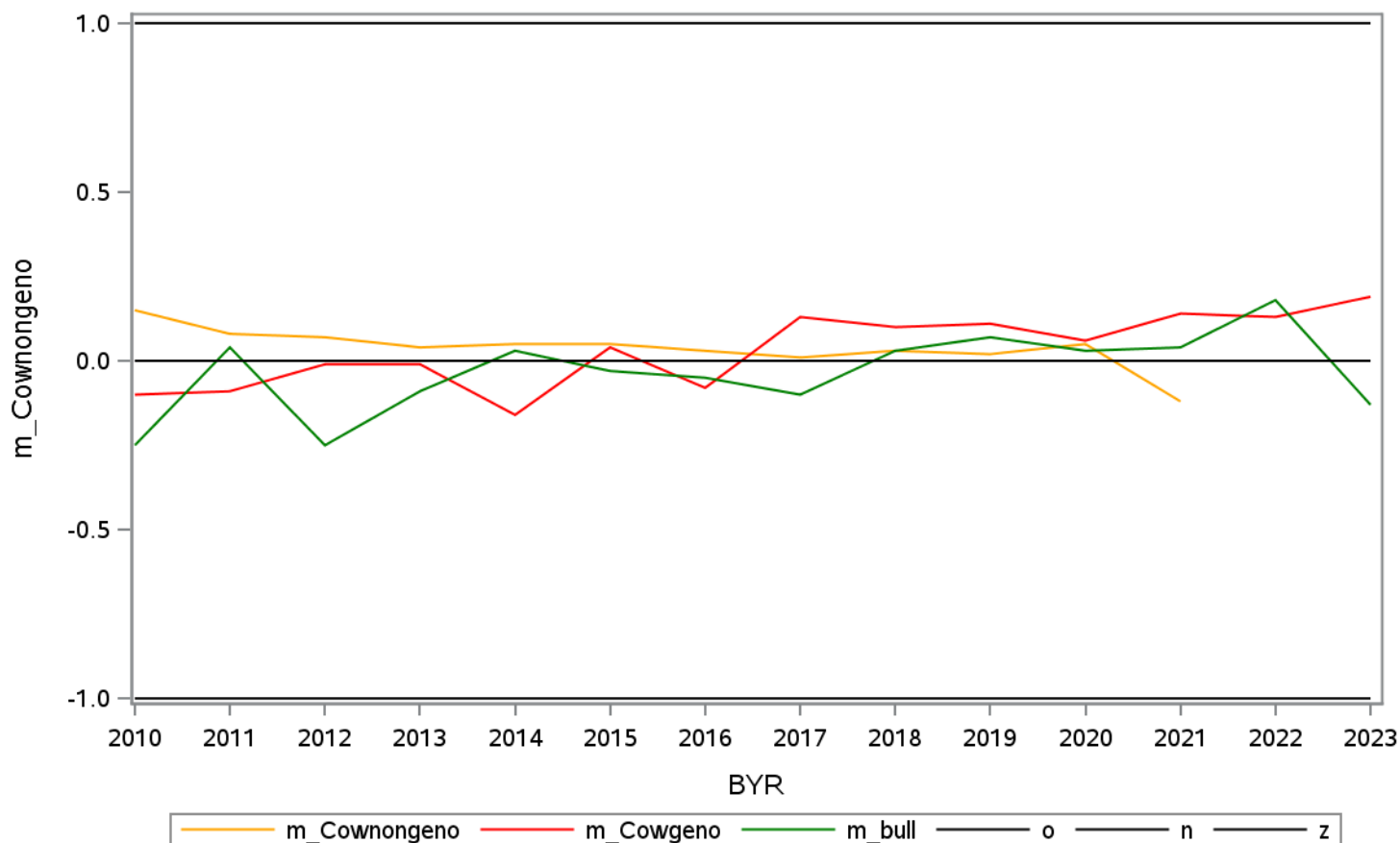
Mendelian sampling for 'Sole_ulcer' ' 25



Mendelian sampling for 'Cork_screw_claws' ' 26

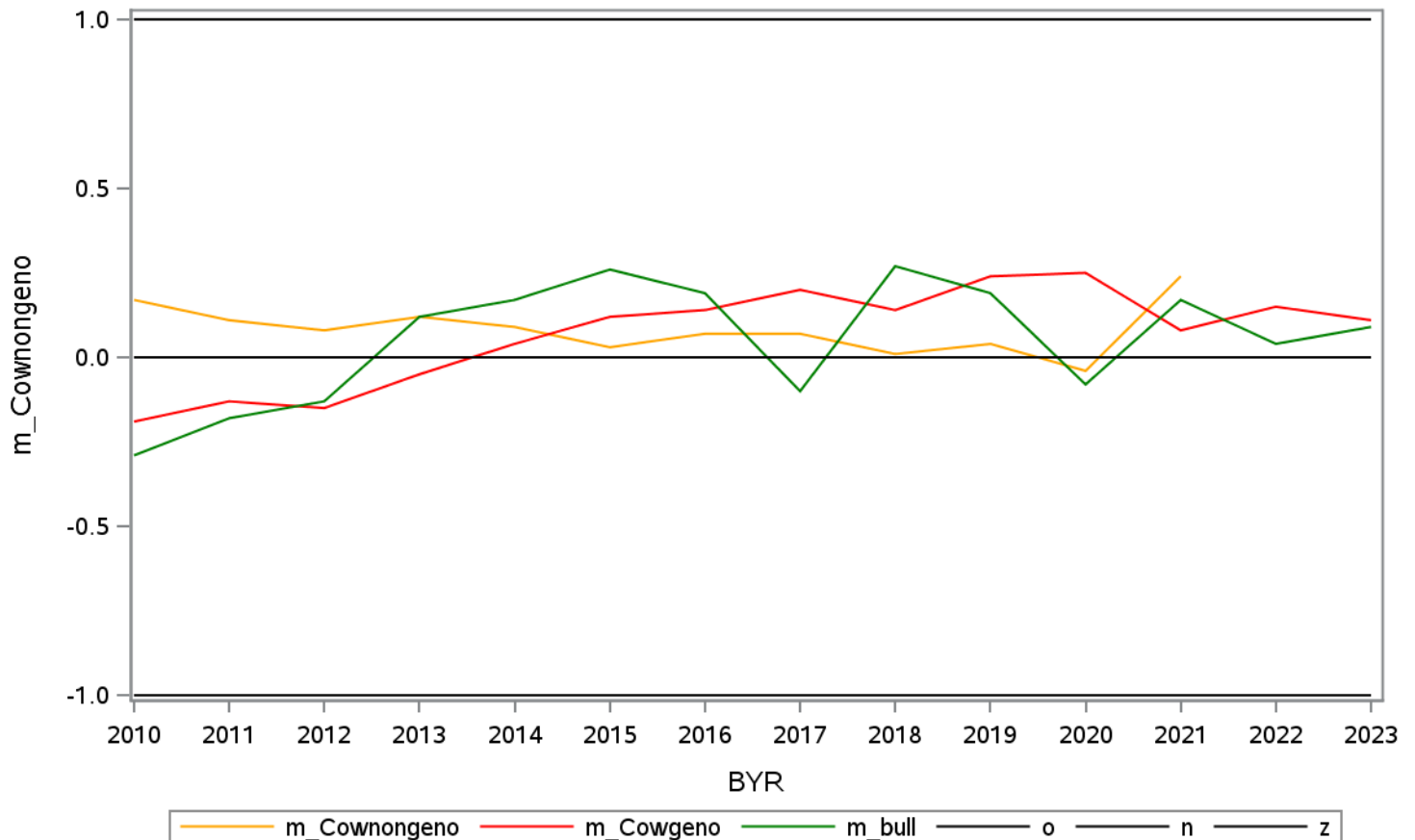
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.15	-0.10	-0.25	27647	3319	867
2	2011	0.08	-0.09	0.04	26121	5753	1431
3	2012	0.07	-0.01	-0.25	23347	6578	1814
4	2013	0.04	-0.01	-0.09	21737	7081	1899
5	2014	0.05	-0.16	0.03	20493	7910	1938
6	2015	0.05	0.04	-0.03	17331	10278	2100
7	2016	0.03	-0.08	-0.05	13789	14041	2108
8	2017	0.01	0.13	-0.10	10425	16668	2265
9	2018	0.03	0.10	0.03	7514	19097	2230
10	2019	0.02	0.11	0.07	5387	19521	2190
11	2020	0.05	0.06	0.03	3745	21383	2569
12	2021	-0.12	0.14	0.04	71	21465	2580
13	2022	.	0.13	0.18	.	21295	2352
14	2023	.	0.19	-0.13	.	3162	439

Mendelian sampling for 'Cork_screw_claws' ' 26



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.17	-0.19	-0.29	27537	3319	867
2	2011	0.11	-0.13	-0.18	26046	5753	1431
3	2012	0.08	-0.15	-0.13	22508	6578	1814
4	2013	0.12	-0.05	0.12	20973	7081	1899
5	2014	0.09	0.04	0.17	20236	7910	1938
6	2015	0.03	0.12	0.26	17254	10278	2100
7	2016	0.07	0.14	0.19	14366	14041	2108
8	2017	0.07	0.20	-0.10	11258	16668	2265
9	2018	0.01	0.14	0.27	7774	19097	2230
10	2019	0.04	0.24	0.19	5797	19521	2190
11	2020	-0.04	0.25	-0.08	3708	21383	2569
12	2021	0.24	0.08	0.17	70	21465	2580
13	2022	.	0.15	0.04	.	21295	2352
14	2023	.	0.11	0.09	.	3162	439

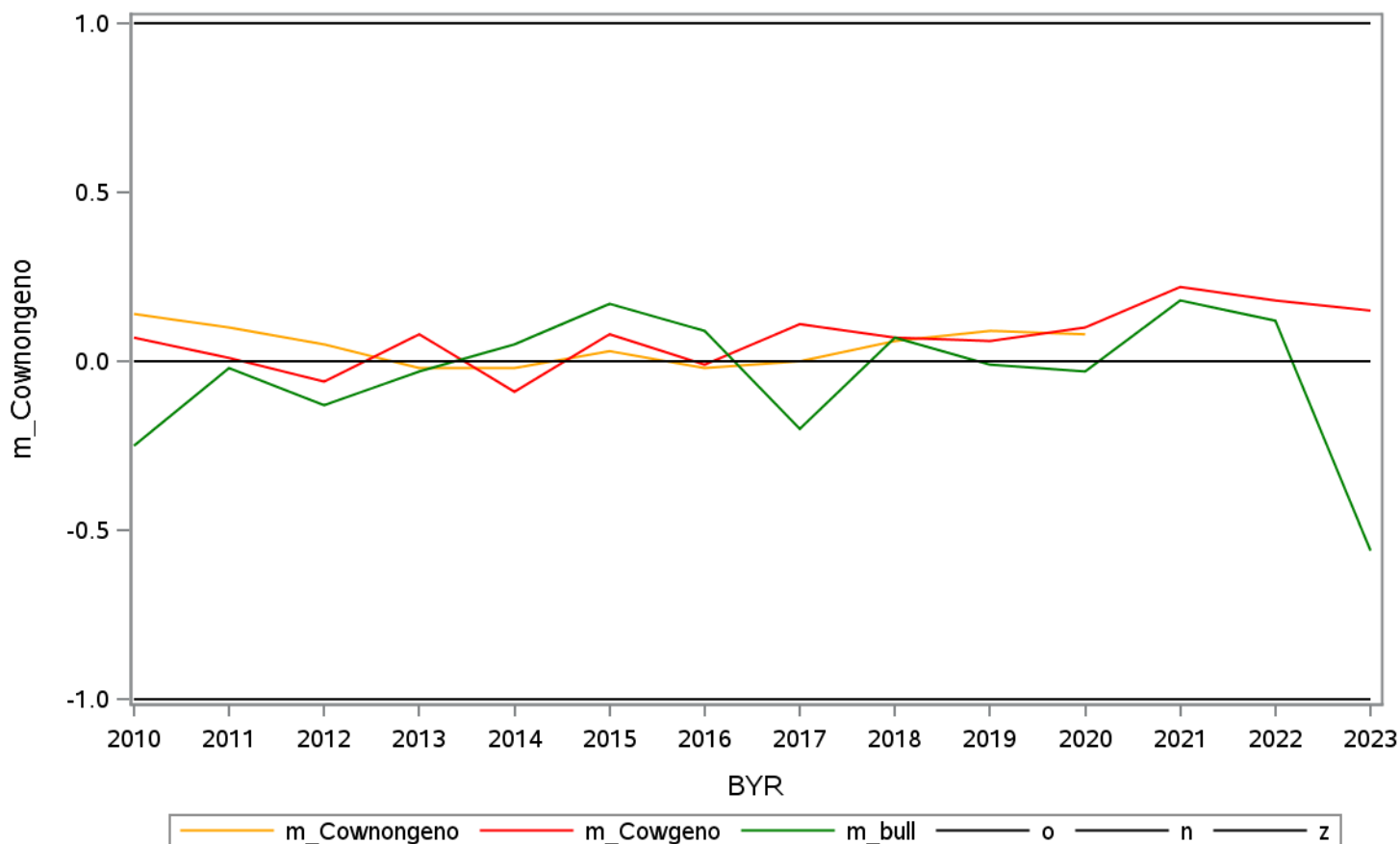
Mendelian sampling for 'Skin_proferation' ' 27



Mendelian sampling for 'White_line_double_sole ' 28

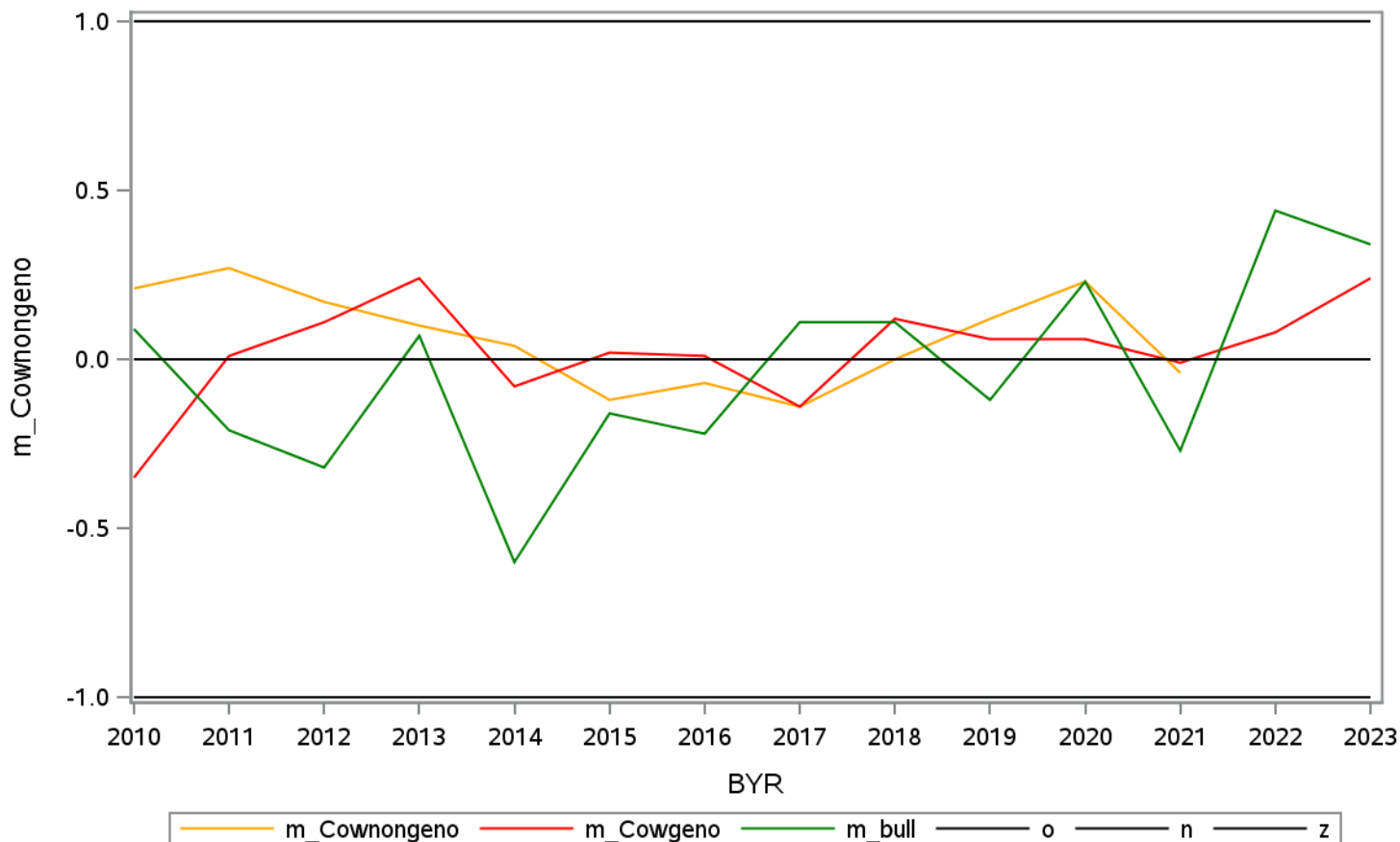
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.14	0.07	-0.25	23663	3319	867
2	2011	0.10	0.01	-0.02	21626	5753	1431
3	2012	0.05	-0.06	-0.13	18867	6578	1814
4	2013	-0.02	0.08	-0.03	17545	7081	1899
5	2014	-0.02	-0.09	0.05	16707	7910	1938
6	2015	0.03	0.08	0.17	13671	10278	2100
7	2016	-0.02	-0.01	0.09	10736	14041	2108
8	2017	0.00	0.11	-0.20	7977	16668	2265
9	2018	0.06	0.07	0.07	5353	19097	2230
10	2019	0.09	0.06	-0.01	3967	19521	2190
11	2020	0.08	0.10	-0.03	2127	21383	2569
12	2021	.	0.22	0.18	38	21465	2580
13	2022	.	0.18	0.12	.	21295	2352
14	2023	.	0.15	-0.56	.	3162	439

Mendelian sampling for 'White_line_double_sole ' 28



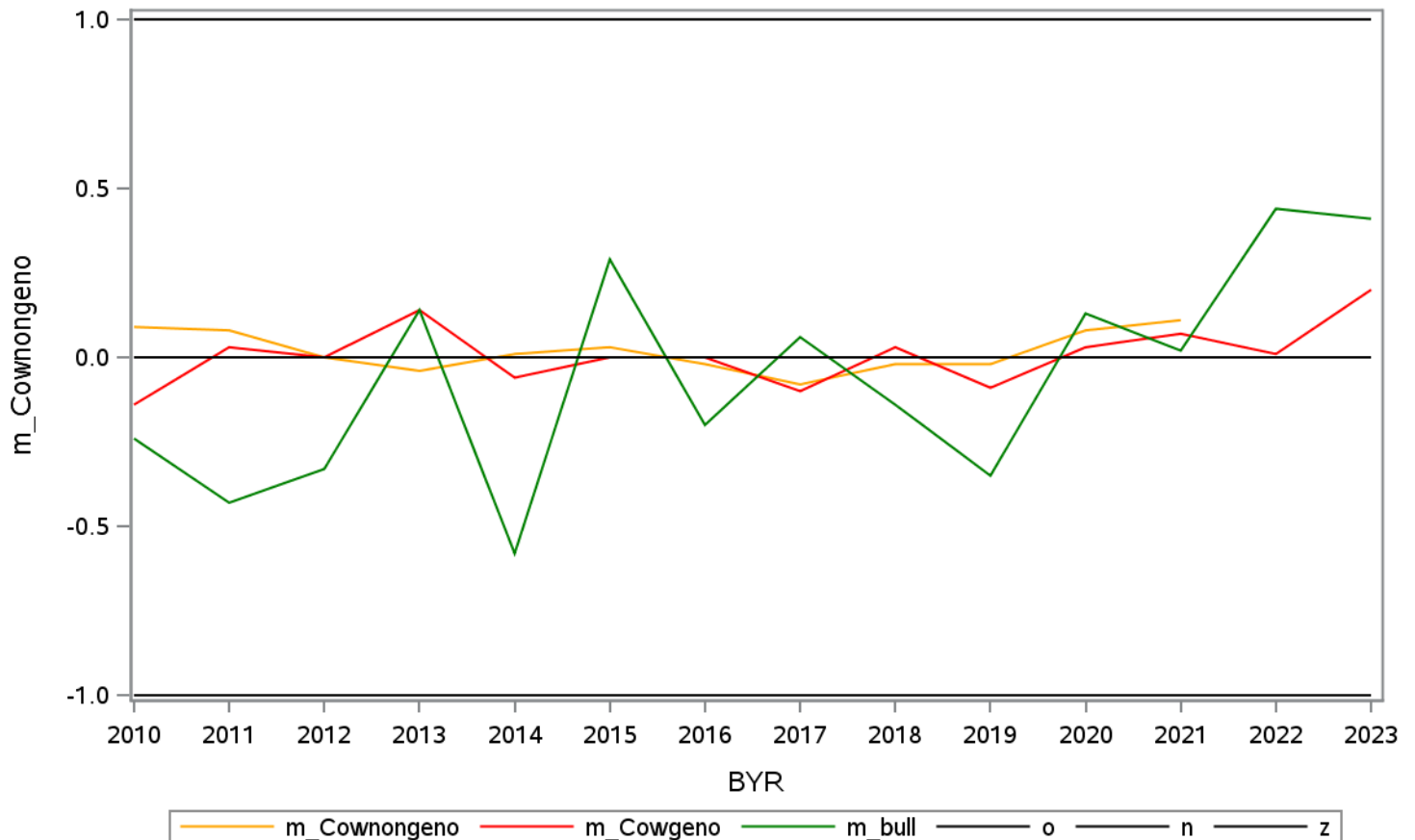
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.21	-0.35	0.09	7966	2224	226
2	2011	0.27	0.01	-0.21	7149	3996	348
3	2012	0.17	0.11	-0.32	6784	4563	375
4	2013	0.10	0.24	0.07	6141	3520	405
5	2014	0.04	-0.08	-0.60	5615	4433	466
6	2015	-0.12	0.02	-0.16	4554	5301	514
7	2016	-0.07	0.01	-0.22	3742	6206	474
8	2017	-0.14	-0.14	0.11	3235	7890	516
9	2018	0.00	0.12	0.11	2799	9796	358
10	2019	0.12	0.06	-0.12	1744	12025	472
11	2020	0.23	0.06	0.23	998	14630	489
12	2021	-0.04	-0.01	-0.27	56	14353	417
13	2022	.	0.08	0.44	.	14150	448
14	2023	.	0.24	0.34	.	1739	129

Mendelian sampling for 'Dermatitis1' ' 1



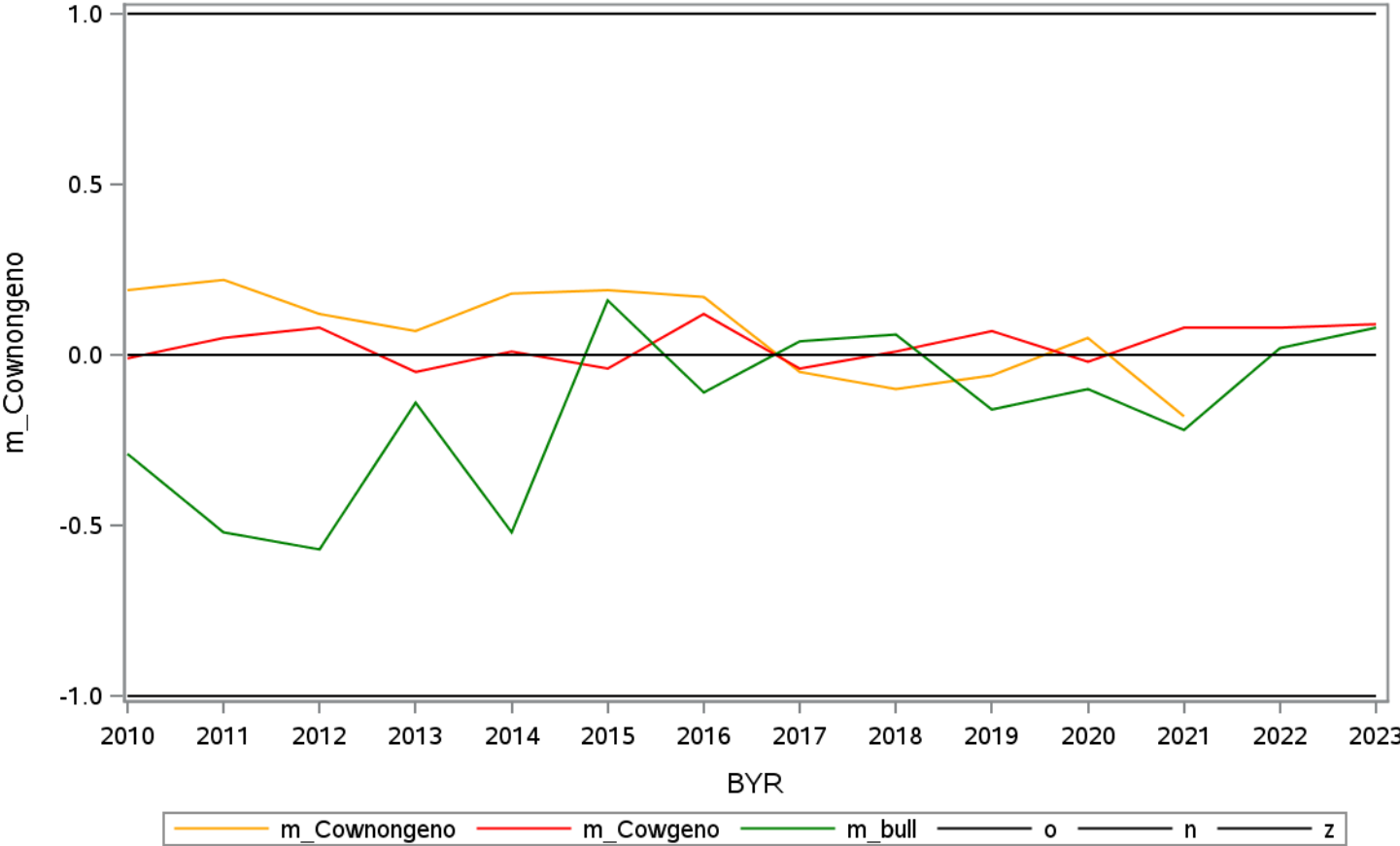
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.09	-0.14	-0.24	10230	2224	226
2	2011	0.08	0.03	-0.43	9885	3996	348
3	2012	0.00	0.00	-0.33	9656	4563	375
4	2013	-0.04	0.14	0.14	9059	3520	405
5	2014	0.01	-0.06	-0.58	8658	4433	466
6	2015	0.03	0.00	0.29	7961	5301	514
7	2016	-0.02	0.00	-0.20	7207	6206	474
8	2017	-0.08	-0.10	0.06	6545	7890	516
9	2018	-0.02	0.03	-0.14	7323	9796	358
10	2019	-0.02	-0.09	-0.35	7202	12025	472
11	2020	0.08	0.03	0.13	6526	14630	489
12	2021	0.11	0.07	0.02	845	14353	417
13	2022	.	0.01	0.44	.	14150	448
14	2023	.	0.20	0.41	.	1739	129

Mendelian sampling for 'Heel_horn_erosion1' 2



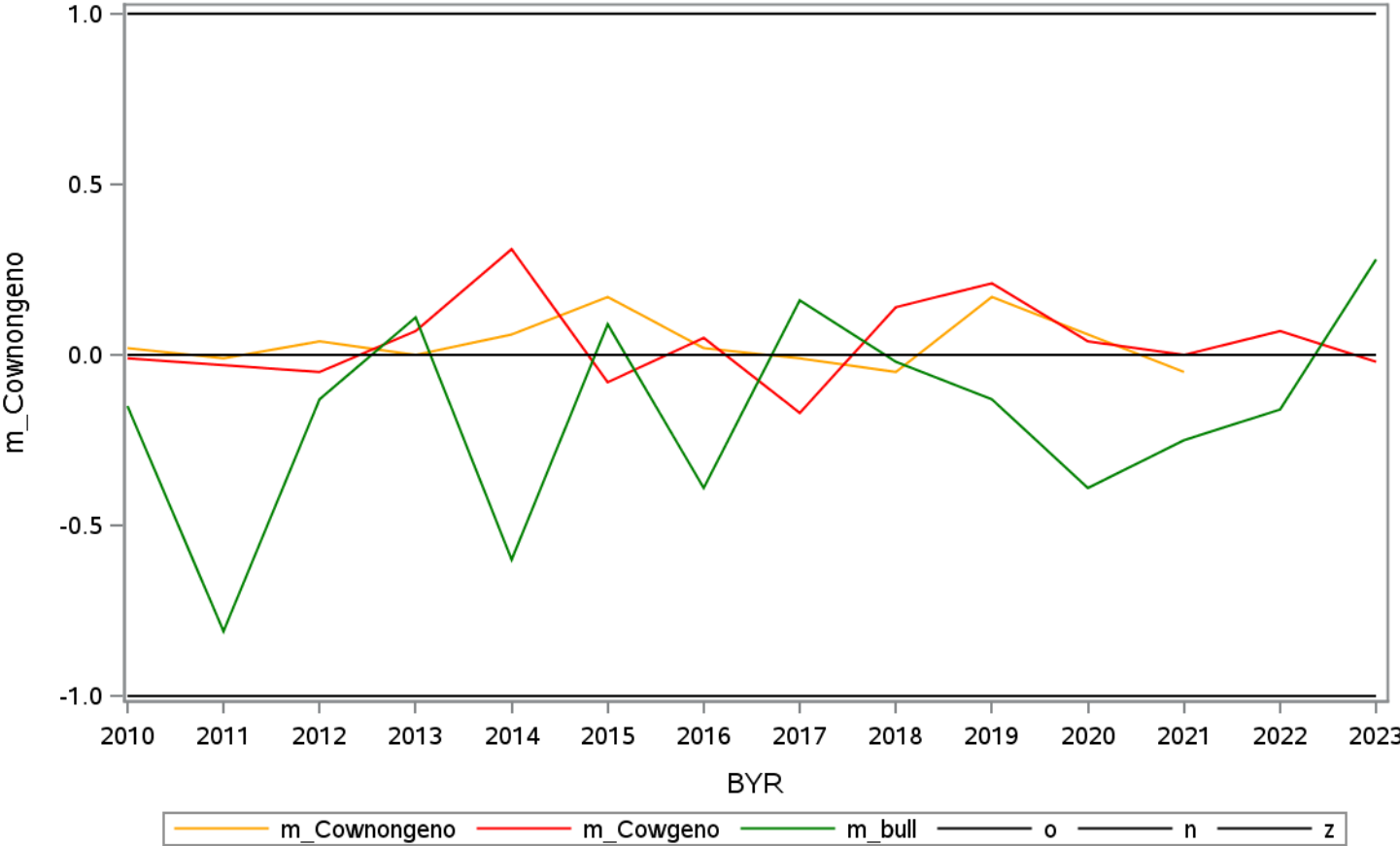
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.19	-0.01	-0.29	7724	2224	226
2	2011	0.22	0.05	-0.52	7074	3996	348
3	2012	0.12	0.08	-0.57	6628	4563	375
4	2013	0.07	-0.05	-0.14	5864	3520	405
5	2014	0.18	0.01	-0.52	5152	4433	466
6	2015	0.19	-0.04	0.16	4634	5301	514
7	2016	0.17	0.12	-0.11	3785	6206	474
8	2017	-0.05	-0.04	0.04	3689	7890	516
9	2018	-0.10	0.01	0.06	3803	9796	358
10	2019	-0.06	0.07	-0.16	3331	12025	472
11	2020	0.05	-0.02	-0.10	3000	14630	489
12	2021	-0.18	0.08	-0.22	394	14353	417
13	2022	.	0.08	0.02	.	14150	448
14	2023	.	0.09	0.08	.	1739	129

Mendelian sampling for 'Sole_heamorrhage1' ' 3



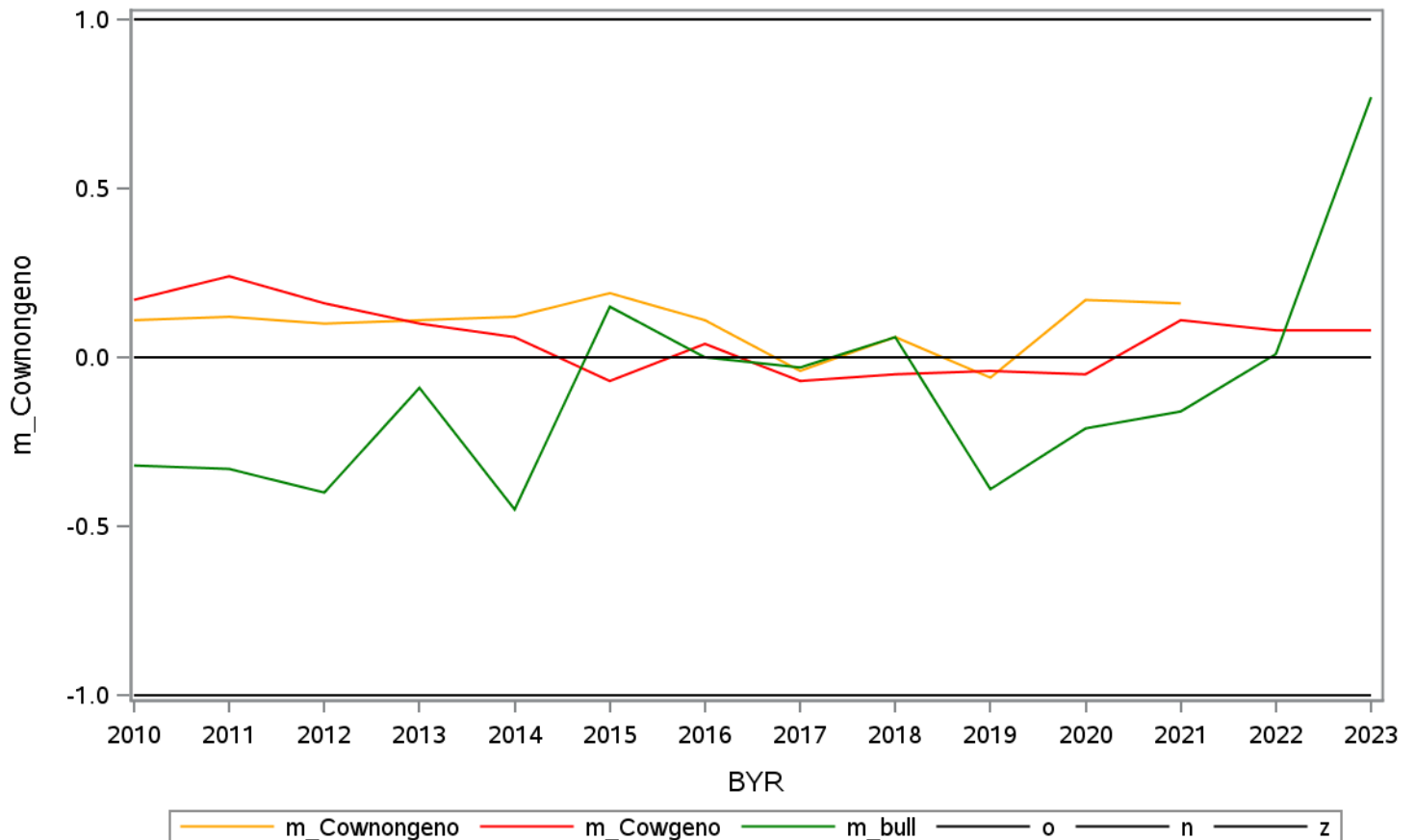
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.02	-0.01	-0.15	7367	2224	226
2	2011	-0.01	-0.03	-0.81	6467	3996	348
3	2012	0.04	-0.05	-0.13	6088	4563	375
4	2013	0.00	0.07	0.11	5335	3520	405
5	2014	0.06	0.31	-0.60	4523	4433	466
6	2015	0.17	-0.08	0.09	3730	5301	514
7	2016	0.02	0.05	-0.39	2966	6206	474
8	2017	-0.01	-0.17	0.16	2462	7890	516
9	2018	-0.05	0.14	-0.02	2150	9796	358
10	2019	0.17	0.21	-0.13	1182	12025	472
11	2020	0.06	0.04	-0.39	661	14630	489
12	2021	-0.05	0.00	-0.25	51	14353	417
13	2022	.	0.07	-0.16	.	14150	448
14	2023	.	-0.02	0.28	.	1739	129

Mendelian sampling for 'Sole_ulcer1' ' 4



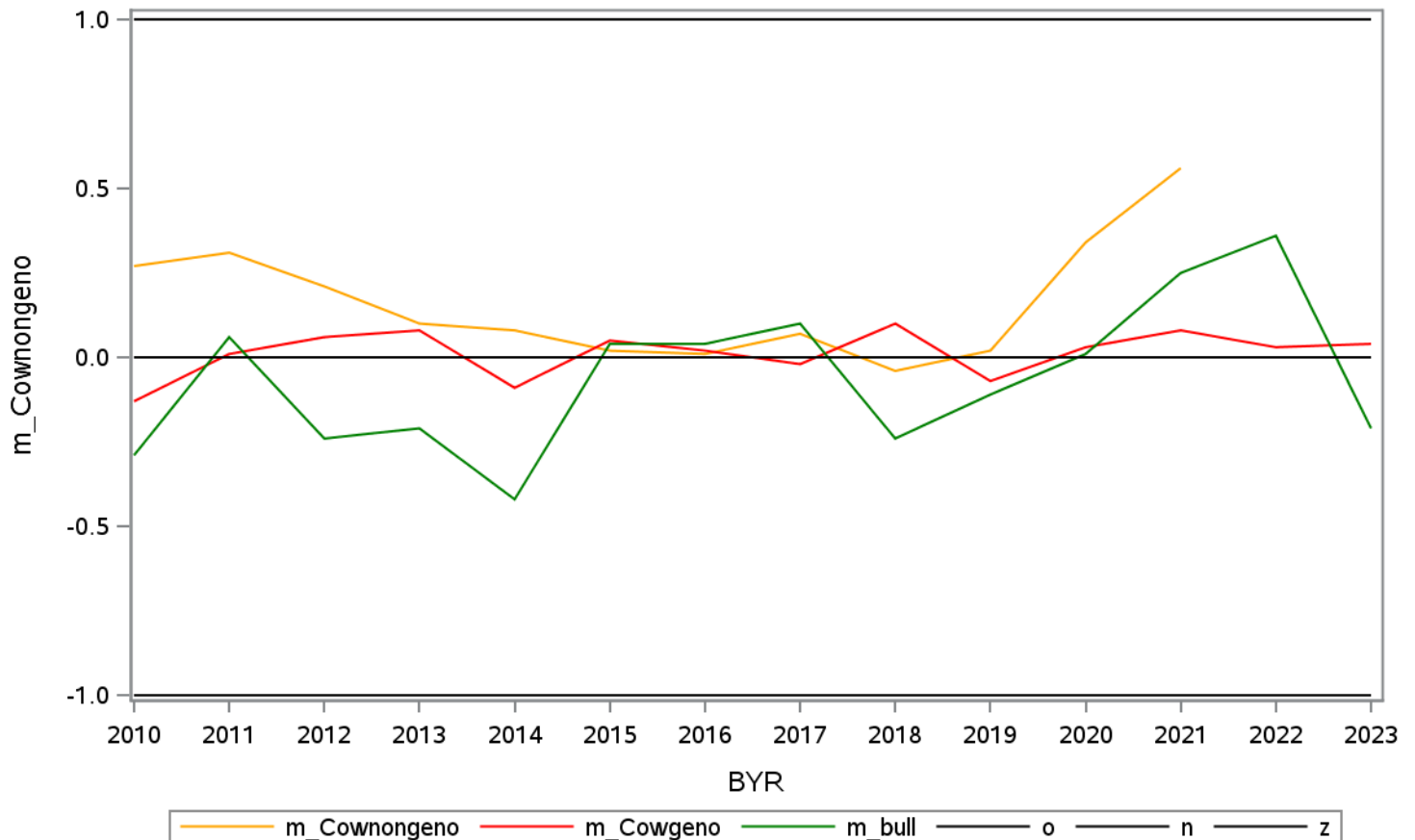
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.11	0.17	-0.32	8112	2224	226
2	2011	0.12	0.24	-0.33	7438	3996	348
3	2012	0.10	0.16	-0.40	6581	4563	375
4	2013	0.11	0.10	-0.09	5748	3520	405
5	2014	0.12	0.06	-0.45	5194	4433	466
6	2015	0.19	-0.07	0.15	4347	5301	514
7	2016	0.11	0.04	0.00	3578	6206	474
8	2017	-0.04	-0.07	-0.03	3188	7890	516
9	2018	0.06	-0.05	0.06	2636	9796	358
10	2019	-0.06	-0.04	-0.39	1418	12025	472
11	2020	0.17	-0.05	-0.21	1544	14630	489
12	2021	0.16	0.11	-0.16	264	14353	417
13	2022	.	0.08	0.01	.	14150	448
14	2023	.	0.08	0.77	.	1739	129

Mendelian sampling for 'Cork_screw_claws1' 5



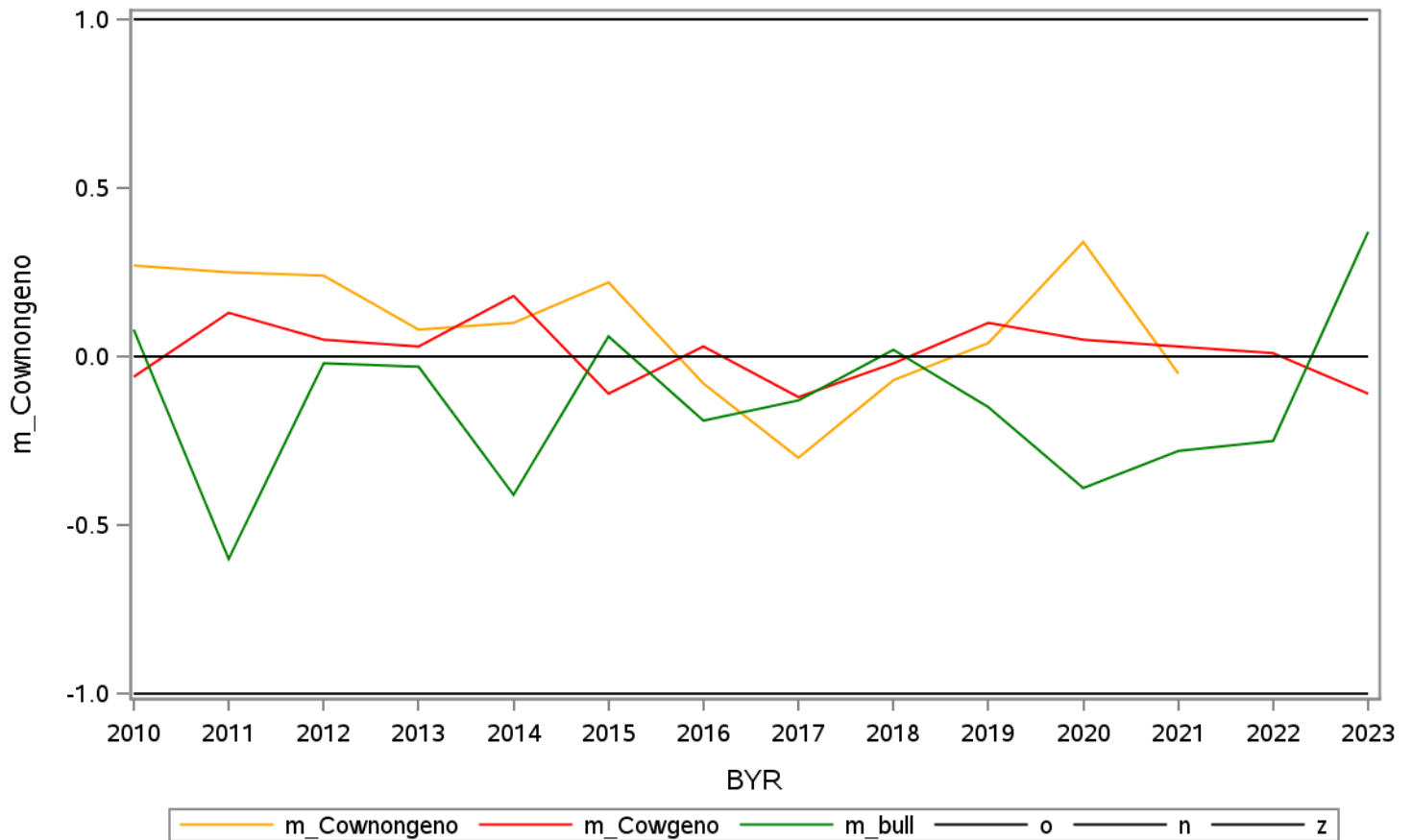
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.27	-0.13	-0.29	7303	2224	226
2	2011	0.31	0.01	0.06	6373	3996	348
3	2012	0.21	0.06	-0.24	5977	4563	375
4	2013	0.10	0.08	-0.21	5352	3520	405
5	2014	0.08	-0.09	-0.42	4515	4433	466
6	2015	0.02	0.05	0.04	3728	5301	514
7	2016	0.01	0.02	0.04	2980	6206	474
8	2017	0.07	-0.02	0.10	2456	7890	516
9	2018	-0.04	0.10	-0.24	2131	9796	358
10	2019	0.02	-0.07	-0.11	1281	12025	472
11	2020	0.34	0.03	0.01	930	14630	489
12	2021	0.56	0.08	0.25	70	14353	417
13	2022	.	0.03	0.36	.	14150	448
14	2023	.	0.04	-0.21	.	1739	129

Mendelian sampling for 'Skin_proferation1' ' 6



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.27	-0.06	0.08	7367	2224	226
2	2011	0.25	0.13	-0.60	6448	3996	348
3	2012	0.24	0.05	-0.02	6077	4563	375
4	2013	0.08	0.03	-0.03	5343	3520	405
5	2014	0.10	0.18	-0.41	4498	4433	466
6	2015	0.22	-0.11	0.06	3746	5301	514
7	2016	-0.08	0.03	-0.19	2962	6206	474
8	2017	-0.30	-0.12	-0.13	2454	7890	516
9	2018	-0.07	-0.02	0.02	2183	9796	358
10	2019	0.04	0.10	-0.15	1200	12025	472
11	2020	0.34	0.05	-0.39	720	14630	489
12	2021	-0.05	0.03	-0.28	51	14353	417
13	2022	.	0.01	-0.25	.	14150	448
14	2023	.	-0.11	0.37	.	1739	129

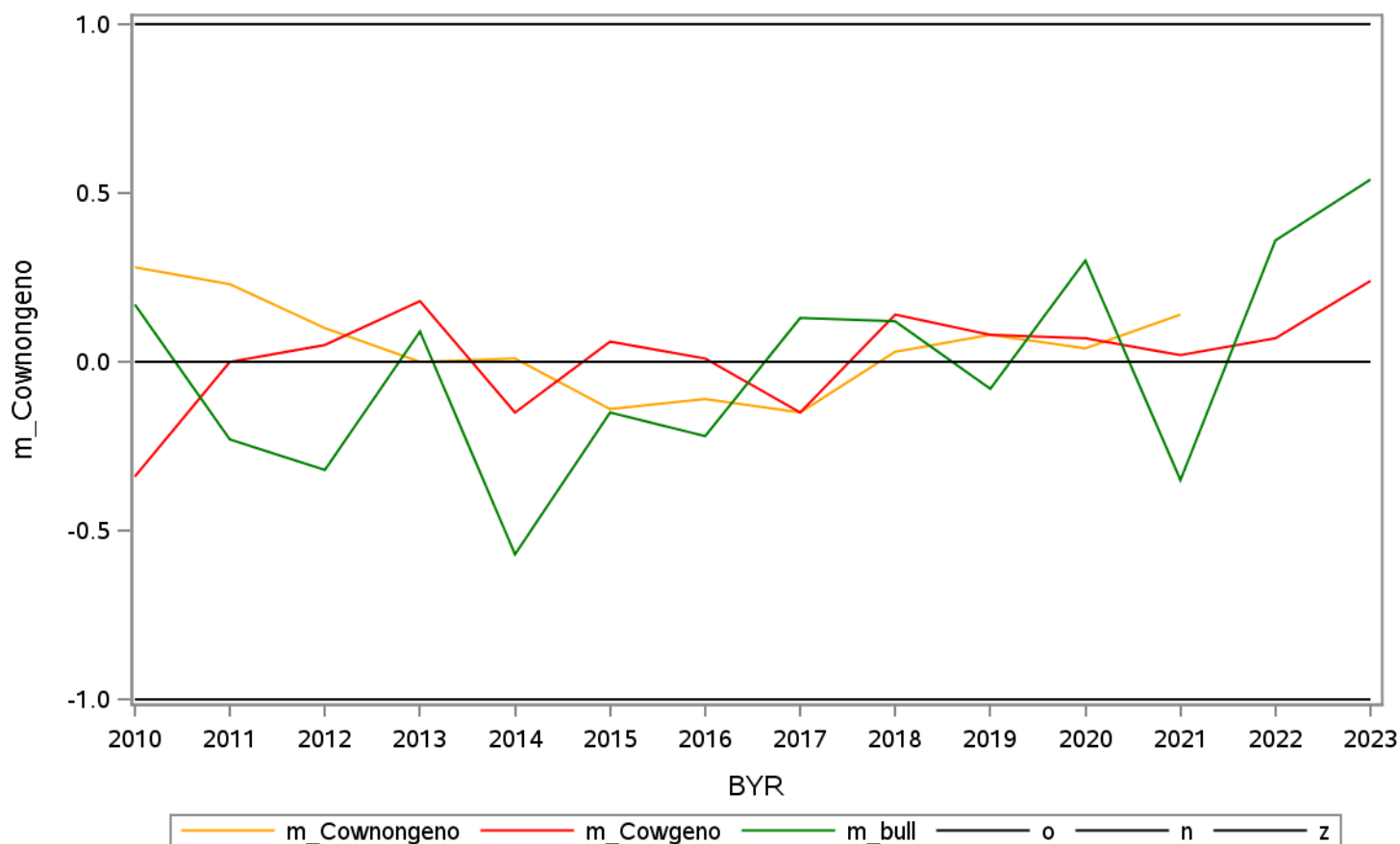
Mendelian sampling for 'White_line_double_sole1' 7



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.28	-0.34	0.17	8973	2224	226
2	2011	0.23	0.00	-0.23	8421	3996	348
3	2012	0.10	0.05	-0.32	8112	4563	375
4	2013	0.00	0.18	0.09	7506	3520	405
5	2014	0.01	-0.15	-0.57	6861	4433	466
6	2015	-0.14	0.06	-0.15	5918	5301	514
7	2016	-0.11	0.01	-0.22	5146	6206	474
8	2017	-0.15	-0.15	0.13	4815	7890	516
9	2018	0.03	0.14	0.12	4342	9796	358
10	2019	0.08	0.08	-0.08	5169	12025	472
11	2020	0.04	0.07	0.30	9248	14630	489
12	2021	0.14	0.02	-0.35	1243	14353	417
13	2022	.	0.07	0.36	.	14150	448
14	2023	.	0.24	0.54	.	1739	129

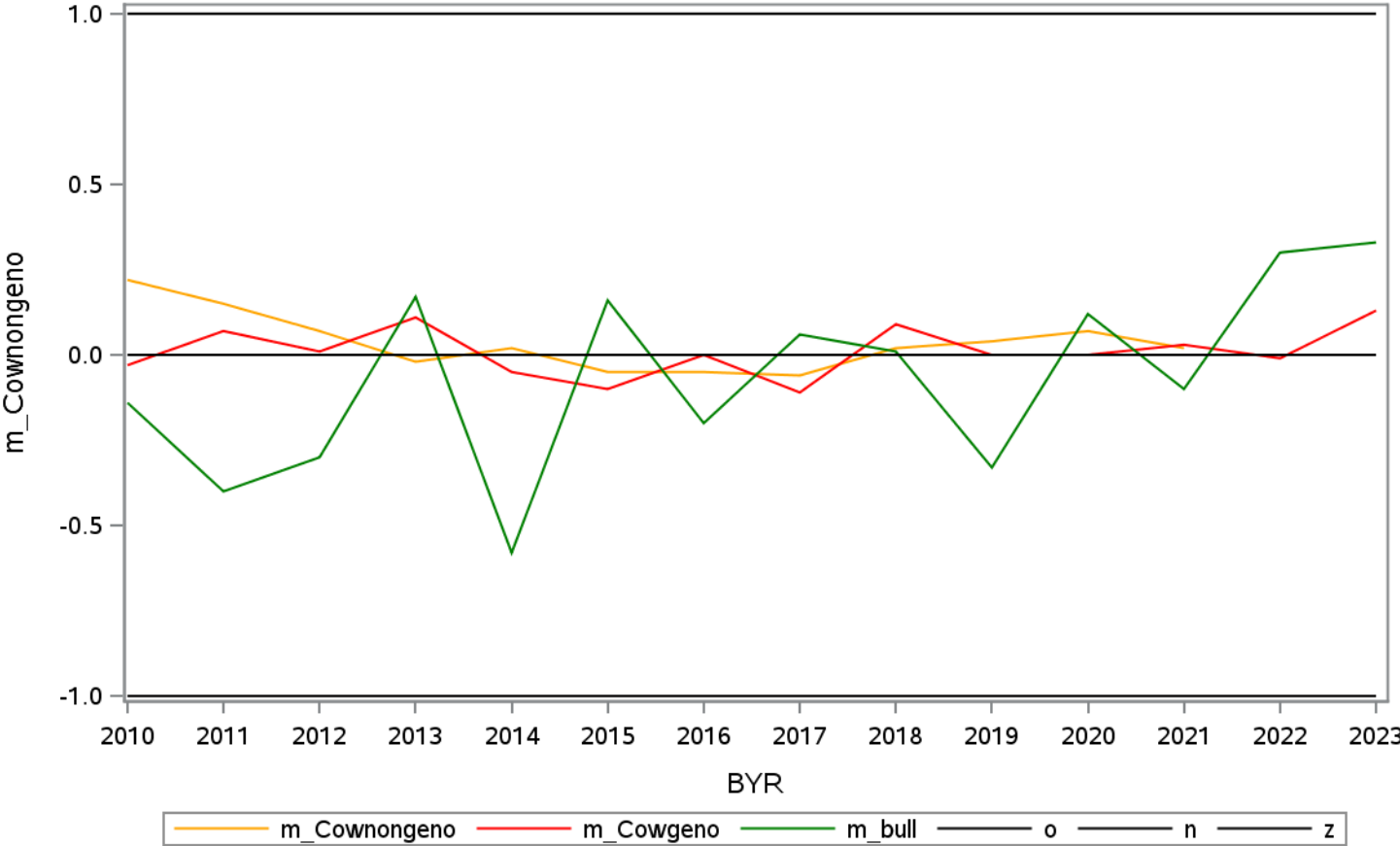
Mendelian sampling for 'Dermatitis2

' 8



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.22	-0.03	-0.14	11183	2224	226
2	2011	0.15	0.07	-0.40	10794	3996	348
3	2012	0.07	0.01	-0.30	10744	4563	375
4	2013	-0.02	0.11	0.17	9813	3520	405
5	2014	0.02	-0.05	-0.58	9626	4433	466
6	2015	-0.05	-0.10	0.16	8923	5301	514
7	2016	-0.05	0.00	-0.20	8190	6206	474
8	2017	-0.06	-0.11	0.06	8146	7890	516
9	2018	0.02	0.09	0.01	8594	9796	358
10	2019	0.04	0.00	-0.33	9306	12025	472
11	2020	0.07	0.00	0.12	9725	14630	489
12	2021	0.02	0.03	-0.10	1243	14353	417
13	2022	.	-0.01	0.30	.	14150	448
14	2023	.	0.13	0.33	.	1739	129

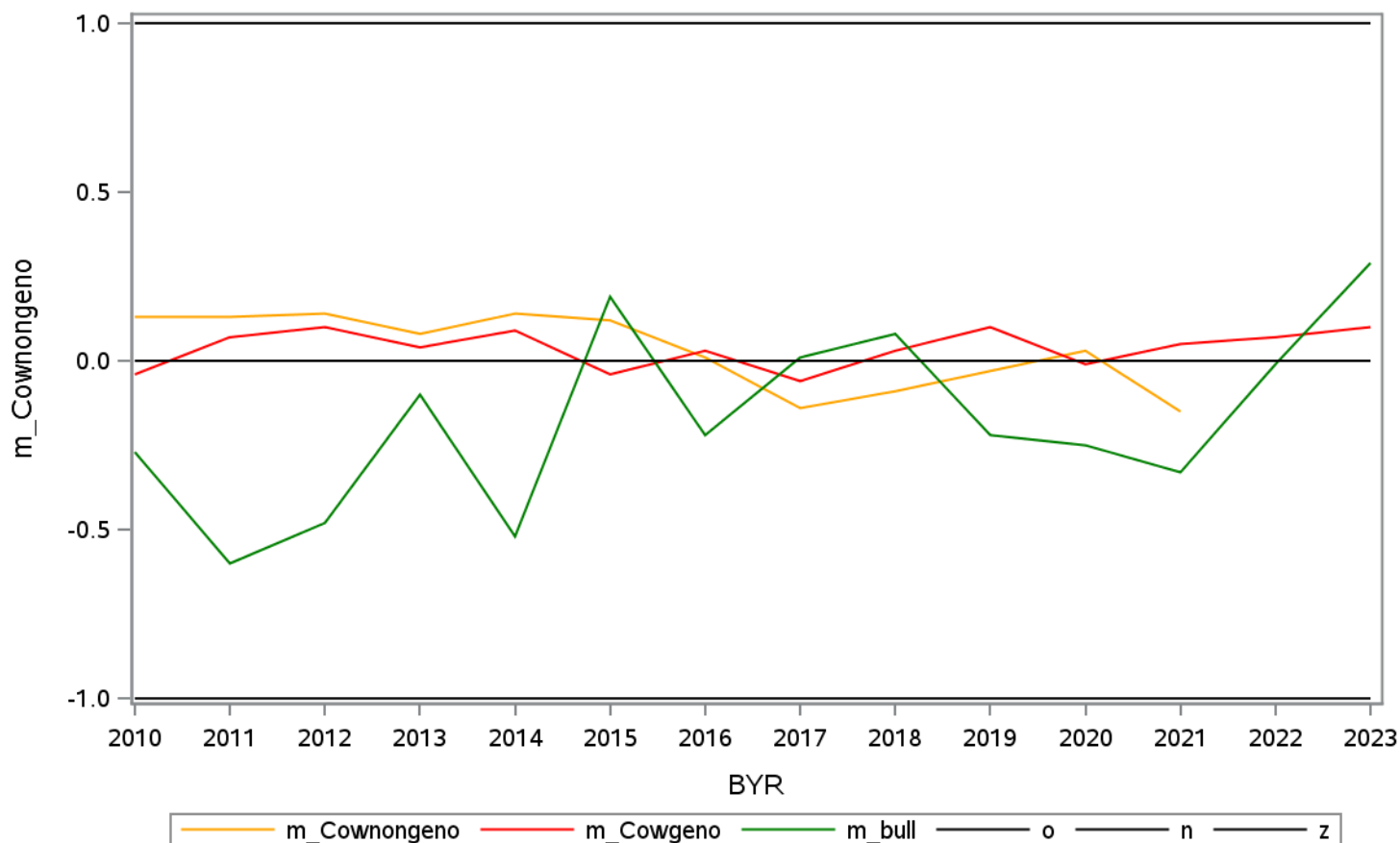
Mendelian sampling for 'Heel_horn_erosion2 ' 9



Mendelian sampling for 'Sole_heamorrhage2 ' 10

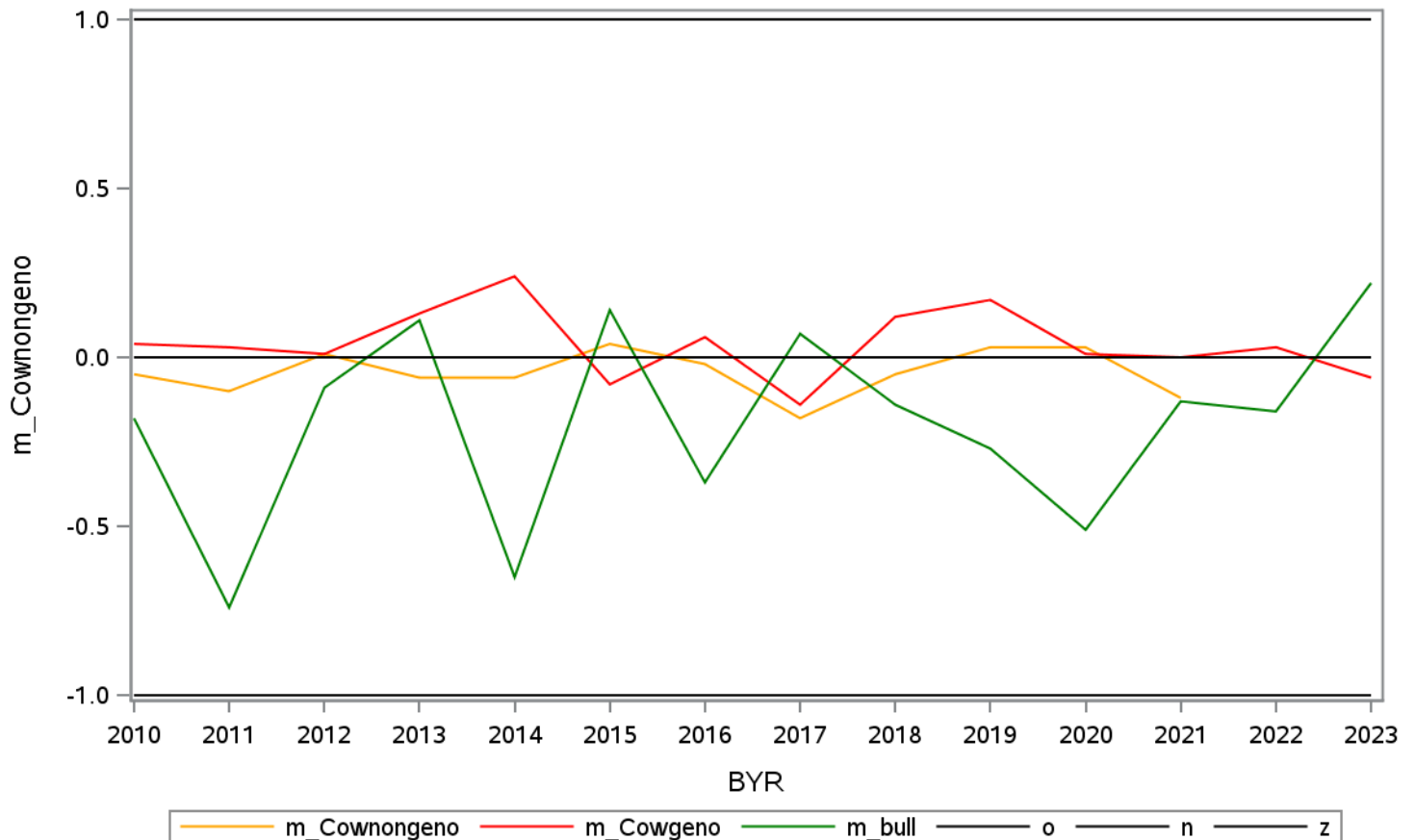
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.13	-0.04	-0.27	9001	2224	226
2	2011	0.13	0.07	-0.60	8409	3996	348
3	2012	0.14	0.10	-0.48	8029	4563	375
4	2013	0.08	0.04	-0.10	7111	3520	405
5	2014	0.14	0.09	-0.52	6948	4433	466
6	2015	0.12	-0.04	0.19	6175	5301	514
7	2016	0.01	0.03	-0.22	5697	6206	474
8	2017	-0.14	-0.06	0.01	5704	7890	516
9	2018	-0.09	0.03	0.08	5510	9796	358
10	2019	-0.03	0.10	-0.22	6958	12025	472
11	2020	0.03	-0.01	-0.25	9491	14630	489
12	2021	-0.15	0.05	-0.33	1243	14353	417
13	2022	.	0.07	-0.01	.	14150	448
14	2023	.	0.10	0.29	.	1739	129

Mendelian sampling for 'Sole_heamorrhage2 ' 10



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.05	0.04	-0.18	8490	2224	226
2	2011	-0.10	0.03	-0.74	7958	3996	348
3	2012	0.01	0.01	-0.09	7627	4563	375
4	2013	-0.06	0.13	0.11	6668	3520	405
5	2014	-0.06	0.24	-0.65	6198	4433	466
6	2015	0.04	-0.08	0.14	5391	5301	514
7	2016	-0.02	0.06	-0.37	4699	6206	474
8	2017	-0.18	-0.14	0.07	4257	7890	516
9	2018	-0.05	0.12	-0.14	3842	9796	358
10	2019	0.03	0.17	-0.27	4838	12025	472
11	2020	0.03	0.01	-0.51	9235	14630	489
12	2021	-0.12	0.00	-0.13	1243	14353	417
13	2022	.	0.03	-0.16	.	14150	448
14	2023	.	-0.06	0.22	.	1739	129

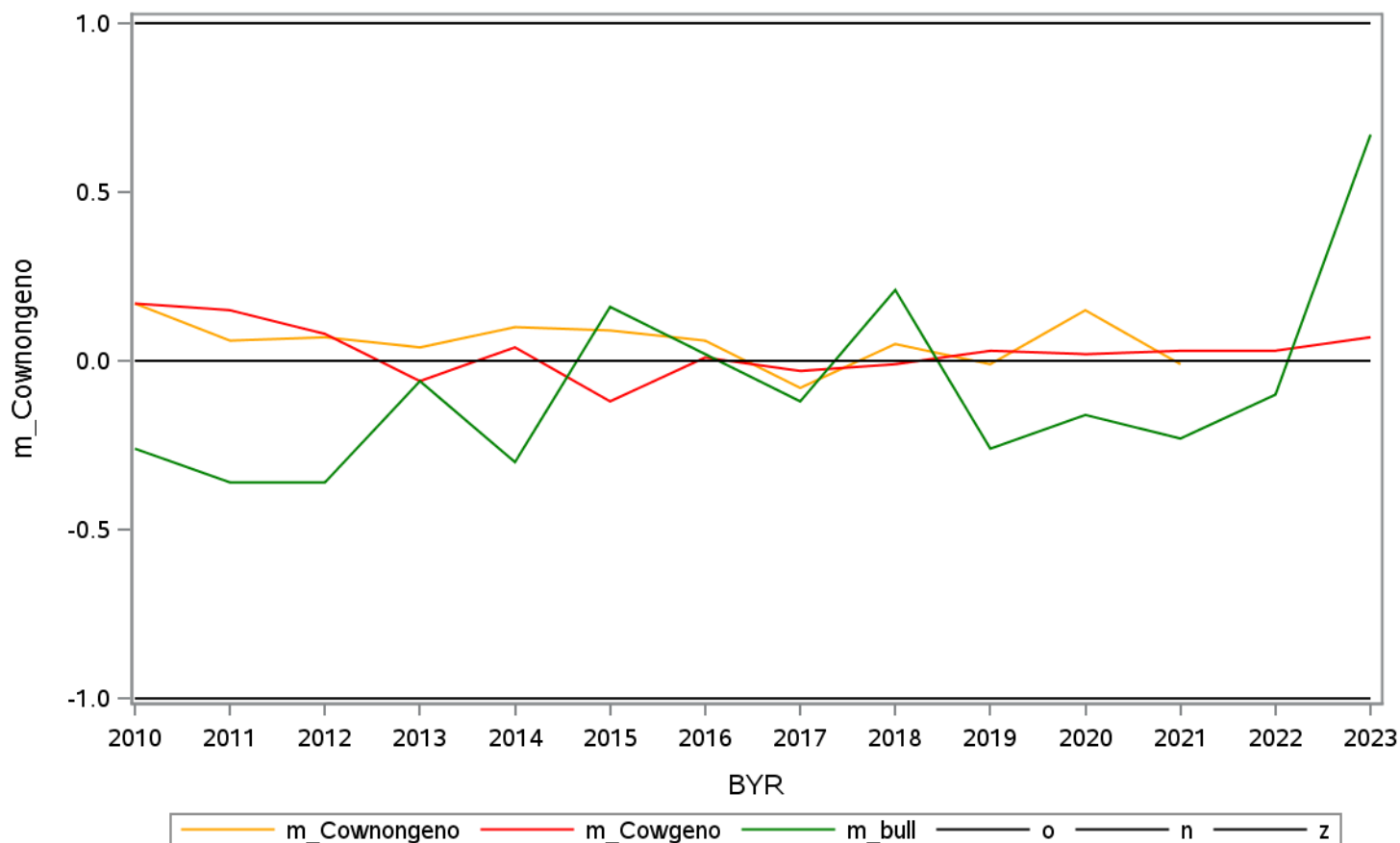
Mendelian sampling for 'Sole_ulcer2' ' 11



Mendelian sampling for 'Cork_screw_claws2 ' 12

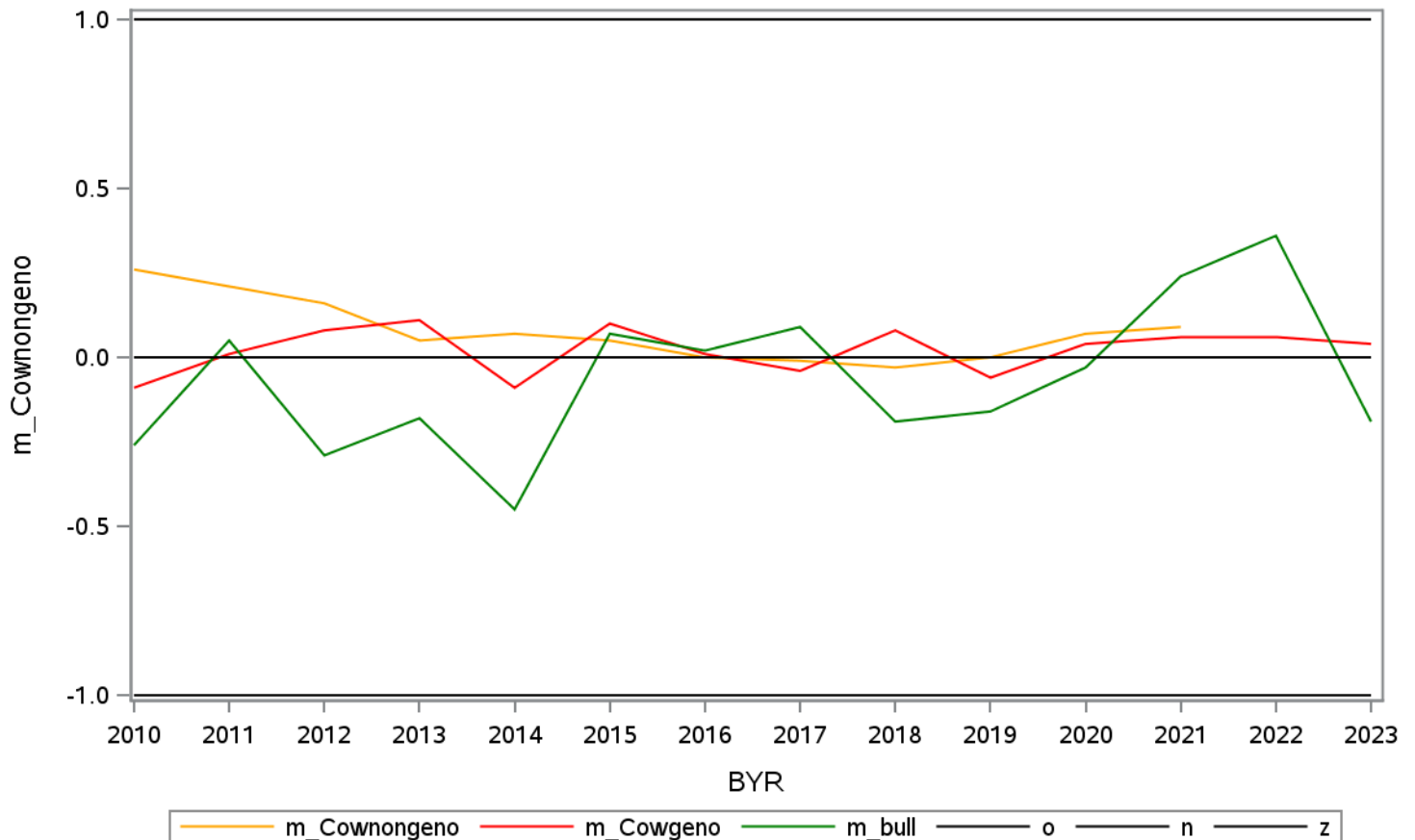
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.17	0.17	-0.26	9352	2224	226
2	2011	0.06	0.15	-0.36	8459	3996	348
3	2012	0.07	0.08	-0.36	8116	4563	375
4	2013	0.04	-0.06	-0.06	7270	3520	405
5	2014	0.10	0.04	-0.30	6780	4433	466
6	2015	0.09	-0.12	0.16	6071	5301	514
7	2016	0.06	0.01	0.02	5261	6206	474
8	2017	-0.08	-0.03	-0.12	4642	7890	516
9	2018	0.05	-0.01	0.21	4083	9796	358
10	2019	-0.01	0.03	-0.26	5418	12025	472
11	2020	0.15	0.02	-0.16	9430	14630	489
12	2021	-0.01	0.03	-0.23	1243	14353	417
13	2022	.	0.03	-0.10	.	14150	448
14	2023	.	0.07	0.67	.	1739	129

Mendelian sampling for 'Cork_screw_claws2 ' 12



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.26	-0.09	-0.26	8458	2224	226
2	2011	0.21	0.01	0.05	7880	3996	348
3	2012	0.16	0.08	-0.29	7637	4563	375
4	2013	0.05	0.11	-0.18	6691	3520	405
5	2014	0.07	-0.09	-0.45	6194	4433	466
6	2015	0.05	0.10	0.07	5378	5301	514
7	2016	0.00	0.01	0.02	4674	6206	474
8	2017	-0.01	-0.04	0.09	4235	7890	516
9	2018	-0.03	0.08	-0.19	3826	9796	358
10	2019	0.00	-0.06	-0.16	4934	12025	472
11	2020	0.07	0.04	-0.03	9238	14630	489
12	2021	0.09	0.06	0.24	1243	14353	417
13	2022	.	0.06	0.36	.	14150	448
14	2023	.	0.04	-0.19	.	1739	129

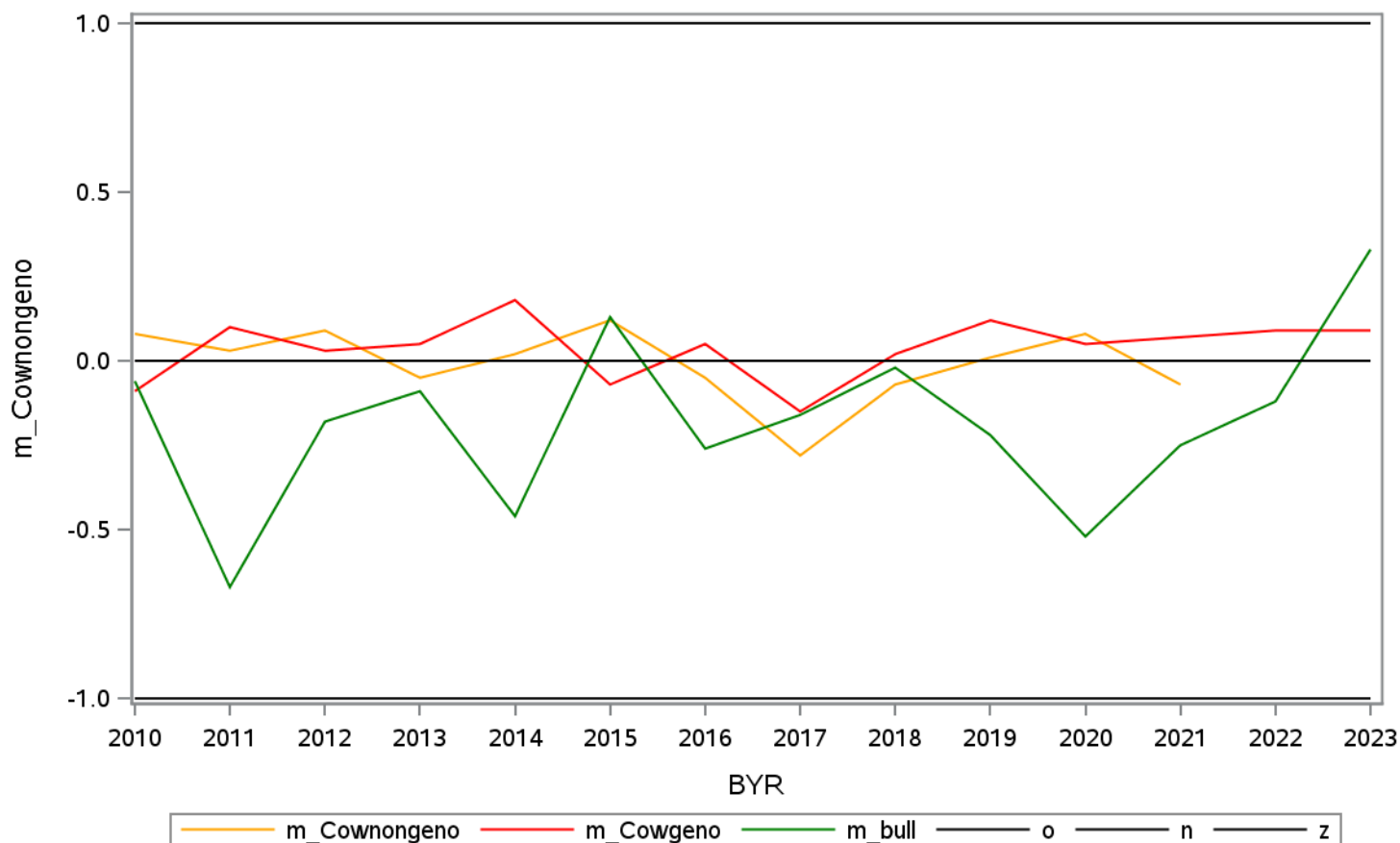
Mendelian sampling for 'Skin_proferation2 ' 13



Mendelian sampling for 'White_line_double_sole2' 14

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.08	-0.09	-0.06	8473	2224	226
2	2011	0.03	0.10	-0.67	7934	3996	348
3	2012	0.09	0.03	-0.18	7620	4563	375
4	2013	-0.05	0.05	-0.09	6648	3520	405
5	2014	0.02	0.18	-0.46	6208	4433	466
6	2015	0.12	-0.07	0.13	5390	5301	514
7	2016	-0.05	0.05	-0.26	4683	6206	474
8	2017	-0.28	-0.15	-0.16	4277	7890	516
9	2018	-0.07	0.02	-0.02	3849	9796	358
10	2019	0.01	0.12	-0.22	4835	12025	472
11	2020	0.08	0.05	-0.52	9234	14630	489
12	2021	-0.07	0.07	-0.25	1243	14353	417
13	2022	.	0.09	-0.12	.	14150	448
14	2023	.	0.09	0.33	.	1739	129

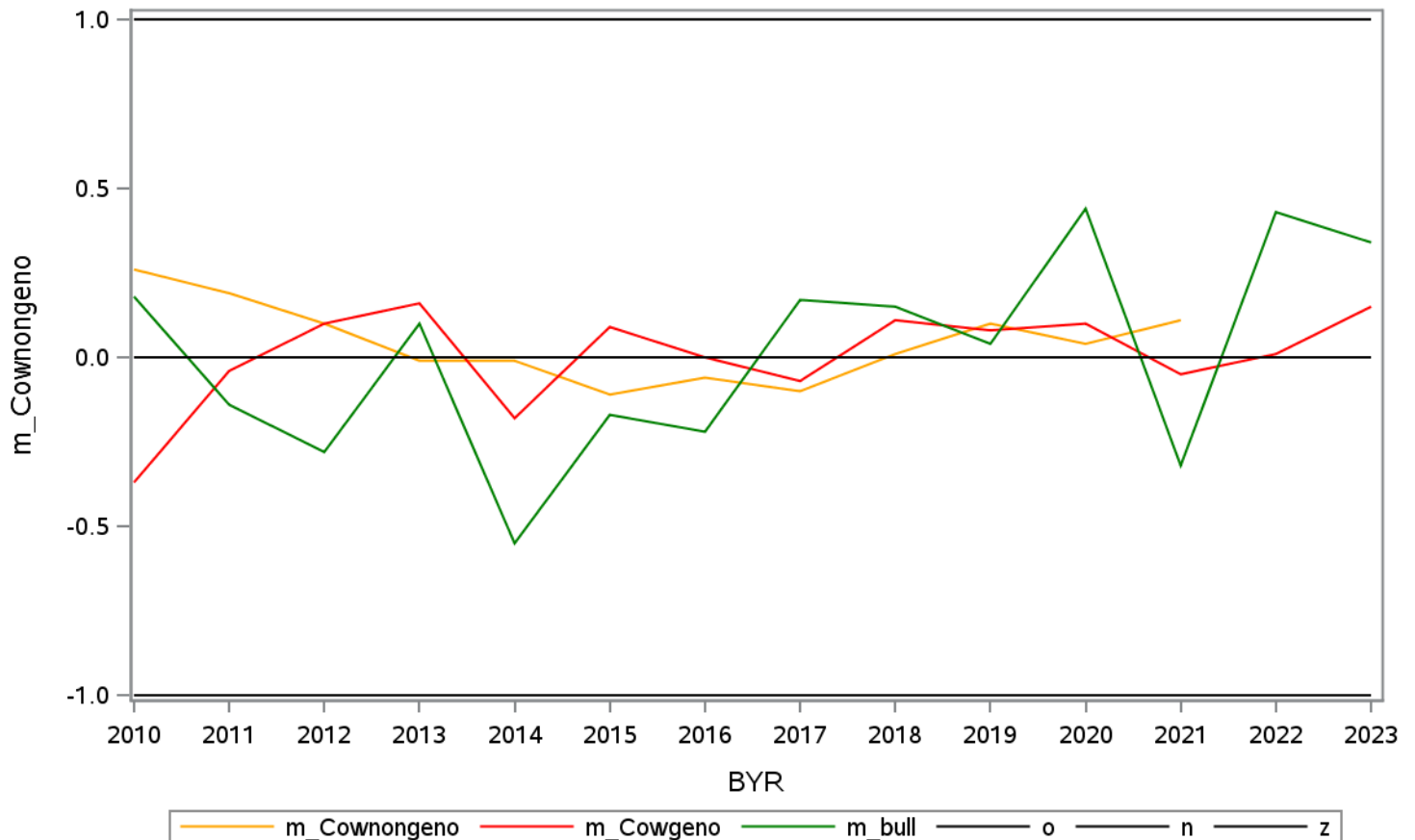
Mendelian sampling for 'White_line_double_sole2' 14



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.26	-0.37	0.18	10456	2224	226
2	2011	0.19	-0.04	-0.14	9849	3996	348
3	2012	0.10	0.10	-0.28	9808	4563	375
4	2013	-0.01	0.16	0.10	8770	3520	405
5	2014	-0.01	-0.18	-0.55	8474	4433	466
6	2015	-0.11	0.09	-0.17	7940	5301	514
7	2016	-0.06	0.00	-0.22	7237	6206	474
8	2017	-0.10	-0.07	0.17	6926	7890	516
9	2018	0.01	0.11	0.15	7709	9796	358
10	2019	0.10	0.08	0.04	11250	12025	472
11	2020	0.04	0.10	0.44	9953	14630	489
12	2021	0.11	-0.05	-0.32	1243	14353	417
13	2022	.	0.01	0.43	.	14150	448
14	2023	.	0.15	0.34	.	1739	129

Mendelian sampling for 'Dermatitis3

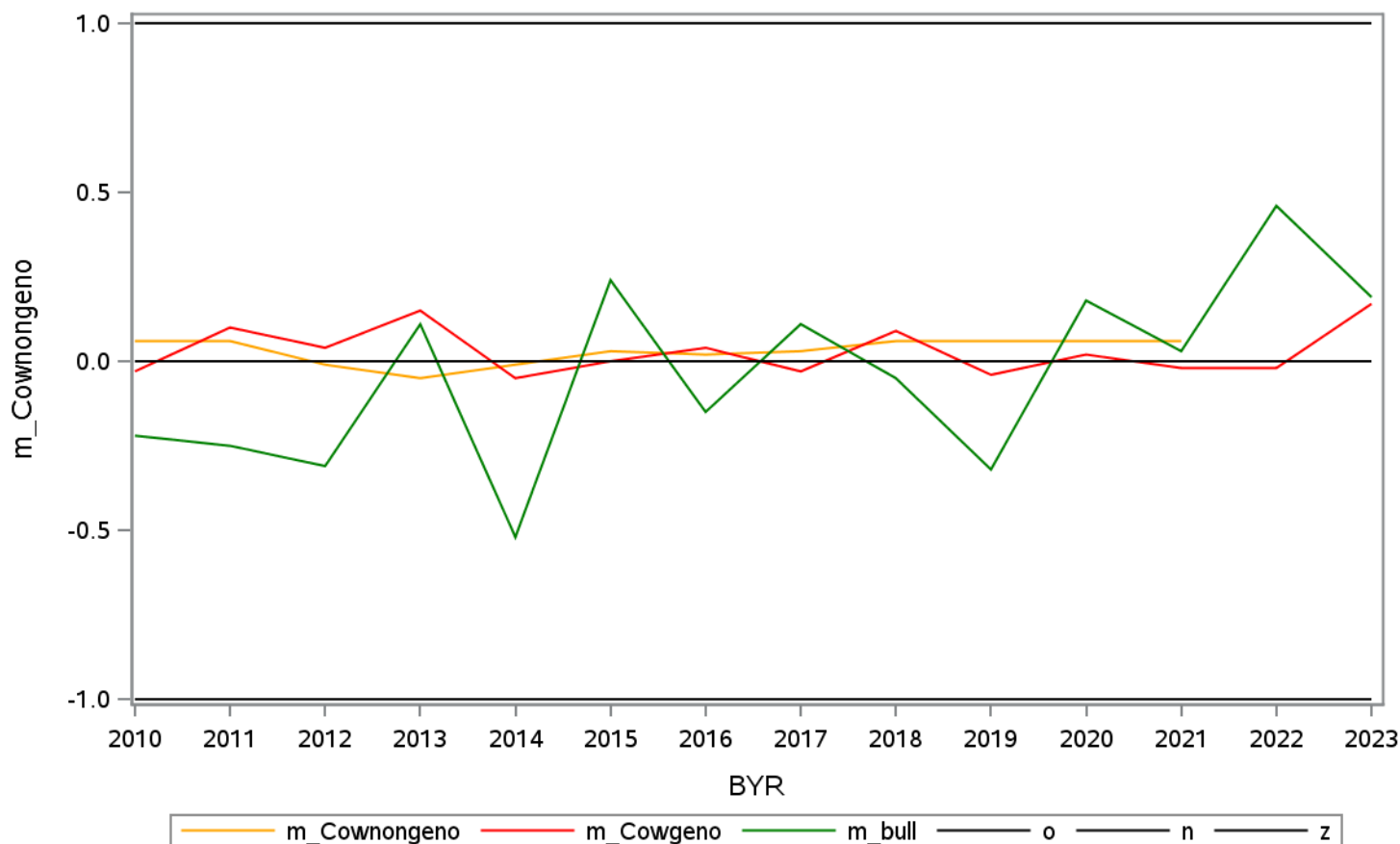
' 15



Mendelian sampling for 'Heel_horn_erosion3 ' 16

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.06	-0.03	-0.22	12092	2224	226
2	2011	0.06	0.10	-0.25	11794	3996	348
3	2012	-0.01	0.04	-0.31	11687	4563	375
4	2013	-0.05	0.15	0.11	10782	3520	405
5	2014	-0.01	-0.05	-0.52	10617	4433	466
6	2015	0.03	0.00	0.24	10327	5301	514
7	2016	0.02	0.04	-0.15	9857	6206	474
8	2017	0.03	-0.03	0.11	9563	7890	516
9	2018	0.06	0.09	-0.05	10556	9796	358
10	2019	0.06	-0.04	-0.32	11662	12025	472
11	2020	0.06	0.02	0.18	9953	14630	489
12	2021	0.06	-0.02	0.03	1243	14353	417
13	2022	.	-0.02	0.46	.	14150	448
14	2023	.	0.17	0.19	.	1739	129

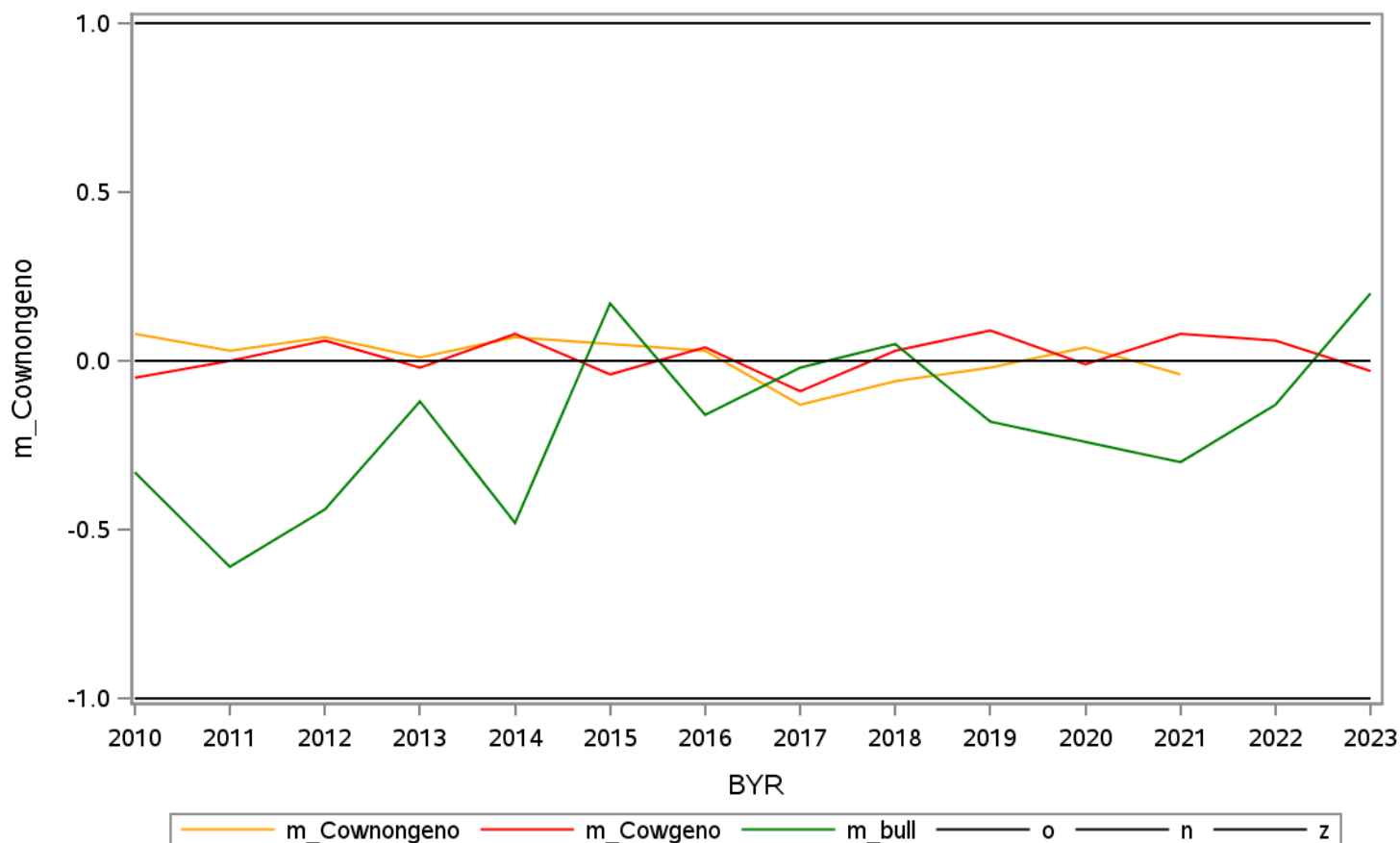
Mendelian sampling for 'Heel_horn_erosion3 ' 16



Mendelian sampling for 'Sole_heamorrhage3 ' 17

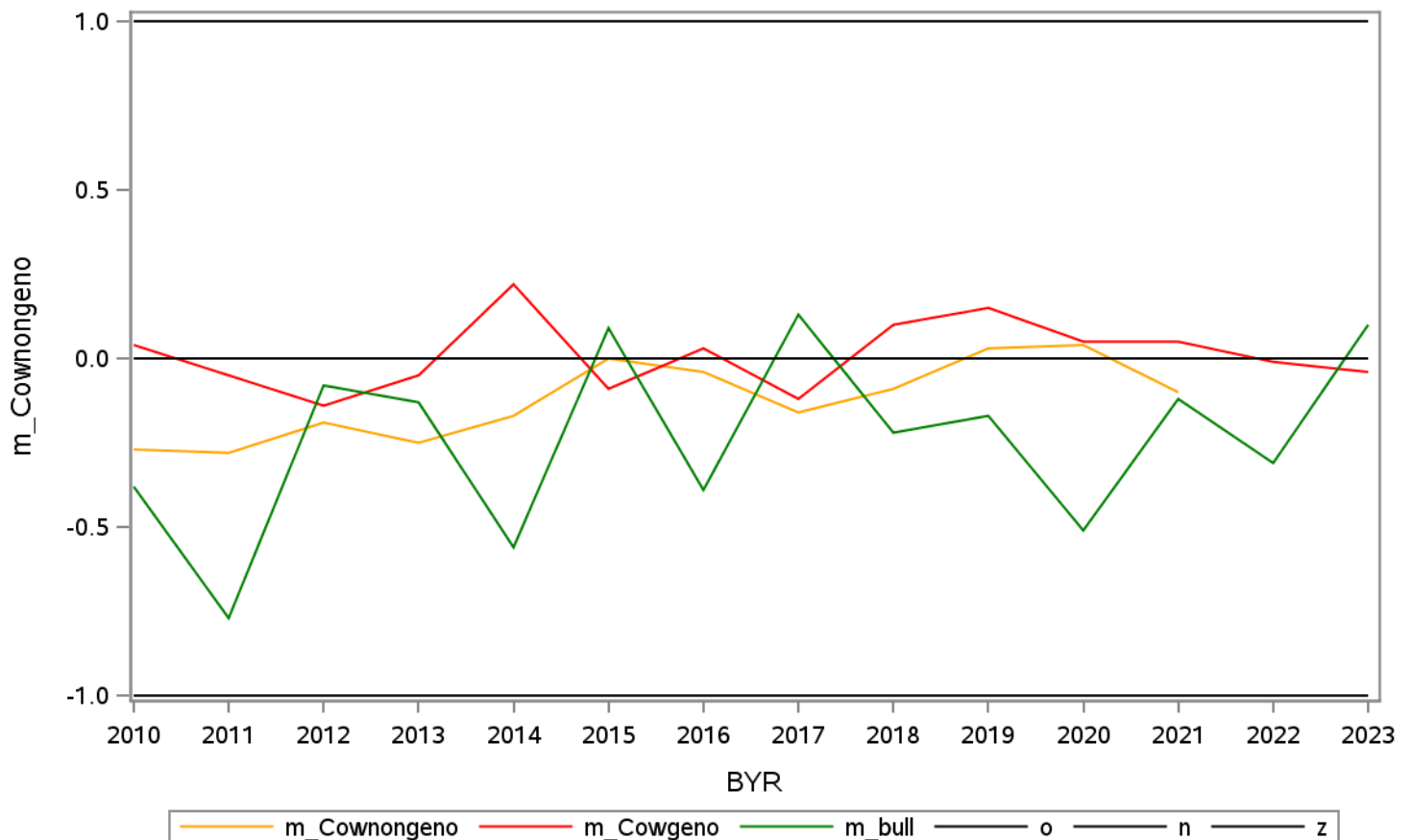
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.08	-0.05	-0.33	10392	2224	226
2	2011	0.03	0.00	-0.61	9813	3996	348
3	2012	0.07	0.06	-0.44	9685	4563	375
4	2013	0.01	-0.02	-0.12	8856	3520	405
5	2014	0.07	0.08	-0.48	8609	4433	466
6	2015	0.05	-0.04	0.17	8395	5301	514
7	2016	0.03	0.04	-0.16	7828	6206	474
8	2017	-0.13	-0.09	-0.02	7645	7890	516
9	2018	-0.06	0.03	0.05	8890	9796	358
10	2019	-0.02	0.09	-0.18	11486	12025	472
11	2020	0.04	-0.01	-0.24	9953	14630	489
12	2021	-0.04	0.08	-0.30	1243	14353	417
13	2022	.	0.06	-0.13	.	14150	448
14	2023	.	-0.03	0.20	.	1739	129

Mendelian sampling for 'Sole_heamorrhage3 ' 17



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.27	0.04	-0.38	10147	2224	226
2	2011	-0.28	-0.05	-0.77	9521	3996	348
3	2012	-0.19	-0.14	-0.08	9329	4563	375
4	2013	-0.25	-0.05	-0.13	8361	3520	405
5	2014	-0.17	0.22	-0.56	8006	4433	466
6	2015	0.00	-0.09	0.09	7622	5301	514
7	2016	-0.04	0.03	-0.39	6841	6206	474
8	2017	-0.16	-0.12	0.13	6521	7890	516
9	2018	-0.09	0.10	-0.22	7476	9796	358
10	2019	0.03	0.15	-0.17	11227	12025	472
11	2020	0.04	0.05	-0.51	9953	14630	489
12	2021	-0.10	0.05	-0.12	1243	14353	417
13	2022	.	-0.01	-0.31	.	14150	448
14	2023	.	-0.04	0.10	.	1739	129

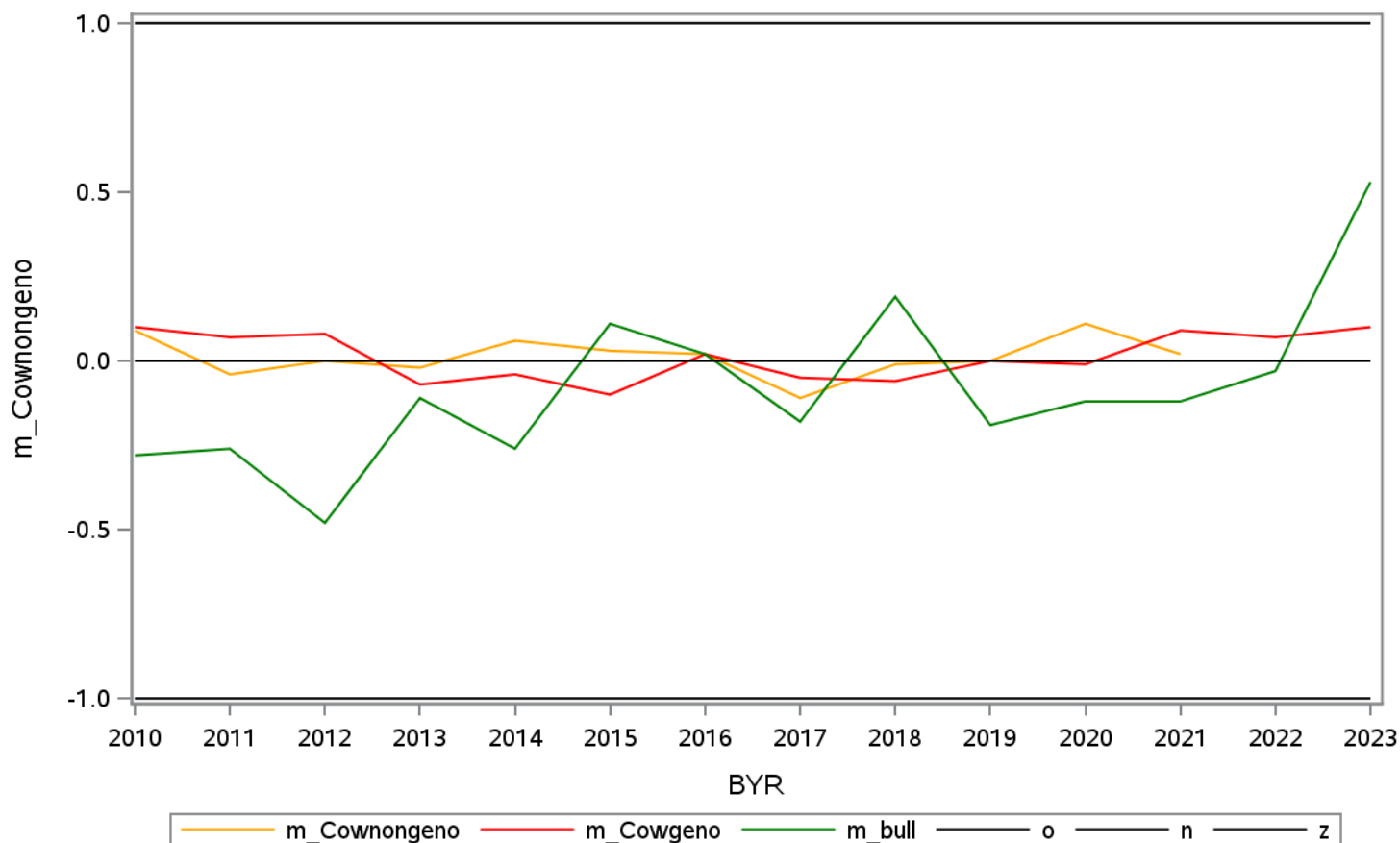
Mendelian sampling for 'Sole_ulcer3' ' 18



Mendelian sampling for 'Cork_screw_claws3 ' 19

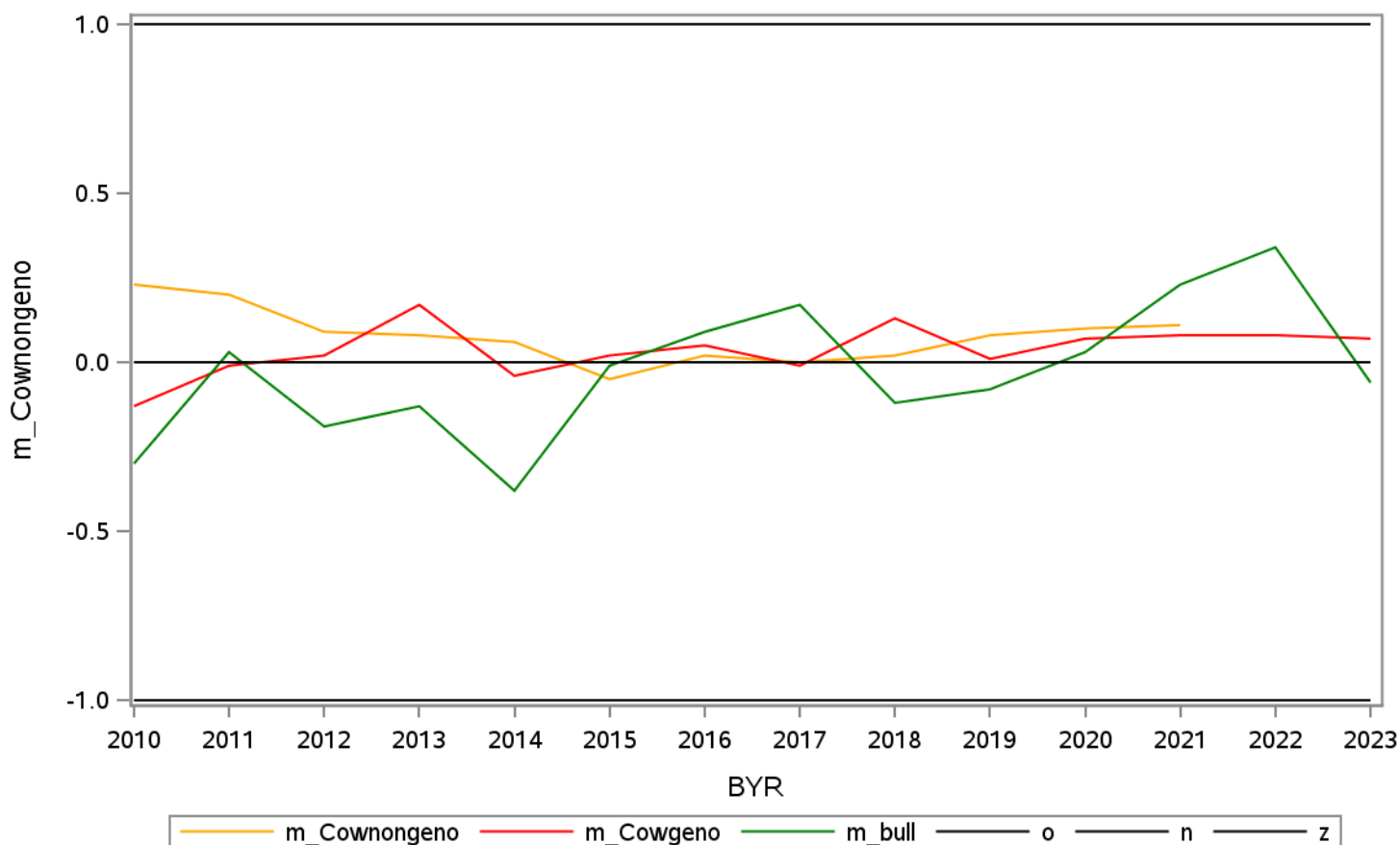
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.09	0.10	-0.28	10410	2224	226
2	2011	-0.04	0.07	-0.26	9796	3996	348
3	2012	0.00	0.08	-0.48	9729	4563	375
4	2013	-0.02	-0.07	-0.11	8690	3520	405
5	2014	0.06	-0.04	-0.26	8503	4433	466
6	2015	0.03	-0.10	0.11	8114	5301	514
7	2016	0.02	0.02	0.02	7139	6206	474
8	2017	-0.11	-0.05	-0.18	6705	7890	516
9	2018	-0.01	-0.06	0.19	7941	9796	358
10	2019	0.00	0.00	-0.19	11401	12025	472
11	2020	0.11	-0.01	-0.12	9953	14630	489
12	2021	0.02	0.09	-0.12	1243	14353	417
13	2022	.	0.07	-0.03	.	14150	448
14	2023	.	0.10	0.53	.	1739	129

Mendelian sampling for 'Cork_screw_claws3 ' 19



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.23	-0.13	-0.30	10092	2224	226
2	2011	0.20	-0.01	0.03	9508	3996	348
3	2012	0.09	0.02	-0.19	9370	4563	375
4	2013	0.08	0.17	-0.13	8367	3520	405
5	2014	0.06	-0.04	-0.38	8005	4433	466
6	2015	-0.05	0.02	-0.01	7585	5301	514
7	2016	0.02	0.05	0.09	6815	6206	474
8	2017	0.00	-0.01	0.17	6507	7890	516
9	2018	0.02	0.13	-0.12	7549	9796	358
10	2019	0.08	0.01	-0.08	11237	12025	472
11	2020	0.10	0.07	0.03	9953	14630	489
12	2021	0.11	0.08	0.23	1243	14353	417
13	2022	.	0.08	0.34	.	14150	448
14	2023	.	0.07	-0.06	.	1739	129

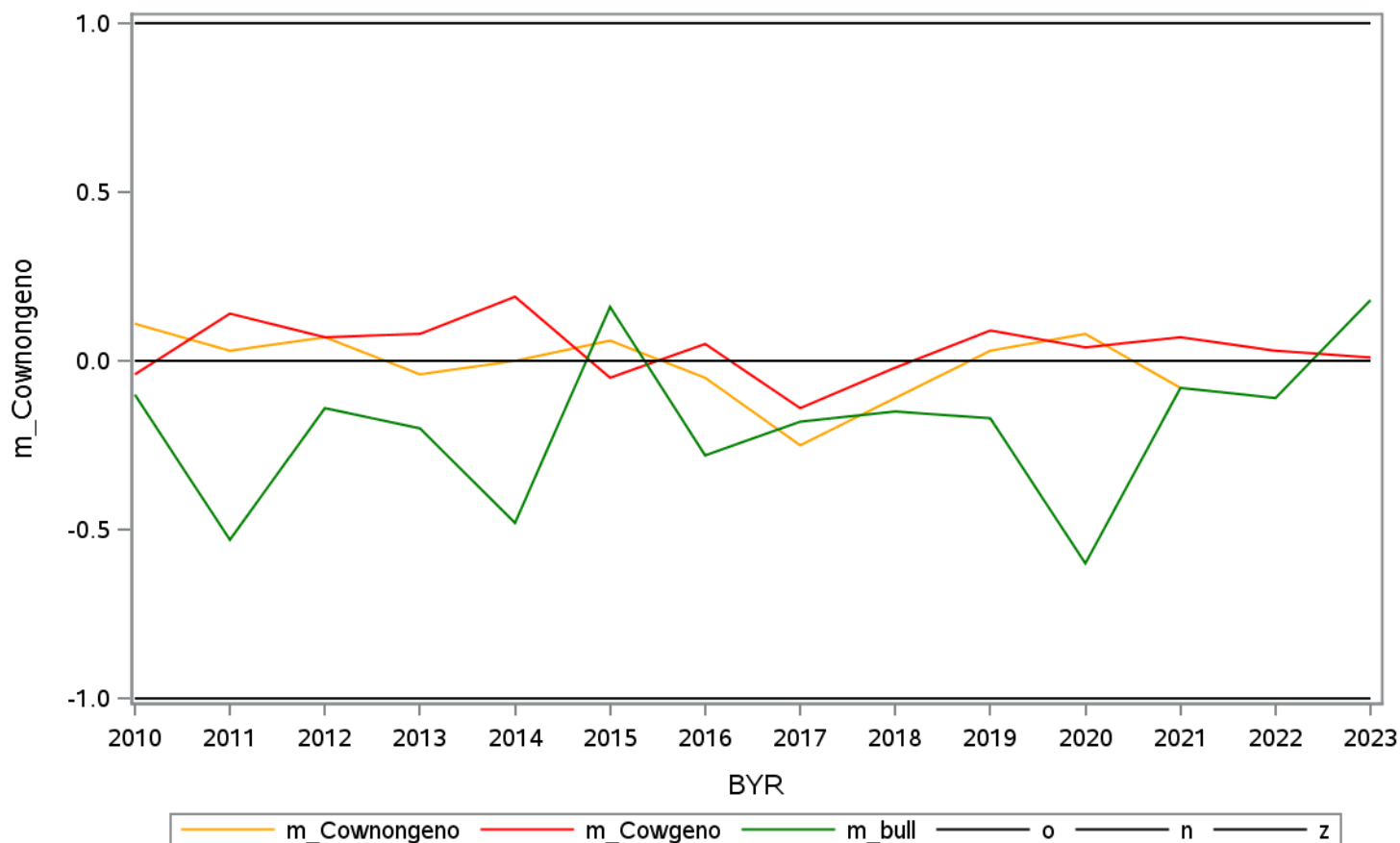
Mendelian sampling for 'Skin_proferation3 ' 20



Mendelian sampling for 'White_line_double_sole3' 21

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.11	-0.04	-0.10	10141	2224	226
2	2011	0.03	0.14	-0.53	9509	3996	348
3	2012	0.07	0.07	-0.14	9314	4563	375
4	2013	-0.04	0.08	-0.20	8357	3520	405
5	2014	0.00	0.19	-0.48	7998	4433	466
6	2015	0.06	-0.05	0.16	7620	5301	514
7	2016	-0.05	0.05	-0.28	6841	6206	474
8	2017	-0.25	-0.14	-0.18	6521	7890	516
9	2018	-0.11	-0.02	-0.15	7480	9796	358
10	2019	0.03	0.09	-0.17	11225	12025	472
11	2020	0.08	0.04	-0.60	9953	14630	489
12	2021	-0.08	0.07	-0.08	1243	14353	417
13	2022	.	0.03	-0.11	.	14150	448
14	2023	.	0.01	0.18	.	1739	129

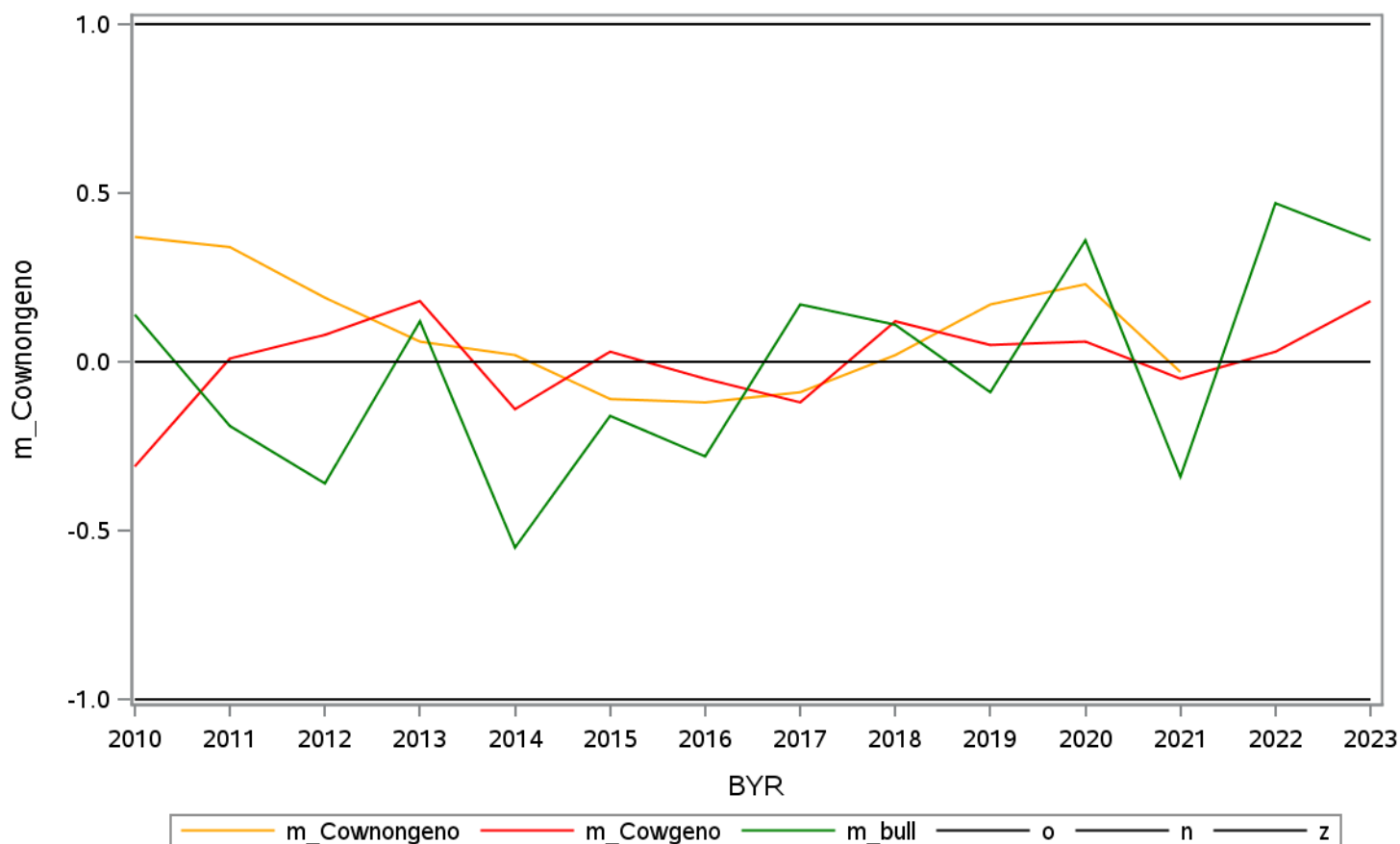
Mendelian sampling for 'White_line_double_sole3' 21



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.37	-0.31	0.14	7966	2224	226
2	2011	0.34	0.01	-0.19	7149	3996	348
3	2012	0.19	0.08	-0.36	6784	4563	375
4	2013	0.06	0.18	0.12	6141	3520	405
5	2014	0.02	-0.14	-0.55	5615	4433	466
6	2015	-0.11	0.03	-0.16	4554	5301	514
7	2016	-0.12	-0.05	-0.28	3742	6206	474
8	2017	-0.09	-0.12	0.17	3235	7890	516
9	2018	0.02	0.12	0.11	2799	9796	358
10	2019	0.17	0.05	-0.09	1744	12025	472
11	2020	0.23	0.06	0.36	998	14630	489
12	2021	-0.03	-0.05	-0.34	56	14353	417
13	2022	.	0.03	0.47	.	14150	448
14	2023	.	0.18	0.36	.	1739	129

Mendelian sampling for 'Dermatitis'

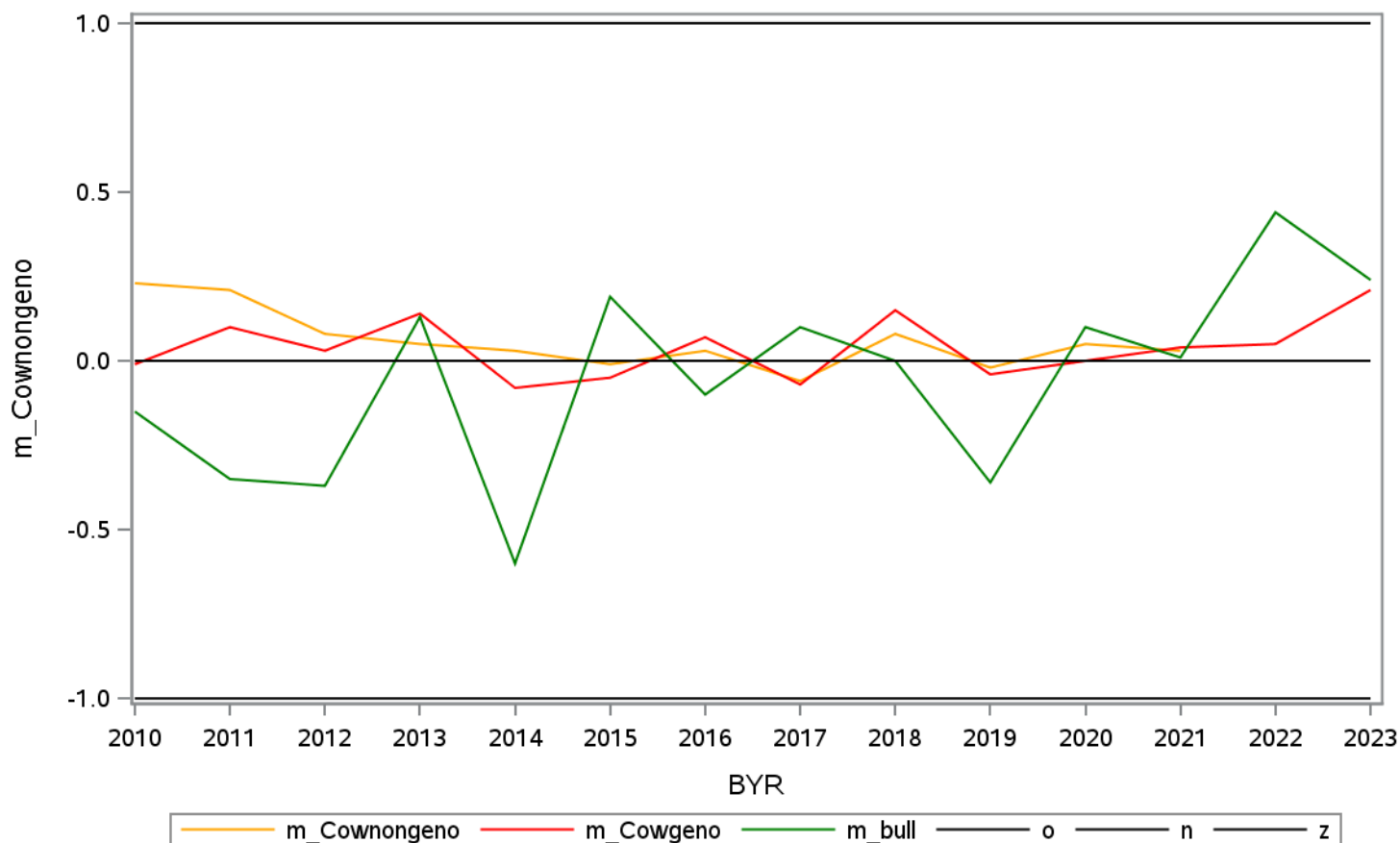
' 22



Mendelian sampling for 'Heel_horn_erosion ' 23

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.23	-0.01	-0.15	10230	2224	226
2	2011	0.21	0.10	-0.35	9885	3996	348
3	2012	0.08	0.03	-0.37	9656	4563	375
4	2013	0.05	0.14	0.13	9059	3520	405
5	2014	0.03	-0.08	-0.60	8658	4433	466
6	2015	-0.01	-0.05	0.19	7961	5301	514
7	2016	0.03	0.07	-0.10	7207	6206	474
8	2017	-0.06	-0.07	0.10	6545	7890	516
9	2018	0.08	0.15	0.00	7323	9796	358
10	2019	-0.02	-0.04	-0.36	7202	12025	472
11	2020	0.05	0.00	0.10	6526	14630	489
12	2021	0.03	0.04	0.01	845	14353	417
13	2022	.	0.05	0.44	.	14150	448
14	2023	.	0.21	0.24	.	1739	129

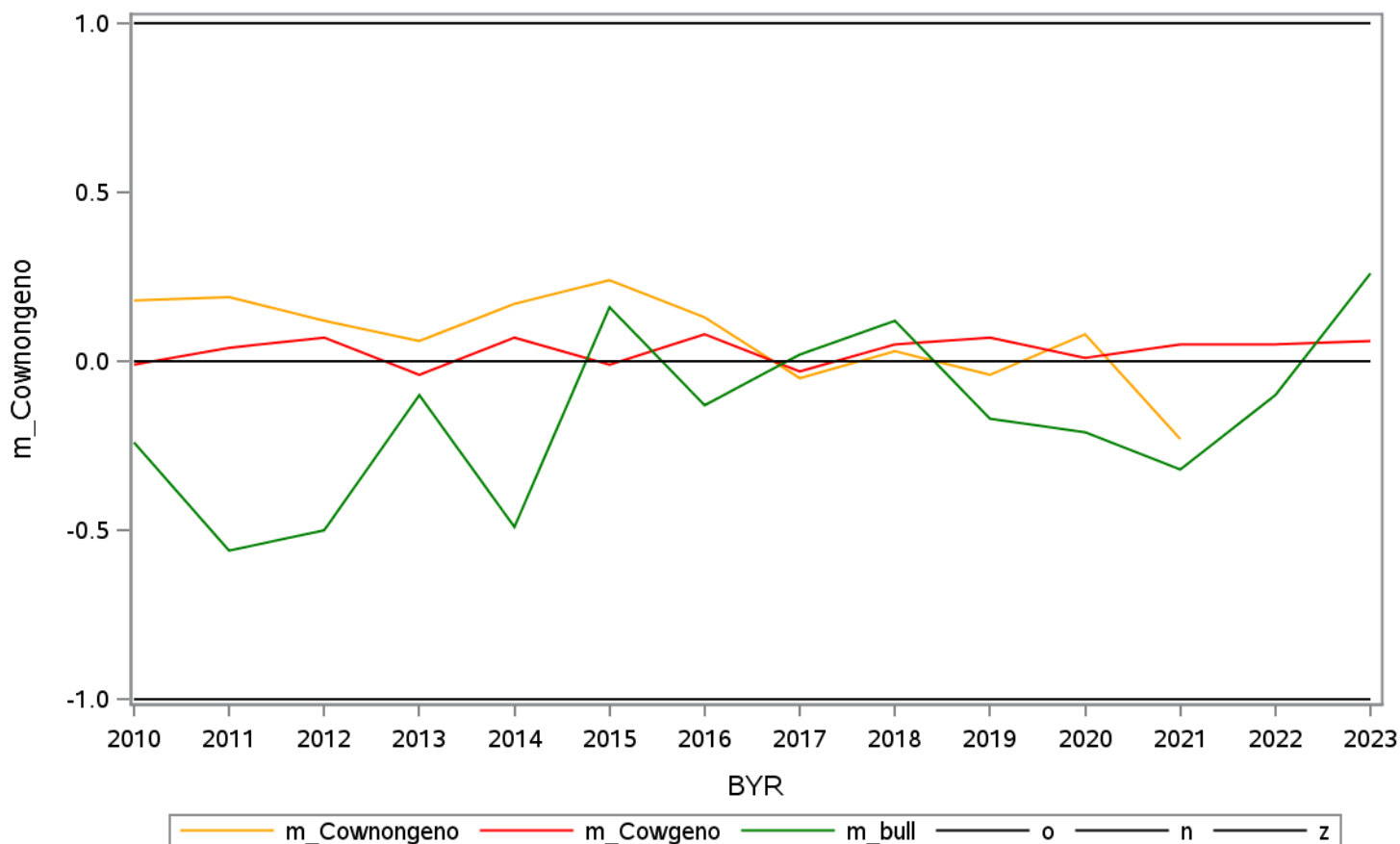
Mendelian sampling for 'Heel_horn_erosion ' 23



Mendelian sampling for 'Sole_heamorrhage ' 24

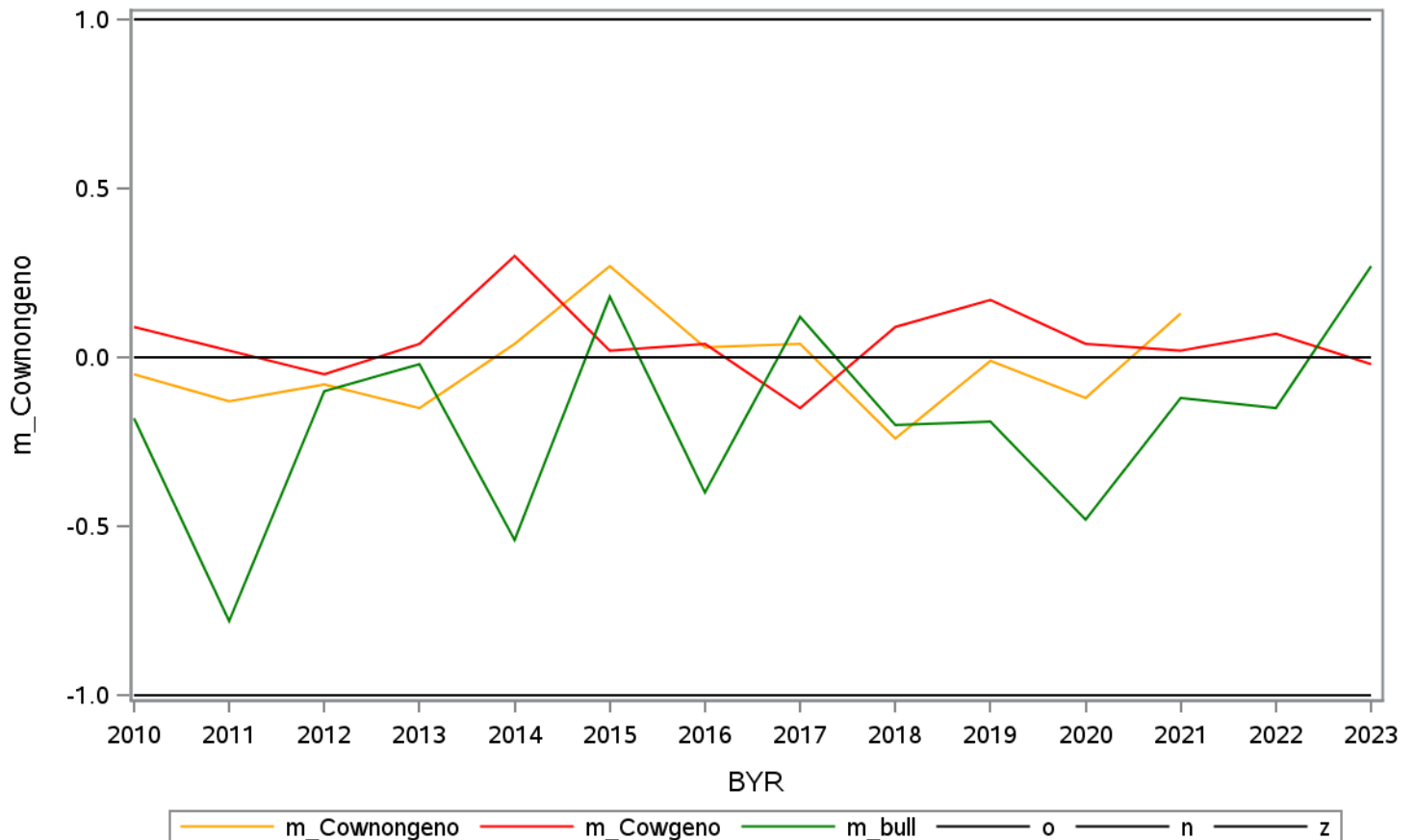
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.18	-0.01	-0.24	7724	2224	226
2	2011	0.19	0.04	-0.56	7074	3996	348
3	2012	0.12	0.07	-0.50	6628	4563	375
4	2013	0.06	-0.04	-0.10	5864	3520	405
5	2014	0.17	0.07	-0.49	5152	4433	466
6	2015	0.24	-0.01	0.16	4634	5301	514
7	2016	0.13	0.08	-0.13	3785	6206	474
8	2017	-0.05	-0.03	0.02	3689	7890	516
9	2018	0.03	0.05	0.12	3803	9796	358
10	2019	-0.04	0.07	-0.17	3331	12025	472
11	2020	0.08	0.01	-0.21	3000	14630	489
12	2021	-0.23	0.05	-0.32	394	14353	417
13	2022	.	0.05	-0.10	.	14150	448
14	2023	.	0.06	0.26	.	1739	129

Mendelian sampling for 'Sole_heamorrhage ' 24



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.05	0.09	-0.18	7367	2224	226
2	2011	-0.13	0.02	-0.78	6467	3996	348
3	2012	-0.08	-0.05	-0.10	6088	4563	375
4	2013	-0.15	0.04	-0.02	5335	3520	405
5	2014	0.04	0.30	-0.54	4523	4433	466
6	2015	0.27	0.02	0.18	3730	5301	514
7	2016	0.03	0.04	-0.40	2966	6206	474
8	2017	0.04	-0.15	0.12	2462	7890	516
9	2018	-0.24	0.09	-0.20	2150	9796	358
10	2019	-0.01	0.17	-0.19	1182	12025	472
11	2020	-0.12	0.04	-0.48	661	14630	489
12	2021	0.13	0.02	-0.12	51	14353	417
13	2022	.	0.07	-0.15	.	14150	448
14	2023	.	-0.02	0.27	.	1739	129

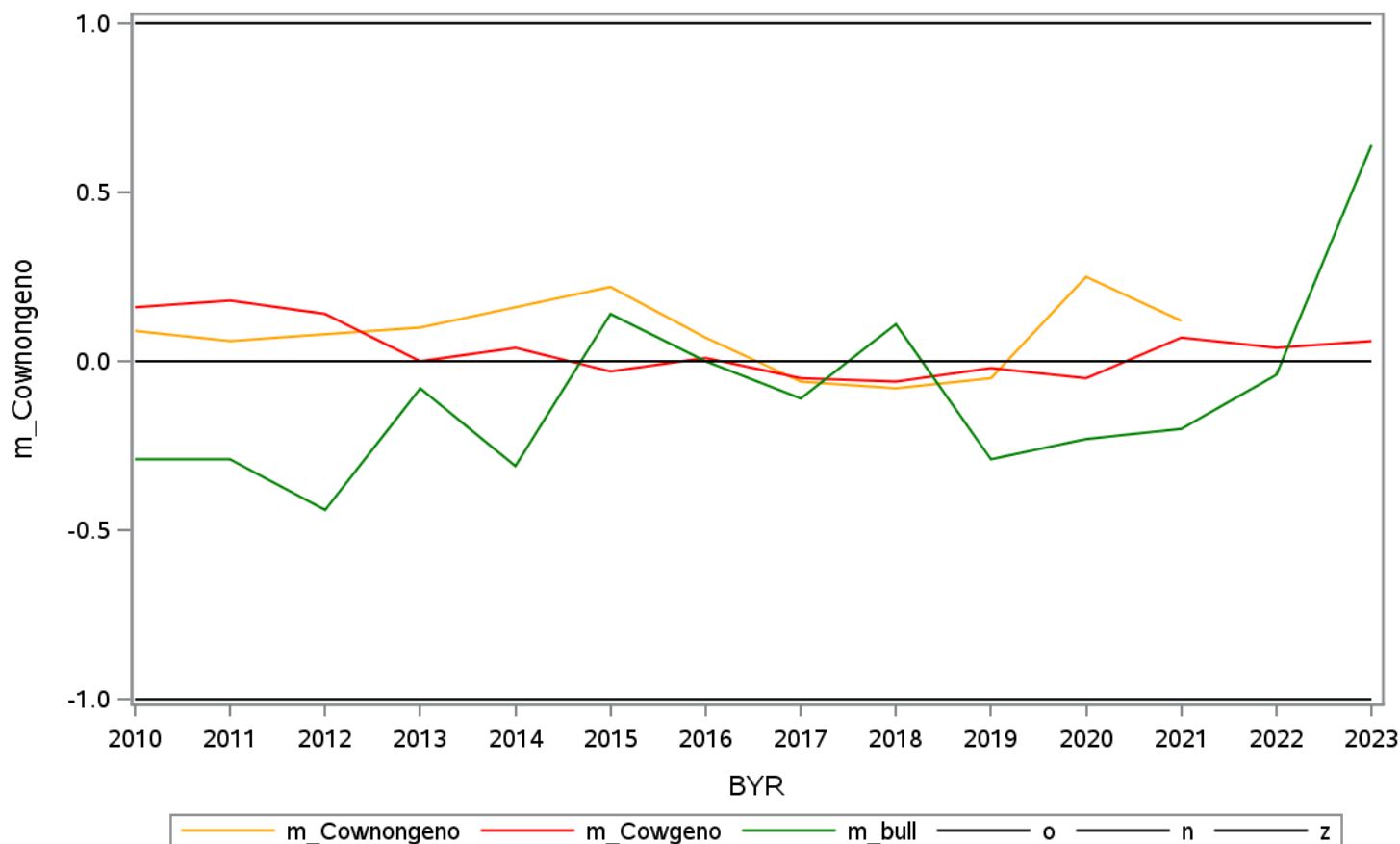
Mendelian sampling for 'Sole_ulcer' ' 25



Mendelian sampling for 'Cork_screw_claws' ' 26

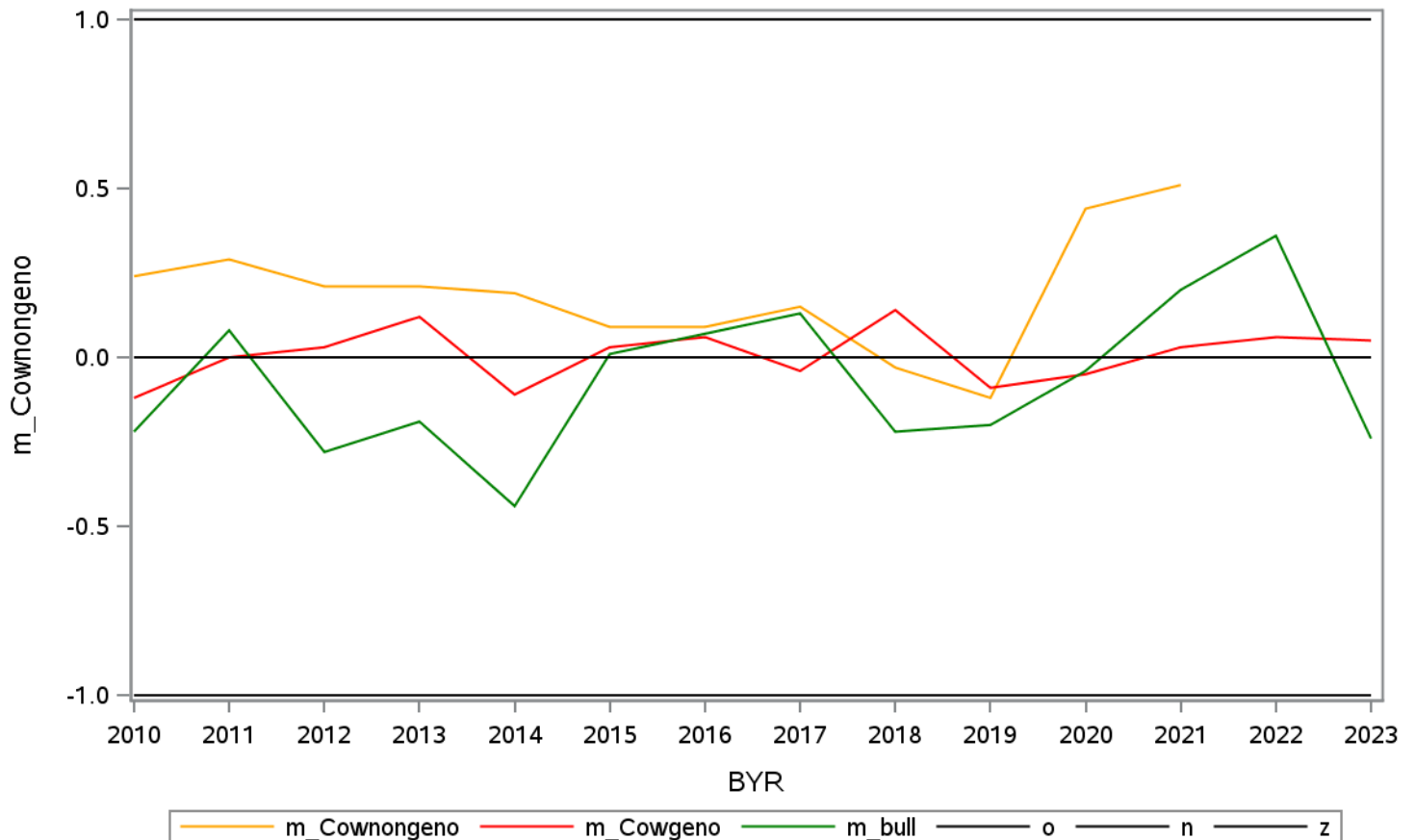
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.09	0.16	-0.29	8112	2224	226
2	2011	0.06	0.18	-0.29	7438	3996	348
3	2012	0.08	0.14	-0.44	6581	4563	375
4	2013	0.10	0.00	-0.08	5748	3520	405
5	2014	0.16	0.04	-0.31	5194	4433	466
6	2015	0.22	-0.03	0.14	4347	5301	514
7	2016	0.07	0.01	0.00	3578	6206	474
8	2017	-0.06	-0.05	-0.11	3188	7890	516
9	2018	-0.08	-0.06	0.11	2636	9796	358
10	2019	-0.05	-0.02	-0.29	1418	12025	472
11	2020	0.25	-0.05	-0.23	1544	14630	489
12	2021	0.12	0.07	-0.20	264	14353	417
13	2022	.	0.04	-0.04	.	14150	448
14	2023	.	0.06	0.64	.	1739	129

Mendelian sampling for 'Cork_screw_claws' ' 26



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.24	-0.12	-0.22	7303	2224	226
2	2011	0.29	0.00	0.08	6373	3996	348
3	2012	0.21	0.03	-0.28	5977	4563	375
4	2013	0.21	0.12	-0.19	5352	3520	405
5	2014	0.19	-0.11	-0.44	4515	4433	466
6	2015	0.09	0.03	0.01	3728	5301	514
7	2016	0.09	0.06	0.07	2980	6206	474
8	2017	0.15	-0.04	0.13	2456	7890	516
9	2018	-0.03	0.14	-0.22	2131	9796	358
10	2019	-0.12	-0.09	-0.20	1281	12025	472
11	2020	0.44	-0.05	-0.04	930	14630	489
12	2021	0.51	0.03	0.20	70	14353	417
13	2022	.	0.06	0.36	.	14150	448
14	2023	.	0.05	-0.24	.	1739	129

Mendelian sampling for 'Skin_proferation' ' 27



Mendelian sampling for 'White_line_double_sole ' 28

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.14	-0.10	-0.08	7367	2224	226
2	2011	0.04	0.08	-0.60	6448	3996	348
3	2012	0.07	0.01	-0.17	6077	4563	375
4	2013	-0.08	0.07	-0.06	5343	3520	405
5	2014	0.16	0.26	-0.32	4498	4433	466
6	2015	0.28	-0.07	0.16	3746	5301	514
7	2016	-0.04	0.05	-0.21	2962	6206	474
8	2017	-0.23	-0.10	-0.09	2454	7890	516
9	2018	-0.36	0.03	-0.02	2183	9796	358
10	2019	-0.09	0.09	-0.19	1200	12025	472
11	2020	0.25	0.03	-0.58	720	14630	489
12	2021	0.49	0.06	-0.19	51	14353	417
13	2022	.	0.06	-0.13	.	14150	448
14	2023	.	0.06	0.28	.	1739	129

Mendelian sampling for 'White_line_double_sole ' 28

