

Understanding SNP Poll Test Results

Neogen Australasia moved to SNP based DNA testing in September 2017. The move to SNP based testing means that we now have a far more accurate test for Poll in both taurine and indicine cattle.

Previously used Beef CRC based Poll tests would return a result and an accuracy (e.g. Homozygous Polled 98%). With SNP based Poll testing, the Poll gene can now be identified with a lot more accuracy and a description of the specific poll allele found is included as a subscript.

When reporting Poll test results from a SNP based test, the results will be reported as seen below:

Result	Interpretation	Animal's Appearance
PcPc	Homozygous Poll (PP)	Predominately Polled (occasional scurs)
PcPf		
PfPf		
HPc	Heterozygous Poll (PH)	Polled or Scurred
HPf		
HH	Horned (HH)	Horned

Mating outcomes (statistically):

Pc and Pf are interchangeable for 'P' in the graphic below.

	P	P							
P	PP	PP							
P	PP	PP							
	P	P							
P	PP	PP							
H	PH	PH							
	P	H							
H	PH	HH							
H	PH	HH							
	H	H							
H	HH	HH							
H	HH	HH							

PP x PP		
100% progeny will be PP polled		

	P	P
H	PH	PH
H	PH	PH

| PP x HH | | |
| 100% progeny will be PH polled | | |

	P	P
P	PP	PP
H	PH	PH

| PP x PH | | |
| 50% progeny will be PP polled, 50% will be PH polled | | |

	P	H
P	PP	PH
H	PH	HH

| PH x PH | | |
| 50% progeny will be PH polled, 25% will be PP polled, 25% will be HH horned | | |

	P	H
H	PH	HH
H	PH	HH

| PH x HH | | |
| 50% progeny will be PH polled, 50% will be HH horned | | |

	H	H
H	HH	HH
H	HH	HH

| HH x HH | | |
| 100% progeny will be HH horned | | |