



SENEPOL

BREEDING VALUE REPORT

November 2024



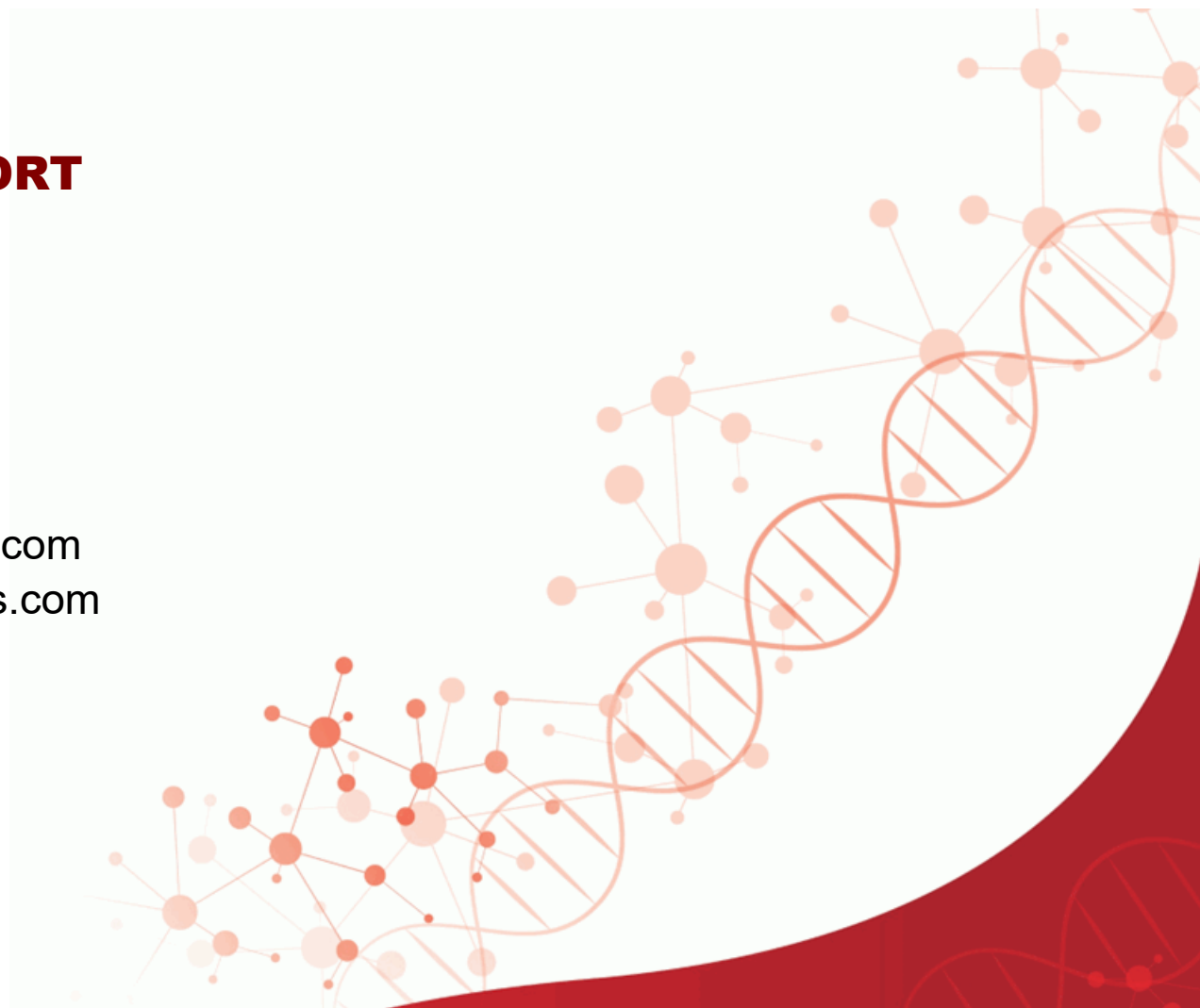
MOZ-MAIZE LDE

Herd Number: 700450

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CERTIFICATE
OF QUALITY
Valid up to
1 April 2024



EBVs, EBVi's and Selection Values

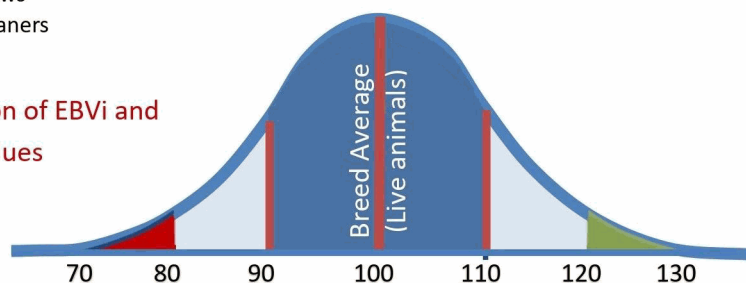


Logix Cow Value

Selecting for:

- fertile,
- low maintenance,
- easy calving cows
- with heavy weaners

Interpretation of EBVi and Selection Values



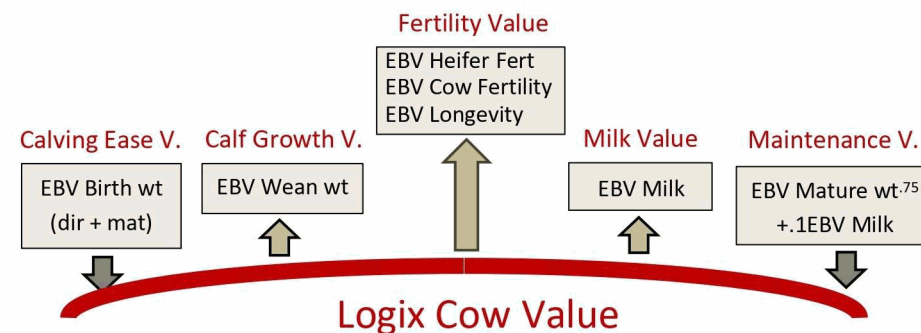
	<< Less favourable	Average	>> More favourable
Logix Cow Value			
Calving Ease Value	• Heavier birth weight		• Lower birth weight
Calf Growth Value	• Lower weaning wght		• Higher weaning wght
Milk Value	• Less milk		• More milk
Maintenance Value	• Higher maintenance (Heavier cow)		• Lower maintenance (Lighter cow)
Fertility Value	• Lower fertility		• Higher fertility
Cow Value	• Lower Cow Value		• Higher Cow Value
		90 – 110: = 50% of population = Average = Save choice	

EBVi (EBVindex): The average EBVi of all the live animals in the breed is 100, and all EBVi values are expressed relative to this value. Values above 100 are always in a more desirable direction. Note that a very high index is not always desirable. For certain traits, such as birth weight, average values may be better.

EBV (Estimated Breeding Value) indicates the genetic potential of the animal for a specific trait. It is presented in the unit of measurement and relative to the average of animals born in the base year (1990 for most traits).

Selection values combine similar breeding values in a scientific manner to simplify the selection of animals. For example, HF (Heifer Fertility), CF (Cow Fertility) and Longevity are combined to form the Fertility Value by taking the heritability and economic importance in consideration. The sub-value is expressed in an index format, thus an animal with a sub-value of 110 for Fertility will genetically be above average compared to the live animals in the breed.

Cow Value combine relative selection values into a single value. This gives a quick and easy indication of the combined genetic value of an animal compared to the breed. It is advised to still look at the sub-values to see where the strengths and weaknesses lie.



The Logix Cow Value identifies fertile, genetically balanced animals. Balanced animals breed heavy weaners relative to cow weight.

Description of traits

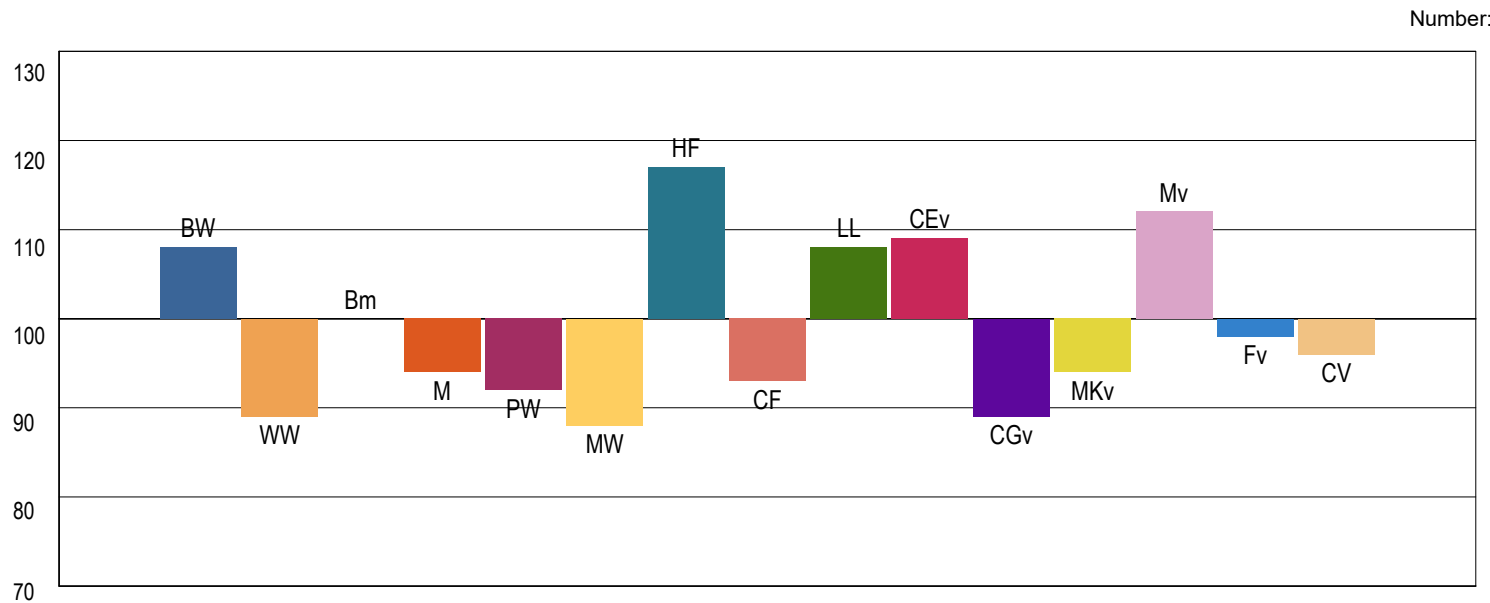
* Depending on selection goal

	EBVi	Description / Measurement	Goal		General Guidelines*					
					80	90	100	110	120	
Selection Values	Cow Value	Combination of sub-values (Rand-value)	Profitable cows	Loss						Profit
	Calving Ease Value	Difficult calving due to high birth weight	Average birth weight	High						Low
	Calf Growth Value	Calf's genetic ability for prewean growth	Heavy weaner	Light						Heavy
	Milk Value	Cow's genetic mothering and milking ability	Enough milk for calf	Less						More
	Maintenance Value	Maintenance requirement of cow (weight and milk)	Low cow maintenance	High					*	Low
	Fertility Value	Fertility and retention of cows and heifers	Fertile cows	Low						High
Cow & Calf	Birth weight direct	Birth weight (Calf's genetic ability)	Average birth weight	Heavy						Light
	Birth weight mat	Birth weight (Dam's genetic ability)	Easy calving	Heavy						Light
	Weaning weight direct	Weaning weight (Calf's genetic ability)	Heavy weaners	Light						Heavy
	Weaning weight mat	Weaning weight (Dam's genetic ability)	Good mothers	Poor						Good
	Mature Cow Weight	Cow weight at weaning of first three calves	Mature cow weight	Light				*	*	Heavy
Ferti.	Heifer Fertility	Age at first calving	Fertile heifers	Less						More
	Cow Fertility	First 3 inter-calving periods (ICPs)	Fertile cows	Less						More
	Longevity	Retention of progeny	Acceptable progeny	Poor						Good

Selection of breeding animals

1. **Cow value:** The cow value indicates genetic balance. Selected Values can range from 90 (acceptable) to 150 (excellent).
2. **Sub values:** Do the sub values meet requirements? For example heavy weaner calves (High Calf Growth Value) or lighter cow weights (High Maintenance Value)
3. **Inbreeding:** Study pedigrees on Logix to keep inbreeding low by preventing closely related animals to mate.
4. **Phenotype:** Breeding animals must be functionally efficient and not transmit any defects to their calves.

Herd and Breed Averages



Abbreviations:

Breeding Value (EBV) and Breeding Value Index (EBVi):

BW	Birth Weight
WW	Weaning Weight
Bm	Birth maternal
M	Milk
PW	Post-Wean Weight
MW	Mature Weight
HF	Heifer Fertility
CF	Cow Fertility
LL	Longevity

Selection Values

CEv	Calving Ease Value
CGv	Calf Growth Value
Mkv	Milk Value
Mv	Maintenance Value
Fv	Fertility Value
CV	Cow Value

	Trait	EBV Herd	EBVi Herd	EBV Breed
Prewrite Growth	Birth Wt	-0.16	108	0.53
	Weaning Wt	0.29	89	4.1
	Birth Mat.	-0.03	100	-0.02
	Milk(Wn.Mat.)	-2.5	94	-0.5
Postwean Growth	Post wean Wt	1.3	92	6.1
	Mature Wt	-11	88	2
Fertility	Heifer Fertility	-18	117	-5
	Cow Fertility	0	93	-2
	Longevity	15	108	11

Selection Value	Avg. Herd
Calving Ease	109
Calf Growth	89
Milk	94
Maintenance	112
Fertility	98
Cow Value	96

- Average of live animals in the breed: 100
- Above 100: **more favourable**,
- Below 100: **less favourable**

What does a sub-selection value above breed average (100) mean?:

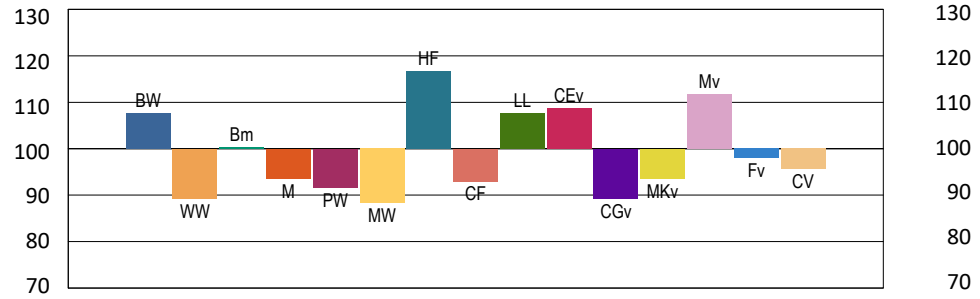
Calving ease:	Smaller calf at birth - easier calving
Calf growth:	Heavier calves at wean due to growth potential of the calf
Milk:	Cows with more milk and better mothering ability
Maintenance:	Animals with low maintenance requirements (lower mature weight).
Fertility:	Cows/daughters that calve earlier and/or more regularly.

Genetic Windows

Bulls on Farm

Bulls born in 2021 and earlier

Number: 3



Cow Herd

Cows born in and earlier

Number:

Abbreviations

BW	Birth weight
WW	Weaning weight
Bm	Birth mat
M	Milk
PW	Post-wean weight
MW	Mature weight
HF	Heifer Fertility
CF	Cow Fertility
LL	Longevity

Sires of Young Animals

Sires of animals 3 years and younger

Number:



Cows older than 6 years

Cows born in and earlier

Number:

CEv	Calving Ease value
CGv	Calf Growth value
MKv	Milk value
Mv	Maintenance value
Fv	Fertility value
CV	Cow Value

Bull Calves

Bull calves born in

Number:



Heifer Calves

Heifers born in

Number:

Summary of Genetic Merits of Cows in the Herd

			Selection Values (SV)						Calf Weight		Mother		Growth		Fertility		
Birth Year	Nr of cows	Avg Cow Value Star grading	Calv. Ease	Calf Grwth	Milk	Maint.	Fert.	Cow Value	Birth Weight	Weaning Weight	Birth Mat.	Milk (Wn.Mat.)	Post-wn weight	Mature weight	Heifer Fertility	Cow Fertility	Longevity
Avg Cows in Breed																	
Avg Cows in Herd																	

Genetic Trends for On-Farm Traits

The graphs show the genetic gain of the herd relative to the breed. Only data of animals with measurements are included.

Herd

Birth Year	Calving Ease				Calf Growth			Milk			Maintenance						Fertility						Cow Value (CV)
	Birth Weight		Dir EBV	Calv. Ease	Weaning Weight		Calf Growth	Milk (Wn.Mat.)		Postwean Weight	Mature Weight		Mainte- nance	Heifer Fert.		Cow Fert.		Longevity		Ferti- lity			
	Number	EBV			Number	EBV		Number	EBV		Milk	Number		EBV	Number	EBV	Number	EBV	Number		EBV	Number	

Breed

Birth Year	Calving Ease				Calf Growth			Milk		Maintenance					Fertility								Cow Value (CV)	
	Birth Weight		Mat EBV	Calv. Ease	Weaning Weight		Calf Growth	Milk (Wn.Mat.)		Postwean Weight		Mature Weight		Maintenance	Heifer Fert.		Cow Fert.		Longevity		Fertility			
	Number	Dir EBV			Number	EBV		Number	EBV	Milk	Number	EBV	Number		EBV	Number	EBV	Number	EBV	Number		EBV		Number
2015	1402	0.37	0.01	102	812	2.6	96	812	-1.12	98	435	3.8	155	-1	103	271	-1.8	195	-0.3	1600	3.0	94	95	
2016	1292	0.36	0.00	102	702	2.7	96	702	-2.07	95	482	3.3	135	-6	106	283	-1.6	226	-0.3	1592	3.2	93	94	
2017	1430	0.44	0.02	101	938	2.9	97	938	-1.72	96	626	3.9	130	-3	105	379	-2.3	234	-1.0	1579	4.5	95	95	
2018	1571	0.43	-0.03	101	958	3.1	97	958	-1.19	98	597	5.8	139	0	101	294	-3.5	203	-1.2	1701	5.4	96	95	
2019	1516	0.49	0.01	100	1032	3.5	98	1032	-1.40	97	522	5.6	113	3	101	307	-1.5	176	-1.0	1553	6.3	95	96	
2020	1229	0.56	0.03	100	706	3.8	99	706	-1.44	97	414	6.0	100	-1	102	257	-2.1	53	-2.1	867	5.1	96	96	
2021	1145	0.37	-0.04	102	706	4.0	100	706	-1.45	97	409	6.5	47	-3	100	168	-6.4	2	-5.4			99	99	
2022	1320	0.51	-0.03	100	908	3.8	99	908	-0.60	100	475	6.2			99	24	-8.4					103	99	
2023	1266	0.56	-0.02	100	739	4.8	102	739	-0.98	98	175	8.3			96								103	
2024	744	0.53	-0.01	99	72	5.0	102	72	-2.15	95													98	

Sires

Sire		Selection Values (SV)						Calf Weight		Mother		Growth		Fertility			Measured Progeny Number of Herds								
ID	Sire ID	Calving Ease	Calf Growth	Milk	Mainte-nance	Fertility	Cow Value	Birth Weight	Weaning Weight	Birth Mat.	Milk (Wn.Mat.)	Post-wean Weight	Mature Weight	Heifer Fertility	Cow Fertility	Longevity	Birth	Wn	Gr. test	Dght/Calves.					
Reg. Nr	Dam ID	SV Acc	SV Acc	SV Acc	SV Acc	SV Acc	SV Acc	EBV Acc	EBVi	EBV Acc	EBVi	EBV Acc	EBVi	EBV Acc	EBVi	EBV Acc					EBVi				
Breed Average:								0.53	100	4.1	100	-0.02	100	-0.5	100	6.1					100	2	100	-5.5	100
GN 100039	RBS9704G	104	104	93	120	99	107	0.23	5.7	0.02	-2.8	4.7	-21	-28.0	0.5	12.7	193	108		32	52				
GN 100039	KL 060361	94	91	86	50	63	72	95	103	91	104	82	98	50	80	81	130	45	90	89	104	4	3	10	

Bulls

Bull			<75	75 - 125	>125	Breeding Values, with an accuracy <5% are not printed.																				
			Selection Values (SV)						Calf Weight				Mother		Growth		Fertility									
ID	% Inbreeding	Sire ID	Calving Ease	Calf Growth	Milk	Mainte-nance	Fertility	Cow Value	Birth Weight	Weaning Weight	Birth Mat.	Milk (WnMat.)	Post-wn Weight	Mature Weight	Heifer Fertility	Cow Fertility	Longevity									
Bull Name		Dam ID	SV Acc	SV Acc	SV Acc	SV Acc	SV Acc	SV Acc	EBV Acc	EBVi	EBV Acc	EBVi	EBV Acc	EBVi	EBV Acc	EBVi	EBV Acc	EBVi								
Inbreeding >6% is high			Breed Average:						0.53	100	4.1	100	-0.02	100	-0.5	100	6.1	100	2	100	-5.5	100	-1.7	100	10.5	100
			Bull Average:						0.66	99	5.2	103	-0.04	101	-0.7	99	7.4	102	6	103	-5.3	100	-1.7	100		
			Shaded EBVi:						90-110	>100	>100	>100	>100	>100	>100	90-110	>100	>100	>100	>100	>100	>100				
N 170038	1	GN 100039	103 73	108 78	96 67	108 29	101 34	110 50	0.36	7.3	-0.15	-1.9	13.2	-7	-15.6	-1.0	16.8									
NONNIE N 170038		AB 130117	★★★	★★★	★★★	★★★	★★★	★★★★	73	102	73	104	54	112	45	114	23	97	56	110						
R 170176		GN 100039	125 83	85 81	89 68	108 25	96 32	101 50	-1.34	-1.2	-0.69	-3.9	-4.0	-7	-15.6	0.2	23.6									
LANGLYF R 170176		R 140076	★★★★	★★	★★	★★★★	★★★	★★★★	84	121	74	119	46	82	41	114	22	92	60	122						
N 190003		GN 100039	98 76	75 76	96 64	119 25	97 32	76 48	0.49	-5.2	0.74	-1.7	-5.2	-19	-21.8	0.6	5.4									
NONNIE N 190003		N 150020	★★★	★★	★★★	★★★★	★★★	★★	77	100	71	78	41	81	41	122	22	90	48	91						

Cows

Cow			<75	75 - 125	>125	Breeding Values with an accuracy <5% are not printed.												
			Selection Values (SV)						Calf Weight				Mother		Growth		Fertility	
ID	% Inbreeding	Sire ID	Calving Ease	Calf Growth	Milk	Mainte-nance	Fertility	Cow Value	Birth Weight	Weaning Weight	Birth Mat.	Milk (WnMat.)	Post-wn Weight	Mature Weight	Heifer Fertility	Cow Fertility	Longevity	
Name		Dam ID	SV Acc	SV Acc	SV Acc	SV Acc	SV Acc	SV Acc	EBV Acc	EBVi	EBV Acc	EBVi	EBV Acc	EBVi	EBV Acc	EBVi	EBV Acc	EBVi
Inbreeding >6% is high			Breed Average:						100	100	100	100	100	100	100	100	100	
			Shaded EBVi						90-110	>100	>100	>100	>100	90-110	>100	>100	>100	

Selection List on Cow Values

Bulls 2 years and older

ID Sorted on ID		Name	Sire ID	Dam ID	% Inbreeding	Calving Ease Value Acc	Calf Growth Value Acc	Milk Value Acc	Maint. Value Acc	Fertility Value Acc	Cow Value Acc											
						★★★★☆																
1	N	170038	N	170038	GN	100039	AB	130117	1.2	103	73	108	78	96	67	108	29	101	34	110	50	
						★★★★																
1	R	170176	R	170176	GN	100039	R	140076	0.2	125	83	85	81	89	68	108	25	96	32	101	50	
						★★★																
1	N	190003	N	190003	GN	100039	N	150020	0.0	98	76	75	76	96	64	119	25	97	32	76	48	

