

**Table 1: PTA cow differences**

	Genetic merit		
	High	Low	Difference high v low
Maternal cow traits	84	17	67
Replacement index (€)	119	50	69
Star rating	5	2	3
Maternal progeny traits	35	33	2
Calving difficulty score	3.37	5.05	1.68 units easier
Cow weight (kg)	14	25	11kg lighter
Gestation length (days)	0.53	1.76	1.23 days shorter
Age at first calving (days)	-16.2	-7.2	9 days younger
Maternal weaning weight (kg)	12.1	5.3	6.8kg heavier
Direct carcase weight (kg)	7.0	10.8	3.8kg lighter

**Table 3: Reproductive performance of the herd**

	Genetic merit		
	High	Low	P-value
Live weight at breeding (kg)	556	572	0.1453
Body condition score at breeding	2.70	2.78	0.019
Calving to service interval (days)	61	58	0.3737
Calving to conception interval (days)	77	74	0.3742
Pregnancy rate to first service (%)	50	48	0.8478
Pregnancy rate (%)	89	86	0.7220
Number of services per cow	1.81	1.65	0.2294
Actual calving interval (days)	360	354	0.3344

**Table 5: Differences found between high and low genetic merit**

	PTA high v low	Actual difference
Maternal cow traits	67	N/A
Maternal progeny traits	2	N/A
Calving difficulty score	-1.68	-1.32
Cow weight (kg)	-11	-16
Gestation length (days)	-1.23	-3
Age at first calving (days)	-9	-2
Maternal weaning weight (kg)	6.8	1.1

**Table 2: Calving performance**

	Genetic merit		
	High	Low	P-value
Mean calving date	20 March	26 March	0.7296
Age at first calving (days)	756	758	0.7481
Liveweight two days post partum (kg)	551	556	0.0905
Body condition score	2.34	2.39	0.1349
Calf birth weight (kg)	42	43	0.4188
Calving score (1-4)	1.39	2.05	0.7696
Gestation length (days)	285	288	0.1253
Calf mortality (%)	16	19	0.3904

**Table 4: Calf performance**

	Genetic merit		
	High	Low	P-value
Milk yield (kg)	7.8	6.7	<0.001
Weaning weight (kg)	286	279	0.5258
Average daily gain (kg)	1.09	1.04	0.5380
Calf quality (1-5)	3.23	3.24	0.8629
Calf docility (1-5)	1.96	1.97	0.9040
Calf value (€)	760	752	0.8770
Proportion suitable for live export (%)	32	36	0.5599

**Table 6: Economic values for traits and actual differences found**

	Economic value	Difference in value found
Calving difficulty	-€4.65	€3.07
Gestation	-€2.25	€6.75
Mortality	-€5.34	€0.19
Docility	€18.40	-€0.18
Carcase weight	€3.89	€21.78
AFC	-€1.61	€3.22
Maternal weaning weight	€2.53	€2.78
Calving interval	-€2.30	-€13.80
Survival	€4.02	€12.06
Cow	-€0.25	€0.07
Actual difference		€35.94