

Genetic traits - results from Nordic beef cattle

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Nordisk Avlsværdi Vurdering • Nordic Cattle Genetic Evaluation

Genetic traits

- Traits that are inherited by a single gene or haplotype
- Traits are not affected by the environment
- Desirable (e.g. polledness) and undesirable (e.g. ataxia)
- Genetic traits are derived from SNP results based on a genomic test or from a laboratory test
- **Results shown in NAV Beef Search and in this presentation are only from genomic test**
- F = Free, C = Carrier, (S = Double carrier)

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Genetic traits – NAV Beef Search

- Results are shown in animals own page in NAV Beef Search

Show genetic traits

Genetic traits ✕

Only traits derived from genomic test.
Results from lab are not included here.

Trait	Code	Result
RP1	RP1F	Free
Polled	POS	Carrier, PP
Coat color	RDF	Free
DD	DDF	Free

[More information on Genetic traits](#)

- Also possible to search animals with a certain genotype
 - E.g. Polled: Carrier, PP

Filter with indices

Select index

Polled ▼ = ▼ Carrier, PP ▼ [Remove](#)

Select genetic trait

Search

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Genetic traits - Beef

- Polled, PO
 - POF = Free (= horns)
 - POC = Carrier, P (= polled)
 - POS = Carrier, PP (= polled)
 - All breeds
- Progressive retinal degeneration, RP1
 - All breeds
- Coat color (red factor)
 - AAN, HLA, SIM, BBL, DEX, GLW

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Genetic traits – Breed specific

- **Aberdeen angus**
 - Development duplication, DD
- **Limousin, Blonde d'Aquitaine**
 - Protoporfyria, PR
- **Charolais**
 - Ataxia
- **Hereford**
 - Hypotrichosis, HY
 - Maple Syrup Urine Disease, MSUD
 - Mandibulofacial dysostosis, MD
- **Simmental**
 - Brown Swiss Haplotype 2, BH2
 - Thrombopathia, TP

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Genetic traits – Carrier frequencies, %

Breed	Polled, P	Polled, PP	Coat color	No. genomic tested
AAN	0,3	99,7	26,0	4896
BAQ	47,0	16,0		586
CHA	45,0	44,0		6403
HER	24,0	72,0		8098
HLA	0,0	0,0	98,0	475
LIM	43,0	14,0		4810
SIM	46,0	47,0	99,9	4598
BBL	4,6	0,1	10,0	739
DEX	31,0	8,0	75,0	641
GLW	3,0	97,0	55,0	657
TGR	0,0	0,0		129
PIE	19,0	0,0		27
SAL	59,0	10,0		63
BSH	56,0	20,0		117

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Genetic traits – Carrier frequencies, %

”Undesirable traits”

Breed	RP1	DD	PR	Ataxia	HY	MSUD	MD	BH2	TP
AAN	8,0	1,7							
BAQ	0,0		0,0						
CHA	27,0			12,0					
HER	0,0				2,3	1,6	1,9		
LIM	0,0		1,7						
SIM	1,2							1,1	2,6
BBL	9,0								
GLW	0,8								
BSH	2,0								

Genetic traits - Beef

- Results updated to beef search at the same time with indices
 - March, April, June, November
- More genetic traits will come to beef search
 - Results of the following traits are most likely available in the near future:
 - AAN – Curly calf
 - AAN – Contractural arachnodactyly (Fawn calf syndrome)
 - CHA – AED (Anhidrotic Ectodermal Dysplasia)
 - HLA – Crop ear
 - LIM – Cleft palate

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Thank you!

