

Long-term pedigree analysis: An effective tool for managing congenital malformations in cattle

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Electronic Supplementary Material (ESM)

Table S1. Sires of affected calves

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Number of the sire	Country of origin	Breed (%)	F_X	Total count of descendants	Count of sons
<i>Aplasia genitalis</i>					
1	Czech Rep.	S 78 A	0.001	11 164	0
2*	Czech Rep.	S 78 A	0	3 471	3
3	Czech Rep.	S 63 H A	0.031	14 509	2
4	Netherlands	H	0.005	15 982	0
5	France	H	0.049	1 075	0
6	Netherlands	H	0.030	2 078	0
7	France	H	0.030	414	0
8	USA	H	0.088	2 346	6
9**	USA	H	0.037	5 698	0
10	Canada	H	0.028	7 800	0
<i>Atresia ani et recti</i>					
1	Czech Rep.	S 63 A	0	18	0
2	Germany	H	0.008	54	0
3	Czech Rep.	H	0.040	39	0
4	Czech Rep.	S 76 A H	0	6 889	5
5**	Czech Rep.	H 65 S	0.004	12 798	14
6	Czech Rep.	S 84 H	0	675	15
7	Czech Rep.	S 71 A H	0	57 645	10
8	Czech Rep.	S 70 A H	0.006	2 808	0
9	Czech Rep.	S	0.016	4 467	0
10	USA	H	0.031	1 912	12
11	France	H	0.045	1 568	0
12	France	H	0.040	2 009	0
13	Netherlands	H	0.013	9 169	0
14	Italy	H	0.054	614	0
15	Belgium	H	0.006	5 102	0
16	Germany	H	0.052	304	0
17	Czech Rep.	H	0.035	401	0
18	Germany	H	0.044	274	0
19	Czech Rep.	H	0.030	326	0
20	USA	H	0.090	599	0
21	Czech Rep.	H	0.009	53	0
22	Italy	H	0.012	2 082	0
23	Germany	H	0.018	340	0
<i>Hernia cerebrealis</i>					
1	Czech Rep.	S 75 A	0	27	0
2	Czech Rep.	S 81 A	0	498	0
3	Czech Rep.	S 88 H	0.002	36	0
4	Czech Rep.	S	0.016	303	0
5	France	S 88 H	0.017	2 690	0
6	Netherlands	H	0.022	2 471	0
7	USA	H	0.061	3 170	0
8*	USA	H	0.034	13 191	2
9	Czech Rep.	Hereford	0	N/A	N/A
10	France	Charolais	0.063	375	5

A = Ayrshire; H = Holstein; N/A = not available; S = Simmental

*The sire fathered two affected calves; **the sire fathered three affected calves; the other sires fathered one affected calf