

Final report about singlestep growth

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Growth traits is 6 breeding values:

Trait name	Trait number	Breed
Short daily gain (sdg)	Bv1	HOL, RDC and JER
Long daily gain (ldg)	Bv2	HOL and RDC. Equal to Bv1 for JER
Carcass conformation score (csc)	Bv3	HOL, RDC and JER
Fat score (fsc)	Bv4	HOL, RDC and JER
Combined daily gain (cdg), mean of sdg and ldg	Bv5	HOL, RDC and JER
Combined growth (grw) = $201.3 \cdot Bv5 + 13.8 \cdot Bv3$ for HOL = $222.8 \cdot Bv5 + 13.6 \cdot Bv3$ for RDC = $45.6 \cdot Bv5 + 10.1 \cdot Bv3$ for JER	Bv6	HOL, RDC and JER

Model description

The model used is similar to the traditional model and the same parameter file is used.

Standardization

Nordic cows born 12-16 years ago, with at least one son with phenotype for carcass conformation score.

Reliability

Reliability is calculated based on a program for singlestep reliability developed by LUKE, which is also used for type traits, claw and general health.

The reliability for Bv5 and for Bv6 are set to the same value as reliability for Bv1.

Results

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Breeding values:

Breeding values for singlestep growth is in line with expectations and similar to those for traditional model and those for twostep model. The RDC bulls for traditional model are wrongly standardized, but it is correctly standardized for Singlestep, and therefor there is a big difference between singlestep and official traditional breeding values for RDC bulls.

Reliability:

Reliabilities are for bulls with many sons similar to those from traditional model, while for genotyped and nongenotyped cows with sons the reliabilities are higher for SS model than for traditional model, which is

also expected since the genetic information increase the reliability. The reliability for singlestep model is lower than for twostep model.

Full vs reduced:

The singlestep breeding values for full vs reduced model is overall in line with expectations, but there is a tendency for birth year classes 2017 and onwards that the full breeding values are lower than reduced breeding values, which indicate that we might have a problem with overprediction by singlestep. The solution might be to do a postprocessing of the breeding values, as we are also discussing for yield traits.

Legarra Reverter regression:

Legarra Reverter regression is calculated for genotyped bulls with status1 or 2, born after 2014, with minimum 14 sons with phenotype. The regression coefficient (b_1) is close to 1 as expected.

The b_1 for RDC are low for some traits (0.87 for csc and 0.90 for grw), and for JER (0.94 for csc and 0.92 for fsc).

Mendelian sampling:

The results for mendelian sampling are close to zero for singlestep breeding values. The mendelian sampling for singlestep evaluation (SS) is closer to zero than the Mendelian sampling for traditional breeding values (EBV).

Singlestep stability:

Results not ready yet

HOL summery statstistics for SS and current breeding value for nordic AI bulls with more than 14 sons with phenotype, by birth year

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Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
1	2010	bv1 sdg	191	97.9	96.9	10.6	10.4	1.0	1.1	0.99
2	2011	bv1 sdg	154	97.9	96.8	12.2	12.1	1.1	0.9	1.00
3	2012	bv1 sdg	170	97.6	96.4	11.6	11.4	1.2	1.1	1.00
4	2013	bv1 sdg	150	99.1	97.7	11.7	11.7	1.4	1.1	1.00
5	2014	bv1 sdg	110	99.8	98.3	11.4	11.3	1.6	1.0	1.00
6	2015	bv1 sdg	82	99.5	97.9	13.3	13.3	1.6	0.6	1.00
7	2016	bv1 sdg	66	100.3	98.7	12.8	12.9	1.6	0.7	1.00
8	2017	bv1 sdg	66	99.0	97.5	12.2	12.0	1.5	0.8	1.00
9	2018	bv1 sdg	77	104.8	103.2	12.5	12.6	1.5	1.4	0.99
10	2019	bv1 sdg	40	101.1	99.4	9.6	9.4	1.7	2.0	0.98
11	2010	bv2 ldg	191	98.5	97.6	10.8	10.5	0.9	1.4	0.99
12	2011	bv2 ldg	154	98.6	97.5	12.3	12.2	1.1	1.2	0.99
13	2012	bv2 ldg	170	98.9	97.8	11.5	11.3	1.1	1.3	0.99
14	2013	bv2 ldg	150	99.6	98.2	12.6	12.3	1.5	1.4	0.99
15	2014	bv2 ldg	110	100.9	99.4	11.9	11.7	1.5	1.3	0.99
16	2015	bv2 ldg	82	98.9	97.2	13.2	13.2	1.7	0.9	1.00
17	2016	bv2 ldg	66	100.8	99.3	12.4	12.4	1.5	1.0	1.00
18	2017	bv2 ldg	66	98.2	96.4	12.9	12.7	1.7	0.9	1.00
19	2018	bv2 ldg	77	104.3	102.8	12.1	12.0	1.5	1.8	0.99
20	2019	bv2 ldg	40	100.8	99.0	10.0	9.5	1.8	2.4	0.97
21	2010	bv3 csc	193	103.3	104.3	11.5	11.2	-1.0	1.1	1.00
22	2011	bv3 csc	155	104.7	105.9	12.4	12.0	-1.2	1.0	1.00
23	2012	bv3 csc	171	104.9	106.2	11.0	10.6	-1.3	0.9	1.00
24	2013	bv3 csc	151	101.8	103.3	11.4	11.0	-1.5	1.0	1.00
25	2014	bv3 csc	114	99.5	101.0	9.7	9.4	-1.5	1.0	0.99
26	2015	bv3 csc	83	98.1	99.9	10.9	10.6	-1.8	0.7	1.00
27	2016	bv3 csc	66	97.3	99.2	10.7	10.5	-1.9	0.8	1.00
28	2017	bv3 csc	66	94.0	95.8	12.1	11.8	-1.8	0.7	1.00
29	2018	bv3 csc	77	95.5	97.4	10.6	10.4	-2.0	1.0	1.00
30	2019	bv3 csc	40	91.9	94.8	11.6	11.7	-2.8	1.9	0.99
31	2010	bv4 fsc	193	99.9	100.1	10.3	10.2	-0.1	1.4	0.99
32	2011	bv4 fsc	155	98.4	98.5	11.4	11.2	-0.1	1.2	0.99
33	2012	bv4 fsc	171	99.5	99.4	11.1	10.9	0.1	1.3	0.99
34	2013	bv4 fsc	151	101.4	101.2	10.4	10.4	0.2	1.1	0.99
35	2014	bv4 fsc	114	101.0	101.1	10.6	10.5	-0.1	1.1	0.99
36	2015	bv4 fsc	83	102.1	102.0	12.3	12.1	0.1	1.1	1.00

HOL summery stastistics for SS and current breeding value for nordic AI bulls with more than 14 sons with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
37	2016	bv4 fsc	66	98.7	98.6	10.5	10.5	0.1	0.9	1.00
38	2017	bv4 fsc	66	103.6	103.5	12.0	11.8	0.1	1.1	1.00
39	2018	bv4 fsc	77	98.9	99.0	11.5	11.5	-0.1	1.3	0.99
40	2019	bv4 fsc	40	99.7	99.6	12.3	12.1	0.2	2.6	0.98
41	2010	bv5 cdg	193	98.2	97.3	10.6	10.4	0.9	1.2	0.99
42	2011	bv5 cdg	155	98.2	97.1	12.2	12.1	1.1	1.0	1.00
43	2012	bv5 cdg	171	98.1	96.9	11.5	11.3	1.2	1.1	1.00
44	2013	bv5 cdg	151	99.3	97.8	12.1	12.0	1.4	1.2	1.00
45	2014	bv5 cdg	114	100.0	98.5	11.7	11.5	1.5	1.1	1.00
46	2015	bv5 cdg	83	99.1	97.5	13.1	13.1	1.6	0.7	1.00
47	2016	bv5 cdg	66	100.5	99.0	12.5	12.6	1.5	0.8	1.00
48	2017	bv5 cdg	66	98.6	96.9	12.4	12.2	1.7	0.8	1.00
49	2018	bv5 cdg	77	104.6	103.1	12.2	12.2	1.5	1.5	0.99
50	2019	bv5 cdg	40	100.9	99.1	9.8	9.4	1.8	2.1	0.98
51	2010	bv6 grw	193	101.1	101.3	11.0	10.7	-0.1	1.1	1.00
52	2011	bv6 grw	155	102.0	102.1	12.2	11.9	-0.1	1.0	1.00
53	2012	bv6 grw	171	102.1	102.2	11.3	11.0	-0.1	1.1	1.00
54	2013	bv6 grw	151	100.8	100.9	12.2	11.9	-0.1	1.1	1.00
55	2014	bv6 grw	114	99.8	99.8	10.1	9.9	0.0	1.1	0.99
56	2015	bv6 grw	83	98.4	98.5	11.8	11.6	-0.1	0.7	1.00
57	2016	bv6 grw	66	98.7	99.0	11.6	11.4	-0.3	0.7	1.00
58	2017	bv6 grw	66	95.6	95.6	12.5	12.2	-0.1	0.8	1.00
59	2018	bv6 grw	77	99.9	100.1	11.1	11.1	-0.2	1.3	0.99
60	2019	bv6 grw	40	95.6	96.2	9.5	9.3	-0.6	2.0	0.98

HOL summery statistics for SS and twostep breeding value for nordic AI bulls without offspring, by birth year

Obs	BYR	name	no	mean_ss	mean_two	std_ss	std_two	mean_dif	std_dif	corr_SS
1	2019	bv6 grw	16	99.4	98.7	9.8	8.4	0.7	3.2	0.95
2	2020	bv6 grw	68	98.9	99.6	10.0	8.2	-0.7	3.7	0.94
3	2021	bv6 grw	59	98.7	98.1	10.0	8.0	0.5	4.0	0.93
4	2022	bv6 grw	57	99.6	99.6	7.4	5.3	0.0	4.1	0.84
5	2023	bv6 grw	1	.	.	.	.	.	.	.

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

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Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
1	2015	bv1 sdg	3742	99.4	98.3	9.9	7.4	1.1	6.9	0.72
2	2016	bv1 sdg	5036	100.9	99.6	10.2	7.6	1.2	6.8	0.74
3	2017	bv1 sdg	6238	100.7	99.3	10.2	7.8	1.3	6.9	0.74
4	2018	bv1 sdg	6888	100.8	99.5	10.5	8.0	1.3	6.9	0.76
5	2019	bv1 sdg	3556	101.3	99.5	10.0	7.6	1.7	6.8	0.74
6	2020	bv1 sdg	47	101.7	99.1	9.2	6.7	2.6	6.1	0.75
7	2015	bv2 ldg	3742	99.9	99.0	9.9	7.4	1.0	7.0	0.71
8	2016	bv2 ldg	5036	101.8	100.7	10.2	7.6	1.2	6.9	0.73
9	2017	bv2 ldg	6238	100.4	99.1	10.4	7.9	1.3	7.0	0.74
10	2018	bv2 ldg	6888	100.7	99.4	10.5	7.9	1.3	7.0	0.75
11	2019	bv2 ldg	3556	101.2	99.4	10.5	8.2	1.8	6.9	0.76
12	2020	bv2 ldg	47	101.3	98.5	9.6	7.3	2.8	6.4	0.75
13	2015	bv3 csc	5897	101.3	102.4	9.9	7.7	-1.1	6.2	0.78
14	2016	bv3 csc	7886	102.1	103.3	9.6	7.2	-1.1	6.2	0.76
15	2017	bv3 csc	9916	99.8	101.2	9.3	6.9	-1.4	6.4	0.73
16	2018	bv3 csc	9653	100.0	101.4	9.3	6.9	-1.4	6.3	0.74
17	2019	bv3 csc	3626	97.1	98.9	9.5	7.1	-1.8	6.3	0.75
18	2020	bv3 csc	47	97.4	97.6	9.2	6.8	-0.2	6.6	0.70
19	2015	bv4 fsc	5900	99.5	99.4	9.2	6.8	0.1	6.2	0.74
20	2016	bv4 fsc	7891	99.4	99.4	9.3	6.9	0.0	6.3	0.74
21	2017	bv4 fsc	9920	100.5	100.6	9.5	7.4	0.0	6.2	0.76
22	2018	bv4 fsc	9656	100.1	100.3	9.5	7.3	-0.1	6.2	0.76
23	2019	bv4 fsc	3626	99.1	99.3	9.4	7.1	-0.3	6.3	0.75
24	2020	bv4 fsc	47	102.1	102.3	9.9	6.9	-0.2	6.7	0.74
25	2015	bv5 cdg	5983	99.4	98.5	9.8	7.3	0.9	6.8	0.72
26	2016	bv5 cdg	8128	100.9	99.9	10.1	7.5	1.1	6.8	0.74
27	2017	bv5 cdg	10610	100.6	99.3	10.2	7.8	1.3	6.9	0.74
28	2018	bv5 cdg	11277	101.1	99.8	10.3	7.7	1.3	6.9	0.74
29	2019	bv5 cdg	5938	101.4	99.7	10.1	7.6	1.7	7.0	0.73
30	2020	bv5 cdg	53	101.1	98.7	9.7	6.9	2.4	6.4	0.75
31	2015	bv6 grw	5983	100.6	100.7	9.8	7.3	-0.1	6.6	0.74
32	2016	bv6 grw	8128	102.0	102.0	9.6	7.0	0.0	6.6	0.73
33	2017	bv6 grw	10610	100.3	100.4	9.8	7.2	-0.1	6.7	0.73
34	2018	bv6 grw	11277	100.7	100.8	9.5	6.9	-0.1	6.7	0.72
35	2019	bv6 grw	5938	99.4	99.4	9.7	7.1	0.0	6.6	0.73
36	2020	bv6 grw	53	99.1	97.8	9.2	6.4	1.3	6.4	0.72

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

Obs	BYR	name	no	mean_ss	mean_two	std_ss	std_two	mean_dif	std_dif	corr_SS
1	2015	bv6 grw	5983	100.6	100.4	9.8	8.2	0.2	3.8	0.92
2	2016	bv6 grw	8128	102.0	101.5	9.6	8.1	0.4	3.8	0.92
3	2017	bv6 grw	10610	100.3	99.9	9.8	8.2	0.4	3.9	0.92
4	2018	bv6 grw	11277	100.7	100.4	9.5	8.0	0.4	3.9	0.92
5	2019	bv6 grw	5938	99.4	99.0	9.7	8.2	0.4	3.8	0.92
6	2020	bv6 grw	53	99.1	98.1	9.2	7.0	1.0	3.6	0.94

sum sta for SS and current breeding value for nongenotyped females with sons with phenotype, by birth year

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Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
1	2015	bv1 sdg	66597	98.3	97.4	7.0	6.9	0.9	1.8	0.97
2	2016	bv1 sdg	60485	99.1	98.1	7.3	7.2	1.0	1.9	0.97
3	2017	bv1 sdg	47107	99.6	98.4	7.7	7.7	1.2	1.8	0.97
4	2018	bv1 sdg	34147	99.8	98.5	7.9	7.9	1.3	1.7	0.98
5	2019	bv1 sdg	15498	100.5	99.1	7.5	7.6	1.4	1.6	0.98
6	2020	bv1 sdg	204	101.4	99.9	7.3	7.5	1.5	1.7	0.97
7	2015	bv2 ldg	66597	99.0	98.2	7.0	6.9	0.8	1.8	0.97
8	2016	bv2 ldg	60485	100.1	99.2	7.2	7.1	1.0	1.9	0.96
9	2017	bv2 ldg	47107	99.9	98.6	7.9	7.8	1.2	1.8	0.97
10	2018	bv2 ldg	34147	99.9	98.6	7.8	7.8	1.3	1.7	0.98
11	2019	bv2 ldg	15498	100.7	99.2	7.9	7.9	1.4	1.6	0.98
12	2020	bv2 ldg	204	101.3	99.8	7.9	8.0	1.5	1.7	0.98
13	2015	bv3 csc	97509	102.8	103.9	8.0	8.0	-1.1	2.0	0.97
14	2016	bv3 csc	88328	102.5	103.8	7.9	7.8	-1.2	2.1	0.97
15	2017	bv3 csc	67858	100.5	101.9	7.4	7.4	-1.4	2.1	0.96
16	2018	bv3 csc	45601	100.1	101.6	7.6	7.6	-1.6	2.0	0.97
17	2019	bv3 csc	15680	98.3	100.0	7.5	7.5	-1.7	1.9	0.97
18	2020	bv3 csc	204	97.2	99.0	7.5	7.4	-1.8	1.6	0.98
19	2015	bv4 fsc	97550	99.6	99.5	7.1	7.1	0.1	1.6	0.97
20	2016	bv4 fsc	88371	99.7	99.7	7.1	7.1	0.0	1.7	0.97
21	2017	bv4 fsc	67888	100.5	100.4	7.2	7.1	0.1	1.6	0.97
22	2018	bv4 fsc	45619	101.0	100.8	7.3	7.2	0.2	1.6	0.98
23	2019	bv4 fsc	15681	99.9	99.6	7.1	7.0	0.3	1.4	0.98
24	2020	bv4 fsc	204	101.5	101.0	7.2	7.1	0.5	1.5	0.98
25	2015	bv5 cdg	97946	98.7	97.8	7.0	7.0	0.9	1.8	0.97
26	2016	bv5 cdg	88924	99.6	98.7	7.2	7.2	1.0	1.9	0.97
27	2017	bv5 cdg	68572	99.9	98.8	7.8	7.7	1.1	1.8	0.97
28	2018	bv5 cdg	46359	100.2	99.0	7.8	7.8	1.2	1.7	0.98
29	2019	bv5 cdg	16098	100.6	99.2	7.6	7.6	1.4	1.7	0.97
30	2020	bv5 cdg	204	101.3	99.9	7.5	7.6	1.5	1.7	0.98
31	2015	bv6 grw	97946	101.1	101.2	7.3	7.2	-0.2	1.8	0.97
32	2016	bv6 grw	88924	101.5	101.7	7.2	7.1	-0.2	1.8	0.97
33	2017	bv6 grw	68572	100.4	100.6	7.2	7.1	-0.2	1.7	0.97
34	2018	bv6 grw	46359	100.3	100.5	7.2	7.2	-0.2	1.6	0.97
35	2019	bv6 grw	16098	99.4	99.6	7.4	7.3	-0.2	1.5	0.98
36	2020	bv6 grw	204	99.1	99.3	7.6	7.5	-0.1	1.3	0.99

RDC summery stastistics for SS and current breeding value for nordic AI bulls with more than 14 sons with phenotype, by birth year

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Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
1	2010	bv1 sdg	149	102.8	97.0	10.1	9.7	5.8	1.5	0.99
2	2011	bv1 sdg	159	103.1	97.3	10.5	10.4	5.8	1.2	0.99
3	2012	bv1 sdg	150	102.8	96.9	11.1	10.8	5.9	1.1	1.00
4	2013	bv1 sdg	103	101.8	95.9	12.0	11.8	6.0	1.3	0.99
5	2014	bv1 sdg	78	102.4	96.4	10.6	10.3	6.0	0.9	1.00
6	2015	bv1 sdg	65	102.1	95.9	9.8	9.7	6.2	0.9	1.00
7	2016	bv1 sdg	68	99.9	93.9	11.7	11.5	6.0	0.9	1.00
8	2017	bv1 sdg	65	100.4	94.3	10.8	10.5	6.1	0.9	1.00
9	2018	bv1 sdg	51	99.9	94.1	9.8	9.8	5.7	1.8	0.98
10	2019	bv1 sdg	27	98.5	93.2	8.3	8.3	5.3	1.6	0.98
11	2010	bv2 ldg	149	102.6	97.2	9.5	9.5	5.4	2.0	0.98
12	2011	bv2 ldg	159	103.7	98.4	9.9	10.2	5.3	1.6	0.99
13	2012	bv2 ldg	150	103.3	97.5	10.9	10.7	5.8	1.8	0.99
14	2013	bv2 ldg	103	102.3	96.3	11.1	11.9	6.0	2.9	0.97
15	2014	bv2 ldg	78	103.8	98.0	10.6	11.0	5.8	1.5	0.99
16	2015	bv2 ldg	65	102.8	96.6	10.0	10.5	6.2	1.3	0.99
17	2016	bv2 ldg	68	101.0	94.9	11.2	11.8	6.1	1.5	0.99
18	2017	bv2 ldg	65	101.2	94.9	11.3	11.8	6.3	1.2	1.00
19	2018	bv2 ldg	51	101.1	95.5	9.6	10.0	5.5	2.0	0.98
20	2019	bv2 ldg	27	99.5	93.7	7.4	7.9	5.8	2.0	0.97
21	2010	bv3 csc	165	101.1	104.9	9.4	9.5	-3.8	0.9	1.00
22	2011	bv3 csc	167	105.2	109.0	8.0	8.0	-3.9	1.0	0.99
23	2012	bv3 csc	170	104.0	108.2	9.2	9.2	-4.2	1.1	0.99
24	2013	bv3 csc	123	101.8	106.2	9.8	9.7	-4.3	1.2	0.99
25	2014	bv3 csc	85	100.6	105.2	9.0	8.9	-4.7	0.9	1.00
26	2015	bv3 csc	71	101.0	105.6	7.9	7.9	-4.6	0.6	1.00
27	2016	bv3 csc	70	97.6	102.3	8.4	8.3	-4.7	0.8	1.00
28	2017	bv3 csc	66	99.2	104.0	8.1	8.0	-4.8	0.6	1.00
29	2018	bv3 csc	51	98.6	103.7	7.2	7.2	-5.1	0.9	0.99
30	2019	bv3 csc	27	96.8	102.2	8.9	8.9	-5.4	2.1	0.97
31	2010	bv4 fsc	165	99.4	98.1	8.9	9.2	1.3	1.3	0.99
32	2011	bv4 fsc	167	98.8	97.5	8.7	8.9	1.3	1.1	0.99
33	2012	bv4 fsc	170	96.9	95.5	7.9	8.2	1.4	1.1	0.99
34	2013	bv4 fsc	123	98.0	96.4	8.4	8.8	1.6	1.1	0.99
35	2014	bv4 fsc	85	97.2	95.7	9.4	9.9	1.5	1.0	1.00
36	2015	bv4 fsc	71	97.7	96.6	8.6	9.0	1.1	0.8	1.00

RDC summery stastistics for SS and current breeding value for nordic AI bulls with more than 14 sons with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
37	2016	bv4 fsc	70	98.0	97.1	9.5	9.8	0.9	0.9	1.00
38	2017	bv4 fsc	66	100.6	100.2	8.1	8.5	0.4	1.0	0.99
39	2018	bv4 fsc	51	100.3	99.9	7.4	7.8	0.4	0.9	0.99
40	2019	bv4 fsc	27	97.3	97.3	8.2	8.5	0.1	2.1	0.97
41	2010	bv5 cdg	165	102.7	97.0	9.9	9.7	5.7	1.5	0.99
42	2011	bv5 cdg	167	103.5	97.8	10.5	10.6	5.6	1.1	0.99
43	2012	bv5 cdg	170	103.5	97.6	11.0	10.7	5.9	1.1	0.99
44	2013	bv5 cdg	123	102.0	96.0	11.8	12.1	6.0	1.6	0.99
45	2014	bv5 cdg	85	103.3	97.4	10.9	10.9	5.9	1.0	1.00
46	2015	bv5 cdg	71	101.8	95.6	9.9	10.1	6.3	0.8	1.00
47	2016	bv5 cdg	70	100.3	94.1	11.4	11.6	6.2	0.9	1.00
48	2017	bv5 cdg	66	101.0	94.7	11.1	11.2	6.3	0.9	1.00
49	2018	bv5 cdg	52	100.6	94.8	9.7	9.9	5.8	1.8	0.98
50	2019	bv5 cdg	30	99.8	94.1	8.5	8.8	5.8	2.0	0.97
51	2010	bv6 grw	165	102.3	100.9	9.6	9.5	1.4	1.1	0.99
52	2011	bv6 grw	167	105.1	103.9	9.3	9.3	1.2	1.1	0.99
53	2012	bv6 grw	170	104.4	103.2	10.0	9.7	1.2	1.1	0.99
54	2013	bv6 grw	123	102.3	101.0	11.0	11.1	1.3	1.4	0.99
55	2014	bv6 grw	85	102.4	101.4	9.5	9.5	1.0	0.9	1.00
56	2015	bv6 grw	71	101.7	100.5	9.1	9.1	1.3	0.8	1.00
57	2016	bv6 grw	70	98.8	97.8	9.7	9.7	1.0	0.7	1.00
58	2017	bv6 grw	66	100.1	99.1	9.0	8.8	1.0	0.8	1.00
59	2018	bv6 grw	52	99.7	99.1	7.6	7.5	0.6	1.3	0.98
60	2019	bv6 grw	30	98.0	97.5	8.0	8.4	0.5	2.0	0.97

RDC summery stastistics for SS and twostep breeding value for nordic AI bulls without offspring, by birth year

Obs	BYR	name	no	mean_ss	mean_two	std_ss	std_two	mean_dif	std_dif	corr_SS
1	2019	bv6 grw	31	101.4	100.1	7.7	7.2	1.3	2.8	0.93
2	2020	bv6 grw	73	99.0	98.2	7.4	6.6	0.8	4.1	0.83
3	2021	bv6 grw	72	99.3	98.6	6.4	5.4	0.7	3.8	0.81
4	2022	bv6 grw	70	101.7	101.3	7.3	6.7	0.4	4.5	0.79
5	2023	bv6 grw	6	.	.	.	.	.	.	.

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

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Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
1	2015	bv1 sdg	1788	103.8	103.3	9.3	7.2	0.5	5.9	0.77
2	2016	bv1 sdg	2074	103.9	103.2	9.1	6.8	0.8	5.9	0.76
3	2017	bv1 sdg	2170	104.4	103.9	9.2	6.7	0.6	6.2	0.75
4	2018	bv1 sdg	1782	101.8	101.5	8.8	6.5	0.4	6.2	0.71
5	2019	bv1 sdg	873	102.4	101.7	8.5	6.3	0.7	6.0	0.71
6	2020	bv1 sdg	11	.	.	.	.	.	.	.
7	2015	bv2 ldg	1788	104.3	102.7	8.8	7.3	1.6	5.7	0.77
8	2016	bv2 ldg	2074	104.6	102.9	8.5	7.0	1.7	5.7	0.75
9	2017	bv2 ldg	2170	105.1	103.5	8.9	7.0	1.6	5.8	0.76
10	2018	bv2 ldg	1782	102.8	101.4	8.5	6.8	1.4	5.9	0.72
11	2019	bv2 ldg	873	103.1	101.4	8.3	6.8	1.6	5.6	0.74
12	2020	bv2 ldg	11	.	.	.	.	.	.	.
13	2015	bv3 csc	4517	102.1	102.7	7.6	6.2	-0.6	4.6	0.79
14	2016	bv3 csc	5687	101.1	101.8	7.8	6.3	-0.7	4.6	0.81
15	2017	bv3 csc	5653	101.6	102.3	7.3	5.8	-0.8	4.7	0.76
16	2018	bv3 csc	4269	99.5	100.5	7.2	5.6	-1.0	4.7	0.76
17	2019	bv3 csc	913	99.1	100.3	7.3	5.7	-1.2	4.7	0.76
18	2020	bv3 csc	11	.	.	.	.	.	.	.
19	2015	bv4 fsc	4522	98.7	98.7	6.9	5.6	0.0	4.5	0.76
20	2016	bv4 fsc	5694	98.8	98.8	7.3	6.1	0.0	4.5	0.79
21	2017	bv4 fsc	5658	97.9	98.2	6.9	5.6	-0.3	4.5	0.75
22	2018	bv4 fsc	4271	99.4	99.7	6.9	5.7	-0.3	4.4	0.77
23	2019	bv4 fsc	913	98.5	99.1	7.1	5.7	-0.6	4.6	0.76
24	2020	bv4 fsc	11	.	.	.	.	.	.	.
25	2015	bv5 cdg	4588	103.4	102.5	9.1	7.1	0.9	5.9	0.76
26	2016	bv5 cdg	5926	103.2	102.3	9.0	7.0	0.9	5.9	0.76
27	2017	bv5 cdg	6162	103.8	102.8	9.2	7.1	1.0	6.1	0.75
28	2018	bv5 cdg	5527	102.1	101.1	8.9	6.7	1.0	6.1	0.72
29	2019	bv5 cdg	2655	102.5	101.3	8.5	6.3	1.2	6.2	0.69
30	2020	bv5 cdg	14	.	.	.	.	.	.	.
31	2015	bv6 grw	4588	103.3	103.1	8.3	6.6	0.2	5.1	0.79
32	2016	bv6 grw	5926	102.6	102.5	8.3	6.6	0.2	5.1	0.79
33	2017	bv6 grw	6162	103.2	103.0	8.2	6.5	0.2	5.3	0.77
34	2018	bv6 grw	5527	101.0	100.9	8.0	6.2	0.1	5.2	0.76
35	2019	bv6 grw	2655	100.8	100.8	7.5	5.5	0.0	5.3	0.71
36	2020	bv6 grw	14	.	.	.	.	.	.	.

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

Obs	BYR	name	no	mean_ss	mean_two	std_ss	std_two	mean_dif	std_dif	corr_SS
1	2015	bv6 grw	4588	103.3	101.7	8.3	7.5	1.7	3.6	0.90
2	2016	bv6 grw	5926	102.6	101.1	8.3	7.5	1.6	3.7	0.90
3	2017	bv6 grw	6162	103.2	101.6	8.2	7.3	1.6	3.7	0.89
4	2018	bv6 grw	5527	101.0	99.7	8.0	7.2	1.3	3.7	0.89
5	2019	bv6 grw	2655	100.8	99.5	7.5	6.5	1.3	3.7	0.87
6	2020	bv6 grw	14	.	.	.	.	.	.	.

sum sta for SS and current breeding value for nongenotyped females with sons with phenotype, by birth year

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Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
1	2015	bv1 sdg	9078	102.6	102.1	7.2	7.2	0.6	2.0	0.96
2	2016	bv1 sdg	7300	102.8	102.1	7.0	6.9	0.7	2.0	0.96
3	2017	bv1 sdg	5232	103.4	102.6	7.0	7.0	0.9	1.8	0.97
4	2018	bv1 sdg	3301	101.7	100.8	6.8	6.6	1.0	1.9	0.96
5	2019	bv1 sdg	1299	102.2	101.2	6.5	6.4	1.0	1.9	0.96
6	2020	bv1 sdg	11	.	.	.	.	.	.	.
7	2015	bv2 ldg	9078	103.0	101.4	7.1	7.3	1.6	2.5	0.94
8	2016	bv2 ldg	7300	103.3	101.6	6.9	7.2	1.7	2.4	0.94
9	2017	bv2 ldg	5232	103.9	102.2	7.1	7.5	1.8	2.4	0.95
10	2018	bv2 ldg	3301	102.4	100.6	6.9	7.3	1.8	2.5	0.94
11	2019	bv2 ldg	1299	102.6	100.7	6.8	7.3	1.9	2.5	0.94
12	2020	bv2 ldg	11	.	.	.	.	.	.	.
13	2015	bv3 csc	30651	102.1	102.7	6.7	6.8	-0.6	1.6	0.97
14	2016	bv3 csc	24744	101.0	101.8	6.7	6.8	-0.8	1.6	0.97
15	2017	bv3 csc	17458	101.3	102.2	6.4	6.6	-0.9	1.6	0.97
16	2018	bv3 csc	9564	99.6	100.6	6.2	6.3	-1.0	1.6	0.97
17	2019	bv3 csc	1379	99.1	100.3	6.0	6.2	-1.2	1.8	0.96
18	2020	bv3 csc	12	.	.	.	.	.	.	.
19	2015	bv4 fsc	30667	99.0	98.8	5.5	5.7	0.2	1.4	0.97
20	2016	bv4 fsc	24755	99.3	99.1	5.9	6.0	0.2	1.3	0.97
21	2017	bv4 fsc	17473	98.7	98.6	5.6	5.8	0.2	1.3	0.98
22	2018	bv4 fsc	9568	99.7	99.6	5.6	5.7	0.1	1.3	0.98
23	2019	bv4 fsc	1379	99.1	99.2	5.8	6.0	-0.1	1.3	0.98
24	2020	bv4 fsc	12	.	.	.	.	.	.	.
25	2015	bv5 cdg	30881	101.5	100.6	7.3	7.4	0.9	1.9	0.97
26	2016	bv5 cdg	25050	101.8	100.8	7.3	7.4	1.0	1.9	0.97
27	2017	bv5 cdg	17857	102.3	101.2	7.4	7.5	1.1	1.8	0.97
28	2018	bv5 cdg	10044	101.4	100.2	7.1	7.2	1.2	2.0	0.96
29	2019	bv5 cdg	1673	102.4	101.0	6.7	6.6	1.4	2.3	0.94
30	2020	bv5 cdg	12	.	.	.	.	.	.	.
31	2015	bv6 grw	30881	102.1	101.9	7.1	7.2	0.2	1.5	0.98
32	2016	bv6 grw	25050	101.7	101.5	7.1	7.2	0.2	1.5	0.98
33	2017	bv6 grw	17857	102.1	102.0	7.1	7.2	0.2	1.5	0.98
34	2018	bv6 grw	10044	100.7	100.5	6.8	6.8	0.2	1.6	0.97
35	2019	bv6 grw	1673	101.0	100.8	6.2	6.2	0.2	1.8	0.96
36	2020	bv6 grw	12	.	.	.	.	.	.	.

JER summery stastistics for SS and current breeding value for nordic AI bulls with more than 14 sons with phenotype, by birth year

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Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
1	2010	bv1 sdg	14	100.0	99.5	6.5	7.1	0.5	2.0	0.96
2	2011	bv1 sdg	8	.	.	.	.	.	.	.
3	2012	bv1 sdg	8	.	.	.	.	.	.	.
4	2013	bv1 sdg	10	101.9	101.2	5.0	5.5	0.7	1.2	0.98
5	2014	bv1 sdg	13	97.7	98.0	8.6	9.3	-0.3	1.4	0.99
6	2015	bv1 sdg	23	100.2	100.4	6.3	6.5	-0.2	0.7	0.99
7	2016	bv1 sdg	16	100.1	100.4	4.3	4.6	-0.4	1.5	0.94
8	2017	bv1 sdg	21	102.3	101.9	8.2	8.0	0.4	1.3	0.99
9	2018	bv1 sdg	8	.	.	.	.	.	.	.
10	2019	bv1 sdg	10	103.0	101.7	4.2	4.8	1.3	1.9	0.92
11	2010	bv2 ldg	14	100.0	99.5	6.5	7.1	0.5	2.0	0.96
12	2011	bv2 ldg	8	.	.	.	.	.	.	.
13	2012	bv2 ldg	8	.	.	.	.	.	.	.
14	2013	bv2 ldg	10	101.9	101.2	5.0	5.5	0.7	1.2	0.98
15	2014	bv2 ldg	13	97.7	98.0	8.6	9.3	-0.3	1.4	0.99
16	2015	bv2 ldg	23	100.2	100.4	6.3	6.5	-0.2	0.7	0.99
17	2016	bv2 ldg	16	100.1	100.4	4.3	4.6	-0.4	1.5	0.94
18	2017	bv2 ldg	21	102.3	101.9	8.2	8.0	0.4	1.3	0.99
19	2018	bv2 ldg	8	.	.	.	.	.	.	.
20	2019	bv2 ldg	10	103.0	101.7	4.2	4.8	1.3	1.9	0.92
21	2010	bv3 csc	14	100.7	101.1	5.7	5.2	-0.4	2.2	0.93
22	2011	bv3 csc	12	94.9	95.5	8.4	8.4	-0.6	1.6	0.98
23	2012	bv3 csc	8	.	.	.	.	.	.	.
24	2013	bv3 csc	10	101.1	101.3	7.6	7.2	-0.2	2.0	0.97
25	2014	bv3 csc	15	100.3	101.4	8.7	8.8	-1.1	2.0	0.97
26	2015	bv3 csc	23	96.8	98.7	8.2	8.3	-1.8	1.1	0.99
27	2016	bv3 csc	16	99.9	102.0	9.2	8.8	-2.1	1.6	0.99
28	2017	bv3 csc	22	96.8	98.5	11.6	11.2	-1.7	1.8	0.99
29	2018	bv3 csc	8	.	.	.	.	.	.	.
30	2019	bv3 csc	11	100.2	101.2	7.7	8.5	-1.0	2.5	0.96
31	2010	bv4 fsc	14	98.4	98.3	7.1	6.8	0.2	1.1	0.99
32	2011	bv4 fsc	12	102.0	101.8	7.5	7.2	0.1	1.2	0.99
33	2012	bv4 fsc	8	.	.	.	.	.	.	.
34	2013	bv4 fsc	10	97.2	97.6	8.3	8.5	-0.4	2.1	0.97
35	2014	bv4 fsc	15	98.7	98.9	7.2	7.8	-0.3	1.7	0.98
36	2015	bv4 fsc	23	102.0	101.1	6.9	7.0	0.9	1.4	0.98

**JER summery statstistics for SS and current breeding value for nordic AI bulls with more than 14 sons
with phenotype, by birth year**

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
37	2016	bv4 fsc	16	98.7	98.3	7.6	7.7	0.5	1.4	0.98
38	2017	bv4 fsc	22	103.5	102.5	5.9	6.0	1.0	1.8	0.95
39	2018	bv4 fsc	8	.	.	.	.	.	.	.
40	2019	bv4 fsc	11	103.2	102.4	5.8	5.1	0.9	2.2	0.93
41	2010	bv5 cdg	14	100.0	99.5	6.5	7.1	0.5	2.0	0.96
42	2011	bv5 cdg	12	94.6	94.3	8.3	9.5	0.2	1.9	0.99
43	2012	bv5 cdg	8	.	.	.	.	.	.	.
44	2013	bv5 cdg	10	101.9	101.2	5.0	5.5	0.7	1.2	0.98
45	2014	bv5 cdg	15	97.3	97.5	8.1	8.7	-0.2	1.6	0.98
46	2015	bv5 cdg	23	100.2	100.4	6.3	6.5	-0.2	0.7	0.99
47	2016	bv5 cdg	16	100.1	100.4	4.3	4.6	-0.4	1.5	0.94
48	2017	bv5 cdg	22	102.7	102.3	8.2	8.0	0.4	1.3	0.99
49	2018	bv5 cdg	8	.	.	.	.	.	.	.
50	2019	bv5 cdg	11	102.1	101.0	4.9	5.1	1.1	1.9	0.93
51	2010	bv6 grw	14	100.6	100.7	6.0	5.6	-0.1	2.3	0.92
52	2011	bv6 grw	12	93.8	94.1	9.2	9.6	-0.3	1.6	0.99
53	2012	bv6 grw	8	.	.	.	.	.	.	.
54	2013	bv6 grw	10	101.7	101.5	7.7	7.5	0.2	1.7	0.98
55	2014	bv6 grw	15	99.2	100.3	9.1	9.2	-1.1	1.9	0.98
56	2015	bv6 grw	23	97.6	99.1	7.6	7.7	-1.5	1.0	0.99
57	2016	bv6 grw	16	100.0	101.8	8.1	7.9	-1.8	1.6	0.98
58	2017	bv6 grw	22	98.5	99.6	11.6	11.3	-1.1	1.9	0.99
59	2018	bv6 grw	8	.	.	.	.	.	.	.
60	2019	bv6 grw	11	101.0	101.2	6.4	7.2	-0.2	2.6	0.94

JER summery statistics for SS and twostep breeding value for nordic AI bulls without offspring, by birth year

Obs	BYR	name	no	mean_ss	mean_two	std_ss	std_two	mean_dif	std_dif	corr_SS
1	2019	bv6 grw	23	100.1	100.9	5.7	6.5	-0.8	3.9	0.80
2	2020	bv6 grw	32	99.8	101.3	4.9	3.6	-1.6	3.7	0.65
3	2021	bv6 grw	40	98.8	99.5	5.4	6.0	-0.7	3.2	0.85
4	2022	bv6 grw	34	99.2	101.6	4.9	5.6	-2.4	3.3	0.81
5	2023	bv6 grw	1	.	.	.	.	.	.	.

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

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Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
1	2015	bv1 sdg	140	99.8	99.3	5.4	5.1	0.5	2.8	0.86
2	2016	bv1 sdg	109	99.5	99.3	4.7	4.3	0.2	2.6	0.83
3	2017	bv1 sdg	120	101.4	101.2	5.0	4.4	0.2	2.9	0.82
4	2018	bv1 sdg	112	99.8	99.6	4.3	3.9	0.2	2.4	0.84
5	2019	bv1 sdg	92	100.7	100.7	4.7	3.9	0.0	2.7	0.81
6	2020	bv1 sdg	2	.	.	.	.	.	.	.
7	2015	bv2 ldg	140	99.8	99.3	5.4	5.1	0.5	2.8	0.86
8	2016	bv2 ldg	109	99.5	99.3	4.7	4.3	0.2	2.6	0.83
9	2017	bv2 ldg	120	101.4	101.2	5.0	4.4	0.2	2.9	0.82
10	2018	bv2 ldg	112	99.8	99.6	4.3	3.9	0.2	2.4	0.84
11	2019	bv2 ldg	92	100.7	100.7	4.7	3.9	0.0	2.7	0.81
12	2020	bv2 ldg	2	.	.	.	.	.	.	.
13	2015	bv3 csc	145	98.0	98.7	5.9	4.8	-0.7	3.3	0.83
14	2016	bv3 csc	114	99.8	100.7	5.5	5.4	-0.8	3.2	0.83
15	2017	bv3 csc	124	97.7	99.1	5.9	5.0	-1.4	3.2	0.84
16	2018	bv3 csc	116	98.7	100.6	5.4	4.8	-1.9	3.4	0.78
17	2019	bv3 csc	93	98.9	101.0	6.8	5.7	-2.1	3.6	0.84
18	2020	bv3 csc	3	.	.	.	.	.	.	.
19	2015	bv4 fsc	145	100.8	100.7	4.9	4.4	0.1	2.2	0.89
20	2016	bv4 fsc	114	100.0	100.0	4.8	4.8	0.0	2.4	0.87
21	2017	bv4 fsc	124	102.1	101.1	4.6	4.4	1.0	2.2	0.88
22	2018	bv4 fsc	116	99.7	98.9	4.5	4.3	0.8	2.2	0.87
23	2019	bv4 fsc	93	101.3	100.5	4.6	4.1	0.8	2.3	0.87
24	2020	bv4 fsc	3	.	.	.	.	.	.	.
25	2015	bv5 cdg	145	99.7	99.3	5.5	5.1	0.4	2.8	0.87
26	2016	bv5 cdg	115	99.5	99.2	4.6	4.3	0.2	2.6	0.83
27	2017	bv5 cdg	123	101.3	101.1	5.0	4.4	0.2	2.9	0.82
28	2018	bv5 cdg	118	99.9	99.7	4.3	3.9	0.2	2.4	0.83
29	2019	bv5 cdg	93	100.7	100.6	4.7	3.9	0.0	2.7	0.81
30	2020	bv5 cdg	2	.	.	.	.	.	.	.
31	2015	bv6 grw	145	98.3	98.6	6.0	5.0	-0.4	3.3	0.84
32	2016	bv6 grw	115	99.7	100.2	5.2	5.2	-0.5	3.1	0.82
33	2017	bv6 grw	123	98.8	99.7	5.7	4.8	-0.9	3.2	0.82
34	2018	bv6 grw	118	98.8	100.3	5.0	4.5	-1.6	3.3	0.77
35	2019	bv6 grw	93	99.3	101.0	6.5	5.4	-1.7	3.4	0.85
36	2020	bv6 grw	2	.	.	.	.	.	.	.

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

Obs	BYR	name	no	mean_ss	mean_two	std_ss	std_two	mean_dif	std_dif	corr_SS
1	2015	bv6 grw	145	98.3	98.2	6.0	6.6	0.1	3.1	0.89
2	2016	bv6 grw	115	99.7	100.2	5.2	6.7	-0.5	3.2	0.89
3	2017	bv6 grw	123	98.8	99.9	5.7	6.0	-1.1	2.7	0.89
4	2018	bv6 grw	118	98.8	100.1	5.0	5.6	-1.4	3.3	0.81
5	2019	bv6 grw	93	99.3	100.4	6.5	6.7	-1.1	3.3	0.88
6	2020	bv6 grw	2	.	.	.	.	.	.	.

sum sta for SS and current breeding value for nongenotyped females with sons with phenotype, by birth year

11:34 Wednesday, September 20, 2023

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Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
1	2015	bv1 sdg	549	99.0	99.2	4.7	4.8	-0.2	1.5	0.95
2	2016	bv1 sdg	379	98.1	98.5	4.6	4.6	-0.4	1.5	0.95
3	2017	bv1 sdg	299	98.8	99.4	4.2	4.4	-0.6	1.5	0.94
4	2018	bv1 sdg	209	99.5	100.0	3.8	3.9	-0.5	1.5	0.92
5	2019	bv1 sdg	99	100.1	100.7	5.1	4.9	-0.6	1.5	0.96
6	2020	bv1 sdg	6	.	.	.	.	.	.	.
7	2015	bv2 ldg	549	99.0	99.2	4.7	4.8	-0.2	1.5	0.95
8	2016	bv2 ldg	379	98.1	98.5	4.6	4.6	-0.4	1.5	0.95
9	2017	bv2 ldg	299	98.8	99.4	4.2	4.4	-0.6	1.5	0.94
10	2018	bv2 ldg	209	99.5	100.0	3.8	3.9	-0.5	1.5	0.92
11	2019	bv2 ldg	99	100.1	100.7	5.1	4.9	-0.6	1.5	0.96
12	2020	bv2 ldg	6	.	.	.	.	.	.	.
13	2015	bv3 csc	605	100.0	99.7	5.2	5.1	0.3	2.4	0.89
14	2016	bv3 csc	408	100.7	100.6	5.3	5.4	0.0	2.4	0.90
15	2017	bv3 csc	326	99.4	99.7	5.0	5.0	-0.3	2.5	0.88
16	2018	bv3 csc	222	100.4	100.7	6.2	5.9	-0.4	2.6	0.91
17	2019	bv3 csc	105	100.1	100.3	5.7	5.4	-0.2	2.3	0.91
18	2020	bv3 csc	6	.	.	.	.	.	.	.
19	2015	bv4 fsc	605	100.2	100.3	4.6	4.4	-0.1	1.6	0.94
20	2016	bv4 fsc	408	99.0	99.1	4.5	4.5	-0.1	1.6	0.94
21	2017	bv4 fsc	326	100.3	100.3	4.4	4.4	-0.1	1.8	0.92
22	2018	bv4 fsc	222	99.2	99.3	3.9	3.7	-0.1	1.5	0.92
23	2019	bv4 fsc	105	100.7	100.8	3.9	3.9	-0.1	1.7	0.90
24	2020	bv4 fsc	6	.	.	.	.	.	.	.
25	2015	bv5 cdg	605	98.9	99.0	4.8	4.9	-0.2	1.5	0.95
26	2016	bv5 cdg	410	98.2	98.6	4.6	4.6	-0.4	1.5	0.95
27	2017	bv5 cdg	327	98.8	99.3	4.1	4.3	-0.5	1.5	0.94
28	2018	bv5 cdg	224	99.6	100.0	3.7	3.9	-0.4	1.5	0.92
29	2019	bv5 cdg	105	100.0	100.6	5.0	4.8	-0.5	1.4	0.96
30	2020	bv5 cdg	6	.	.	.	.	.	.	.
31	2015	bv6 grw	605	99.6	99.4	4.9	4.9	0.2	2.2	0.90
32	2016	bv6 grw	410	99.9	100.0	5.2	5.3	-0.1	2.1	0.92
33	2017	bv6 grw	327	99.1	99.5	4.5	4.6	-0.5	2.1	0.89
34	2018	bv6 grw	224	100.1	100.6	5.5	5.4	-0.5	2.2	0.92
35	2019	bv6 grw	105	100.1	100.4	5.7	5.6	-0.4	1.9	0.94
36	2020	bv6 grw	6	.	.	.	.	.	.	.

HOL summery stastistics for SS and current reliability for nordic AI bulls with more than 14 sons with phenotype, by birth year

07:54 Thursday, September 21, 2023

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Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
1	2010	bv1 sdg	191	93.5	92.3	2.8	3.6	1.2	0.9	0.99
2	2011	bv1 sdg	154	94.4	93.5	2.1	2.7	1.0	0.7	0.98
3	2012	bv1 sdg	170	94.7	93.7	2.9	4.1	1.0	1.4	0.97
4	2013	bv1 sdg	150	94.8	93.9	2.8	3.4	0.9	0.9	0.98
5	2014	bv1 sdg	110	96.0	95.4	3.2	3.9	0.6	0.8	0.99
6	2015	bv1 sdg	82	97.0	96.8	2.2	2.5	0.2	0.4	0.99
7	2016	bv1 sdg	66	96.5	96.3	3.1	3.7	0.1	0.8	0.99
8	2017	bv1 sdg	66	96.6	96.6	3.0	3.5	0.0	0.8	0.98
9	2018	bv1 sdg	77	95.3	95.2	3.6	3.9	0.1	0.7	0.99
10	2019	bv1 sdg	40	90.6	88.6	7.4	10.8	2.0	3.6	0.99
11	2010	bv2 ldg	191	92.2	90.4	3.5	4.6	1.8	1.3	0.99
12	2011	bv2 ldg	154	93.2	91.7	2.8	3.8	1.5	1.2	0.98
13	2012	bv2 ldg	170	93.6	92.1	3.7	5.2	1.5	1.8	0.98
14	2013	bv2 ldg	150	93.8	92.6	3.3	4.4	1.2	1.3	0.98
15	2014	bv2 ldg	110	94.8	93.9	3.8	4.7	0.9	1.1	0.99
16	2015	bv2 ldg	82	96.1	95.8	2.8	3.2	0.3	0.6	0.99
17	2016	bv2 ldg	66	95.4	95.1	3.6	4.5	0.3	1.0	0.99
18	2017	bv2 ldg	66	95.3	95.1	3.6	4.2	0.2	0.9	0.99
19	2018	bv2 ldg	77	93.2	92.7	3.7	4.3	0.5	0.8	0.99
20	2019	bv2 ldg	40	87.8	84.9	6.8	10.2	2.9	3.6	0.99
21	2010	bv3 csc	193	93.8	92.8	2.7	3.4	1.0	0.8	0.99
22	2011	bv3 csc	155	94.7	93.9	2.7	3.0	0.7	0.7	0.98
23	2012	bv3 csc	171	95.0	94.3	2.9	4.0	0.8	1.3	0.98
24	2013	bv3 csc	151	95.1	94.5	2.7	3.3	0.6	0.8	0.99
25	2014	bv3 csc	114	95.8	95.3	3.6	4.5	0.5	1.1	0.99
26	2015	bv3 csc	83	97.0	96.8	2.9	3.9	0.2	1.3	0.97
27	2016	bv3 csc	66	96.6	96.6	3.0	3.6	0.0	0.8	0.99
28	2017	bv3 csc	66	96.7	96.8	3.0	3.3	-0.1	0.7	0.98
29	2018	bv3 csc	77	95.3	95.3	3.5	3.8	0.0	0.7	0.99
30	2019	bv3 csc	40	90.6	88.9	7.4	10.4	1.7	3.3	0.99
31	2010	bv4 fsc	193	91.3	88.9	3.9	5.2	2.4	1.4	0.99
32	2011	bv4 fsc	155	92.3	90.5	3.6	4.5	1.8	1.2	0.98
33	2012	bv4 fsc	171	93.0	91.1	4.0	5.8	1.8	2.0	0.98
34	2013	bv4 fsc	151	93.1	91.4	3.8	5.0	1.6	1.4	0.99
35	2014	bv4 fsc	114	94.2	93.0	4.9	6.6	1.2	1.9	0.99
36	2015	bv4 fsc	83	95.8	95.3	3.9	5.5	0.6	1.8	0.98

HOL summery stastistics for SS and current reliability for nordic AI bulls with more than 14 sons with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
37	2016	bv4 fsc	66	95.3	95.0	4.2	5.3	0.4	1.3	0.99
38	2017	bv4 fsc	66	95.3	95.0	4.2	5.1	0.2	1.1	0.99
39	2018	bv4 fsc	77	93.3	92.9	5.0	5.9	0.4	1.2	0.99
40	2019	bv4 fsc	40	87.5	84.2	9.1	13.4	3.3	4.6	0.99
41	2010	bv5 cdg	193	93.4	92.1	2.8	3.8	1.3	1.5	0.94
42	2011	bv5 cdg	155	94.3	93.3	2.7	3.3	1.0	1.3	0.92
43	2012	bv5 cdg	171	94.7	93.6	3.0	4.4	1.0	1.9	0.94
44	2013	bv5 cdg	151	94.8	94.0	2.8	3.6	0.8	1.4	0.94
45	2014	bv5 cdg	114	95.7	94.9	3.6	4.7	0.7	1.4	0.98
46	2015	bv5 cdg	83	96.8	96.6	2.9	4.2	0.2	1.6	0.96
47	2016	bv5 cdg	66	96.5	96.3	3.1	3.9	0.2	1.2	0.97
48	2017	bv5 cdg	66	96.6	96.5	3.0	3.6	0.1	0.9	0.97
49	2018	bv5 cdg	77	95.3	94.8	3.6	4.0	0.5	0.9	0.98
50	2019	bv5 cdg	40	90.6	87.7	7.4	10.7	2.9	3.6	0.99
51	2010	bv6 grw	193	93.4	94.3	2.8	2.7	-0.9	0.9	0.95
52	2011	bv6 grw	155	94.3	95.2	2.7	2.4	-0.9	0.9	0.95
53	2012	bv6 grw	171	94.7	95.4	3.0	3.3	-0.7	1.2	0.93
54	2013	bv6 grw	151	94.8	95.7	2.8	2.5	-0.9	0.9	0.95
55	2014	bv6 grw	114	95.7	96.3	3.6	3.6	-0.6	0.9	0.97
56	2015	bv6 grw	83	96.8	97.4	2.9	3.4	-0.6	1.3	0.93
57	2016	bv6 grw	66	96.5	97.3	3.1	3.0	-0.8	0.9	0.96
58	2017	bv6 grw	66	96.6	97.3	3.0	2.6	-0.7	0.8	0.97
59	2018	bv6 grw	77	95.3	96.3	3.6	2.9	-1.0	0.9	0.98
60	2019	bv6 grw	40	90.6	90.7	7.4	9.0	-0.1	2.3	0.98

HOL summery stastistics for SS and twostep reliability for nordic AI bulls without offspring, by birth year

Obs	BYR	name	no	mean_ss	mean_two	std_ss	std_two	mean_dif	std_dif	corr_SS
1	2019	bv6 grw	16	62.6	76.9	1.7	1.2	-14.4	0.7	0.93
2	2020	bv6 grw	68	61.6	76.2	1.9	1.0	-14.6	1.2	0.84
3	2021	bv6 grw	59	59.6	75.2	3.5	1.8	-15.3	1.0	0.96
4	2022	bv6 grw	57	53.4	71.0	2.4	1.5	-17.6	1.0	0.95
5	2023	bv6 grw	1	.	.	.	.	.	.	.

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
1	2015	bv1 sdg	3742	63.7	34.8	2.7	4.3	28.9	3.7	0.51
2	2016	bv1 sdg	5036	63.4	34.5	2.5	4.5	28.9	3.6	0.61
3	2017	bv1 sdg	6238	63.0	33.8	2.2	4.2	29.2	3.6	0.51
4	2018	bv1 sdg	6888	62.7	32.9	2.2	4.4	29.8	3.8	0.50
5	2019	bv1 sdg	3556	62.6	30.3	2.1	5.3	32.3	5.0	0.33
6	2020	bv1 sdg	47	62.5	25.8	2.0	6.6	36.7	6.0	0.41
7	2015	bv2 ldg	3742	62.3	34.4	2.7	4.4	28.0	3.8	0.51
8	2016	bv2 ldg	5036	62.0	34.0	2.6	4.5	28.0	3.6	0.61
9	2017	bv2 ldg	6238	61.6	33.3	2.3	4.2	28.3	3.6	0.52
10	2018	bv2 ldg	6888	61.3	32.4	2.3	4.4	28.9	3.8	0.51
11	2019	bv2 ldg	3556	61.2	29.8	2.2	5.5	31.4	5.1	0.34
12	2020	bv2 ldg	47	61.1	25.1	2.1	6.6	36.0	6.0	0.45
13	2015	bv3 csc	5897	63.1	35.1	2.7	4.1	28.0	3.7	0.48
14	2016	bv3 csc	7886	62.9	34.7	2.5	4.2	28.1	3.5	0.57
15	2017	bv3 csc	9916	62.4	34.0	2.4	3.9	28.4	3.6	0.46
16	2018	bv3 csc	9653	62.2	33.0	2.3	4.3	29.2	3.9	0.45
17	2019	bv3 csc	3626	62.4	30.8	2.1	5.3	31.6	5.0	0.33
18	2020	bv3 csc	47	62.3	26.5	1.9	6.7	35.9	6.1	0.41
19	2015	bv4 fsc	5900	60.3	32.0	2.7	4.3	28.3	3.9	0.46
20	2016	bv4 fsc	7891	60.1	31.7	2.5	4.5	28.5	3.7	0.56
21	2017	bv4 fsc	9920	59.8	31.1	2.4	4.4	28.7	3.9	0.47
22	2018	bv4 fsc	9656	59.7	30.0	2.3	4.9	29.6	4.3	0.48
23	2019	bv4 fsc	3626	59.9	27.4	2.2	5.9	32.5	5.5	0.38
24	2020	bv4 fsc	47	59.7	22.1	2.1	6.7	37.6	6.0	0.46
25	2015	bv5 cdg	5983	63.3	34.6	2.7	4.1	28.6	3.7	0.48
26	2016	bv5 cdg	8128	63.0	34.2	2.5	4.3	28.8	3.5	0.57
27	2017	bv5 cdg	10610	62.5	33.4	2.4	4.1	29.1	3.7	0.47
28	2018	bv5 cdg	11277	62.2	31.8	2.4	4.8	30.3	4.2	0.50
29	2019	bv5 cdg	5938	61.8	28.2	2.3	6.3	33.7	5.7	0.44
30	2020	bv5 cdg	53	62.5	25.7	1.9	6.2	36.8	5.7	0.40
31	2015	bv6 grw	5983	63.3	36.3	2.7	4.2	27.0	3.7	0.51
32	2016	bv6 grw	8128	63.0	35.8	2.5	4.3	27.2	3.5	0.59
33	2017	bv6 grw	10610	62.5	34.8	2.4	4.1	27.7	3.6	0.50
34	2018	bv6 grw	11277	62.2	33.2	2.4	4.8	28.9	4.1	0.52
35	2019	bv6 grw	5938	61.8	29.6	2.3	6.3	32.2	5.6	0.48
36	2020	bv6 grw	53	62.5	27.8	1.9	6.1	34.6	5.5	0.43

sum sta for SS and twostep reliability for genotyped females with sons with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_two	std_ss	std_two	mean_dif	std_dif	corr_SS
1	2015	bv6 grw	5983	63.3	79.8	2.7	1.7	-16.5	1.4	0.84
2	2016	bv6 grw	8128	63.0	79.6	2.5	1.6	-16.6	1.4	0.83
3	2017	bv6 grw	10610	62.5	79.4	2.4	1.7	-16.9	1.3	0.85
4	2018	bv6 grw	11277	62.2	79.3	2.4	1.7	-17.1	1.3	0.84
5	2019	bv6 grw	5938	61.8	79.3	2.3	1.6	-17.4	1.4	0.75
6	2020	bv6 grw	53	62.5	79.4	1.9	1.3	-17.0	1.5	0.62

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
1	2015	bv1 sdg	66597	34.0	33.7	5.7	5.1	0.3	5.9	0.41
2	2016	bv1 sdg	60483	33.9	33.6	5.6	4.9	0.3	5.9	0.37
3	2017	bv1 sdg	47107	33.4	32.8	5.3	5.0	0.6	6.0	0.33
4	2018	bv1 sdg	34147	32.7	31.7	4.7	5.2	0.9	6.0	0.28
5	2019	bv1 sdg	15496	32.0	28.9	4.2	6.2	3.1	6.8	0.19
6	2020	bv1 sdg	204	31.8	24.0	3.8	7.2	7.8	6.7	0.38
7	2015	bv2 ldg	66597	33.6	33.2	5.6	5.2	0.4	5.9	0.41
8	2016	bv2 ldg	60483	33.6	33.1	5.6	5.0	0.5	5.9	0.37
9	2017	bv2 ldg	47107	33.1	32.3	5.3	5.1	0.8	6.0	0.33
10	2018	bv2 ldg	34147	32.4	31.2	4.7	5.3	1.2	6.0	0.28
11	2019	bv2 ldg	15496	31.8	28.4	4.2	6.3	3.4	6.8	0.21
12	2020	bv2 ldg	204	31.5	23.3	3.9	7.2	8.2	6.6	0.41
13	2015	bv3 csc	97508	33.9	33.8	5.8	5.2	0.1	5.9	0.43
14	2016	bv3 csc	88325	33.7	33.6	5.7	5.1	0.2	5.9	0.40
15	2017	bv3 csc	67858	33.2	32.8	5.4	5.2	0.4	5.9	0.37
16	2018	bv3 csc	45601	32.6	31.6	4.7	5.5	1.0	5.9	0.33
17	2019	bv3 csc	15678	32.1	29.4	4.2	6.1	2.7	6.7	0.20
18	2020	bv3 csc	204	31.9	24.5	3.8	7.1	7.3	6.6	0.39
19	2015	bv4 fsc	97549	31.5	30.6	5.9	5.7	0.9	6.4	0.40
20	2016	bv4 fsc	88368	31.5	30.4	5.8	5.6	1.1	6.4	0.37
21	2017	bv4 fsc	67888	31.1	29.6	5.6	5.8	1.5	6.5	0.36
22	2018	bv4 fsc	45619	30.6	28.3	4.9	6.3	2.3	6.6	0.33
23	2019	bv4 fsc	15679	30.2	25.8	4.4	6.8	4.4	7.3	0.21
24	2020	bv4 fsc	204	30.0	20.4	4.1	7.3	9.6	7.0	0.37
25	2015	bv5 cdg	97945	33.9	33.4	5.8	5.2	0.5	5.9	0.43
26	2016	bv5 cdg	88921	33.8	33.2	5.7	5.1	0.6	6.0	0.39
27	2017	bv5 cdg	68572	33.3	32.4	5.4	5.2	0.9	6.1	0.35
28	2018	bv5 cdg	46359	32.7	31.1	4.7	5.6	1.6	6.1	0.30
29	2019	bv5 cdg	16096	32.1	28.6	4.3	6.2	3.5	6.9	0.17
30	2020	bv5 cdg	204	31.8	23.7	3.8	7.2	8.1	6.7	0.38
31	2015	bv6 grw	97945	33.9	35.1	5.8	5.1	-1.2	5.8	0.44
32	2016	bv6 grw	88921	33.8	34.8	5.7	5.0	-1.0	5.9	0.40
33	2017	bv6 grw	68572	33.3	34.0	5.4	5.0	-0.7	5.9	0.37
34	2018	bv6 grw	46359	32.7	32.8	4.7	5.3	-0.1	5.9	0.31
35	2019	bv6 grw	16096	32.1	30.6	4.3	5.9	1.6	6.7	0.16
36	2020	bv6 grw	204	31.8	26.0	3.8	6.8	5.7	6.4	0.40

RDC summery stastistics for SS and current reliability for nordic AI bulls with more than 14 sons with phenotype, by birth year

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Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
1	2010	bv1 sdg	149	90.2	89.3	3.2	3.7	0.9	0.8	0.99
2	2011	bv1 sdg	159	90.9	90.1	3.8	4.4	0.8	0.9	0.99
3	2012	bv1 sdg	150	90.8	90.1	4.5	5.2	0.7	1.0	0.99
4	2013	bv1 sdg	103	91.9	91.3	5.2	5.7	0.6	0.7	0.99
5	2014	bv1 sdg	78	94.0	93.8	3.5	3.6	0.2	0.5	0.99
6	2015	bv1 sdg	65	95.0	95.0	3.0	3.0	0.0	0.3	1.00
7	2016	bv1 sdg	68	94.1	94.3	3.3	3.5	-0.1	0.6	0.99
8	2017	bv1 sdg	65	93.8	94.2	3.8	3.8	-0.3	0.6	0.99
9	2018	bv1 sdg	51	91.1	91.2	6.6	7.3	-0.1	1.0	0.99
10	2019	bv1 sdg	27	86.5	85.6	7.8	9.8	0.9	2.4	0.99
11	2010	bv2 ldg	149	90.7	89.5	4.1	5.2	1.2	1.2	0.99
12	2011	bv2 ldg	159	91.5	90.5	4.7	5.8	1.0	1.3	0.99
13	2012	bv2 ldg	150	91.3	90.3	5.1	6.3	1.0	1.4	0.99
14	2013	bv2 ldg	103	92.4	91.6	5.7	6.7	0.8	1.2	1.00
15	2014	bv2 ldg	78	94.8	94.6	3.6	4.1	0.2	0.6	0.99
16	2015	bv2 ldg	65	95.7	95.7	3.3	3.6	0.0	0.6	0.99
17	2016	bv2 ldg	68	94.7	94.9	3.5	3.9	-0.1	0.7	0.99
18	2017	bv2 ldg	65	94.3	94.4	4.1	4.4	-0.2	0.7	0.99
19	2018	bv2 ldg	51	90.0	89.5	6.7	8.0	0.5	1.5	1.00
20	2019	bv2 ldg	27	84.0	81.5	6.8	9.0	2.4	2.6	0.98
21	2010	bv3 csc	165	90.9	90.1	3.9	4.6	0.7	1.1	0.98
22	2011	bv3 csc	167	91.5	90.9	4.6	5.4	0.6	1.1	0.99
23	2012	bv3 csc	170	91.4	90.7	5.1	6.1	0.7	1.2	0.99
24	2013	bv3 csc	123	92.2	91.8	5.6	6.1	0.4	0.8	1.00
25	2014	bv3 csc	85	94.5	94.4	4.3	5.1	0.1	1.2	0.98
26	2015	bv3 csc	71	95.7	95.9	3.1	3.1	-0.1	0.4	0.99
27	2016	bv3 csc	70	95.0	95.3	3.5	3.6	-0.3	0.6	0.99
28	2017	bv3 csc	66	94.5	94.8	4.2	4.1	-0.4	0.5	0.99
29	2018	bv3 csc	51	90.6	90.7	7.3	8.2	-0.1	1.3	0.99
30	2019	bv3 csc	27	84.6	83.6	8.5	10.8	1.1	2.7	0.99
31	2010	bv4 fsc	165	89.5	87.9	4.4	5.6	1.6	1.5	0.99
32	2011	bv4 fsc	167	90.3	88.9	5.1	6.5	1.4	1.6	0.99
33	2012	bv4 fsc	170	90.1	88.7	5.6	7.2	1.4	1.8	0.99
34	2013	bv4 fsc	123	91.0	90.0	6.2	7.3	1.0	1.3	1.00
35	2014	bv4 fsc	85	93.6	93.1	4.9	6.0	0.5	1.4	0.99
36	2015	bv4 fsc	71	94.9	94.9	3.7	3.9	0.0	0.5	0.99

RDC summery stastistics for SS and current reliability for nordic AI bulls with more than 14 sons with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
37	2016	bv4 fsc	70	94.1	94.2	4.1	4.3	-0.1	0.7	0.99
38	2017	bv4 fsc	66	93.5	93.7	4.7	5.0	-0.2	0.6	0.99
39	2018	bv4 fsc	51	89.2	88.7	8.0	9.6	0.5	1.8	0.99
40	2019	bv4 fsc	27	82.8	80.4	9.1	12.2	2.4	3.4	0.99
41	2010	bv5 cdg	165	90.1	90.2	3.1	4.1	-0.2	1.5	0.94
42	2011	bv5 cdg	167	90.8	91.0	3.7	4.8	-0.3	1.6	0.96
43	2012	bv5 cdg	170	90.6	90.8	4.4	5.5	-0.3	1.7	0.97
44	2013	bv5 cdg	123	91.4	91.8	5.0	5.6	-0.5	1.3	0.98
45	2014	bv5 cdg	85	93.4	94.2	4.3	5.0	-0.8	1.4	0.97
46	2015	bv5 cdg	71	94.6	95.7	3.2	3.0	-1.0	0.9	0.96
47	2016	bv5 cdg	70	94.0	95.2	3.4	3.3	-1.2	1.0	0.96
48	2017	bv5 cdg	66	93.7	94.9	3.8	3.8	-1.2	0.9	0.97
49	2018	bv5 cdg	52	90.8	90.8	7.0	8.3	-0.1	1.8	0.99
50	2019	bv5 cdg	30	84.8	82.3	9.1	11.8	2.5	3.0	0.99
51	2010	bv6 grw	165	90.1	92.1	3.1	3.6	-2.1	1.5	0.91
52	2011	bv6 grw	167	90.8	92.8	3.7	4.2	-2.0	1.4	0.94
53	2012	bv6 grw	170	90.6	92.6	4.4	4.9	-2.0	1.6	0.95
54	2013	bv6 grw	123	91.4	93.4	5.0	4.9	-2.1	1.4	0.96
55	2014	bv6 grw	85	93.4	95.4	4.3	4.3	-2.0	1.4	0.95
56	2015	bv6 grw	71	94.6	96.7	3.2	2.4	-2.0	1.3	0.93
57	2016	bv6 grw	70	94.0	96.2	3.4	2.8	-2.2	1.3	0.93
58	2017	bv6 grw	66	93.7	96.0	3.8	3.1	-2.3	1.3	0.95
59	2018	bv6 grw	52	90.8	92.3	7.0	7.5	-1.5	1.6	0.98
60	2019	bv6 grw	30	84.8	84.5	9.1	11.3	0.3	2.7	0.99

RDC summery stastistics for SS and twostep reliability for nordic AI bulls without offspring, by birth year

Obs	BYR	name	no	mean_ss	mean_two	std_ss	std_two	mean_dif	std_dif	corr_SS
1	2019	bv6 grw	31	54.9	63.2	2.9	1.3	-8.2	2.2	0.68
2	2020	bv6 grw	73	55.3	63.0	2.8	1.5	-7.7	2.3	0.59
3	2021	bv6 grw	72	51.9	60.8	3.4	2.8	-8.9	1.4	0.92
4	2022	bv6 grw	70	44.2	54.5	2.6	2.1	-10.3	0.8	0.96
5	2023	bv6 grw	6	.	.	.	.	.	.	.

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
1	2015	bv1 sdg	1788	56.9	35.2	3.1	4.3	21.7	3.5	0.61
2	2016	bv1 sdg	2074	56.6	35.1	2.8	3.5	21.5	3.0	0.59
3	2017	bv1 sdg	2170	56.2	34.5	2.6	3.5	21.8	3.2	0.47
4	2018	bv1 sdg	1782	55.9	32.7	2.8	4.1	23.1	4.1	0.35
5	2019	bv1 sdg	873	55.8	27.5	2.1	5.4	28.4	5.3	0.27
6	2020	bv1 sdg	11	.	.	.	.	.	.	.
7	2015	bv2 ldg	1788	57.6	34.9	3.1	4.3	22.7	3.5	0.59
8	2016	bv2 ldg	2074	57.3	34.7	2.8	3.5	22.5	2.9	0.57
9	2017	bv2 ldg	2170	56.9	34.1	2.5	3.4	22.8	3.2	0.46
10	2018	bv2 ldg	1782	56.6	32.3	2.8	4.1	24.3	4.1	0.35
11	2019	bv2 ldg	873	56.5	26.8	2.1	5.5	29.7	5.3	0.26
12	2020	bv2 ldg	11	.	.	.	.	.	.	.
13	2015	bv3 csc	4517	56.3	33.9	2.8	4.0	22.4	3.4	0.56
14	2016	bv3 csc	5687	56.0	33.6	2.5	3.4	22.4	3.0	0.53
15	2017	bv3 csc	5653	55.5	32.9	2.3	3.4	22.7	3.2	0.43
16	2018	bv3 csc	4269	55.2	31.3	2.6	4.1	24.0	4.1	0.32
17	2019	bv3 csc	913	54.9	26.2	2.1	5.6	28.7	5.5	0.24
18	2020	bv3 csc	11	.	.	.	.	.	.	.
19	2015	bv4 fsc	4522	55.5	31.9	2.7	4.2	23.6	3.5	0.57
20	2016	bv4 fsc	5694	55.2	31.5	2.4	3.6	23.6	3.1	0.52
21	2017	bv4 fsc	5658	54.8	30.9	2.3	3.6	23.9	3.4	0.42
22	2018	bv4 fsc	4271	54.5	29.1	2.5	4.6	25.4	4.4	0.33
23	2019	bv4 fsc	913	54.2	23.3	2.1	5.8	30.9	5.7	0.25
24	2020	bv4 fsc	11	.	.	.	.	.	.	.
25	2015	bv5 cdg	4588	56.7	34.1	2.8	4.2	22.6	3.3	0.61
26	2016	bv5 cdg	5926	56.3	33.5	2.6	3.7	22.8	3.0	0.58
27	2017	bv5 cdg	6162	55.8	32.7	2.4	3.8	23.2	3.3	0.52
28	2018	bv5 cdg	5527	55.4	30.4	2.7	4.9	25.0	4.4	0.45
29	2019	bv5 cdg	2655	54.7	23.3	2.4	7.1	31.3	6.5	0.41
30	2020	bv5 cdg	14	.	.	.	.	.	.	.
31	2015	bv6 grw	4588	56.7	35.2	2.8	4.2	21.5	3.3	0.61
32	2016	bv6 grw	5926	56.3	34.6	2.6	3.7	21.6	3.0	0.58
33	2017	bv6 grw	6162	55.8	33.7	2.4	3.8	22.1	3.2	0.53
34	2018	bv6 grw	5527	55.4	31.4	2.7	4.8	24.0	4.3	0.46
35	2019	bv6 grw	2655	54.7	24.1	2.4	7.2	30.5	6.5	0.42
36	2020	bv6 grw	14	.	.	.	.	.	.	.

sum sta for SS and twostep reliability for genotyped females with sons with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_two	std_ss	std_two	mean_dif	std_dif	corr_SS
1	2015	bv6 grw	4588	56.7	65.5	2.8	3.0	-8.8	2.1	0.74
2	2016	bv6 grw	5926	56.3	64.9	2.6	2.8	-8.6	1.9	0.74
3	2017	bv6 grw	6162	55.8	64.2	2.4	2.7	-8.3	1.7	0.78
4	2018	bv6 grw	5527	55.4	63.5	2.7	2.5	-8.1	1.4	0.85
5	2019	bv6 grw	2655	54.7	63.1	2.4	2.1	-8.5	1.4	0.80
6	2020	bv6 grw	14	.	.	.	.	.	.	.

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
1	2015	bv1 sdg	9076	36.5	34.1	5.5	5.0	2.4	5.6	0.44
2	2016	bv1 sdg	7300	36.2	34.1	5.4	4.5	2.1	5.1	0.47
3	2017	bv1 sdg	5232	35.4	33.2	4.6	4.4	2.2	4.7	0.46
4	2018	bv1 sdg	3301	34.8	31.6	4.5	4.7	3.2	5.0	0.41
5	2019	bv1 sdg	1299	34.0	27.2	4.0	5.6	6.8	5.9	0.30
6	2020	bv1 sdg	11	.	.	.	.	.	.	.
7	2015	bv2 ldg	9076	36.2	33.7	5.5	5.0	2.5	5.7	0.42
8	2016	bv2 ldg	7300	35.9	33.8	5.4	4.5	2.1	5.2	0.46
9	2017	bv2 ldg	5232	35.0	32.8	4.7	4.5	2.2	4.8	0.45
10	2018	bv2 ldg	3301	34.5	31.2	4.6	4.8	3.3	5.1	0.41
11	2019	bv2 ldg	1299	33.7	26.7	4.1	5.7	7.0	6.0	0.29
12	2020	bv2 ldg	11	.	.	.	.	.	.	.
13	2015	bv3 csc	30650	34.4	32.5	5.3	5.2	1.9	5.6	0.43
14	2016	bv3 csc	24743	34.1	32.5	5.1	4.8	1.6	5.3	0.44
15	2017	bv3 csc	17456	33.5	31.5	4.6	4.8	2.0	4.9	0.46
16	2018	bv3 csc	9564	33.2	30.2	4.2	5.1	3.0	5.1	0.43
17	2019	bv3 csc	1379	32.8	26.0	4.1	5.9	6.8	6.1	0.31
18	2020	bv3 csc	12	.	.	.	.	.	.	.
19	2015	bv4 fsc	30666	33.6	30.4	5.4	5.6	3.3	6.0	0.40
20	2016	bv4 fsc	24754	33.3	30.4	5.2	5.1	2.9	5.5	0.43
21	2017	bv4 fsc	17471	32.8	29.4	4.7	5.2	3.4	5.2	0.44
22	2018	bv4 fsc	9568	32.5	28.0	4.3	5.6	4.5	5.5	0.42
23	2019	bv4 fsc	1379	32.2	23.2	4.2	6.2	8.9	6.4	0.30
24	2020	bv4 fsc	12	.	.	.	.	.	.	.
25	2015	bv5 cdg	30879	34.9	32.6	5.5	5.3	2.3	5.6	0.46
26	2016	bv5 cdg	25049	34.6	32.5	5.3	4.9	2.0	5.3	0.46
27	2017	bv5 cdg	17855	34.0	31.6	4.7	4.9	2.4	5.0	0.46
28	2018	bv5 cdg	10044	33.8	30.2	4.3	5.2	3.5	5.2	0.42
29	2019	bv5 cdg	1673	34.4	26.1	3.9	6.3	8.3	6.9	0.17
30	2020	bv5 cdg	12	.	.	.	.	.	.	.
31	2015	bv6 grw	30879	34.9	33.9	5.5	5.1	1.0	5.5	0.47
32	2016	bv6 grw	25049	34.6	33.7	5.3	4.8	0.8	5.2	0.47
33	2017	bv6 grw	17855	34.0	32.8	4.7	4.7	1.2	4.9	0.47
34	2018	bv6 grw	10044	33.8	31.4	4.3	4.9	2.4	5.1	0.41
35	2019	bv6 grw	1673	34.4	27.2	3.9	6.3	7.3	6.9	0.16
36	2020	bv6 grw	12	.	.	.	.	.	.	.

JER summery stastistics for SS and current reliability for nordic AI bulls with more than 14 sons with phenotype, by birth year

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Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
1	2010	bv1 sdg	14	66.6	66.6	5.8	6.4	0.0	1.3	0.98
2	2011	bv1 sdg	8	.	.	.	.	.	.	.
3	2012	bv1 sdg	8	.	.	.	.	.	.	.
4	2013	bv1 sdg	10	71.2	71.5	8.7	9.0	-0.3	1.3	0.99
5	2014	bv1 sdg	13	73.2	73.2	5.1	5.3	0.0	1.7	0.94
6	2015	bv1 sdg	23	73.2	75.1	9.6	9.2	-1.9	1.4	0.99
7	2016	bv1 sdg	16	67.9	70.1	9.2	8.6	-2.1	1.8	0.98
8	2017	bv1 sdg	21	67.3	70.4	6.8	7.3	-3.1	1.6	0.98
9	2018	bv1 sdg	8	.	.	.	.	.	.	.
10	2019	bv1 sdg	10	59.7	63.2	7.1	7.3	-3.5	1.3	0.98
11	2010	bv2 ldg	14	66.6	66.6	5.8	6.4	0.0	1.3	0.98
12	2011	bv2 ldg	8	.	.	.	.	.	.	.
13	2012	bv2 ldg	8	.	.	.	.	.	.	.
14	2013	bv2 ldg	10	71.2	71.5	8.7	9.0	-0.3	1.3	0.99
15	2014	bv2 ldg	13	73.2	73.2	5.1	5.3	0.0	1.7	0.94
16	2015	bv2 ldg	23	73.2	75.1	9.6	9.2	-1.9	1.4	0.99
17	2016	bv2 ldg	16	67.9	70.1	9.2	8.6	-2.1	1.8	0.98
18	2017	bv2 ldg	21	67.3	70.4	6.8	7.3	-3.1	1.6	0.98
19	2018	bv2 ldg	8	.	.	.	.	.	.	.
20	2019	bv2 ldg	10	59.7	63.2	7.1	7.3	-3.5	1.3	0.98
21	2010	bv3 csc	14	60.3	60.7	5.9	6.7	-0.4	1.7	0.97
22	2011	bv3 csc	12	55.9	55.8	5.1	5.3	0.1	1.2	0.98
23	2012	bv3 csc	8	.	.	.	.	.	.	.
24	2013	bv3 csc	10	65.3	66.8	9.5	10.5	-1.5	1.3	1.00
25	2014	bv3 csc	15	64.9	66.1	7.9	8.3	-1.1	1.6	0.98
26	2015	bv3 csc	23	67.3	70.1	10.3	10.6	-2.8	1.5	0.99
27	2016	bv3 csc	16	61.5	63.8	9.6	9.5	-2.3	1.7	0.98
28	2017	bv3 csc	22	60.1	63.7	7.8	8.3	-3.5	1.7	0.98
29	2018	bv3 csc	8	.	.	.	.	.	.	.
30	2019	bv3 csc	11	52.3	55.5	6.8	7.3	-3.3	1.3	0.98
31	2010	bv4 fsc	14	56.0	55.4	5.7	6.7	0.6	1.6	0.98
32	2011	bv4 fsc	12	51.8	50.5	5.2	5.1	1.3	1.1	0.98
33	2012	bv4 fsc	8	.	.	.	.	.	.	.
34	2013	bv4 fsc	10	60.6	61.4	9.6	11.1	-0.8	1.9	0.99
35	2014	bv4 fsc	15	59.8	60.0	7.8	8.3	-0.2	1.3	0.99
36	2015	bv4 fsc	23	62.7	64.7	10.5	11.0	-2.0	1.7	0.99

JER summery stastistics for SS and current reliability for nordic AI bulls with more than 14 sons with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
37	2016	bv4 fsc	16	56.5	57.6	9.3	9.7	-1.1	1.6	0.99
38	2017	bv4 fsc	22	55.0	57.5	7.5	8.4	-2.4	1.7	0.98
39	2018	bv4 fsc	8	.	.	.	.	.	.	.
40	2019	bv4 fsc	11	47.6	49.3	6.1	7.0	-1.6	1.8	0.97
41	2010	bv5 cdg	14	66.6	66.6	5.8	6.4	0.0	1.3	0.98
42	2011	bv5 cdg	12	62.1	61.0	4.8	5.0	1.1	1.3	0.97
43	2012	bv5 cdg	8	.	.	.	.	.	.	.
44	2013	bv5 cdg	10	71.2	71.5	8.7	9.0	-0.3	1.3	0.99
45	2014	bv5 cdg	15	71.1	70.5	7.5	8.6	0.5	2.3	0.97
46	2015	bv5 cdg	23	73.2	75.1	9.6	9.2	-1.9	1.4	0.99
47	2016	bv5 cdg	16	67.9	70.1	9.2	8.6	-2.1	1.8	0.98
48	2017	bv5 cdg	22	66.6	69.6	7.4	8.0	-3.0	1.6	0.98
49	2018	bv5 cdg	8	.	.	.	.	.	.	.
50	2019	bv5 cdg	11	59.1	62.2	7.0	7.7	-3.1	1.8	0.97
51	2010	bv6 grw	14	66.6	61.6	5.8	6.6	5.0	1.5	0.98
52	2011	bv6 grw	12	62.1	56.3	4.8	5.1	5.8	1.1	0.98
53	2012	bv6 grw	8	.	.	.	.	.	.	.
54	2013	bv6 grw	10	71.2	67.2	8.7	10.3	4.0	1.8	1.00
55	2014	bv6 grw	15	71.1	66.7	7.5	8.4	4.4	1.2	0.99
56	2015	bv6 grw	23	73.2	70.8	9.6	10.4	2.4	1.7	0.99
57	2016	bv6 grw	16	67.9	64.7	9.2	9.3	3.3	1.7	0.98
58	2017	bv6 grw	22	66.6	64.5	7.4	8.3	2.1	1.6	0.98
59	2018	bv6 grw	8	.	.	.	.	.	.	.
60	2019	bv6 grw	11	59.1	56.5	7.0	7.4	2.6	1.7	0.97

JER summery statistics for SS and twostep reliability for nordic AI bulls without offspring, by birth year

Obs	BYR	name	no	mean_ss	mean_two	std_ss	std_two	mean_dif	std_dif	corr_SS
1	2019	bv6 grw	23	28.0	40.6	3.4	3.4	-12.6	1.2	0.93
2	2020	bv6 grw	32	27.4	39.5	2.8	3.5	-12.1	1.7	0.87
3	2021	bv6 grw	40	22.7	35.0	4.1	3.8	-12.4	2.0	0.88
4	2022	bv6 grw	34	18.0	31.9	2.9	2.8	-13.9	1.2	0.91
5	2023	bv6 grw	1	.	.	.	.	.	.	.

Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
1	2015	bv1 sdg	140	31.7	19.1	4.4	5.7	12.6	3.8	0.75
2	2016	bv1 sdg	109	31.6	17.3	3.2	4.4	14.3	3.6	0.58
3	2017	bv1 sdg	120	31.7	14.3	3.5	3.0	17.5	3.6	0.40
4	2018	bv1 sdg	112	30.8	14.0	3.3	3.0	16.8	3.1	0.52
5	2019	bv1 sdg	92	29.7	11.7	3.5	3.9	18.0	3.6	0.52
6	2020	bv1 sdg	2	.	.	.	.	.	.	.
7	2015	bv2 ldg	140	31.7	19.1	4.4	5.7	12.6	3.8	0.75
8	2016	bv2 ldg	109	31.6	17.3	3.2	4.4	14.3	3.6	0.58
9	2017	bv2 ldg	120	31.7	14.3	3.5	3.0	17.5	3.6	0.40
10	2018	bv2 ldg	112	30.8	14.0	3.3	3.0	16.8	3.1	0.52
11	2019	bv2 ldg	92	29.7	11.7	3.5	3.9	18.0	3.6	0.52
12	2020	bv2 ldg	2	.	.	.	.	.	.	.
13	2015	bv3 csc	145	29.3	16.2	4.3	5.5	13.0	3.4	0.78
14	2016	bv3 csc	114	28.8	14.1	3.3	4.2	14.7	3.3	0.63
15	2017	bv3 csc	124	28.9	11.2	3.4	2.7	17.7	3.4	0.42
16	2018	bv3 csc	116	27.9	10.9	3.2	2.6	17.0	3.0	0.50
17	2019	bv3 csc	93	26.6	8.8	3.3	3.1	17.8	3.4	0.44
18	2020	bv3 csc	3	.	.	.	.	.	.	.
19	2015	bv4 fsc	145	28.8	14.1	4.3	5.1	14.7	3.1	0.79
20	2016	bv4 fsc	114	28.0	12.0	3.2	3.8	16.0	3.0	0.65
21	2017	bv4 fsc	124	28.0	9.3	3.3	2.4	18.7	3.1	0.44
22	2018	bv4 fsc	116	26.9	8.9	3.0	2.3	17.9	2.8	0.48
23	2019	bv4 fsc	93	25.6	7.1	3.1	2.6	18.5	3.1	0.42
24	2020	bv4 fsc	3	.	.	.	.	.	.	.
25	2015	bv5 cdg	145	31.7	19.2	4.3	5.7	12.6	3.8	0.75
26	2016	bv5 cdg	115	31.4	17.0	3.3	4.5	14.5	3.7	0.58
27	2017	bv5 cdg	123	31.7	14.2	3.5	3.1	17.6	3.6	0.39
28	2018	bv5 cdg	118	30.7	13.8	3.3	3.1	16.9	3.1	0.56
29	2019	bv5 cdg	93	29.7	11.6	3.5	4.0	18.0	3.6	0.53
30	2020	bv5 cdg	2	.	.	.	.	.	.	.
31	2015	bv6 grw	145	31.7	16.6	4.3	5.4	15.2	3.8	0.71
32	2016	bv6 grw	115	31.4	14.4	3.3	4.2	17.1	3.5	0.58
33	2017	bv6 grw	123	31.7	11.6	3.5	2.7	20.2	3.5	0.39
34	2018	bv6 grw	118	30.7	11.3	3.3	2.7	19.4	3.0	0.53
35	2019	bv6 grw	93	29.7	9.2	3.5	3.3	20.5	3.3	0.53
36	2020	bv6 grw	2	.	.	.	.	.	.	.

sum sta for SS and twostep reliability for genotyped females with sons with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_two	std_ss	std_two	mean_dif	std_dif	corr_SS
1	2015	bv6 grw	145	31.7	53.3	4.3	3.2	-21.5	2.8	0.76
2	2016	bv6 grw	115	31.4	53.0	3.3	3.7	-21.6	2.7	0.70
3	2017	bv6 grw	123	31.7	53.1	3.5	2.7	-21.4	2.0	0.82
4	2018	bv6 grw	118	30.7	52.2	3.3	3.6	-21.5	3.1	0.59
5	2019	bv6 grw	93	29.7	51.2	3.5	4.3	-21.6	4.2	0.43
6	2020	bv6 grw	2	.	.	.	.	.	.	.

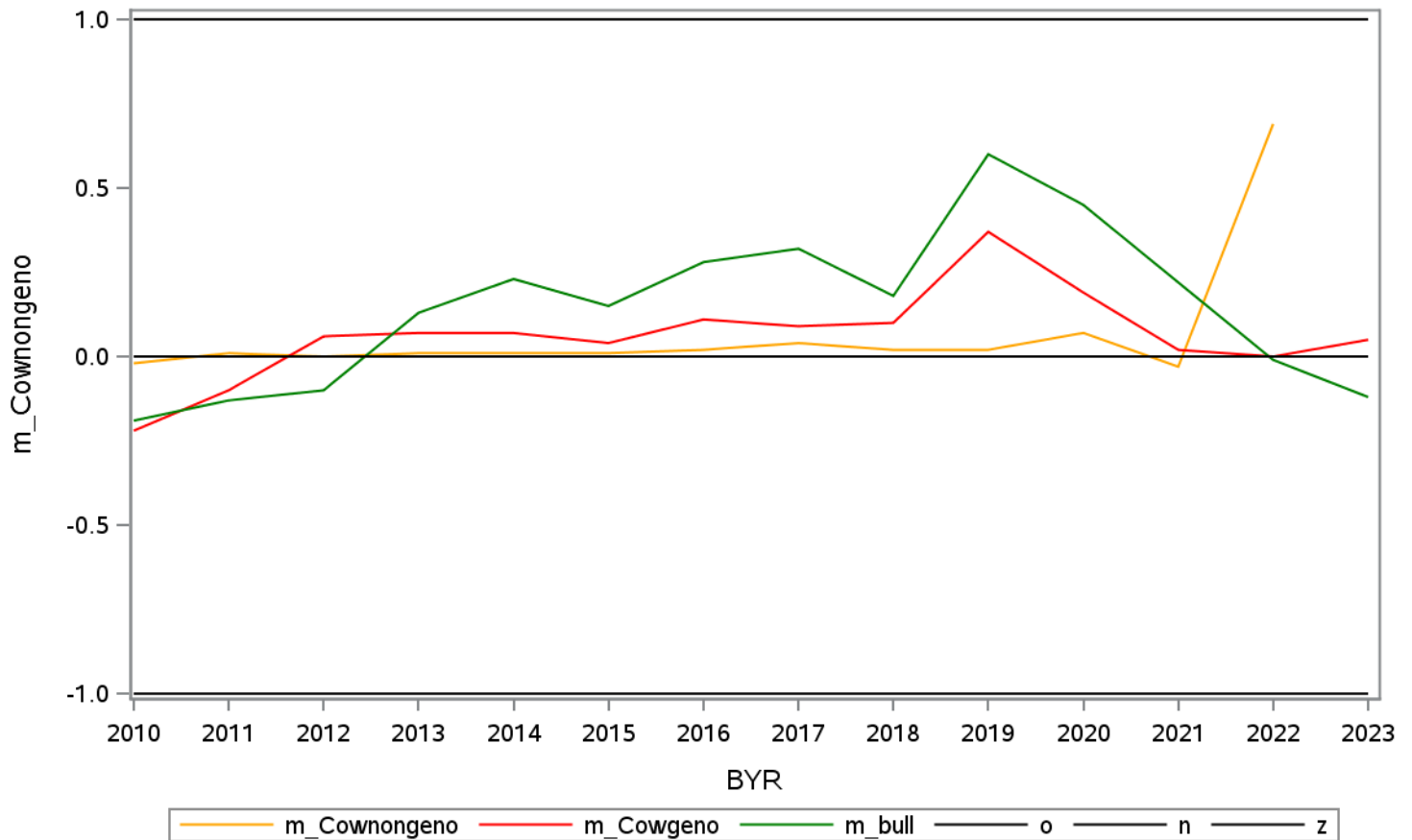
Obs	BYR	name	no	mean_ss	mean_e	std_ss	std_e	mean_dif	std_dif	corr_SS
1	2015	bv1 sdg	549	30.6	18.4	5.4	6.3	12.2	5.7	0.55
2	2016	bv1 sdg	379	30.4	15.1	5.5	4.8	15.3	5.2	0.49
3	2017	bv1 sdg	298	29.8	13.6	5.6	3.3	16.2	5.1	0.43
4	2018	bv1 sdg	209	30.0	12.8	4.8	3.3	17.1	4.4	0.47
5	2019	bv1 sdg	99	29.8	10.6	3.6	2.6	19.2	3.5	0.41
6	2020	bv1 sdg	6	.	.	.	.	.	.	.
7	2015	bv2 ldg	549	30.6	18.4	5.4	6.3	12.2	5.7	0.55
8	2016	bv2 ldg	379	30.4	15.1	5.5	4.8	15.3	5.2	0.49
9	2017	bv2 ldg	298	29.8	13.6	5.6	3.3	16.2	5.1	0.43
10	2018	bv2 ldg	209	30.0	12.8	4.8	3.3	17.1	4.4	0.47
11	2019	bv2 ldg	99	29.8	10.6	3.6	2.6	19.2	3.5	0.41
12	2020	bv2 ldg	6	.	.	.	.	.	.	.
13	2015	bv3 csc	605	29.2	15.4	5.7	6.2	13.7	5.6	0.56
14	2016	bv3 csc	408	29.0	12.3	5.6	4.5	16.7	5.2	0.49
15	2017	bv3 csc	325	28.4	10.7	5.8	3.0	17.7	5.4	0.41
16	2018	bv3 csc	222	28.7	9.9	5.0	3.1	18.8	4.4	0.47
17	2019	bv3 csc	105	28.7	7.9	3.8	2.4	20.8	3.5	0.44
18	2020	bv3 csc	6	.	.	.	.	.	.	.
19	2015	bv4 fsc	605	28.6	13.4	5.7	5.9	15.2	5.5	0.55
20	2016	bv4 fsc	408	28.4	10.4	5.7	4.2	18.1	5.2	0.48
21	2017	bv4 fsc	325	27.9	8.8	6.0	2.7	19.0	5.5	0.39
22	2018	bv4 fsc	222	28.1	8.2	5.1	2.8	20.0	4.6	0.45
23	2019	bv4 fsc	105	28.2	6.4	3.9	2.1	21.8	3.5	0.44
24	2020	bv4 fsc	6	.	.	.	.	.	.	.
25	2015	bv5 cdg	605	30.4	17.9	5.6	6.6	12.5	5.8	0.56
26	2016	bv5 cdg	410	30.1	14.8	5.7	5.0	15.4	5.4	0.49
27	2017	bv5 cdg	326	29.5	13.3	5.8	3.6	16.2	5.2	0.48
28	2018	bv5 cdg	224	29.8	12.6	4.8	3.6	17.3	4.4	0.49
29	2019	bv5 cdg	105	29.6	10.4	3.6	2.7	19.3	3.5	0.40
30	2020	bv5 cdg	6	.	.	.	.	.	.	.
31	2015	bv6 grw	605	30.4	15.7	5.6	6.2	14.7	5.7	0.54
32	2016	bv6 grw	410	30.1	12.5	5.7	4.6	17.6	5.2	0.49
33	2017	bv6 grw	326	29.5	11.0	5.8	3.0	18.5	5.3	0.43
34	2018	bv6 grw	224	29.8	10.2	4.8	3.1	19.5	4.3	0.48
35	2019	bv6 grw	105	29.6	8.2	3.6	2.4	21.4	3.4	0.42
36	2020	bv6 grw	6	.	.	.	.	.	.	.

HOL Mendelian sampling for singlestep and traditional breeding values

Obs	tekst
1	m_Cownongen is nordic nongenotyped cows
2	m_Cowgeno is nordic genotyped cows
3	m_bull is nordic genotyped bulls

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.02	-0.22	-0.19	126763	1705	1131
2	2011	0.01	-0.10	-0.13	126975	3383	1716
3	2012	0.00	0.06	-0.10	128093	5330	2169
4	2013	0.01	0.07	0.13	123963	9004	2381
5	2014	0.01	0.07	0.23	123219	10626	3169
6	2015	0.01	0.04	0.15	114671	13411	2775
7	2016	0.02	0.11	0.28	103159	20697	2956
8	2017	0.04	0.09	0.32	78263	30927	3234
9	2018	0.02	0.10	0.18	54702	43005	3079
10	2019	0.02	0.37	0.60	25212	48268	3256
11	2020	0.07	0.19	0.45	7300	57834	3213
12	2021	-0.03	0.02	0.22	1596	61344	3172
13	2022	0.69	0.00	-0.01	38	64550	3189
14	2023	.	0.05	-0.12	14	15447	1119

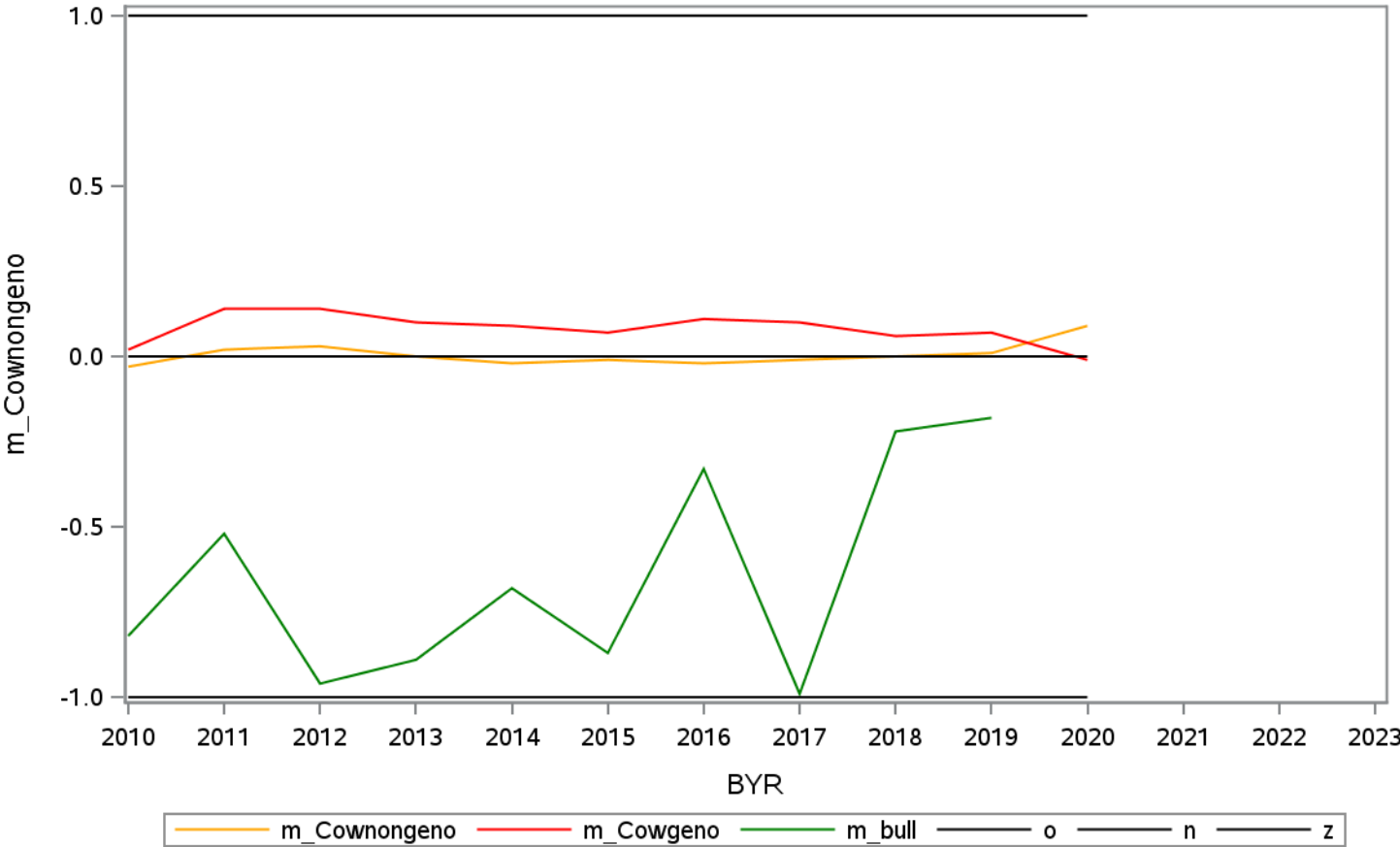
HOL Mendelian sampling for 'SS bv1 sdg '



HOL Mendelian sampling for 'EBV bv1 sdg '

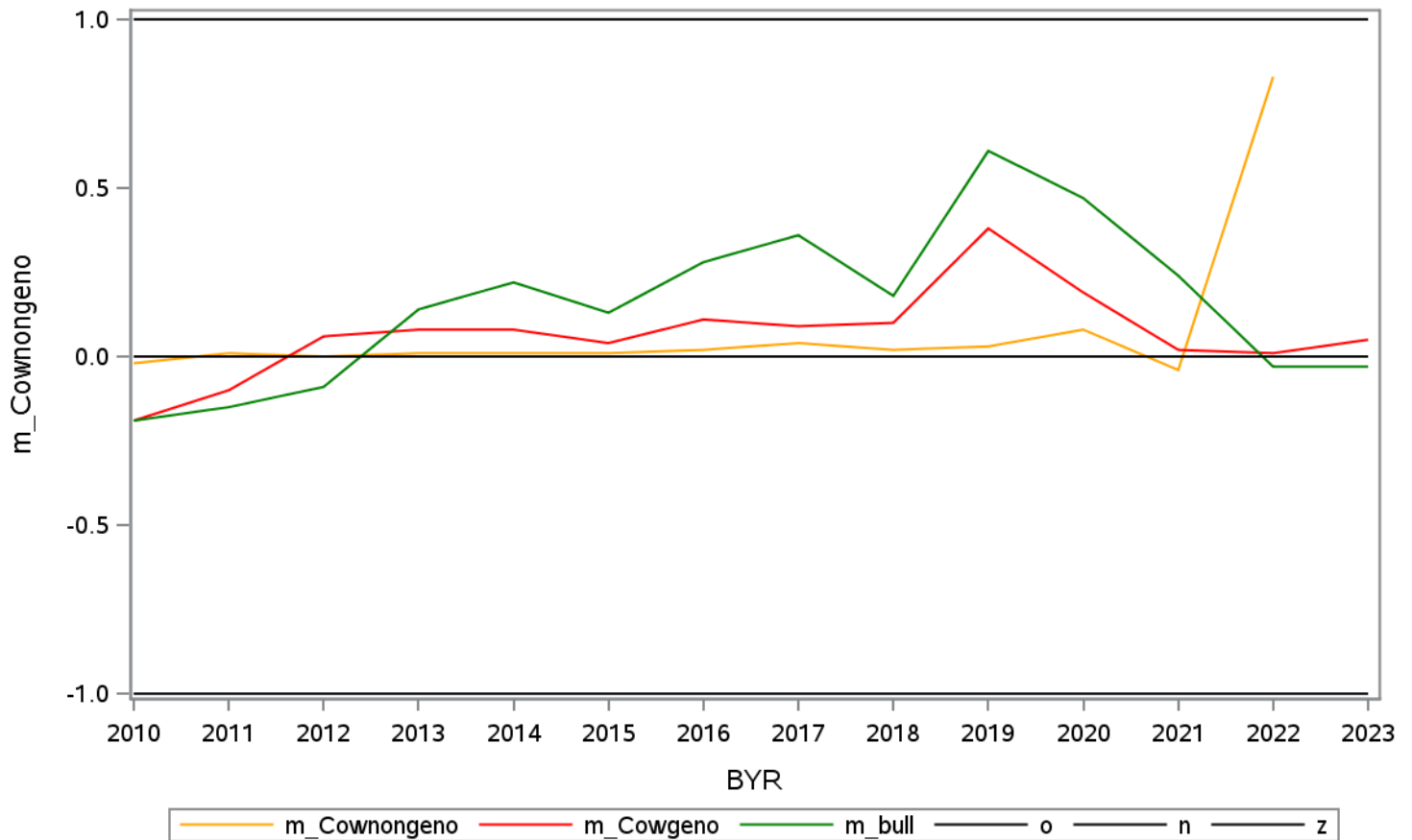
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.03	0.02	-0.82	123504	1249	302
2	2011	0.02	0.14	-0.52	122998	2523	301
3	2012	0.03	0.14	-0.96	123359	3768	321
4	2013	0.00	0.10	-0.89	118077	6031	301
5	2014	-0.02	0.09	-0.68	115327	6608	267
6	2015	-0.01	0.07	-0.87	105024	7539	218
7	2016	-0.02	0.11	-0.33	91336	9776	190
8	2017	-0.01	0.10	-0.99	66868	11971	226
9	2018	0.00	0.06	-0.22	43618	12312	204
10	2019	0.01	0.07	-0.18	15409	7469	118
11	2020	0.09	-0.01	.	303	1402	4

HOL Mendelian sampling for 'EBV bv1 sdg '



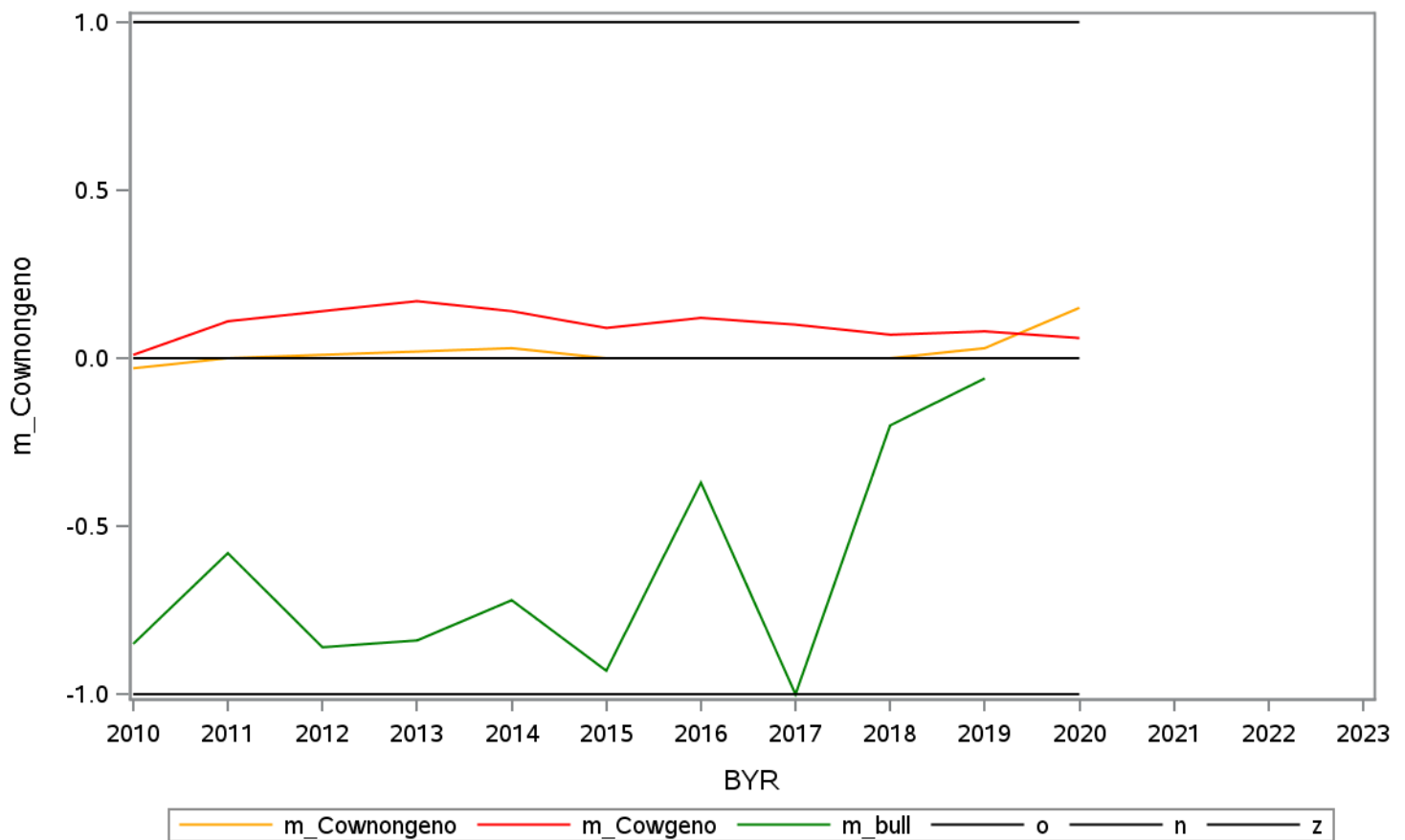
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.02	-0.19	-0.19	126763	1705	1131
2	2011	0.01	-0.10	-0.15	126975	3383	1716
3	2012	0.00	0.06	-0.09	128093	5330	2169
4	2013	0.01	0.08	0.14	123963	9004	2381
5	2014	0.01	0.08	0.22	123219	10626	3169
6	2015	0.01	0.04	0.13	114671	13411	2775
7	2016	0.02	0.11	0.28	103159	20697	2956
8	2017	0.04	0.09	0.36	78263	30927	3234
9	2018	0.02	0.10	0.18	54702	43005	3079
10	2019	0.03	0.38	0.61	25212	48268	3256
11	2020	0.08	0.19	0.47	7300	57834	3213
12	2021	-0.04	0.02	0.24	1596	61344	3172
13	2022	0.83	0.01	-0.03	38	64550	3189
14	2023	.	0.05	-0.03	14	15447	1119

HOL Mendelian sampling for ' SS bv2 Idg '



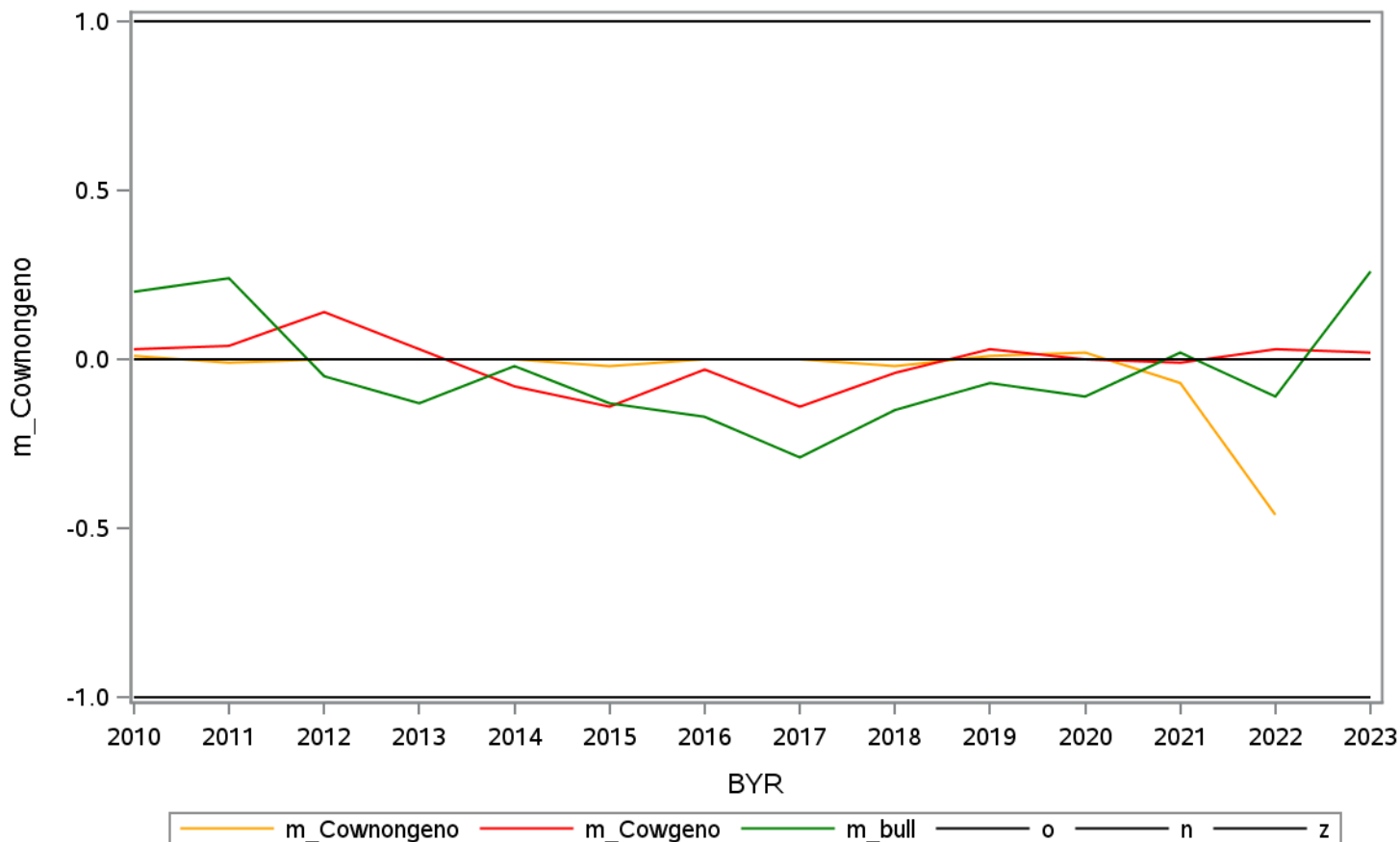
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.03	0.01	-0.85	123504	1249	302
2	2011	0.00	0.11	-0.58	122998	2523	301
3	2012	0.01	0.14	-0.86	123359	3768	321
4	2013	0.02	0.17	-0.84	118077	6031	301
5	2014	0.03	0.14	-0.72	115327	6608	267
6	2015	0.00	0.09	-0.93	105024	7539	218
7	2016	0.00	0.12	-0.37	91336	9776	190
8	2017	0.00	0.10	-1.00	66868	11971	226
9	2018	0.00	0.07	-0.20	43618	12312	204
10	2019	0.03	0.08	-0.06	15409	7469	118
11	2020	0.15	0.06	.	303	1402	4

HOL Mendelian sampling for 'EBV bv2 Idg '



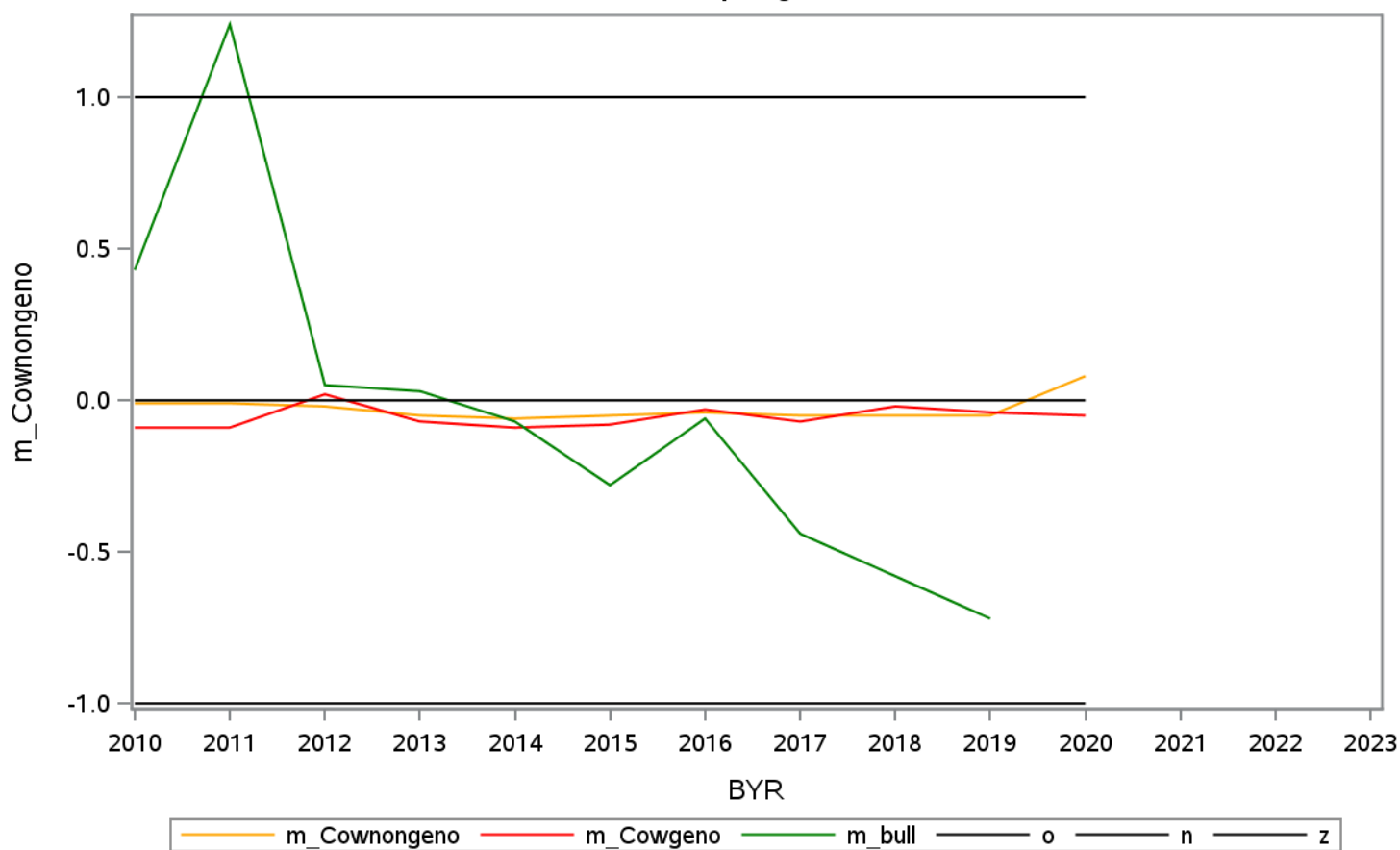
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.01	0.03	0.20	126757	1705	1131
2	2011	-0.01	0.04	0.24	126974	3383	1716
3	2012	0.00	0.14	-0.05	128092	5330	2169
4	2013	0.00	0.03	-0.13	123960	9004	2381
5	2014	0.00	-0.08	-0.02	123219	10626	3169
6	2015	-0.02	-0.14	-0.13	114670	13411	2775
7	2016	0.00	-0.03	-0.17	103157	20696	2956
8	2017	0.00	-0.14	-0.29	78262	30927	3234
9	2018	-0.02	-0.04	-0.15	54702	43004	3079
10	2019	0.01	0.03	-0.07	25212	48267	3255
11	2020	0.02	0.00	-0.11	7300	57834	3213
12	2021	-0.07	-0.01	0.02	1596	61344	3172
13	2022	-0.46	0.03	-0.11	38	64550	3189
14	2023	.	0.02	0.26	14	15446	1119

HOL Mendelian sampling for 'SS bv3 csc '



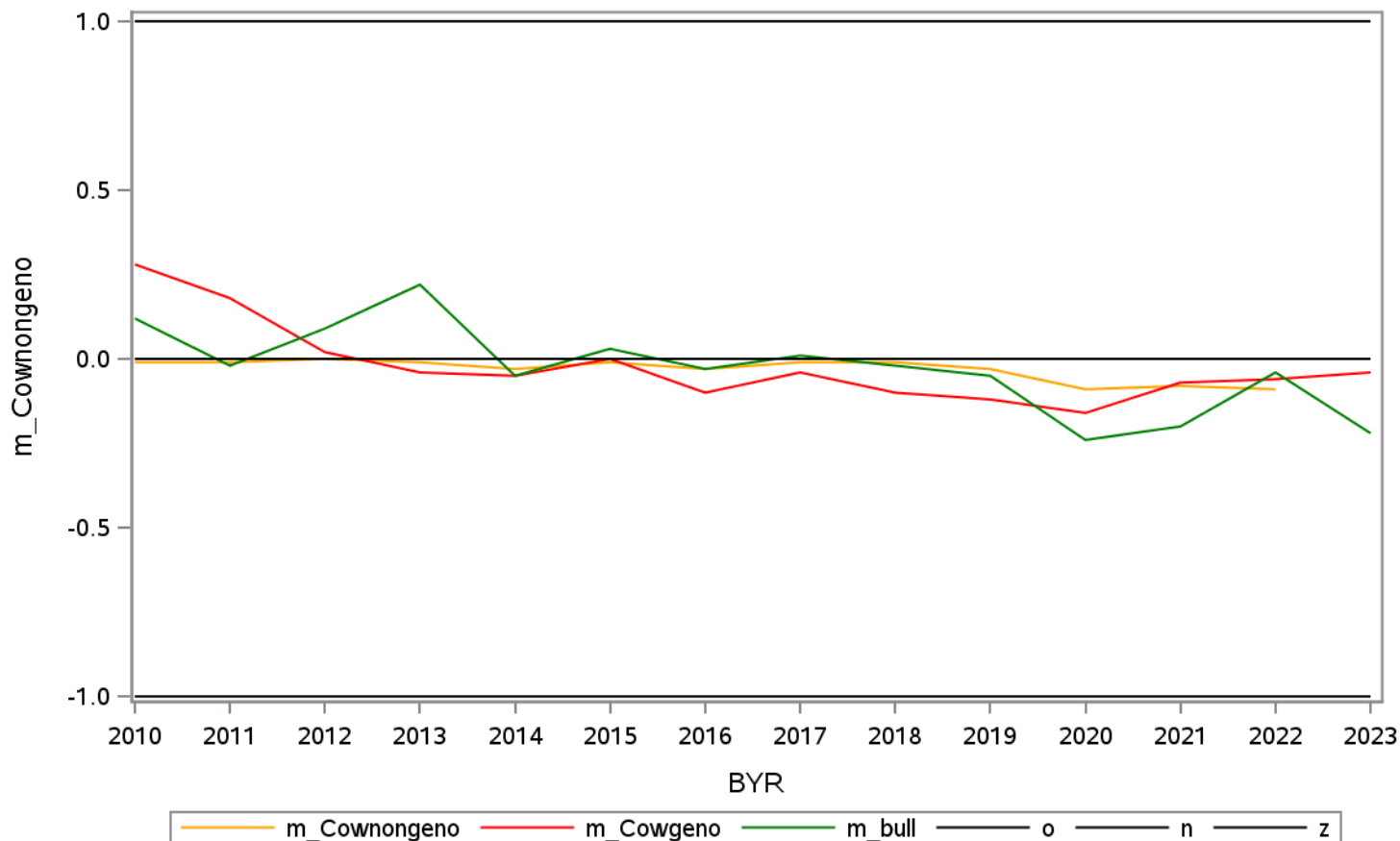
Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	-0.09	0.43	123495	1249	302
2	2011	-0.01	-0.09	1.24	122993	2523	301
3	2012	-0.02	0.02	0.05	123358	3768	321
4	2013	-0.05	-0.07	0.03	118073	6031	301
5	2014	-0.06	-0.09	-0.07	115326	6608	267
6	2015	-0.05	-0.08	-0.28	105023	7538	218
7	2016	-0.04	-0.03	-0.06	91334	9776	190
8	2017	-0.05	-0.07	-0.44	66865	11971	226
9	2018	-0.05	-0.02	-0.58	43617	12312	204
10	2019	-0.05	-0.04	-0.72	15409	7469	118
11	2020	0.08	-0.05	.	303	1402	4

HOL Mendelian sampling for 'EBV bv3 csc '



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	0.28	0.12	126763	1705	1131
2	2011	-0.01	0.18	-0.02	126975	3383	1716
3	2012	0.00	0.02	0.09	128093	5330	2169
4	2013	-0.01	-0.04	0.22	123963	9004	2381
5	2014	-0.03	-0.05	-0.05	123219	10626	3169
6	2015	-0.01	0.00	0.03	114671	13411	2775
7	2016	-0.03	-0.10	-0.03	103159	20697	2956
8	2017	-0.01	-0.04	0.01	78263	30927	3234
9	2018	-0.01	-0.10	-0.02	54702	43005	3079
10	2019	-0.03	-0.12	-0.05	25212	48268	3256
11	2020	-0.09	-0.16	-0.24	7300	57834	3213
12	2021	-0.08	-0.07	-0.20	1596	61344	3172
13	2022	-0.09	-0.06	-0.04	38	64550	3189
14	2023	.	-0.04	-0.22	14	15447	1119

HOL Mendelian sampling for ' SS bv4 fsc '



Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.03	0.02	0.24	123504	1249	302
2	2011	-0.01	0.03	-0.90	122998	2523	301
3	2012	-0.01	-0.02	0.30	123359	3768	321
4	2013	0.00	0.02	1.07	118077	6031	301
5	2014	0.00	0.00	0.34	115327	6608	267
6	2015	0.04	0.04	0.38	105024	7539	218
7	2016	-0.03	-0.06	-0.29	91336	9776	190
8	2017	0.01	0.02	0.58	66868	11971	226
9	2018	0.05	0.00	-0.18	43618	12312	204
10	2019	0.04	0.03	-0.59	15409	7469	118
11	2020	-0.04	0.02	.	303	1402	4

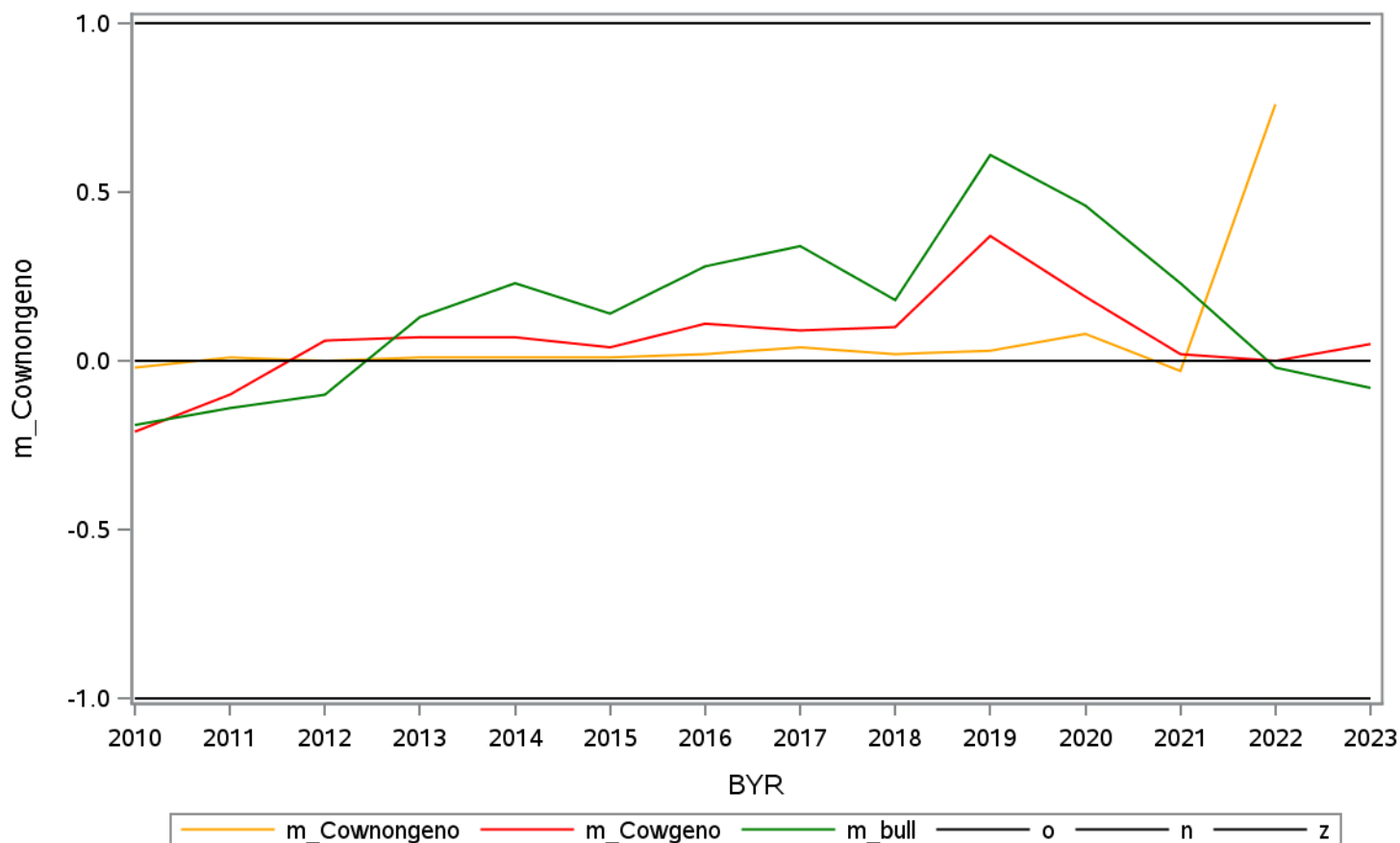
HOL Mendelian sampling for 'EBV bv4 fsc '



HOL Mendelian sampling for ' SS bv5 cdg '

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.02	-0.21	-0.19	126763	1705	1131
2	2011	0.01	-0.10	-0.14	126975	3383	1716
3	2012	0.00	0.06	-0.10	128093	5330	2169
4	2013	0.01	0.07	0.13	123963	9004	2381
5	2014	0.01	0.07	0.23	123219	10626	3169
6	2015	0.01	0.04	0.14	114671	13411	2775
7	2016	0.02	0.11	0.28	103159	20697	2956
8	2017	0.04	0.09	0.34	78263	30927	3234
9	2018	0.02	0.10	0.18	54702	43005	3079
10	2019	0.03	0.37	0.61	25212	48268	3256
11	2020	0.08	0.19	0.46	7300	57834	3213
12	2021	-0.03	0.02	0.23	1596	61344	3172
13	2022	0.76	0.00	-0.02	38	64550	3189
14	2023	.	0.05	-0.08	14	15447	1119

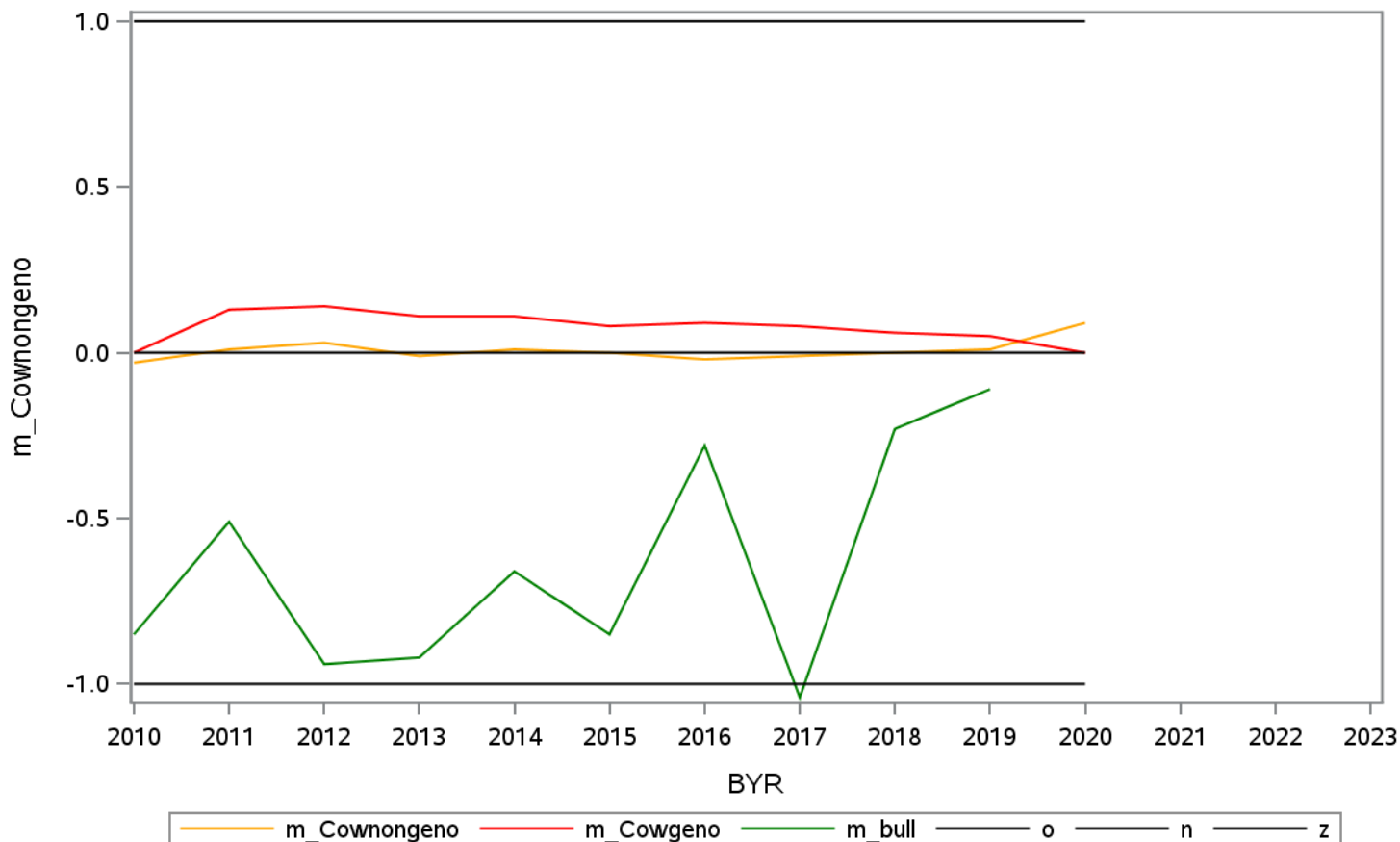
HOL Mendelian sampling for ' SS bv5 cdg '



HOL Mendelian sampling for 'EBV bv5 cdg '

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.03	0.00	-0.85	123504	1249	302
2	2011	0.01	0.13	-0.51	122998	2523	301
3	2012	0.03	0.14	-0.94	123359	3768	321
4	2013	-0.01	0.11	-0.92	118077	6031	301
5	2014	0.01	0.11	-0.66	115327	6608	267
6	2015	0.00	0.08	-0.85	105024	7539	218
7	2016	-0.02	0.09	-0.28	91336	9776	190
8	2017	-0.01	0.08	-1.04	66868	11971	226
9	2018	0.00	0.06	-0.23	43618	12312	204
10	2019	0.01	0.05	-0.11	15409	7469	118
11	2020	0.09	0.00	.	303	1402	4

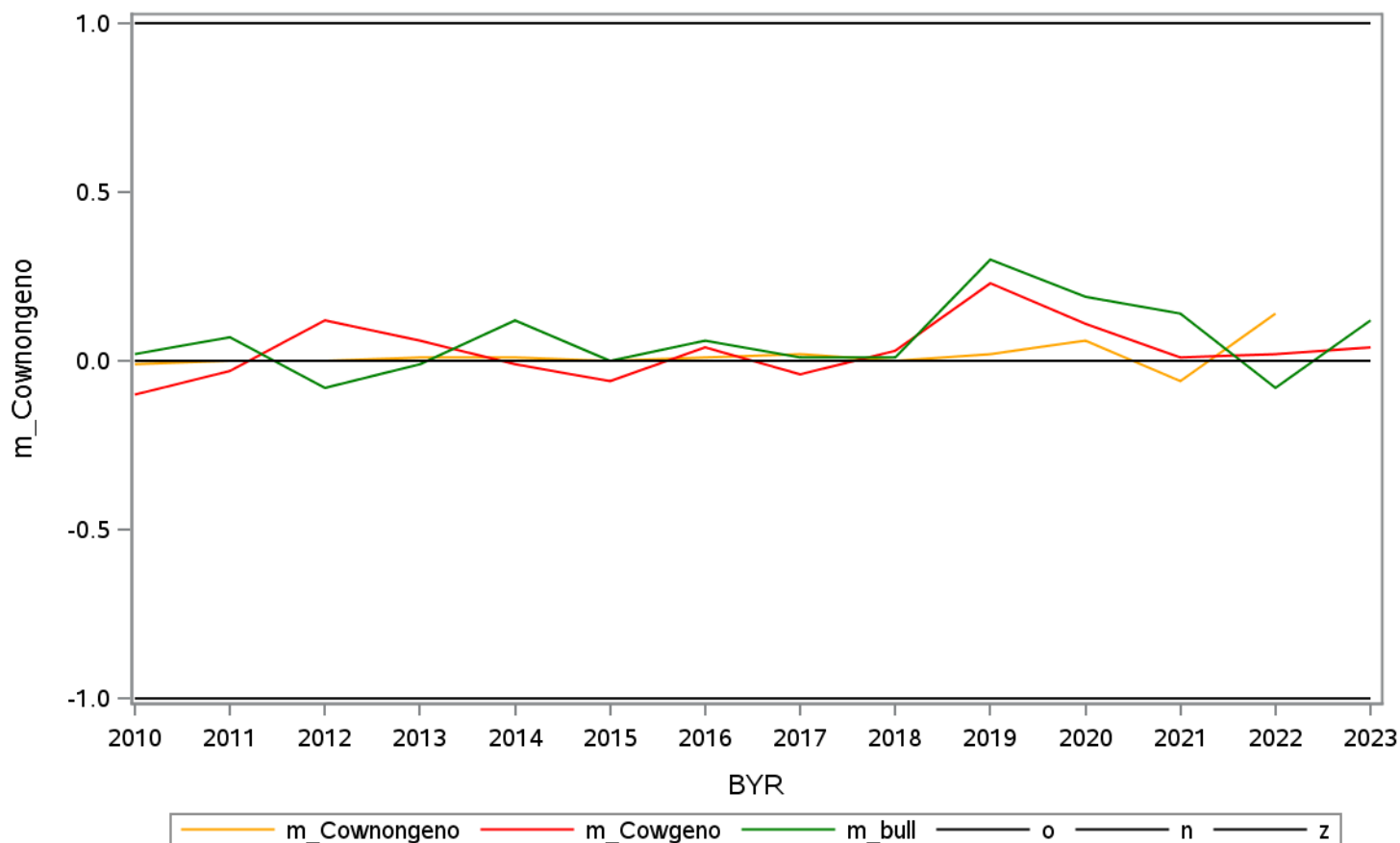
HOL Mendelian sampling for 'EBV bv5 cdg '



HOL Mendelian sampling for 'SS bv6 grw '

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	-0.10	0.02	126763	1705	1131
2	2011	0.00	-0.03	0.07	126975	3383	1716
3	2012	0.00	0.12	-0.08	128093	5330	2169
4	2013	0.01	0.06	-0.01	123963	9004	2381
5	2014	0.01	-0.01	0.12	123219	10626	3169
6	2015	0.00	-0.06	0.00	114671	13411	2775
7	2016	0.01	0.04	0.06	103159	20697	2956
8	2017	0.02	-0.04	0.01	78263	30927	3234
9	2018	0.00	0.03	0.01	54702	43005	3079
10	2019	0.02	0.23	0.30	25212	48268	3256
11	2020	0.06	0.11	0.19	7300	57834	3213
12	2021	-0.06	0.01	0.14	1596	61344	3172
13	2022	0.14	0.02	-0.08	38	64550	3189
14	2023	.	0.04	0.12	14	15447	1119

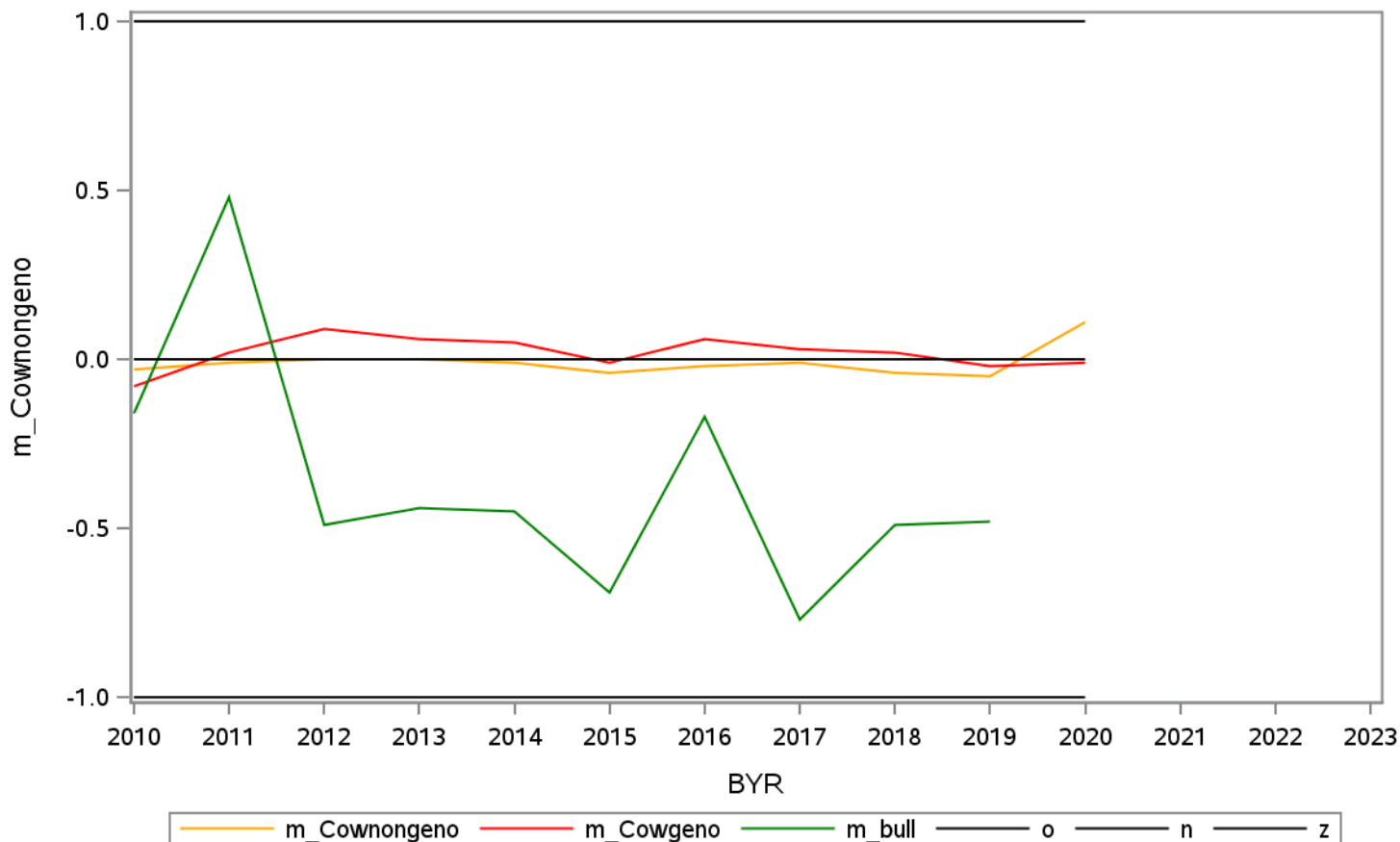
HOL Mendelian sampling for 'SS bv6 grw '



HOL Mendelian sampling for 'EBV bv6 grw '

Obs	BYR	m_Cownongen	m_Cowgeno	m_bull	N_Cownongen	N_Cowgeno	N_bull
1	2010	-0.03	-0.08	-0.16	123504	1249	302
2	2011	-0.01	0.02	0.48	122998	2523	301
3	2012	0.00	0.09	-0.49	123359	3768	321
4	2013	0.00	0.06	-0.44	118077	6031	301
5	2014	-0.01	0.05	-0.45	115327	6608	267
6	2015	-0.04	-0.01	-0.69	105024	7539	218
7	2016	-0.02	0.06	-0.17	91336	9776	190
8	2017	-0.01	0.03	-0.77	66868	11971	226
9	2018	-0.04	0.02	-0.49	43618	12312	204
10	2019	-0.05	-0.02	-0.48	15409	7469	118
11	2020	0.11	-0.01	.	303	1402	4

HOL Mendelian sampling for 'EBV bv6 grw '



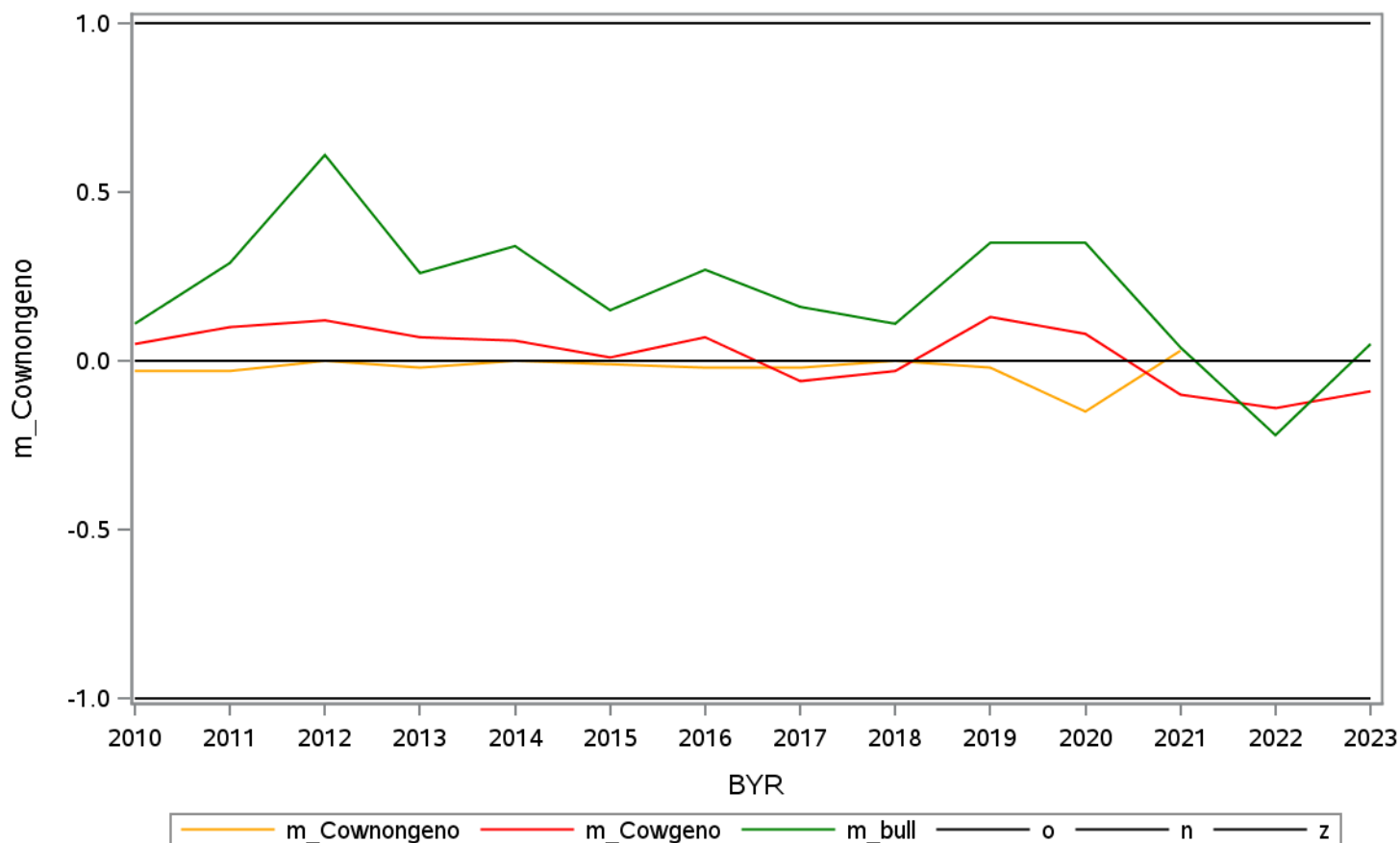
RDC Mendelian sampling for singlestep and traditional breeding values

Obs	tekst
1	m_Cownongen is nordic nongenotyped cows
2	m_Cowgeno is nordic genotyped cows
3	m_bull is nordic genotyped bulls

RDC Mendelian sampling for ' SS bv1 sdg '

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.03	0.05	0.11	59154	3668	997
2	2011	-0.03	0.10	0.29	57222	6414	1814
3	2012	0.00	0.12	0.61	52555	7240	2334
4	2013	-0.02	0.07	0.26	48903	7645	2353
5	2014	0.00	0.06	0.34	44059	8513	2328
6	2015	-0.01	0.01	0.15	37595	11175	2378
7	2016	-0.02	0.07	0.27	30060	15479	2351
8	2017	-0.02	-0.06	0.16	21541	18453	2622
9	2018	0.00	-0.03	0.11	13738	20781	2559
10	2019	-0.02	0.13	0.35	4894	21137	2451
11	2020	-0.15	0.08	0.35	2364	23385	2833
12	2021	0.03	-0.10	0.04	335	23642	2778
13	2022	.	-0.14	-0.22	15	23700	2576
14	2023	.	-0.09	0.05	12	5599	780

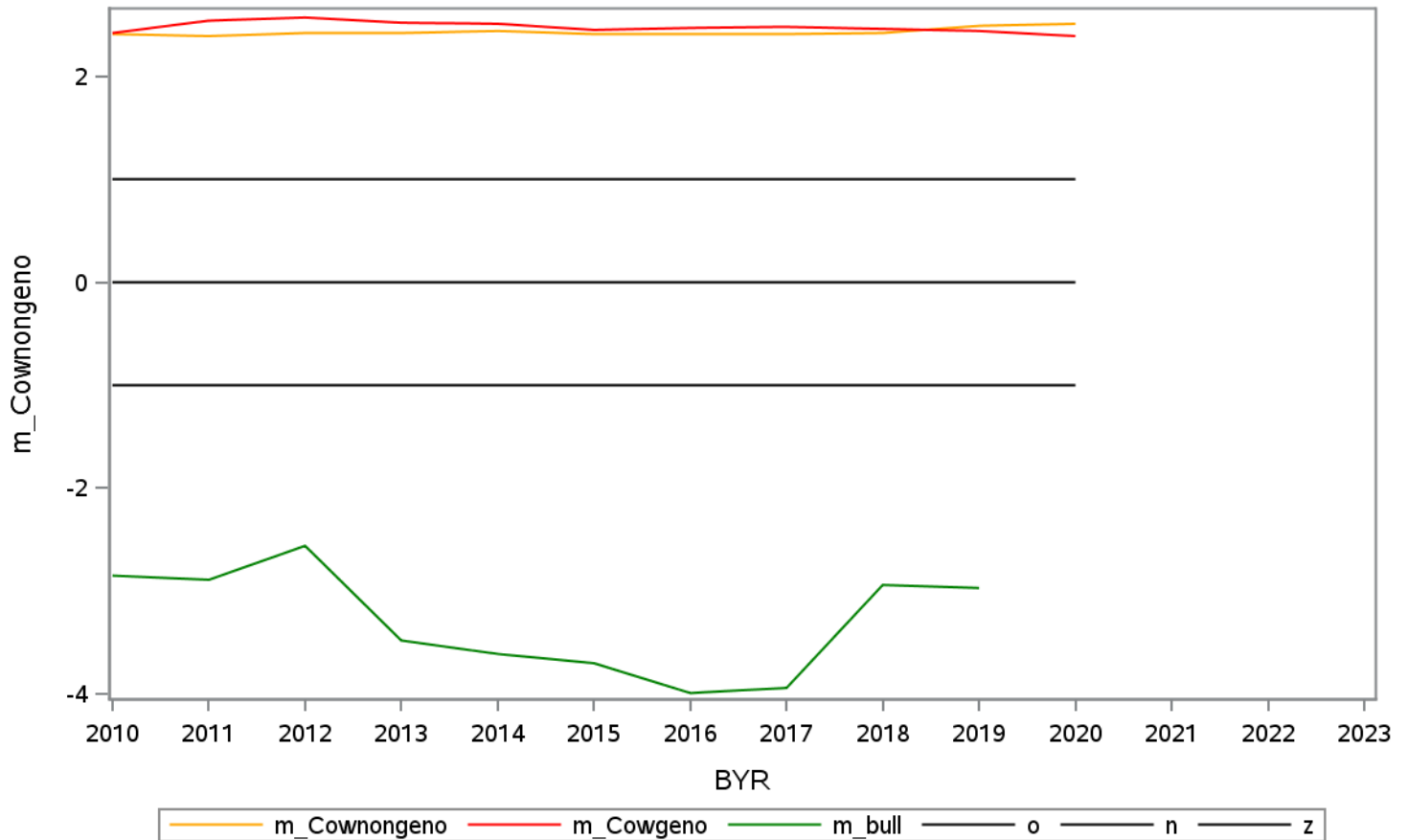
RDC Mendelian sampling for ' SS bv1 sdg '



RDC Mendelian sampling for 'EBV bv1 sdg '

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	2.41	2.42	-2.85	57437	2630	227
2	2011	2.39	2.54	-2.89	55343	4421	238
3	2012	2.42	2.57	-2.56	50334	4637	236
4	2013	2.42	2.52	-3.48	46039	4577	201
5	2014	2.44	2.51	-3.61	40401	4605	143
6	2015	2.41	2.45	-3.70	33551	5698	127
7	2016	2.41	2.47	-3.99	25787	6954	106
8	2017	2.41	2.48	-3.94	17503	6778	106
9	2018	2.42	2.46	-2.94	9597	5760	100
10	2019	2.49	2.44	-2.97	1629	2944	68
11	2020	2.51	2.39	.	40	248	2

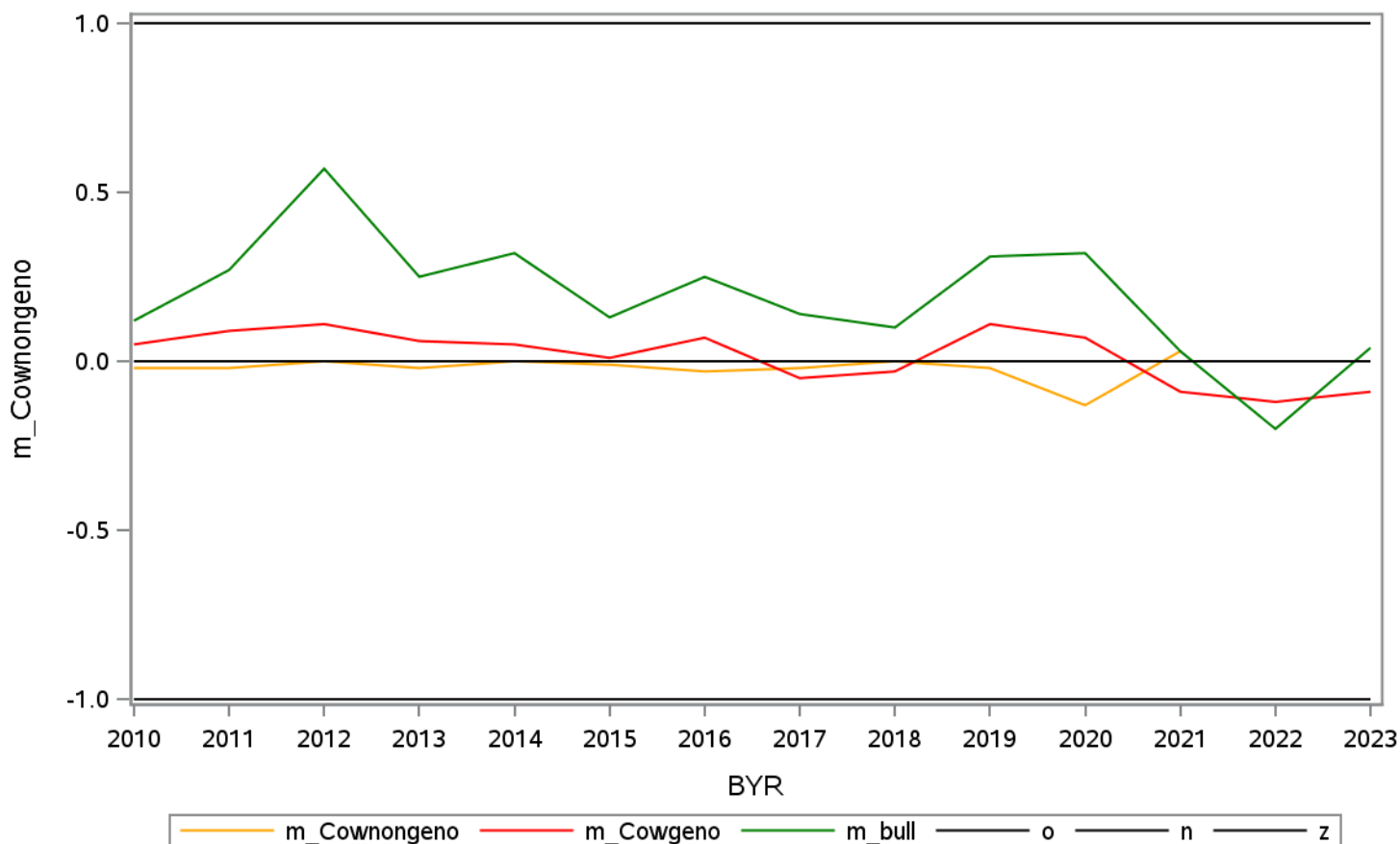
RDC Mendelian sampling for 'EBV bv1 sdg '



RDC Mendelian sampling for ' SS bv2 Idg '

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.02	0.05	0.12	59154	3668	997
2	2011	-0.02	0.09	0.27	57222	6414	1814
3	2012	0.00	0.11	0.57	52555	7240	2334
4	2013	-0.02	0.06	0.25	48903	7645	2353
5	2014	0.00	0.05	0.32	44059	8513	2328
6	2015	-0.01	0.01	0.13	37595	11175	2378
7	2016	-0.03	0.07	0.25	30060	15479	2351
8	2017	-0.02	-0.05	0.14	21541	18453	2622
9	2018	0.00	-0.03	0.10	13738	20781	2559
10	2019	-0.02	0.11	0.31	4894	21137	2451
11	2020	-0.13	0.07	0.32	2364	23385	2833
12	2021	0.03	-0.09	0.03	335	23642	2778
13	2022	.	-0.12	-0.20	15	23700	2576
14	2023	.	-0.09	0.04	12	5599	780

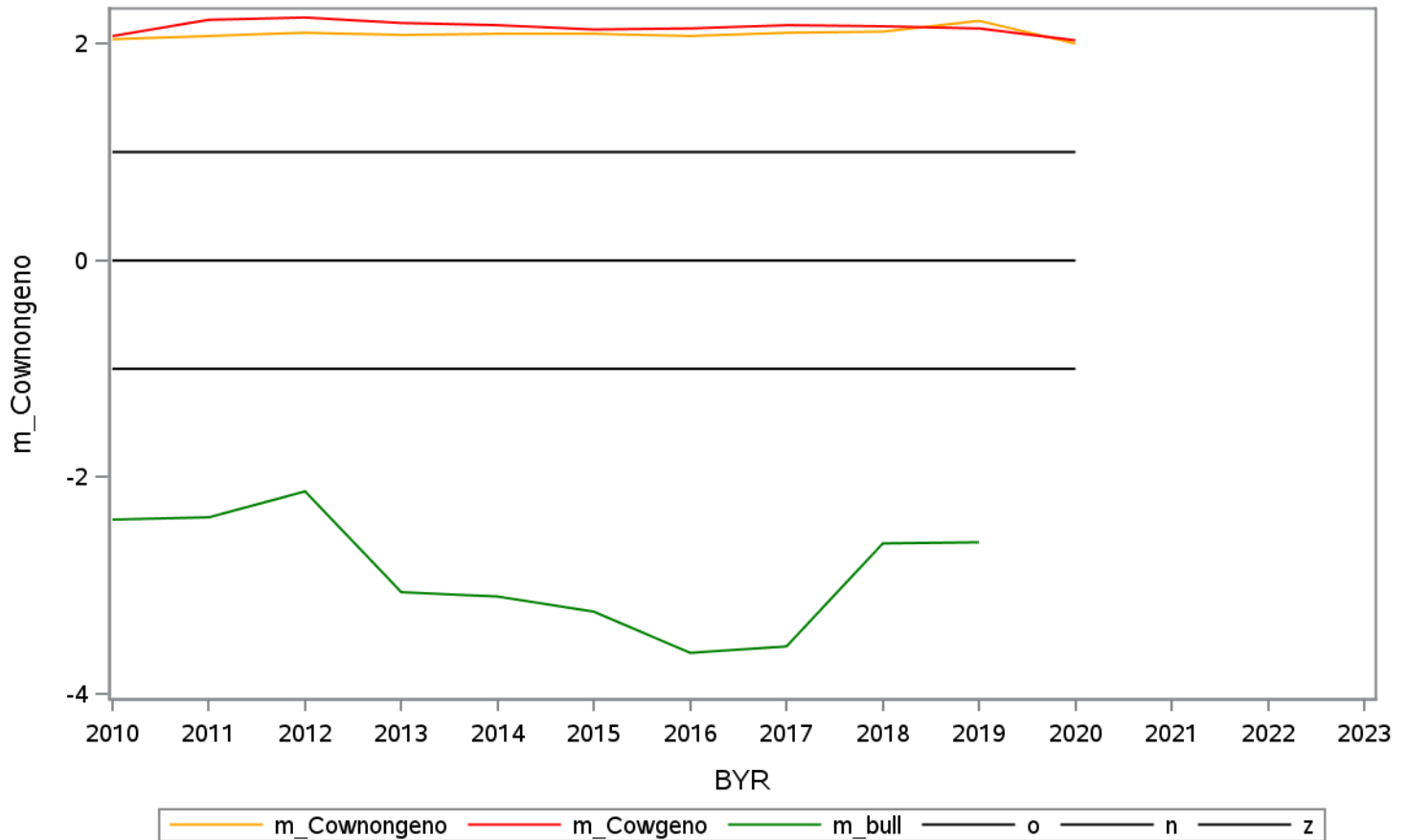
RDC Mendelian sampling for ' SS bv2 Idg '



RDC Mendelian sampling for 'EBV bv2 Idg '

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	2.04	2.07	-2.39	57437	2630	227
2	2011	2.07	2.22	-2.37	55343	4421	238
3	2012	2.10	2.24	-2.13	50334	4637	236
4	2013	2.08	2.19	-3.06	46039	4577	201
5	2014	2.09	2.17	-3.10	40401	4605	143
6	2015	2.09	2.13	-3.24	33551	5698	127
7	2016	2.07	2.14	-3.62	25787	6954	106
8	2017	2.10	2.17	-3.56	17503	6778	106
9	2018	2.11	2.16	-2.61	9597	5760	100
10	2019	2.21	2.14	-2.60	1629	2944	68
11	2020	2.00	2.03	.	40	248	2

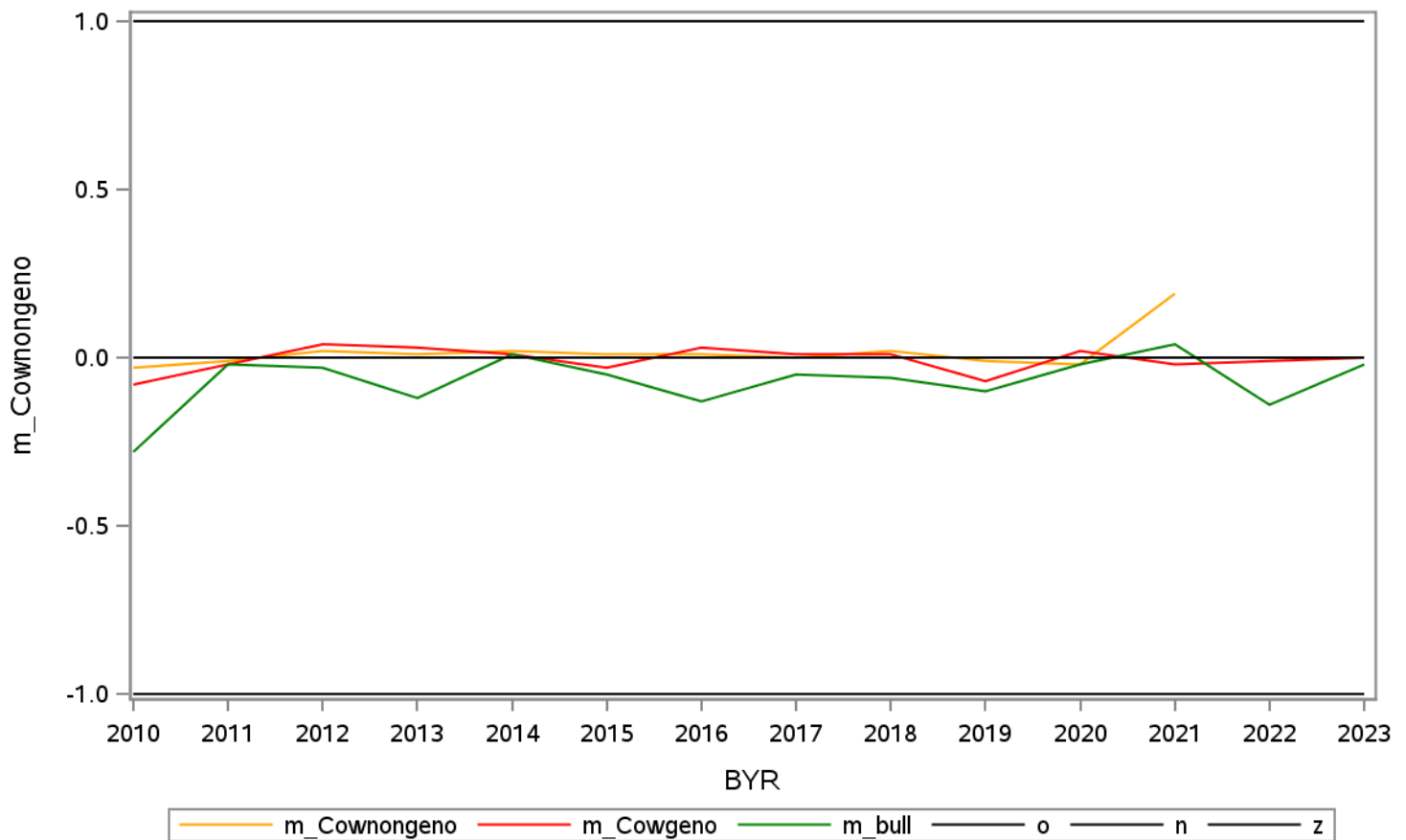
RDC Mendelian sampling for 'EBV bv2 Idg '



RDC Mendelian sampling for ' SS bv3 csc '

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.03	-0.08	-0.28	59154	3668	997
2	2011	-0.01	-0.02	-0.02	57222	6414	1814
3	2012	0.02	0.04	-0.03	52555	7240	2334
4	2013	0.01	0.03	-0.12	48903	7645	2353
5	2014	0.02	0.01	0.01	44059	8513	2328
6	2015	0.01	-0.03	-0.05	37595	11175	2378
7	2016	0.01	0.03	-0.13	30060	15479	2351
8	2017	0.00	0.01	-0.05	21541	18453	2622
9	2018	0.02	0.01	-0.06	13738	20781	2559
10	2019	-0.01	-0.07	-0.10	4894	21137	2451
11	2020	-0.02	0.02	-0.02	2364	23385	2833
12	2021	0.19	-0.02	0.04	335	23642	2778
13	2022	.	-0.01	-0.14	15	23700	2576
14	2023	.	0.00	-0.02	12	5599	780

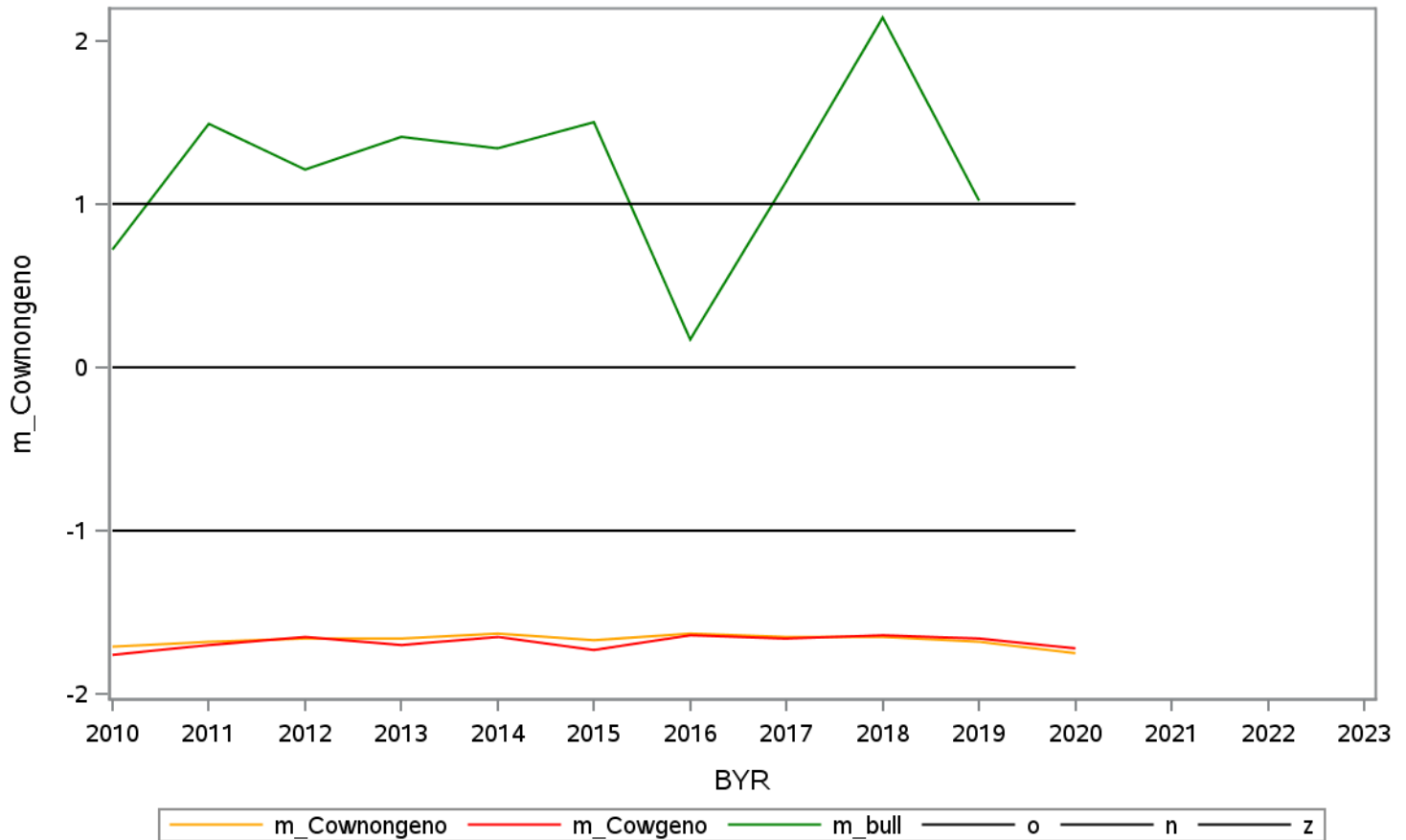
RDC Mendelian sampling for ' SS bv3 csc '



RDC Mendelian sampling for 'EBV bv3 csc '

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-1.71	-1.76	0.72	57437	2630	227
2	2011	-1.68	-1.70	1.49	55343	4421	238
3	2012	-1.66	-1.65	1.21	50334	4637	236
4	2013	-1.66	-1.70	1.41	46039	4577	201
5	2014	-1.63	-1.65	1.34	40401	4605	143
6	2015	-1.67	-1.73	1.50	33551	5698	127
7	2016	-1.63	-1.64	0.17	25787	6954	106
8	2017	-1.65	-1.66	1.14	17503	6778	106
9	2018	-1.65	-1.64	2.14	9597	5760	100
10	2019	-1.68	-1.66	1.02	1629	2944	68
11	2020	-1.75	-1.72	.	40	248	2

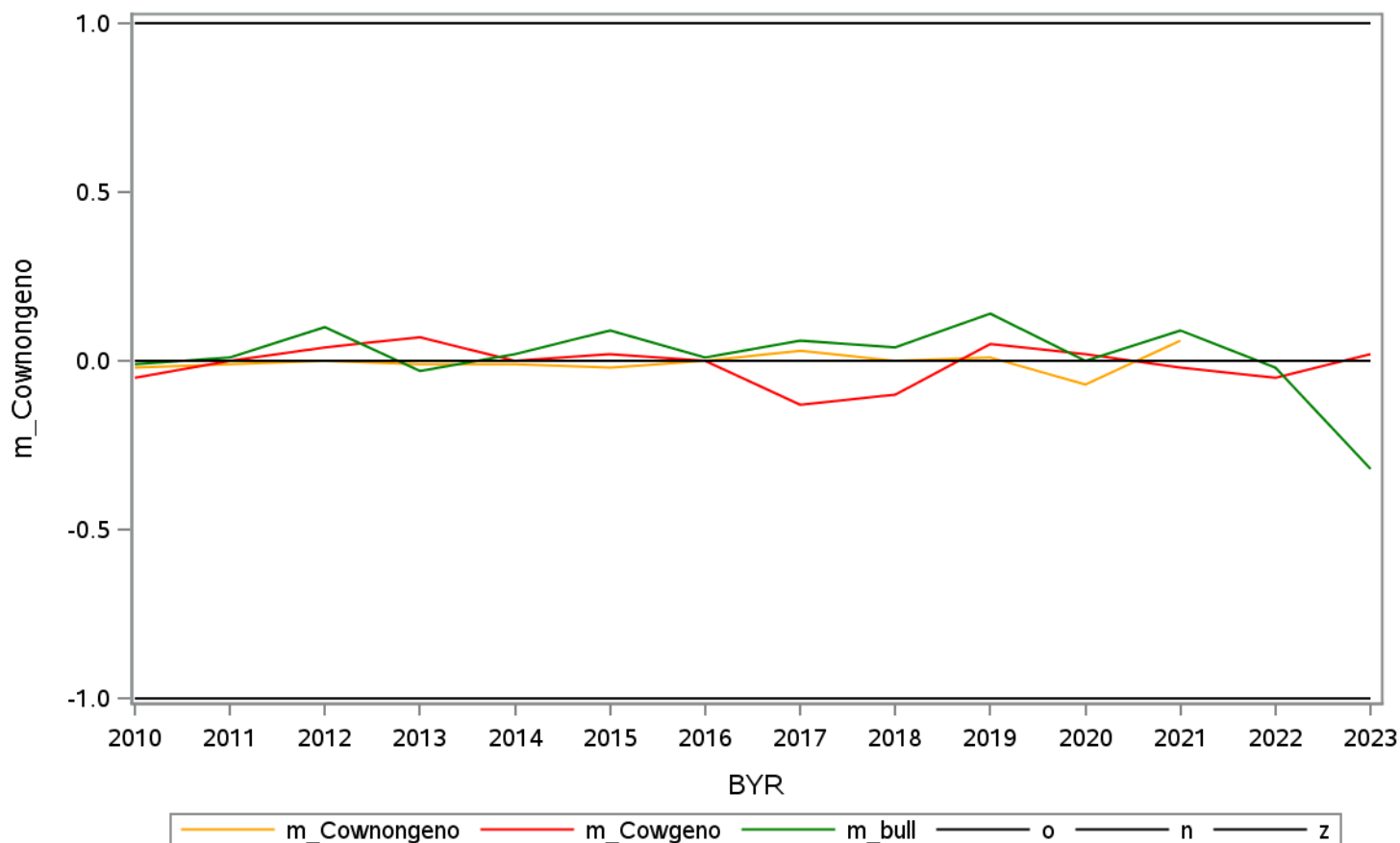
RDC Mendelian sampling for 'EBV bv3 csc '



RDC Mendelian sampling for ' SS bv4 fsc '

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.02	-0.05	-0.01	59154	3668	997
2	2011	-0.01	0.00	0.01	57222	6414	1814
3	2012	0.00	0.04	0.10	52555	7240	2334
4	2013	-0.01	0.07	-0.03	48903	7645	2353
5	2014	-0.01	0.00	0.02	44059	8513	2328
6	2015	-0.02	0.02	0.09	37595	11175	2378
7	2016	0.00	0.00	0.01	30060	15479	2351
8	2017	0.03	-0.13	0.06	21541	18453	2622
9	2018	0.00	-0.10	0.04	13738	20781	2559
10	2019	0.01	0.05	0.14	4894	21137	2451
11	2020	-0.07	0.02	0.00	2364	23385	2833
12	2021	0.06	-0.02	0.09	335	23642	2778
13	2022	.	-0.05	-0.02	15	23700	2576
14	2023	.	0.02	-0.32	12	5599	780

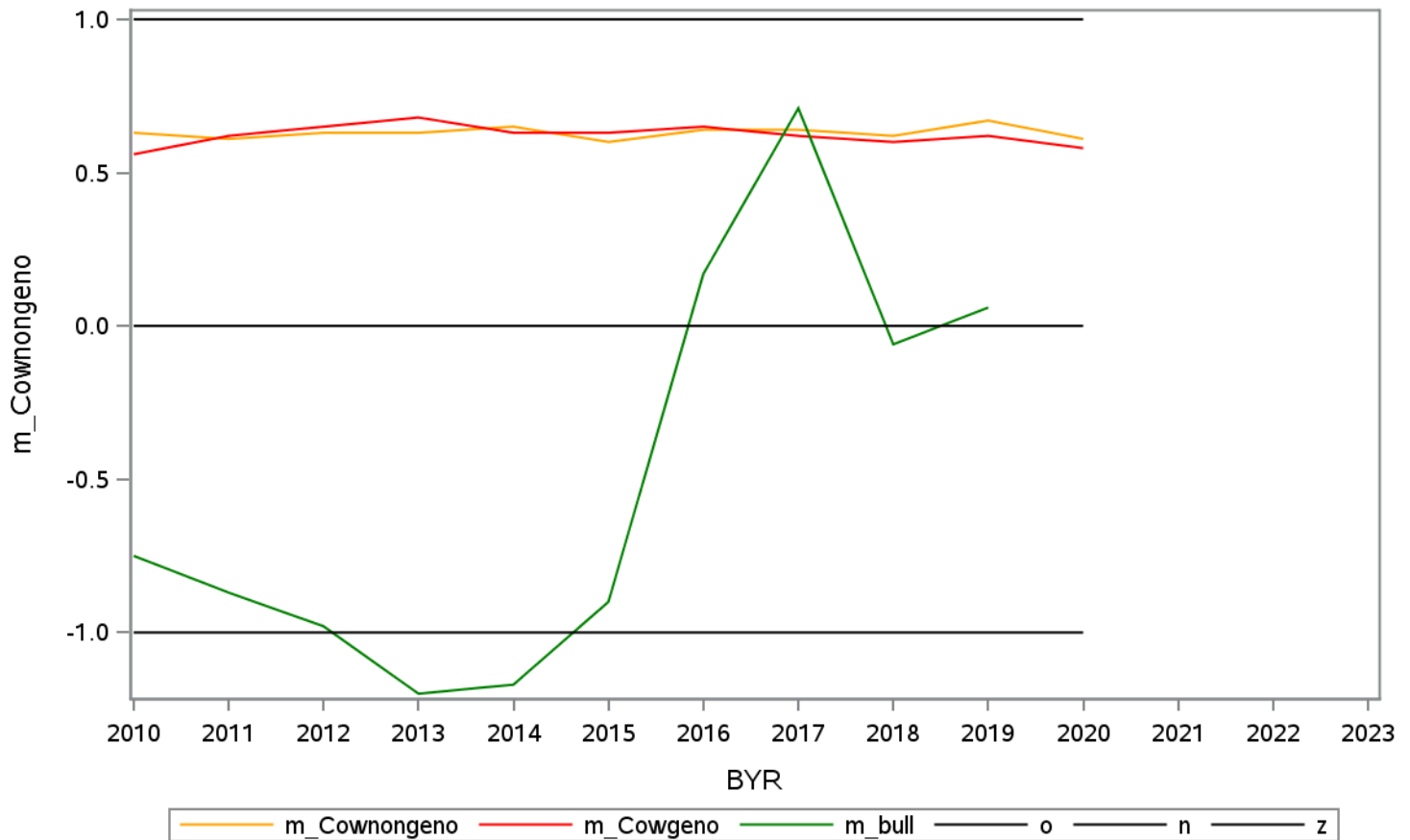
RDC Mendelian sampling for ' SS bv4 fsc '



RDC Mendelian sampling for 'EBV bv4 fsc '

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.63	0.56	-0.75	57437	2630	227
2	2011	0.61	0.62	-0.87	55343	4421	238
3	2012	0.63	0.65	-0.98	50334	4637	236
4	2013	0.63	0.68	-1.20	46039	4577	201
5	2014	0.65	0.63	-1.17	40401	4605	143
6	2015	0.60	0.63	-0.90	33551	5698	127
7	2016	0.64	0.65	0.17	25787	6954	106
8	2017	0.64	0.62	0.71	17503	6778	106
9	2018	0.62	0.60	-0.06	9597	5760	100
10	2019	0.67	0.62	0.06	1629	2944	68
11	2020	0.61	0.58	.	40	248	2

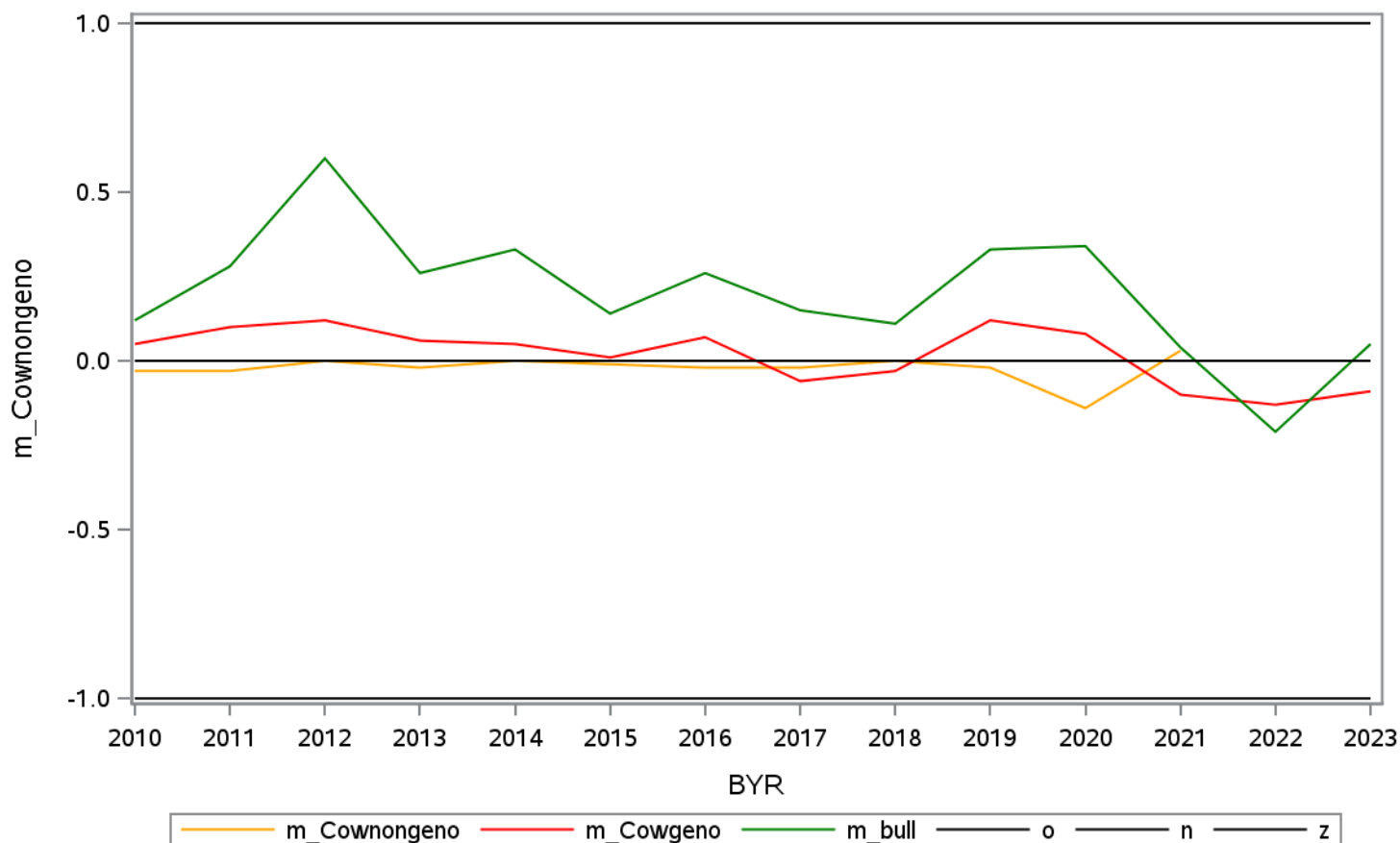
RDC Mendelian sampling for 'EBV bv4 fsc '



RDC Mendelian sampling for ' SS bv5 cdg '

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.03	0.05	0.12	59154	3668	997
2	2011	-0.03	0.10	0.28	57222	6414	1814
3	2012	0.00	0.12	0.60	52555	7240	2334
4	2013	-0.02	0.06	0.26	48903	7645	2353
5	2014	0.00	0.05	0.33	44059	8513	2328
6	2015	-0.01	0.01	0.14	37595	11175	2378
7	2016	-0.02	0.07	0.26	30060	15479	2351
8	2017	-0.02	-0.06	0.15	21541	18453	2622
9	2018	0.00	-0.03	0.11	13738	20781	2559
10	2019	-0.02	0.12	0.33	4894	21137	2451
11	2020	-0.14	0.08	0.34	2364	23385	2833
12	2021	0.03	-0.10	0.04	335	23642	2778
13	2022	.	-0.13	-0.21	15	23700	2576
14	2023	.	-0.09	0.05	12	5599	780

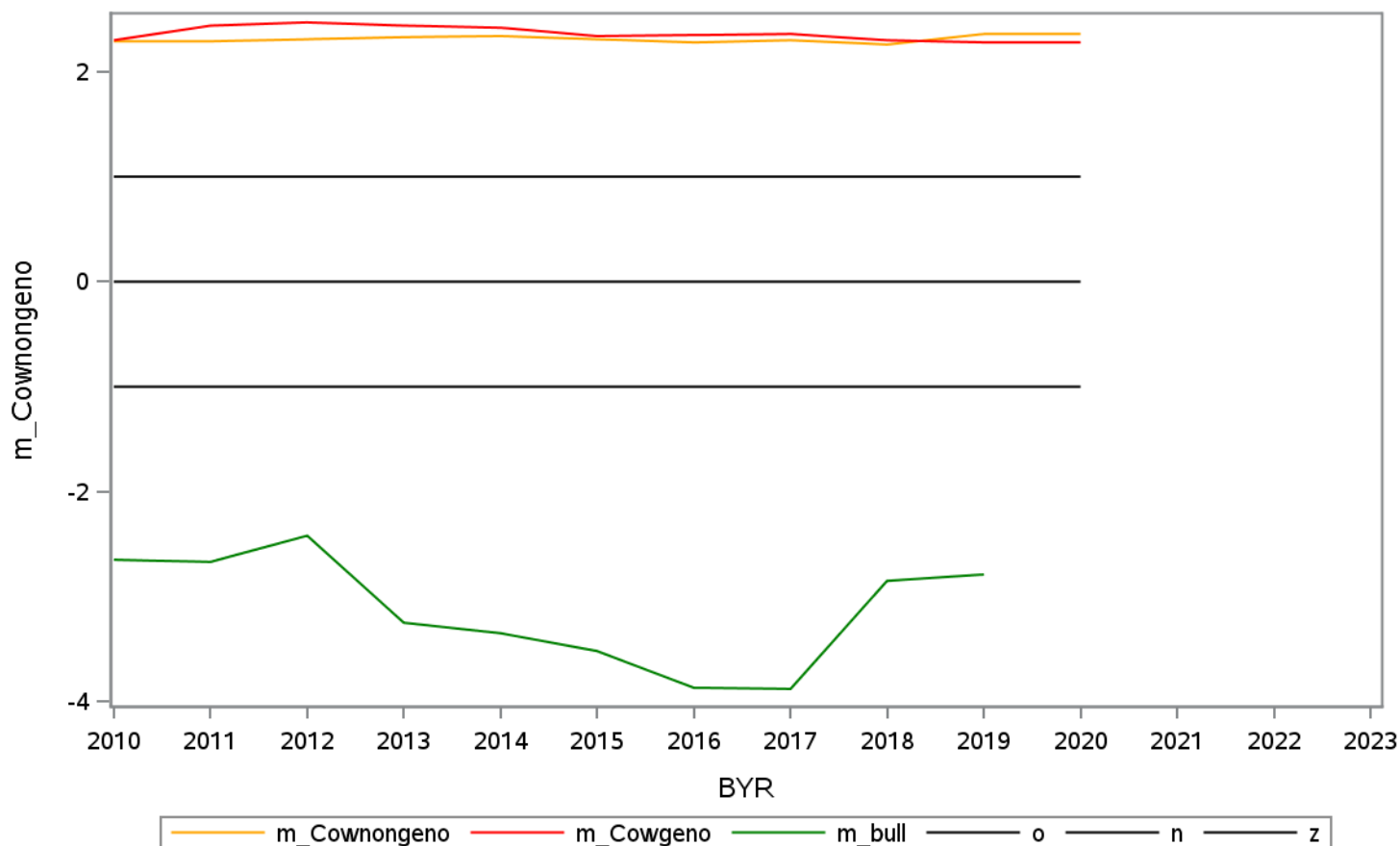
RDC Mendelian sampling for ' SS bv5 cdg '



RDC Mendelian sampling for 'EBV bv5 cdg '

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	2.29	2.30	-2.65	57437	2630	227
2	2011	2.29	2.44	-2.67	55343	4421	238
3	2012	2.31	2.47	-2.42	50334	4637	236
4	2013	2.33	2.44	-3.25	46039	4577	201
5	2014	2.34	2.42	-3.35	40401	4605	143
6	2015	2.31	2.34	-3.52	33551	5698	127
7	2016	2.28	2.35	-3.87	25787	6954	106
8	2017	2.30	2.36	-3.88	17503	6778	106
9	2018	2.26	2.30	-2.85	9597	5760	100
10	2019	2.36	2.28	-2.79	1629	2944	68
11	2020	2.36	2.28	.	40	248	2

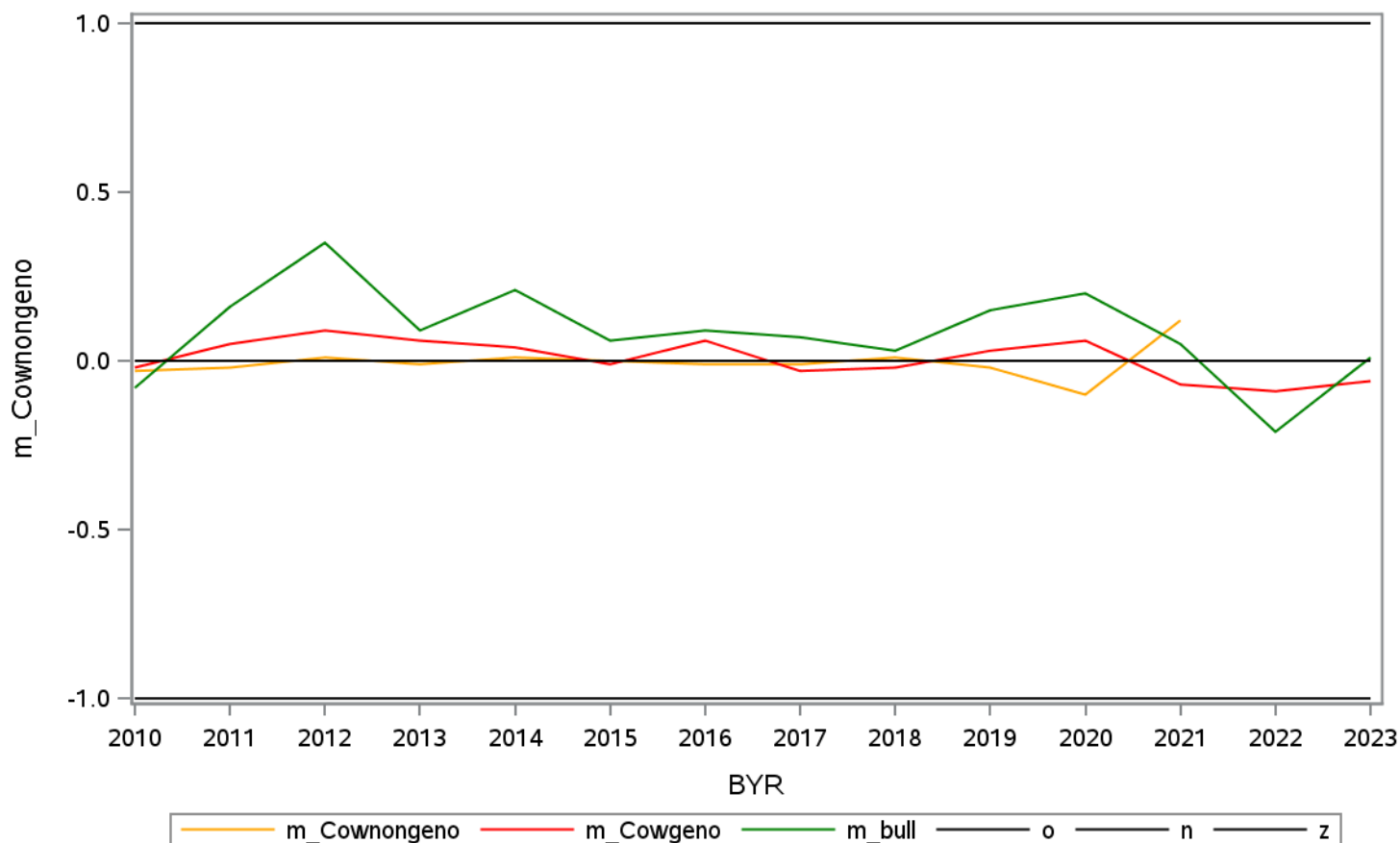
RDC Mendelian sampling for 'EBV bv5 cdg '



RDC Mendelian sampling for ' SS bv6 grw '

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.03	-0.02	-0.08	59154	3668	997
2	2011	-0.02	0.05	0.16	57222	6414	1814
3	2012	0.01	0.09	0.35	52555	7240	2334
4	2013	-0.01	0.06	0.09	48903	7645	2353
5	2014	0.01	0.04	0.21	44059	8513	2328
6	2015	0.00	-0.01	0.06	37595	11175	2378
7	2016	-0.01	0.06	0.09	30060	15479	2351
8	2017	-0.01	-0.03	0.07	21541	18453	2622
9	2018	0.01	-0.02	0.03	13738	20781	2559
10	2019	-0.02	0.03	0.15	4894	21137	2451
11	2020	-0.10	0.06	0.20	2364	23385	2833
12	2021	0.12	-0.07	0.05	335	23642	2778
13	2022	.	-0.09	-0.21	15	23700	2576
14	2023	.	-0.06	0.01	12	5599	780

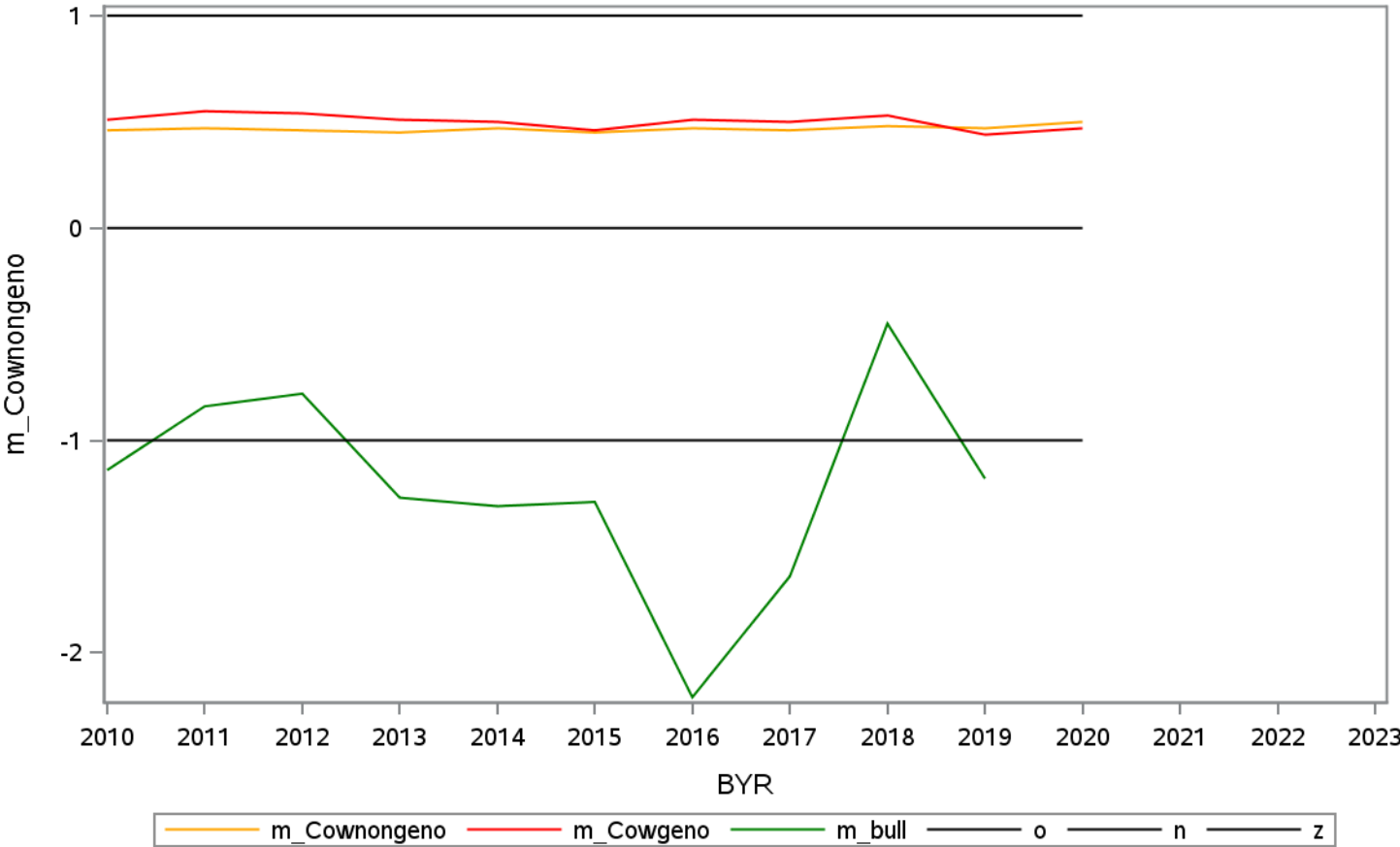
RDC Mendelian sampling for ' SS bv6 grw '



RDC Mendelian sampling for 'EBV bv6 grw '

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.46	0.51	-1.14	57437	2630	227
2	2011	0.47	0.55	-0.84	55343	4421	238
3	2012	0.46	0.54	-0.78	50334	4637	236
4	2013	0.45	0.51	-1.27	46039	4577	201
5	2014	0.47	0.50	-1.31	40401	4605	143
6	2015	0.45	0.46	-1.29	33551	5698	127
7	2016	0.47	0.51	-2.21	25787	6954	106
8	2017	0.46	0.50	-1.64	17503	6778	106
9	2018	0.48	0.53	-0.45	9597	5760	100
10	2019	0.47	0.44	-1.18	1629	2944	68
11	2020	0.50	0.47	.	40	248	2

RDC Mendelian sampling for 'EBV bv6 grw '



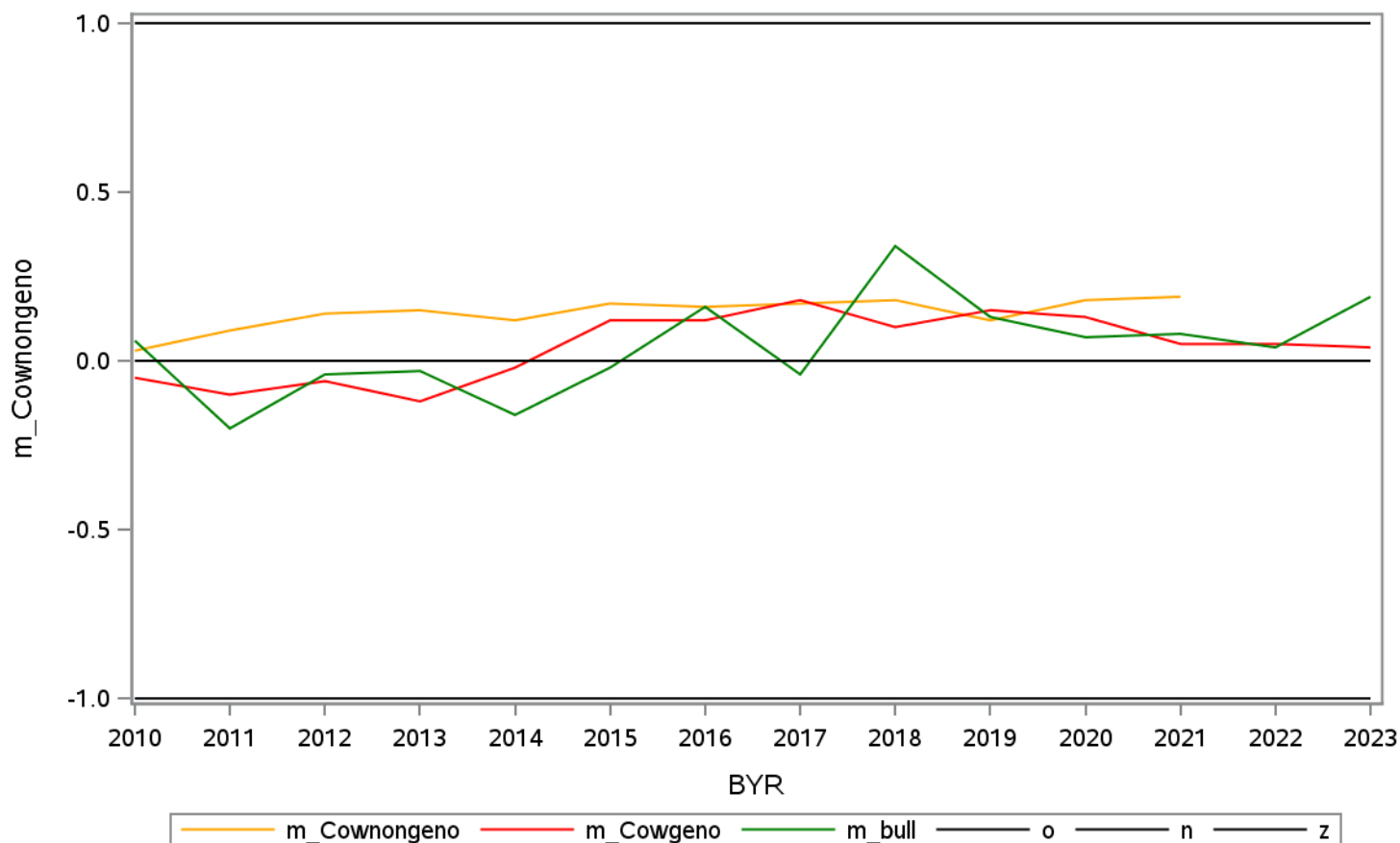
JER Mendelian sampling for singlestep and traditional breeding values

Obs	tekst
1	m_Cownongen is nordic nongenotyped cows
2	m_Cowgeno is nordic genotyped cows
3	m_bull is nordic genotyped bulls

JER Mendelian sampling for ' SS bv1 sdg '

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.03	-0.05	0.06	3274	2303	252
2	2011	0.09	-0.10	-0.20	3116	4255	399
3	2012	0.14	-0.06	-0.04	3604	4914	430
4	2013	0.15	-0.12	-0.03	3994	3878	458
5	2014	0.12	-0.02	-0.16	4350	4860	496
6	2015	0.17	0.12	-0.02	4349	5783	551
7	2016	0.16	0.12	0.16	3765	6906	508
8	2017	0.17	0.18	-0.04	2944	8603	570
9	2018	0.18	0.10	0.34	2646	10590	371
10	2019	0.12	0.15	0.13	1762	12958	493
11	2020	0.18	0.13	0.07	1177	15655	509
12	2021	0.19	0.05	0.08	421	15071	427
13	2022	.	0.05	0.04	9	15226	462
14	2023	.	0.04	0.19	2	3605	202

JER Mendelian sampling for ' SS bv1 sdg '



JER Mendelian sampling for 'EBV bv1 sdg '

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.02	-0.03	-0.11	1156	212	56
2	2011	-0.09	-0.01	-0.89	1008	327	50
3	2012	0.01	-0.01	0.06	966	335	47
4	2013	0.00	-0.05	-0.25	787	293	53
5	2014	0.01	-0.07	-0.11	814	320	40
6	2015	0.01	-0.06	-0.36	672	267	33
7	2016	-0.05	0.13	-0.30	445	185	30
8	2017	-0.03	0.10	0.45	326	200	38
9	2018	0.02	-0.02	0.38	210	143	24
10	2019	-0.06	0.00	-0.52	106	116	31
11	2020	.	-0.02	.	10	31	1

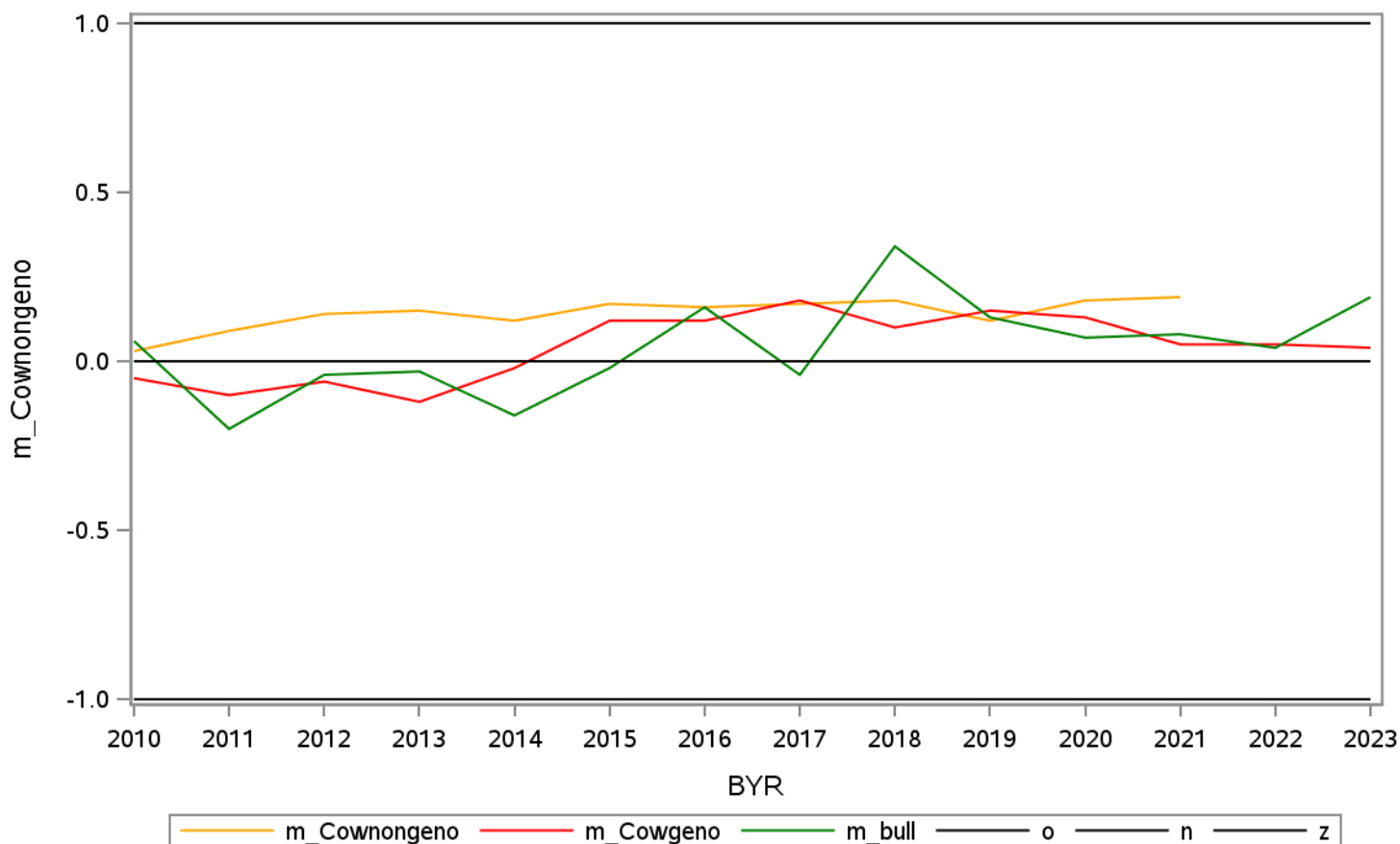
JER Mendelian sampling for 'EBV bv1 sdg '



JER Mendelian sampling for ' SS bv2 Idg '

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.03	-0.05	0.06	3274	2303	252
2	2011	0.09	-0.10	-0.20	3116	4255	399
3	2012	0.14	-0.06	-0.04	3604	4914	430
4	2013	0.15	-0.12	-0.03	3994	3878	458
5	2014	0.12	-0.02	-0.16	4350	4860	496
6	2015	0.17	0.12	-0.02	4349	5783	551
7	2016	0.16	0.12	0.16	3765	6906	508
8	2017	0.17	0.18	-0.04	2944	8603	570
9	2018	0.18	0.10	0.34	2646	10590	371
10	2019	0.12	0.15	0.13	1762	12958	493
11	2020	0.18	0.13	0.07	1177	15655	509
12	2021	0.19	0.05	0.08	421	15071	427
13	2022	.	0.05	0.04	9	15226	462
14	2023	.	0.04	0.19	2	3605	202

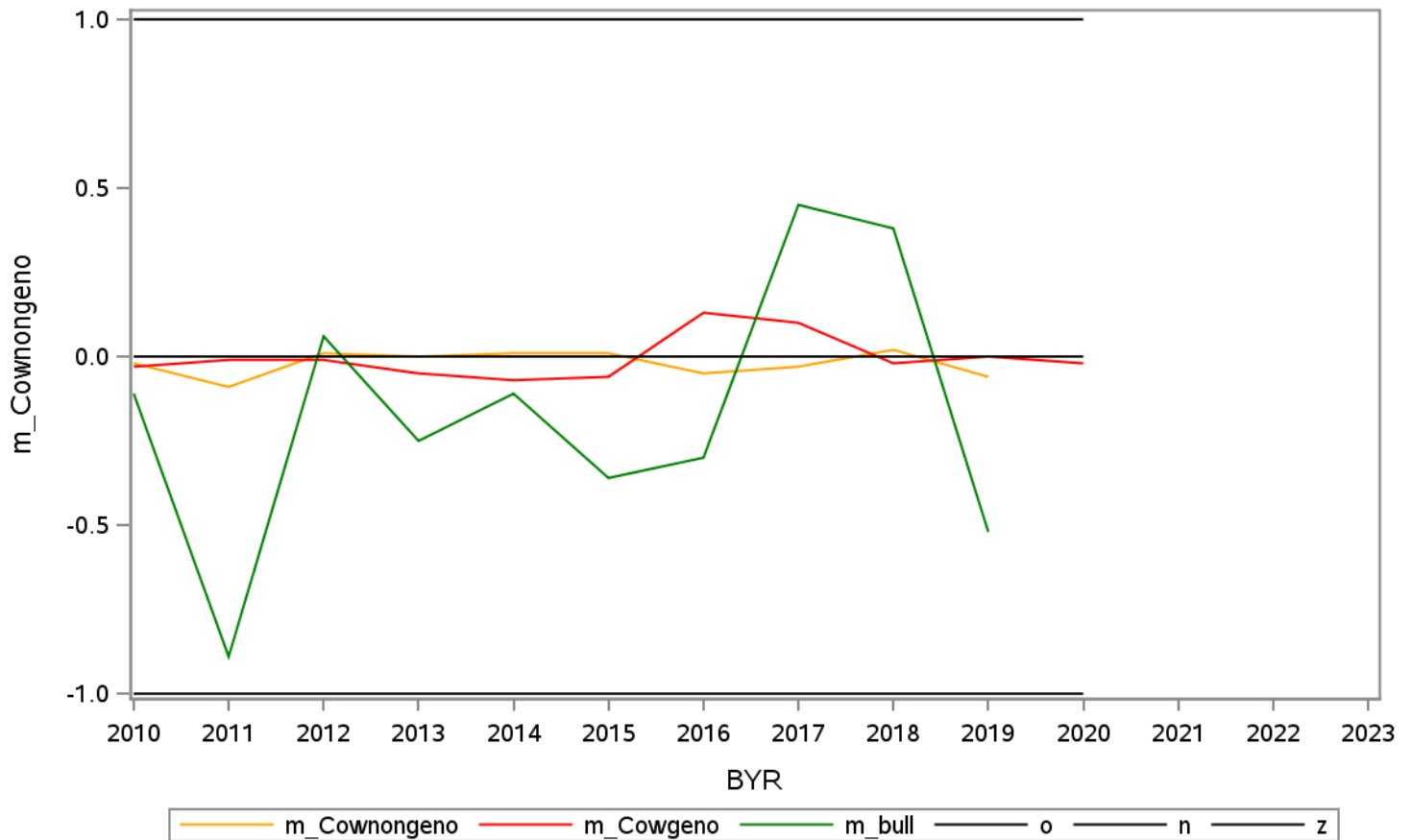
JER Mendelian sampling for ' SS bv2 Idg '



JER Mendelian sampling for 'EBV bv2 Idg '

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.02	-0.03	-0.11	1156	212	56
2	2011	-0.09	-0.01	-0.89	1008	327	50
3	2012	0.01	-0.01	0.06	966	335	47
4	2013	0.00	-0.05	-0.25	787	293	53
5	2014	0.01	-0.07	-0.11	814	320	40
6	2015	0.01	-0.06	-0.36	672	267	33
7	2016	-0.05	0.13	-0.30	445	185	30
8	2017	-0.03	0.10	0.45	326	200	38
9	2018	0.02	-0.02	0.38	210	143	24
10	2019	-0.06	0.00	-0.52	106	116	31
11	2020	.	-0.02	.	10	31	1

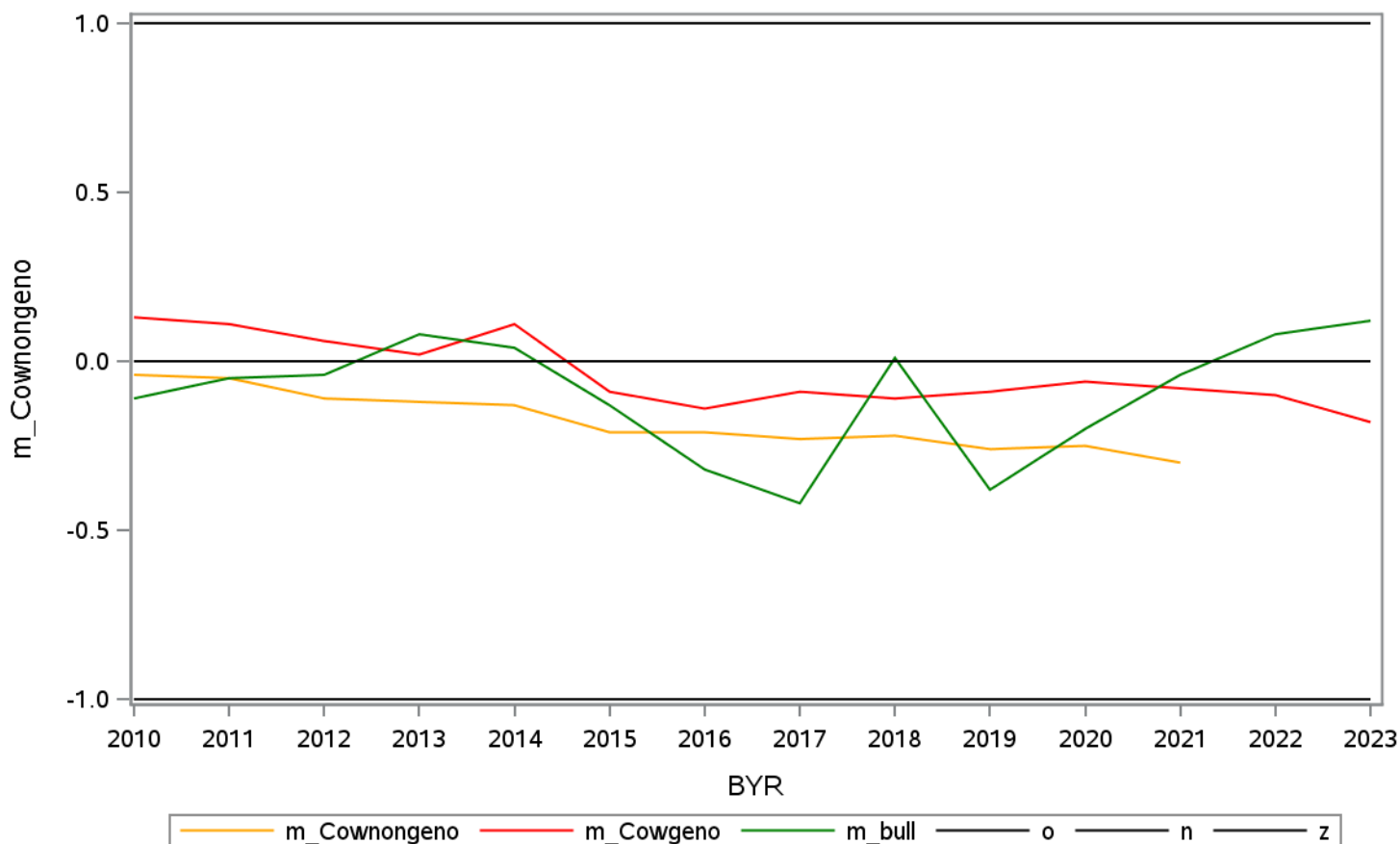
JER Mendelian sampling for 'EBV bv2 Idg '



JER Mendelian sampling for ' SS bv3 csc '

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.04	0.13	-0.11	3274	2303	252
2	2011	-0.05	0.11	-0.05	3116	4255	399
3	2012	-0.11	0.06	-0.04	3604	4914	430
4	2013	-0.12	0.02	0.08	3994	3878	458
5	2014	-0.13	0.11	0.04	4350	4860	496
6	2015	-0.21	-0.09	-0.13	4349	5783	551
7	2016	-0.21	-0.14	-0.32	3765	6906	508
8	2017	-0.23	-0.09	-0.42	2944	8603	570
9	2018	-0.22	-0.11	0.01	2646	10590	371
10	2019	-0.26	-0.09	-0.38	1762	12958	493
11	2020	-0.25	-0.06	-0.20	1177	15655	509
12	2021	-0.30	-0.08	-0.04	421	15071	427
13	2022	.	-0.10	0.08	9	15226	462
14	2023	.	-0.18	0.12	2	3605	202

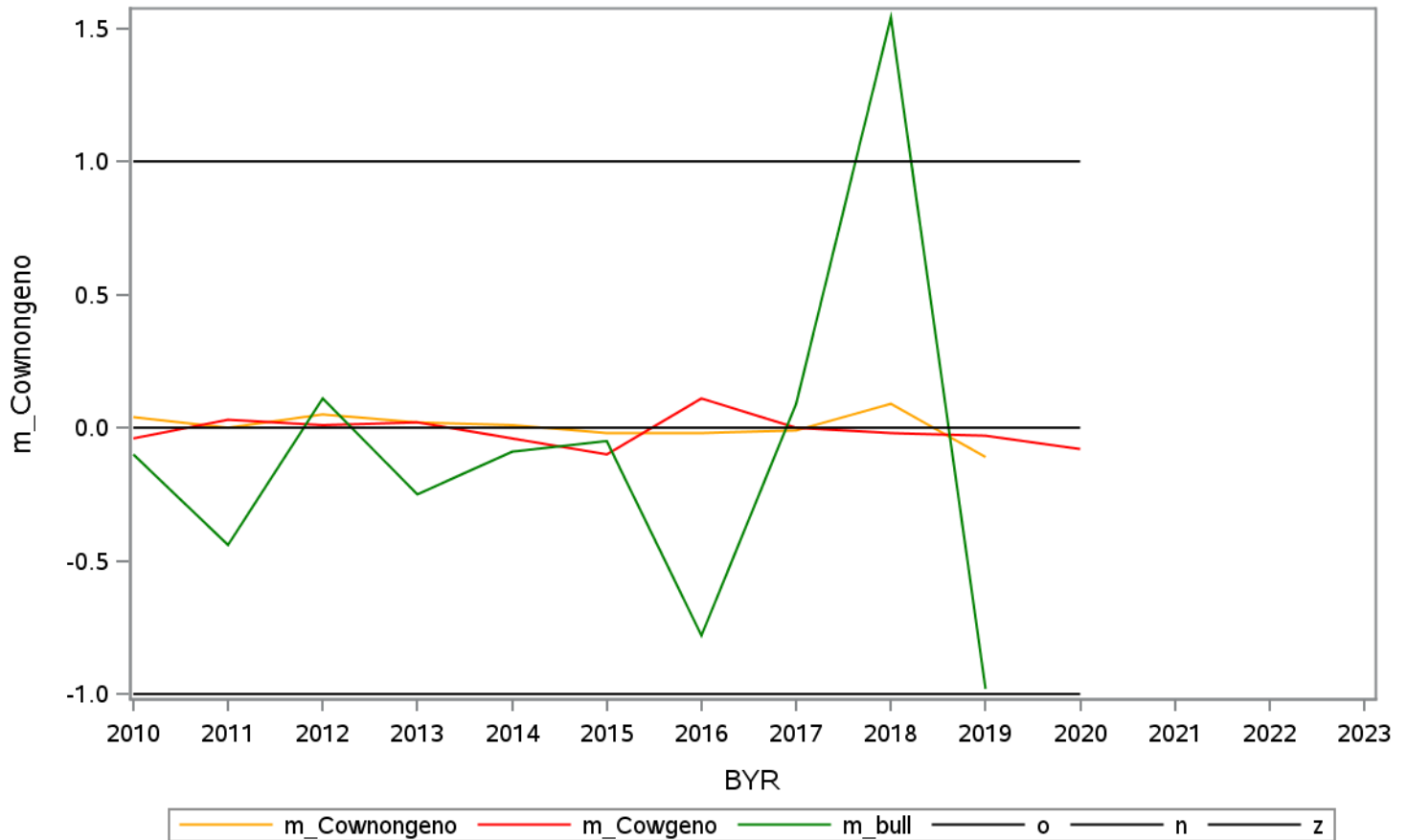
JER Mendelian sampling for ' SS bv3 csc '



JER Mendelian sampling for 'EBV bv3 csc '

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.04	-0.04	-0.10	1156	212	56
2	2011	0.00	0.03	-0.44	1008	327	50
3	2012	0.05	0.01	0.11	966	335	47
4	2013	0.02	0.02	-0.25	787	293	53
5	2014	0.01	-0.04	-0.09	814	320	40
6	2015	-0.02	-0.10	-0.05	672	267	33
7	2016	-0.02	0.11	-0.78	445	185	30
8	2017	-0.01	0.00	0.09	326	200	38
9	2018	0.09	-0.02	1.54	210	143	24
10	2019	-0.11	-0.03	-0.98	106	116	31
11	2020	.	-0.08	.	10	31	1

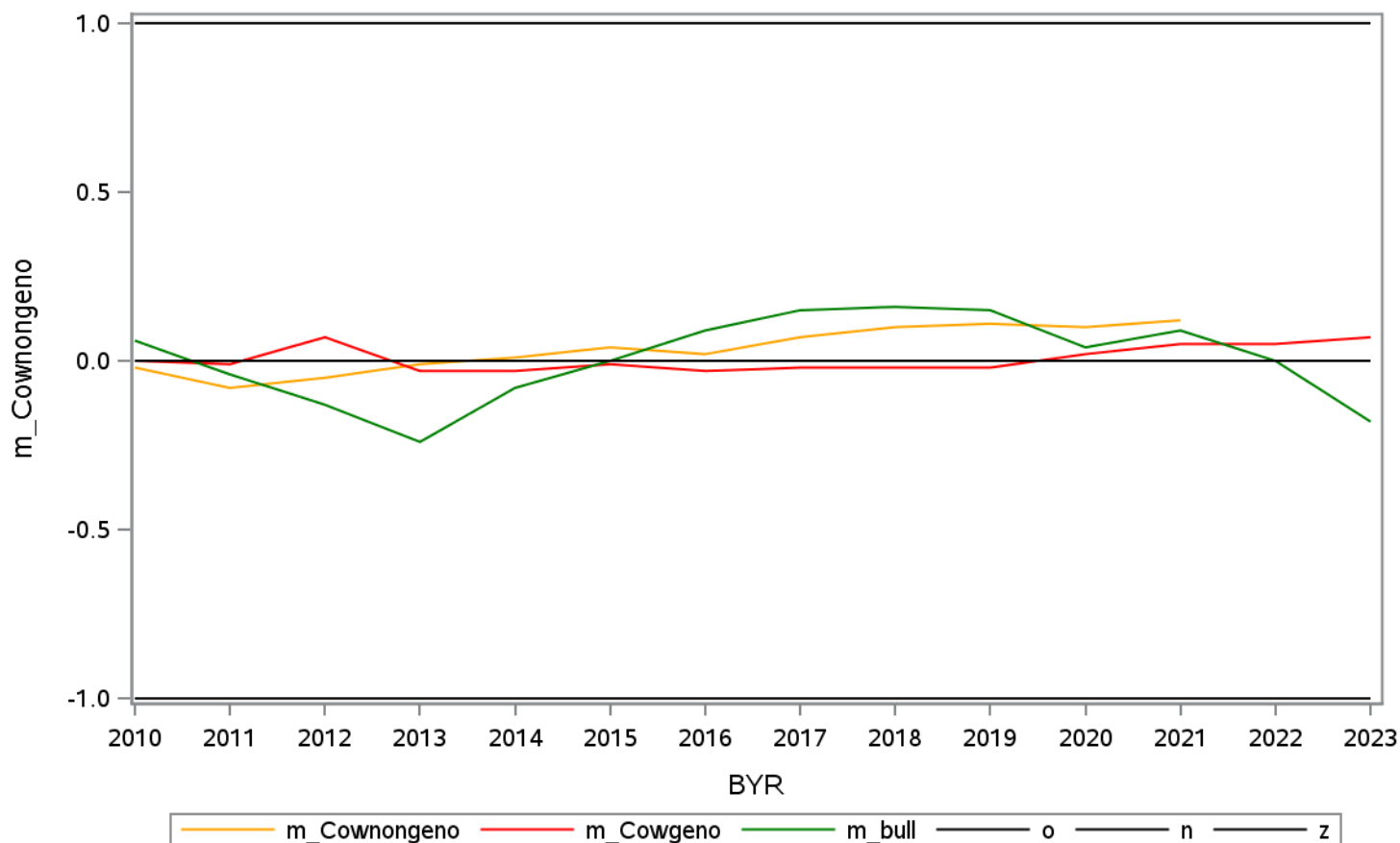
JER Mendelian sampling for 'EBV bv3 csc '



JER Mendelian sampling for ' SS bv4 fsc '

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.02	0.00	0.06	3274	2303	252
2	2011	-0.08	-0.01	-0.04	3116	4255	399
3	2012	-0.05	0.07	-0.13	3604	4914	430
4	2013	-0.01	-0.03	-0.24	3994	3878	458
5	2014	0.01	-0.03	-0.08	4350	4860	496
6	2015	0.04	-0.01	0.00	4349	5783	551
7	2016	0.02	-0.03	0.09	3765	6906	508
8	2017	0.07	-0.02	0.15	2944	8603	570
9	2018	0.10	-0.02	0.16	2646	10590	371
10	2019	0.11	-0.02	0.15	1762	12958	493
11	2020	0.10	0.02	0.04	1177	15655	509
12	2021	0.12	0.05	0.09	421	15071	427
13	2022	.	0.05	0.00	9	15226	462
14	2023	.	0.07	-0.18	2	3605	202

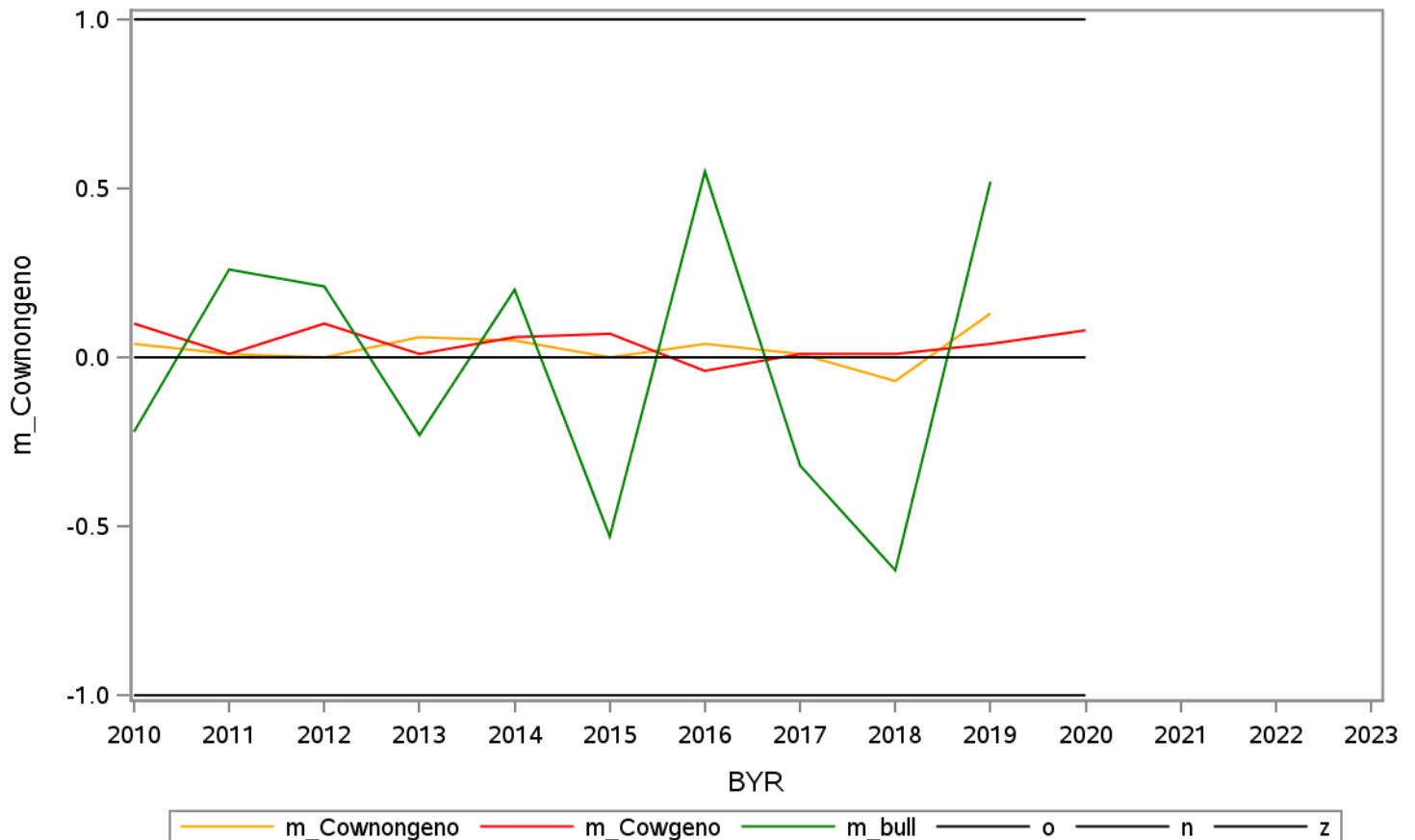
JER Mendelian sampling for ' SS bv4 fsc '



JER Mendelian sampling for 'EBV bv4 fsc '

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.04	0.10	-0.22	1156	212	56
2	2011	0.01	0.01	0.26	1008	327	50
3	2012	0.00	0.10	0.21	966	335	47
4	2013	0.06	0.01	-0.23	787	293	53
5	2014	0.05	0.06	0.20	814	320	40
6	2015	0.00	0.07	-0.53	672	267	33
7	2016	0.04	-0.04	0.55	445	185	30
8	2017	0.01	0.01	-0.32	326	200	38
9	2018	-0.07	0.01	-0.63	210	143	24
10	2019	0.13	0.04	0.52	106	116	31
11	2020	.	0.08	.	10	31	1

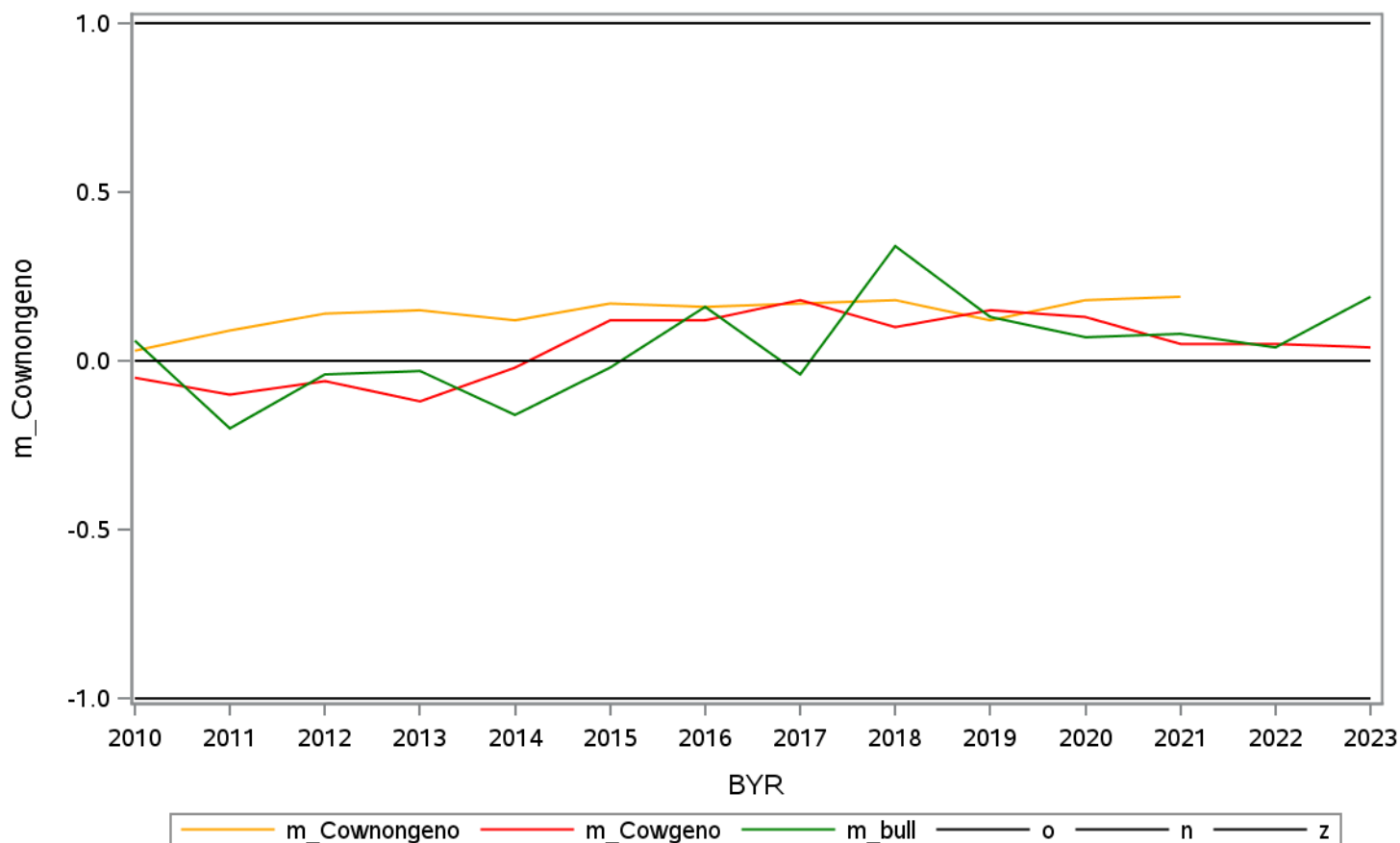
JER Mendelian sampling for 'EBV bv4 fsc '



JER Mendelian sampling for ' SS bv5 cdg '

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	0.03	-0.05	0.06	3274	2303	252
2	2011	0.09	-0.10	-0.20	3116	4255	399
3	2012	0.14	-0.06	-0.04	3604	4914	430
4	2013	0.15	-0.12	-0.03	3994	3878	458
5	2014	0.12	-0.02	-0.16	4350	4860	496
6	2015	0.17	0.12	-0.02	4349	5783	551
7	2016	0.16	0.12	0.16	3765	6906	508
8	2017	0.17	0.18	-0.04	2944	8603	570
9	2018	0.18	0.10	0.34	2646	10590	371
10	2019	0.12	0.15	0.13	1762	12958	493
11	2020	0.18	0.13	0.07	1177	15655	509
12	2021	0.19	0.05	0.08	421	15071	427
13	2022	.	0.05	0.04	9	15226	462
14	2023	.	0.04	0.19	2	3605	202

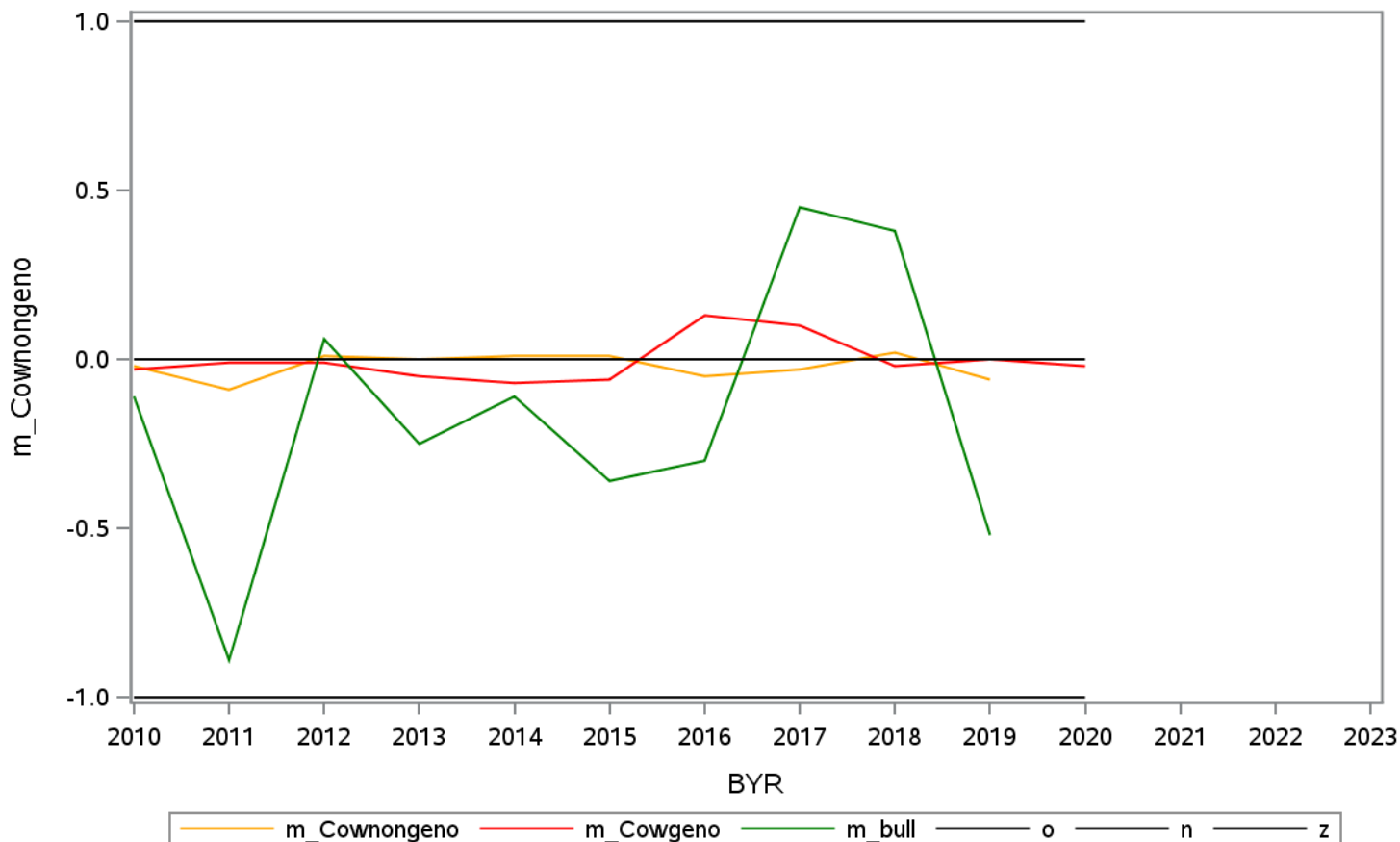
JER Mendelian sampling for ' SS bv5 cdg '



JER Mendelian sampling for 'EBV bv5 cdg '

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.02	-0.03	-0.11	1156	212	56
2	2011	-0.09	-0.01	-0.89	1008	327	50
3	2012	0.01	-0.01	0.06	966	335	47
4	2013	0.00	-0.05	-0.25	787	293	53
5	2014	0.01	-0.07	-0.11	814	320	40
6	2015	0.01	-0.06	-0.36	672	267	33
7	2016	-0.05	0.13	-0.30	445	185	30
8	2017	-0.03	0.10	0.45	326	200	38
9	2018	0.02	-0.02	0.38	210	143	24
10	2019	-0.06	0.00	-0.52	106	116	31
11	2020	.	-0.02	.	10	31	1

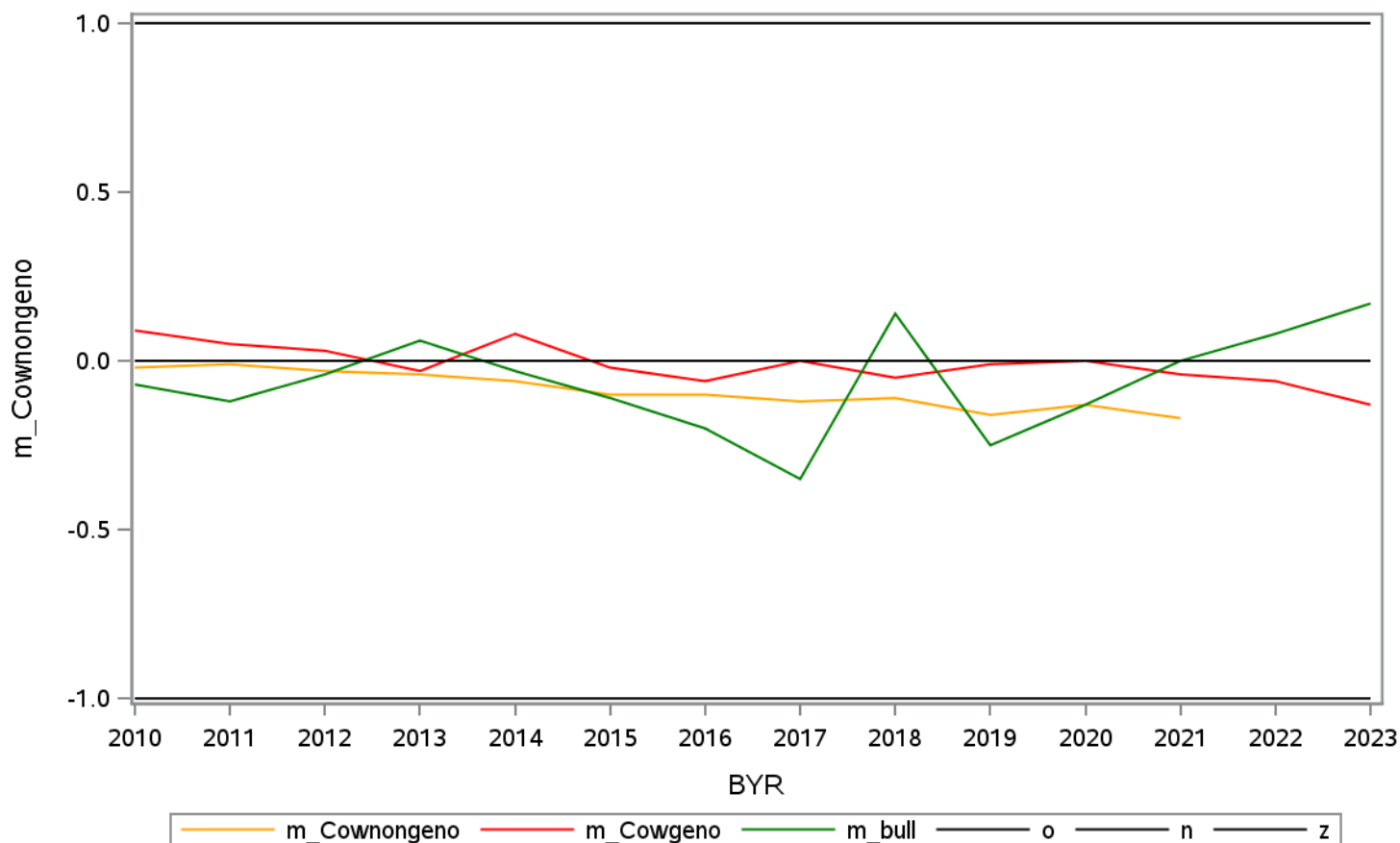
JER Mendelian sampling for 'EBV bv5 cdg '



JER Mendelian sampling for ' SS bv6 grw '

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.02	0.09	-0.07	3274	2303	252
2	2011	-0.01	0.05	-0.12	3116	4255	399
3	2012	-0.03	0.03	-0.04	3604	4914	430
4	2013	-0.04	-0.03	0.06	3994	3878	458
5	2014	-0.06	0.08	-0.03	4350	4860	496
6	2015	-0.10	-0.02	-0.11	4349	5783	551
7	2016	-0.10	-0.06	-0.20	3765	6906	508
8	2017	-0.12	0.00	-0.35	2944	8603	570
9	2018	-0.11	-0.05	0.14	2646	10590	371
10	2019	-0.16	-0.01	-0.25	1762	12958	493
11	2020	-0.13	0.00	-0.13	1177	15655	509
12	2021	-0.17	-0.04	0.00	421	15071	427
13	2022	.	-0.06	0.08	9	15226	462
14	2023	.	-0.13	0.17	2	3605	202

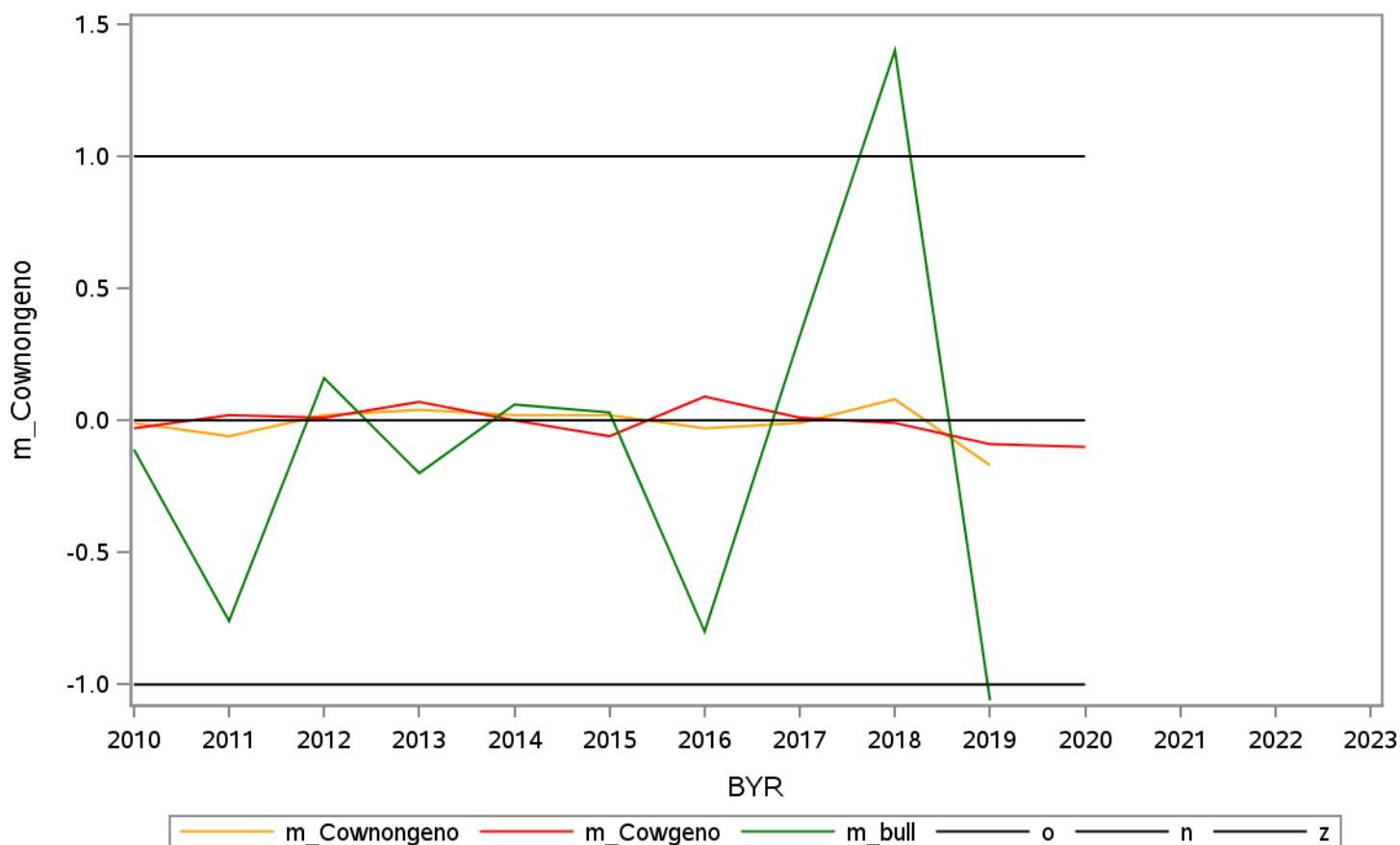
JER Mendelian sampling for ' SS bv6 grw '



JER Mendelian sampling for 'EBV bv6 grw '

Obs	BYR	m_Cownongeno	m_Cowgeno	m_bull	N_Cownongeno	N_Cowgeno	N_bull
1	2010	-0.01	-0.03	-0.11	1156	212	56
2	2011	-0.06	0.02	-0.76	1008	327	50
3	2012	0.02	0.01	0.16	966	335	47
4	2013	0.04	0.07	-0.20	787	293	53
5	2014	0.02	0.00	0.06	814	320	40
6	2015	0.02	-0.06	0.03	672	267	33
7	2016	-0.03	0.09	-0.80	445	185	30
8	2017	-0.01	0.01	0.32	326	200	38
9	2018	0.08	-0.01	1.40	210	143	24
10	2019	-0.17	-0.09	-1.06	106	116	31
11	2020	.	-0.10	.	10	31	1

JER Mendelian sampling for 'EBV bv6 grw '



HOL summery stastistics for SS and reduc SS breeding value for nordic AI bulls with more than 14 sons with phenotype, by birth year

07:53 Thursday, September 21, 2023

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Obs	BYR	name	no	mean_ss	mean_rSS	std_ss	std_rSS	mean_dif	std_dif	corr_SS
1	2010	bv1 sdg	191	97.9	98.1	10.6	10.6	-0.2	1.0	1.00
2	2011	bv1 sdg	154	97.9	98.0	12.2	12.3	-0.1	1.1	1.00
3	2012	bv1 sdg	170	97.6	97.7	11.6	11.7	-0.1	1.3	0.99
4	2013	bv1 sdg	150	99.1	98.6	11.7	11.7	0.5	1.5	0.99
5	2014	bv1 sdg	110	99.8	99.1	11.4	11.6	0.7	1.5	0.99
6	2015	bv1 sdg	82	99.5	101.2	13.3	10.5	-1.7	8.5	0.77
7	2016	bv1 sdg	66	100.3	100.5	12.8	8.9	-0.2	7.2	0.84
8	2017	bv1 sdg	66	99.0	101.1	12.2	9.0	-2.1	8.9	0.69
9	2018	bv1 sdg	77	104.8	103.1	12.5	7.5	1.7	8.7	0.73
10	2019	bv1 sdg	40	101.1	101.8	9.6	8.5	-0.7	8.1	0.61
11	2010	bv2 ldg	191	98.5	98.6	10.8	10.8	0.0	1.0	1.00
12	2011	bv2 ldg	154	98.6	98.5	12.3	12.4	0.1	1.1	1.00
13	2012	bv2 ldg	170	98.9	98.8	11.5	11.6	0.1	1.3	0.99
14	2013	bv2 ldg	150	99.6	99.1	12.6	12.5	0.5	1.5	0.99
15	2014	bv2 ldg	110	100.9	100.4	11.9	12.0	0.5	1.6	0.99
16	2015	bv2 ldg	82	98.9	101.7	13.2	10.9	-2.8	8.2	0.79
17	2016	bv2 ldg	66	100.8	101.6	12.4	8.8	-0.8	7.8	0.78
18	2017	bv2 ldg	66	98.2	101.8	12.9	9.5	-3.7	8.8	0.74
19	2018	bv2 ldg	77	104.3	104.0	12.1	7.6	0.3	8.4	0.73
20	2019	bv2 ldg	40	100.8	102.8	10.0	8.8	-2.0	8.5	0.60
21	2010	bv3 csc	193	103.3	103.2	11.5	11.5	0.1	0.9	1.00
22	2011	bv3 csc	155	104.7	104.8	12.4	12.4	-0.1	0.9	1.00
23	2012	bv3 csc	171	104.9	105.0	11.0	11.0	-0.1	1.1	1.00
24	2013	bv3 csc	151	101.8	101.8	11.4	11.5	0.0	1.3	0.99
25	2014	bv3 csc	114	99.5	99.9	9.7	9.8	-0.4	1.1	0.99
26	2015	bv3 csc	83	98.1	98.0	10.9	10.3	0.1	5.7	0.86
27	2016	bv3 csc	66	97.3	97.9	10.7	8.2	-0.6	7.3	0.73
28	2017	bv3 csc	66	94.0	96.0	12.1	8.9	-2.0	7.7	0.77
29	2018	bv3 csc	77	95.5	96.9	10.6	7.3	-1.4	8.1	0.65
30	2019	bv3 csc	40	91.9	94.9	11.6	7.5	-3.0	8.5	0.68
31	2010	bv4 fsc	193	99.9	100.3	10.3	10.2	-0.4	1.1	0.99
32	2011	bv4 fsc	155	98.4	98.6	11.4	11.4	-0.2	1.1	1.00
33	2012	bv4 fsc	171	99.5	99.7	11.1	11.2	-0.2	1.2	0.99
34	2013	bv4 fsc	151	101.4	101.7	10.4	10.3	-0.4	1.6	0.99
35	2014	bv4 fsc	114	101.0	100.6	10.6	10.5	0.4	1.4	0.99
36	2015	bv4 fsc	83	102.1	102.5	12.3	10.1	-0.4	6.8	0.83

HOL summery stastistics for SS and reduc SS breeding value for nordic AI bulls with more than 14 sons with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_rSS	std_ss	std_rSS	mean_dif	std_dif	corr_SS
37	2016	bv4 fsc	66	98.7	99.2	10.5	9.2	-0.5	7.0	0.75
38	2017	bv4 fsc	66	103.6	103.3	12.0	8.8	0.4	8.3	0.72
39	2018	bv4 fsc	77	98.9	99.6	11.5	7.5	-0.8	9.1	0.61
40	2019	bv4 fsc	40	99.7	102.1	12.3	7.3	-2.4	8.0	0.78
41	2010	bv5 cdg	193	98.2	98.3	10.6	10.6	-0.1	0.9	1.00
42	2011	bv5 cdg	155	98.2	98.1	12.2	12.3	0.0	1.0	1.00
43	2012	bv5 cdg	171	98.1	98.1	11.5	11.6	0.0	1.3	0.99
44	2013	bv5 cdg	151	99.3	98.8	12.1	12.1	0.5	1.5	0.99
45	2014	bv5 cdg	114	100.0	99.3	11.7	11.8	0.6	1.5	0.99
46	2015	bv5 cdg	83	99.1	101.3	13.1	10.6	-2.2	8.2	0.78
47	2016	bv5 cdg	66	100.5	101.0	12.5	8.9	-0.5	7.4	0.82
48	2017	bv5 cdg	66	98.6	101.4	12.4	9.2	-2.8	8.7	0.71
49	2018	bv5 cdg	77	104.6	103.5	12.2	7.5	1.0	8.5	0.73
50	2019	bv5 cdg	40	100.9	102.2	9.8	8.6	-1.3	8.2	0.60
51	2010	bv6 grw	193	101.1	101.1	11.0	11.0	0.0	1.0	1.00
52	2011	bv6 grw	155	102.0	102.0	12.2	12.2	0.0	0.9	1.00
53	2012	bv6 grw	171	102.1	102.1	11.3	11.4	0.0	1.1	1.00
54	2013	bv6 grw	151	100.8	100.5	12.2	12.2	0.3	1.4	0.99
55	2014	bv6 grw	114	99.8	99.7	10.1	10.3	0.1	1.2	0.99
56	2015	bv6 grw	83	98.4	99.5	11.8	10.0	-1.2	7.1	0.80
57	2016	bv6 grw	66	98.7	99.3	11.6	8.3	-0.6	7.5	0.76
58	2017	bv6 grw	66	95.6	98.4	12.5	9.1	-2.8	8.4	0.74
59	2018	bv6 grw	77	99.9	100.1	11.1	6.7	-0.3	8.3	0.67
60	2019	bv6 grw	40	95.6	98.1	9.5	7.6	-2.6	7.6	0.63

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

07:53 Thursday, September 21, 2023

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Obs	BYR	name	no	mean_ss	mean_rSS	std_ss	std_rSS	mean_dif	std_dif	corr_SS
1	2015	bv1 sdg	3742	99.4	99.1	9.9	9.1	0.3	3.6	0.93
2	2016	bv1 sdg	5036	100.9	100.3	10.2	9.2	0.5	3.8	0.93
3	2017	bv1 sdg	6238	100.7	99.7	10.2	8.9	1.0	4.9	0.88
4	2018	bv1 sdg	6888	100.8	100.4	10.5	8.5	0.4	5.4	0.86
5	2019	bv1 sdg	3556	101.3	100.5	10.0	8.0	0.8	5.3	0.85
6	2020	bv1 sdg	47	101.7	100.9	9.2	7.9	0.8	5.7	0.79
7	2015	bv2 ldg	3742	99.9	99.7	9.9	9.2	0.3	3.7	0.93
8	2016	bv2 ldg	5036	101.8	101.4	10.2	9.3	0.5	3.8	0.93
9	2017	bv2 ldg	6238	100.4	100.3	10.4	9.2	0.1	4.6	0.90
10	2018	bv2 ldg	6888	100.7	101.3	10.5	8.7	-0.6	5.5	0.85
11	2019	bv2 ldg	3556	101.2	101.5	10.5	8.2	-0.2	5.8	0.84
12	2020	bv2 ldg	47	101.3	101.6	9.6	8.1	-0.3	5.9	0.79
13	2015	bv3 csc	5897	101.3	101.3	9.9	9.4	0.0	3.0	0.95
14	2016	bv3 csc	7886	102.1	102.2	9.6	9.0	-0.1	3.1	0.95
15	2017	bv3 csc	9916	99.8	99.7	9.3	8.8	0.1	3.5	0.93
16	2018	bv3 csc	9653	100.0	100.1	9.3	8.7	-0.1	3.9	0.91
17	2019	bv3 csc	3626	97.1	98.2	9.5	8.1	-1.1	4.4	0.89
18	2020	bv3 csc	47	97.4	99.2	9.2	8.4	-1.8	4.4	0.88
19	2015	bv4 fsc	5900	99.5	99.7	9.2	8.6	-0.2	3.1	0.94
20	2016	bv4 fsc	7891	99.4	99.6	9.3	8.7	-0.2	3.1	0.94
21	2017	bv4 fsc	9920	100.5	100.4	9.5	8.8	0.1	4.2	0.90
22	2018	bv4 fsc	9656	100.1	101.0	9.5	8.3	-0.9	5.1	0.85
23	2019	bv4 fsc	3626	99.1	100.1	9.4	8.1	-1.1	4.9	0.85
24	2020	bv4 fsc	47	102.1	102.1	9.9	7.2	0.0	5.7	0.83
25	2015	bv5 cdg	5983	99.4	99.1	9.8	9.0	0.3	3.6	0.93
26	2016	bv5 cdg	8128	100.9	100.4	10.1	9.2	0.5	3.7	0.93
27	2017	bv5 cdg	10610	100.6	100.1	10.2	9.1	0.5	4.6	0.89
28	2018	bv5 cdg	11277	101.1	100.9	10.3	8.5	0.2	5.2	0.86
29	2019	bv5 cdg	5938	101.4	101.0	10.1	8.1	0.4	5.3	0.85
30	2020	bv5 cdg	53	101.1	100.7	9.7	8.1	0.4	5.8	0.81
31	2015	bv6 grw	5983	100.6	100.4	9.8	9.1	0.1	3.2	0.94
32	2016	bv6 grw	8128	102.0	101.7	9.6	8.9	0.2	3.3	0.94
33	2017	bv6 grw	10610	100.3	99.9	9.8	8.9	0.4	4.0	0.91
34	2018	bv6 grw	11277	100.7	100.6	9.5	8.5	0.1	4.6	0.88
35	2019	bv6 grw	5938	99.4	99.6	9.7	8.0	-0.2	4.8	0.87
36	2020	bv6 grw	53	99.1	99.8	9.2	8.2	-0.6	5.5	0.81

sum sta for SS and reduc SS breeding value for nongenotyped females with sons with phenotype, by birth year

07:54 Thursday, September 21, 2023

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Obs	BYR	name	no	mean_ss	mean_rSS	std_ss	std_rSS	mean_dif	std_dif	corr_SS
1	2015	bv1 sdg	66597	98.3	98.3	7.0	6.4	0.0	3.0	0.90
2	2016	bv1 sdg	60485	99.1	98.9	7.3	6.7	0.2	3.2	0.90
3	2017	bv1 sdg	47107	99.6	99.3	7.7	6.7	0.3	4.0	0.85
4	2018	bv1 sdg	34147	99.8	100.1	7.9	6.0	-0.3	4.8	0.79
5	2019	bv1 sdg	15498	100.5	100.5	7.5	5.7	0.1	4.6	0.79
6	2020	bv1 sdg	204	101.4	101.0	7.3	6.0	0.4	5.0	0.74
7	2015	bv2 ldg	66597	99.0	99.0	7.0	6.4	0.0	3.0	0.90
8	2016	bv2 ldg	60485	100.1	100.0	7.2	6.6	0.2	3.2	0.90
9	2017	bv2 ldg	47107	99.9	100.1	7.9	7.0	-0.2	3.8	0.87
10	2018	bv2 ldg	34147	99.9	100.9	7.8	6.1	-0.9	4.8	0.79
11	2019	bv2 ldg	15498	100.7	101.4	7.9	5.9	-0.7	5.0	0.78
12	2020	bv2 ldg	204	101.3	101.8	7.9	6.3	-0.5	5.2	0.75
13	2015	bv3 csc	97509	102.8	102.8	8.0	7.6	0.0	2.7	0.94
14	2016	bv3 csc	88328	102.5	102.6	7.9	7.3	0.0	2.9	0.93
15	2017	bv3 csc	67858	100.5	100.6	7.4	6.9	-0.1	3.2	0.90
16	2018	bv3 csc	45601	100.1	100.6	7.6	7.0	-0.5	3.7	0.87
17	2019	bv3 csc	15680	98.3	99.2	7.5	6.2	-0.9	4.1	0.83
18	2020	bv3 csc	204	97.2	98.7	7.5	6.5	-1.5	4.5	0.80
19	2015	bv4 fsc	97550	99.6	99.7	7.1	6.8	-0.2	2.2	0.95
20	2016	bv4 fsc	88371	99.7	100.0	7.1	6.8	-0.2	2.4	0.94
21	2017	bv4 fsc	67888	100.5	100.4	7.2	6.8	0.1	3.3	0.89
22	2018	bv4 fsc	45619	101.0	101.3	7.3	6.2	-0.3	4.2	0.81
23	2019	bv4 fsc	15681	99.9	100.5	7.1	6.0	-0.5	4.1	0.82
24	2020	bv4 fsc	204	101.5	102.3	7.2	6.3	-0.9	4.1	0.83
25	2015	bv5 cdg	97946	98.7	98.6	7.0	6.5	0.1	3.0	0.91
26	2016	bv5 cdg	88924	99.6	99.4	7.2	6.6	0.2	3.2	0.90
27	2017	bv5 cdg	68572	99.9	99.8	7.8	6.9	0.1	3.8	0.87
28	2018	bv5 cdg	46359	100.2	100.6	7.8	6.1	-0.4	4.7	0.80
29	2019	bv5 cdg	16098	100.6	100.9	7.6	5.8	-0.3	4.7	0.79
30	2020	bv5 cdg	204	101.3	101.4	7.5	6.1	0.0	5.0	0.75
31	2015	bv6 grw	97946	101.1	101.1	7.3	6.8	0.0	2.8	0.92
32	2016	bv6 grw	88924	101.5	101.4	7.2	6.7	0.1	3.0	0.91
33	2017	bv6 grw	68572	100.4	100.3	7.2	6.6	0.1	3.4	0.88
34	2018	bv6 grw	46359	100.3	100.8	7.2	6.2	-0.5	4.2	0.82
35	2019	bv6 grw	16098	99.4	100.1	7.4	5.8	-0.7	4.4	0.81
36	2020	bv6 grw	204	99.1	100.0	7.6	6.3	-0.9	4.8	0.78

RDC summery statistics for SS and reduc SS breeding value for nordic AI bulls with more than 14 sons with phenotype, by birth year

12:26 Wednesday, September 20, 2023

1

Obs	BYR	name	no	mean_ss	mean_rSS	std_ss	std_rSS	mean_dif	std_dif	corr_SS
1	2010	bv1 sdg	149	102.8	102.9	10.1	9.9	-0.1	1.0	1.00
2	2011	bv1 sdg	159	103.1	103.1	10.5	10.4	0.0	0.9	1.00
3	2012	bv1 sdg	150	102.8	102.9	11.1	11.0	-0.2	1.1	0.99
4	2013	bv1 sdg	103	101.8	102.3	12.0	11.9	-0.5	1.4	0.99
5	2014	bv1 sdg	78	102.4	102.8	10.6	10.7	-0.4	1.2	0.99
6	2015	bv1 sdg	65	102.1	103.3	9.8	7.3	-1.2	7.0	0.71
7	2016	bv1 sdg	68	99.9	101.1	11.7	9.2	-1.2	8.2	0.72
8	2017	bv1 sdg	65	100.4	102.6	10.8	7.2	-2.1	8.1	0.66
9	2018	bv1 sdg	51	99.9	102.6	9.8	6.4	-2.7	7.0	0.71
10	2019	bv1 sdg	27	98.5	102.0	8.3	6.5	-3.6	8.8	0.32
11	2010	bv2 ldg	149	102.6	102.6	9.5	9.5	0.0	0.9	1.00
12	2011	bv2 ldg	159	103.7	103.5	9.9	9.8	0.1	0.8	1.00
13	2012	bv2 ldg	150	103.3	103.3	10.9	10.8	0.0	1.1	1.00
14	2013	bv2 ldg	103	102.3	102.6	11.1	11.1	-0.3	1.2	0.99
15	2014	bv2 ldg	78	103.8	103.8	10.6	10.6	0.0	1.1	0.99
16	2015	bv2 ldg	65	102.8	103.9	10.0	7.2	-1.0	6.7	0.74
17	2016	bv2 ldg	68	101.0	101.9	11.2	8.7	-0.9	7.7	0.73
18	2017	bv2 ldg	65	101.2	103.3	11.3	6.8	-2.1	8.4	0.67
19	2018	bv2 ldg	51	101.1	103.3	9.6	6.0	-2.3	6.5	0.75
20	2019	bv2 ldg	27	99.5	102.7	7.4	6.0	-3.3	7.6	0.37
21	2010	bv3 csc	165	101.1	101.1	9.4	9.3	0.0	0.7	1.00
22	2011	bv3 csc	167	105.2	105.0	8.0	7.9	0.1	0.9	0.99
23	2012	bv3 csc	170	104.0	104.0	9.2	9.3	0.0	1.0	0.99
24	2013	bv3 csc	123	101.8	101.9	9.8	9.8	-0.1	1.1	0.99
25	2014	bv3 csc	85	100.6	101.0	9.0	9.1	-0.4	1.0	0.99
26	2015	bv3 csc	71	101.0	100.3	7.9	7.2	0.8	5.9	0.70
27	2016	bv3 csc	70	97.6	99.2	8.4	6.1	-1.6	6.3	0.66
28	2017	bv3 csc	66	99.2	99.8	8.1	6.3	-0.6	6.5	0.62
29	2018	bv3 csc	51	98.6	99.5	7.2	5.3	-0.9	6.8	0.44
30	2019	bv3 csc	27	96.8	99.3	8.9	5.6	-2.5	7.9	0.47
31	2010	bv4 fsc	165	99.4	99.2	8.9	9.0	0.2	0.8	1.00
32	2011	bv4 fsc	167	98.8	98.5	8.7	8.9	0.2	0.7	1.00
33	2012	bv4 fsc	170	96.9	96.6	7.9	7.9	0.2	1.1	0.99
34	2013	bv4 fsc	123	98.0	97.8	8.4	8.5	0.2	1.4	0.99
35	2014	bv4 fsc	85	97.2	96.7	9.4	9.4	0.5	1.0	0.99
36	2015	bv4 fsc	71	97.7	96.8	8.6	6.9	0.9	5.5	0.77

RDC summery statstistics for SS and reduc SS breeding value for nordic AI bulls with more than 14 sons with phenotype, by birth year

Obs	BYR	name	no	mean_ss	mean_rSS	std_ss	std_rSS	mean_dif	std_dif	corr_SS
37	2016	bv4 fsc	70	98.0	96.3	9.5	7.1	1.8	6.3	0.75
38	2017	bv4 fsc	66	100.6	96.7	8.1	5.2	3.9	6.1	0.65
39	2018	bv4 fsc	51	100.3	98.1	7.4	5.7	2.2	6.2	0.58
40	2019	bv4 fsc	27	97.3	94.6	8.2	6.2	2.8	6.2	0.67
41	2010	bv5 cdg	165	102.7	102.7	9.9	9.8	0.0	1.0	1.00
42	2011	bv5 cdg	167	103.5	103.4	10.5	10.4	0.1	0.9	1.00
43	2012	bv5 cdg	170	103.5	103.6	11.0	10.9	-0.1	1.0	1.00
44	2013	bv5 cdg	123	102.0	102.4	11.8	11.8	-0.3	1.2	0.99
45	2014	bv5 cdg	85	103.3	103.6	10.9	10.9	-0.2	1.2	0.99
46	2015	bv5 cdg	71	101.8	102.9	9.9	7.6	-1.1	6.8	0.73
47	2016	bv5 cdg	70	100.3	101.5	11.4	9.0	-1.3	8.0	0.72
48	2017	bv5 cdg	66	101.0	102.9	11.1	7.0	-2.0	8.3	0.66
49	2018	bv5 cdg	52	100.6	103.1	9.7	6.2	-2.5	6.7	0.73
50	2019	bv5 cdg	30	99.8	103.0	8.5	6.4	-3.2	8.4	0.40
51	2010	bv6 grw	165	102.3	102.3	9.6	9.4	0.0	0.9	1.00
52	2011	bv6 grw	167	105.1	104.9	9.3	9.2	0.1	0.8	1.00
53	2012	bv6 grw	170	104.4	104.5	10.0	10.0	-0.1	1.0	1.00
54	2013	bv6 grw	123	102.3	102.6	11.0	11.1	-0.3	1.2	0.99
55	2014	bv6 grw	85	102.4	102.8	9.5	9.5	-0.4	1.0	0.99
56	2015	bv6 grw	71	101.7	102.0	9.1	7.4	-0.2	6.2	0.74
57	2016	bv6 grw	70	98.8	100.5	9.7	7.4	-1.7	7.3	0.67
58	2017	bv6 grw	66	100.1	101.7	9.0	6.4	-1.5	7.2	0.61
59	2018	bv6 grw	52	99.7	101.6	7.6	5.2	-2.0	6.6	0.52
60	2019	bv6 grw	30	98.0	101.5	8.0	5.7	-3.5	8.0	0.36

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

12:26 Wednesday, September 20, 2023

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Obs	BYR	name	no	mean_ss	mean_rSS	std_ss	std_rSS	mean_dif	std_dif	corr_SS
1	2015	bv1 sdg	1788	103.8	104.0	9.3	8.5	-0.2	3.3	0.93
2	2016	bv1 sdg	2074	103.9	104.2	9.1	8.1	-0.3	3.4	0.93
3	2017	bv1 sdg	2170	104.4	104.4	9.2	7.9	0.0	4.0	0.90
4	2018	bv1 sdg	1782	101.8	102.8	8.8	7.5	-1.0	4.4	0.87
5	2019	bv1 sdg	873	102.4	103.3	8.5	7.3	-1.0	5.2	0.80
6	2020	bv1 sdg	11	.	.	.	.	.	.	.
7	2015	bv2 ldg	1788	104.3	104.3	8.8	8.1	0.0	3.0	0.94
8	2016	bv2 ldg	2074	104.6	104.6	8.5	7.7	0.0	3.0	0.94
9	2017	bv2 ldg	2170	105.1	104.9	8.9	7.5	0.2	3.7	0.91
10	2018	bv2 ldg	1782	102.8	103.5	8.5	7.1	-0.8	4.1	0.88
11	2019	bv2 ldg	873	103.1	103.9	8.3	6.8	-0.8	5.2	0.77
12	2020	bv2 ldg	11	.	.	.	.	.	.	.
13	2015	bv3 csc	4517	102.1	102.2	7.6	7.0	-0.1	2.6	0.94
14	2016	bv3 csc	5687	101.1	101.3	7.8	7.3	-0.2	2.7	0.94
15	2017	bv3 csc	5653	101.6	101.5	7.3	6.7	0.1	3.5	0.88
16	2018	bv3 csc	4269	99.5	100.8	7.2	6.5	-1.3	4.0	0.83
17	2019	bv3 csc	913	99.1	100.6	7.3	6.1	-1.6	4.2	0.82
18	2020	bv3 csc	11	.	.	.	.	.	.	.
19	2015	bv4 fsc	4522	98.7	98.6	6.9	6.5	0.2	2.3	0.94
20	2016	bv4 fsc	5694	98.8	98.5	7.3	7.0	0.3	2.4	0.95
21	2017	bv4 fsc	5658	97.9	97.3	6.9	6.3	0.6	3.1	0.89
22	2018	bv4 fsc	4271	99.4	98.4	6.9	5.9	1.0	3.3	0.88
23	2019	bv4 fsc	913	98.5	96.5	7.1	5.8	2.0	3.8	0.84
24	2020	bv4 fsc	11	.	.	.	.	.	.	.
25	2015	bv5 cdg	4588	103.4	103.5	9.1	8.3	-0.1	3.1	0.94
26	2016	bv5 cdg	5926	103.2	103.3	9.0	8.2	-0.1	3.2	0.94
27	2017	bv5 cdg	6162	103.8	103.7	9.2	7.8	0.1	3.8	0.91
28	2018	bv5 cdg	5527	102.1	102.9	8.9	7.5	-0.8	4.2	0.88
29	2019	bv5 cdg	2655	102.5	103.4	8.5	7.2	-0.9	5.0	0.81
30	2020	bv5 cdg	14	.	.	.	.	.	.	.
31	2015	bv6 grw	4588	103.3	103.5	8.3	7.6	-0.1	2.8	0.94
32	2016	bv6 grw	5926	102.6	102.8	8.3	7.7	-0.1	2.8	0.94
33	2017	bv6 grw	6162	103.2	103.1	8.2	7.1	0.1	3.6	0.90
34	2018	bv6 grw	5527	101.0	102.2	8.0	6.9	-1.2	4.0	0.87
35	2019	bv6 grw	2655	100.8	102.3	7.5	6.4	-1.5	4.4	0.81
36	2020	bv6 grw	14	.	.	.	.	.	.	.

sum sta for SS and reduc SS breeding value for nongenotyped females with sons with phenotype, by birth year

12:26 Wednesday, September 20, 2023

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Obs	BYR	name	no	mean_ss	mean_rSS	std_ss	std_rSS	mean_dif	std_dif	corr_SS
1	2015	bv1 sdg	9078	102.6	102.9	7.2	6.7	-0.3	3.0	0.91
2	2016	bv1 sdg	7300	102.8	103.1	7.0	6.4	-0.3	3.2	0.89
3	2017	bv1 sdg	5232	103.4	103.6	7.0	6.1	-0.2	3.7	0.85
4	2018	bv1 sdg	3301	101.7	102.5	6.8	5.7	-0.8	4.1	0.79
5	2019	bv1 sdg	1299	102.2	102.6	6.5	5.7	-0.3	4.8	0.70
6	2020	bv1 sdg	11	.	.	.	.	.	.	.
7	2015	bv2 ldg	9078	103.0	103.0	7.1	6.6	0.0	2.6	0.93
8	2016	bv2 ldg	7300	103.3	103.3	6.9	6.5	0.0	2.7	0.92
9	2017	bv2 ldg	5232	103.9	103.8	7.1	6.2	0.1	3.3	0.89
10	2018	bv2 ldg	3301	102.4	102.9	6.9	5.7	-0.5	3.8	0.84
11	2019	bv2 ldg	1299	102.6	102.8	6.8	5.6	-0.2	4.8	0.71
12	2020	bv2 ldg	11	.	.	.	.	.	.	.
13	2015	bv3 csc	30651	102.1	102.1	6.7	6.3	0.0	2.3	0.94
14	2016	bv3 csc	24744	101.0	101.2	6.7	6.3	-0.1	2.5	0.93
15	2017	bv3 csc	17458	101.3	101.2	6.4	6.0	0.1	3.1	0.88
16	2018	bv3 csc	9564	99.6	100.6	6.2	5.6	-1.0	3.7	0.81
17	2019	bv3 csc	1379	99.1	100.6	6.0	5.2	-1.5	4.1	0.75
18	2020	bv3 csc	12	.	.	.	.	.	.	.
19	2015	bv4 fsc	30667	99.0	98.9	5.5	5.3	0.1	1.9	0.94
20	2016	bv4 fsc	24755	99.3	99.0	5.9	5.6	0.2	2.0	0.94
21	2017	bv4 fsc	17473	98.7	98.2	5.6	5.2	0.5	2.7	0.88
22	2018	bv4 fsc	9568	99.7	98.9	5.6	4.8	0.8	2.9	0.85
23	2019	bv4 fsc	1379	99.1	97.6	5.8	4.7	1.5	3.4	0.81
24	2020	bv4 fsc	12	.	.	.	.	.	.	.
25	2015	bv5 cdg	30881	101.5	101.7	7.3	6.9	-0.1	2.7	0.93
26	2016	bv5 cdg	25050	101.8	102.0	7.3	6.8	-0.2	2.8	0.92
27	2017	bv5 cdg	17857	102.3	102.5	7.4	6.5	-0.2	3.4	0.89
28	2018	bv5 cdg	10044	101.4	102.0	7.1	6.0	-0.7	3.8	0.84
29	2019	bv5 cdg	1673	102.4	102.7	6.7	5.8	-0.3	4.7	0.72
30	2020	bv5 cdg	12	.	.	.	.	.	.	.
31	2015	bv6 grw	30881	102.1	102.2	7.1	6.7	-0.1	2.3	0.95
32	2016	bv6 grw	25050	101.7	101.9	7.1	6.7	-0.2	2.5	0.94
33	2017	bv6 grw	17857	102.1	102.2	7.1	6.4	-0.1	3.0	0.90
34	2018	bv6 grw	10044	100.7	101.6	6.8	5.9	-1.0	3.7	0.84
35	2019	bv6 grw	1673	101.0	102.1	6.2	5.5	-1.1	4.3	0.73
36	2020	bv6 grw	12	.	.	.	.	.	.	.

JER summery stastistics for SS and reduc SS breeding value for nordic AI bulls with more than 14 sons with phenotype, by birth year

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Obs	BYR	name	no	mean_ss	mean_rSS	std_ss	std_rSS	mean_dif	std_dif	corr_SS
1	2010	bv1 sdg	14	100.0	99.8	6.5	6.9	0.2	1.2	0.98
2	2011	bv1 sdg	8	.	.	.	.	.	.	.
3	2012	bv1 sdg	8	.	.	.	.	.	.	.
4	2013	bv1 sdg	10	101.9	101.6	5.0	4.5	0.3	2.3	0.89
5	2014	bv1 sdg	13	97.7	97.8	8.6	8.0	-0.1	1.8	0.98
6	2015	bv1 sdg	23	100.2	100.2	6.3	4.2	0.0	4.6	0.68
7	2016	bv1 sdg	16	100.1	99.6	4.3	3.6	0.4	3.5	0.62
8	2017	bv1 sdg	21	102.3	99.5	8.2	3.9	2.7	7.0	0.51
9	2018	bv1 sdg	8	.	.	.	.	.	.	.
10	2019	bv1 sdg	10	103.0	101.2	4.2	2.3	1.8	4.5	0.11
11	2010	bv2 ldg	14	100.0	99.8	6.5	6.9	0.2	1.2	0.98
12	2011	bv2 ldg	8	.	.	.	.	.	.	.
13	2012	bv2 ldg	8	.	.	.	.	.	.	.
14	2013	bv2 ldg	10	101.9	101.6	5.0	4.5	0.3	2.3	0.89
15	2014	bv2 ldg	13	97.7	97.8	8.6	8.0	-0.1	1.8	0.98
16	2015	bv2 ldg	23	100.2	100.2	6.3	4.2	0.0	4.6	0.68
17	2016	bv2 ldg	16	100.1	99.6	4.3	3.6	0.4	3.5	0.62
18	2017	bv2 ldg	21	102.3	99.5	8.2	3.9	2.7	7.0	0.51
19	2018	bv2 ldg	8	.	.	.	.	.	.	.
20	2019	bv2 ldg	10	103.0	101.2	4.2	2.3	1.8	4.5	0.11
21	2010	bv3 csc	14	100.7	100.3	5.7	6.0	0.4	1.7	0.96
22	2011	bv3 csc	12	94.9	95.2	8.4	9.3	-0.3	1.8	0.98
23	2012	bv3 csc	8	.	.	.	.	.	.	.
24	2013	bv3 csc	10	101.1	101.5	7.6	7.8	-0.4	3.5	0.90
25	2014	bv3 csc	15	100.3	100.7	8.7	7.7	-0.5	2.6	0.96
26	2015	bv3 csc	23	96.8	98.0	8.2	5.8	-1.2	8.8	0.25
27	2016	bv3 csc	16	99.9	100.1	9.2	5.6	-0.2	5.9	0.79
28	2017	bv3 csc	22	96.8	98.5	11.6	4.0	-1.6	10.6	0.42
29	2018	bv3 csc	8	.	.	.	.	.	.	.
30	2019	bv3 csc	11	100.2	101.4	7.7	3.3	-1.2	7.0	0.43
31	2010	bv4 fsc	14	98.4	98.5	7.1	7.1	0.0	1.4	0.98
32	2011	bv4 fsc	12	102.0	101.8	7.5	7.4	0.2	1.5	0.98
33	2012	bv4 fsc	8	.	.	.	.	.	.	.
34	2013	bv4 fsc	10	97.2	97.3	8.3	8.2	-0.2	2.0	0.97
35	2014	bv4 fsc	15	98.7	98.3	7.2	6.0	0.4	2.6	0.94
36	2015	bv4 fsc	23	102.0	103.5	6.9	4.9	-1.5	6.5	0.45

**JER summery stastistics for SS and reduc SS breeding value for nordic AI bulls with more than 14 sons
with phenotype, by birth year**

Obs	BYR	name	no	mean_ss	mean_rSS	std_ss	std_rSS	mean_dif	std_dif	corr_SS
37	2016	bv4 fsc	16	98.7	98.3	7.6	4.3	0.4	4.7	0.83
38	2017	bv4 fsc	22	103.5	102.4	5.9	2.7	1.1	5.7	0.30
39	2018	bv4 fsc	8	.	.	.	.	.	.	.
40	2019	bv4 fsc	11	103.2	101.1	5.8	2.8	2.1	4.7	0.58
41	2010	bv5 cdg	14	100.0	99.8	6.5	6.9	0.2	1.2	0.98
42	2011	bv5 cdg	12	94.6	94.5	8.3	8.4	0.1	1.5	0.98
43	2012	bv5 cdg	8	.	.	.	.	.	.	.
44	2013	bv5 cdg	10	101.9	101.6	5.0	4.5	0.3	2.3	0.89
45	2014	bv5 cdg	15	97.3	97.4	8.1	7.5	-0.1	1.9	0.97
46	2015	bv5 cdg	23	100.2	100.2	6.3	4.2	0.0	4.6	0.68
47	2016	bv5 cdg	16	100.1	99.6	4.3	3.6	0.4	3.5	0.62
48	2017	bv5 cdg	22	102.7	99.8	8.2	4.0	2.9	6.9	0.55
49	2018	bv5 cdg	8	.	.	.	.	.	.	.
50	2019	bv5 cdg	11	102.1	101.0	4.9	2.3	1.1	4.8	0.28
51	2010	bv6 grw	14	100.6	100.2	6.0	6.5	0.4	1.6	0.97
52	2011	bv6 grw	12	93.8	94.0	9.2	9.9	-0.2	1.9	0.98
53	2012	bv6 grw	8	.	.	.	.	.	.	.
54	2013	bv6 grw	10	101.7	101.9	7.7	7.6	-0.2	3.4	0.90
55	2014	bv6 grw	15	99.2	99.6	9.1	7.9	-0.4	2.5	0.97
56	2015	bv6 grw	23	97.6	98.5	7.6	4.9	-1.0	7.9	0.25
57	2016	bv6 grw	16	100.0	100.0	8.1	5.2	0.0	5.0	0.80
58	2017	bv6 grw	22	98.5	98.7	11.6	3.4	-0.2	10.5	0.47
59	2018	bv6 grw	8	.	.	.	.	.	.	.
60	2019	bv6 grw	11	101.0	101.5	6.4	2.7	-0.6	6.0	0.36

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

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Obs	BYR	name	no	mean_ss	mean_rSS	std_ss	std_rSS	mean_dif	std_dif	corr_SS
1	2015	bv1 sdg	140	99.8	99.7	5.4	5.1	0.1	2.4	0.90
2	2016	bv1 sdg	109	99.5	99.2	4.7	4.1	0.3	1.8	0.92
3	2017	bv1 sdg	120	101.4	100.4	5.0	4.0	1.0	2.6	0.86
4	2018	bv1 sdg	112	99.8	99.3	4.3	3.4	0.5	2.9	0.74
5	2019	bv1 sdg	92	100.7	99.5	4.7	3.2	1.3	3.4	0.68
6	2020	bv1 sdg	2	.	.	.	.	.	.	.
7	2015	bv2 ldg	140	99.8	99.7	5.4	5.1	0.1	2.4	0.90
8	2016	bv2 ldg	109	99.5	99.2	4.7	4.1	0.3	1.8	0.92
9	2017	bv2 ldg	120	101.4	100.4	5.0	4.0	1.0	2.6	0.86
10	2018	bv2 ldg	112	99.8	99.3	4.3	3.4	0.5	2.9	0.74
11	2019	bv2 ldg	92	100.7	99.5	4.7	3.2	1.3	3.4	0.68
12	2020	bv2 ldg	2	.	.	.	.	.	.	.
13	2015	bv3 csc	145	98.0	98.3	5.9	5.6	-0.4	2.8	0.88
14	2016	bv3 csc	114	99.8	100.0	5.5	5.0	-0.2	2.7	0.88
15	2017	bv3 csc	124	97.7	99.3	5.9	4.3	-1.6	3.8	0.76
16	2018	bv3 csc	116	98.7	97.8	5.4	4.5	0.9	4.3	0.63
17	2019	bv3 csc	93	98.9	99.4	6.8	4.1	-0.5	4.7	0.73
18	2020	bv3 csc	3	.	.	.	.	.	.	.
19	2015	bv4 fsc	145	100.8	101.1	4.9	4.7	-0.3	1.8	0.93
20	2016	bv4 fsc	114	100.0	100.3	4.8	4.8	-0.3	1.8	0.93
21	2017	bv4 fsc	124	102.1	101.9	4.6	3.5	0.2	3.1	0.75
22	2018	bv4 fsc	116	99.7	101.7	4.5	4.5	-2.0	3.2	0.74
23	2019	bv4 fsc	93	101.3	101.2	4.6	3.3	0.1	3.2	0.73
24	2020	bv4 fsc	3	.	.	.	.	.	.	.
25	2015	bv5 cdg	145	99.7	99.7	5.5	5.3	0.0	2.4	0.90
26	2016	bv5 cdg	115	99.5	99.2	4.6	4.1	0.3	1.9	0.92
27	2017	bv5 cdg	123	101.3	100.4	5.0	3.9	0.9	2.6	0.86
28	2018	bv5 cdg	118	99.9	99.4	4.3	3.3	0.5	2.9	0.73
29	2019	bv5 cdg	93	100.7	99.5	4.7	3.2	1.2	3.4	0.68
30	2020	bv5 cdg	2	.	.	.	.	.	.	.
31	2015	bv6 grw	145	98.3	98.6	6.0	5.7	-0.3	3.0	0.87
32	2016	bv6 grw	115	99.7	99.8	5.2	4.7	0.0	2.6	0.87
33	2017	bv6 grw	123	98.8	99.6	5.7	4.3	-0.9	3.5	0.79
34	2018	bv6 grw	118	98.8	97.9	5.0	4.1	0.9	4.0	0.64
35	2019	bv6 grw	93	99.3	99.2	6.5	3.9	0.1	4.6	0.72
36	2020	bv6 grw	2	.	.	.	.	.	.	.

sum sta for SS and reduc SS breeding value for nongenotyped females with sons with phenotype, by birth year

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Obs	BYR	name	no	mean_ss	mean_rSS	std_ss	std_rSS	mean_dif	std_dif	corr_SS
1	2015	bv1 sdg	549	99.0	98.4	4.7	4.6	0.6	2.0	0.91
2	2016	bv1 sdg	379	98.1	97.7	4.6	4.2	0.4	2.1	0.89
3	2017	bv1 sdg	299	98.8	98.4	4.2	3.7	0.4	2.4	0.83
4	2018	bv1 sdg	209	99.5	98.8	3.8	2.8	0.7	2.8	0.68
5	2019	bv1 sdg	99	100.1	99.2	5.1	3.0	1.0	3.9	0.63
6	2020	bv1 sdg	6	.	.	.	.	.	.	.
7	2015	bv2 ldg	549	99.0	98.4	4.7	4.6	0.6	2.0	0.91
8	2016	bv2 ldg	379	98.1	97.7	4.6	4.2	0.4	2.1	0.89
9	2017	bv2 ldg	299	98.8	98.4	4.2	3.7	0.4	2.4	0.83
10	2018	bv2 ldg	209	99.5	98.8	3.8	2.8	0.7	2.8	0.68
11	2019	bv2 ldg	99	100.1	99.2	5.1	3.0	1.0	3.9	0.63
12	2020	bv2 ldg	6	.	.	.	.	.	.	.
13	2015	bv3 csc	605	100.0	98.7	5.2	5.0	1.3	3.2	0.81
14	2016	bv3 csc	408	100.7	99.3	5.3	4.9	1.3	2.9	0.84
15	2017	bv3 csc	326	99.4	98.9	5.0	4.2	0.5	3.5	0.72
16	2018	bv3 csc	222	100.4	98.4	6.2	4.0	1.9	4.6	0.67
17	2019	bv3 csc	105	100.1	99.5	5.7	3.3	0.6	4.9	0.51
18	2020	bv3 csc	6	.	.	.	.	.	.	.
19	2015	bv4 fsc	605	100.2	100.7	4.6	4.3	-0.5	1.6	0.94
20	2016	bv4 fsc	408	99.0	99.5	4.5	4.4	-0.4	1.5	0.94
21	2017	bv4 fsc	326	100.3	100.8	4.4	3.3	-0.5	2.8	0.78
22	2018	bv4 fsc	222	99.2	100.8	3.9	3.2	-1.7	3.0	0.66
23	2019	bv4 fsc	105	100.7	100.7	3.9	2.9	0.0	2.7	0.72
24	2020	bv4 fsc	6	.	.	.	.	.	.	.
25	2015	bv5 cdg	605	98.9	98.3	4.8	4.7	0.5	1.9	0.92
26	2016	bv5 cdg	410	98.2	97.8	4.6	4.2	0.4	2.0	0.90
27	2017	bv5 cdg	327	98.8	98.4	4.1	3.6	0.4	2.3	0.83
28	2018	bv5 cdg	224	99.6	98.8	3.7	2.8	0.8	2.7	0.69
29	2019	bv5 cdg	105	100.0	99.1	5.0	3.0	1.0	3.8	0.63
30	2020	bv5 cdg	6	.	.	.	.	.	.	.
31	2015	bv6 grw	605	99.6	98.3	4.9	4.7	1.2	3.1	0.80
32	2016	bv6 grw	410	99.9	98.7	5.2	4.9	1.2	2.9	0.84
33	2017	bv6 grw	327	99.1	98.6	4.5	4.1	0.5	3.2	0.72
34	2018	bv6 grw	224	100.1	98.3	5.5	3.6	1.8	4.2	0.64
35	2019	bv6 grw	105	100.1	99.3	5.7	3.1	0.8	4.9	0.52
36	2020	bv6 grw	6	.	.	.	.	.	.	.

HOL Legarra Reverter regression for genotyped bulls with more than 14 sons with phenotype, born after 2014

Obs	status	t	name	no	b1	rsq
1	1&2	1	bv1 sdg	1041	0.98	0.66
2	1&2	2	bv2 ldg	1041	0.98	0.67
3	1&2	3	bv3 csc	1093	0.98	0.69
4	1&2	4	bv4 fsc	1093	1.02	0.65
5	1&2	5	bv5 cdg	1103	0.98	0.68
6	1&2	6	bv6 grw	1103	0.97	0.66

Obs	status	t	name	no	b1	rsq
1	1	1	bv1 sdg	490	1.01	0.64
2	1	2	bv2 ldg	490	1.00	0.64
3	1	3	bv3 csc	495	0.98	0.65
4	1	4	bv4 fsc	495	0.99	0.64
5	1	5	bv5 cdg	496	1.00	0.65
6	1	6	bv6 grw	496	0.99	0.62

RDC Legarra Reverter regression for genotyped bulls with more than 14 sons with phenotype, born after 2014

Obs	status	t	name	no	b1	rsq
1	1	1	bv1 sdg	353	0.94	0.57
2	1	2	bv2 ldg	353	0.99	0.60
3	1	3	bv3 csc	369	0.87	0.53
4	1	4	bv4 fsc	369	0.96	0.62
5	1	5	bv5 cdg	373	0.96	0.59
6	1	6	bv6 grw	373	0.90	0.54

JER Legarra Reverter regression for genotyped bulls with more than 14 sons with phenotype, born after 2014

Obs	status	t	name	no	b1	rsq
1	1	1	bv1 sdg	89	1.01	0.46
2	1	2	bv2 ldg	89	1.01	0.46
3	1	3	bv3 csc	93	0.94	0.30
4	1	4	bv4 fsc	93	0.92	0.41
5	1	5	bv5 cdg	93	1.04	0.48
6	1	6	bv6 grw	93	1.02	0.33