

News in evaluation run April 2017

- Yearly change of base for all traits
- New weights of traits in conformation composites

Yearly change of base for all traits and breeds

The new base 2017 for all traits and breeds are cows born 2011 – 2013 with own performance within trait (before cows born 2010-2012).

Number of cows in the breed base is given in the table:

Cow base 2011-2013	n cows milk traits	n cows conformation
HOL	1,967,087	417,296
RED HOL	213,434	40,340
Angler/RDC	11,561	4,130
R&W dual purp.	13,928	856
DSN/Friesian	2,980	755
Jersey	4,014	

The effects on main EBV caused by shift of base are listed in the following tables i.e. EBV reduction due to breeding progress in most traits:

	RZM	RZS	RZE	RZN	RZR	RZKm	RZG
Holstein	-1.6	-0.7	-3.2	-1.9	-0.3	-0.1	-2.9
Red Hol.	-1.6	-0.5	-3.4	-2.2	0.2	-0.2	-3.0
Angler	-1.2	0.7	-2.8	-0.8	-0.5	-0.6	-1.9
R&W d p	-0.4	0.0	-0.6	1.3	1.8	0.2	0.5
Jersey	0.2	0.0	n.a.	0.2	0.3	0.0	n.a.

	M kg	F %	F kg	P %	P kg
Holstein	-64	0.00	-2.3	0.00	-2.2
Red Hol.	-56	0.01	-1.5	-0.01	-2.4
Angler	-65	0.00	-3.0	0.01	-1.4
R&W d p	-15	0.00	-0.6	0.00	-0.8
Jersey	29	-0.01	1.2	-0.01	0.4

	D.Type	Body	F&L	Udder	RZD
Holstein	-1.2	-1.7	-1.2	-3.3	-0.2
Red Hol.	-1.5	-1.5	-1.2	-3.6	-0.2
Angler	-2.8	-2.0	-1.1	-2.6	-0.7
R&W d p	-0.6	-0.7	0.2	-0.5	-0.1

	CEm	SBm	Ced	SBd	RZKd
Holstein	-0.1	0.0	-0.3	-0.3	-0.3
Red Hol.	-0.1	-0.2	-0.2	-0.2	-0.2
Angler	-0.4	-0.5	-0.1	-0.2	-0.2
R&W d p	0.4	0.2	-0.2	-0.1	-0.2
Jersey	0.1	0.0	0.4	0.3	0.3

Positive value = new base is lower and therefore new EBV is higher

New weights of traits in conformation composites

Based on decisions of German Holstein Association (DHV) calculation of conformation composites for Body, Feet&Legs and Udder was modified:

Body:

- Stature now with optimum 112 (before no extra value above 112)
- Strength now 20% (before 15%)
- Body Depth now 20% (before 25%)
-

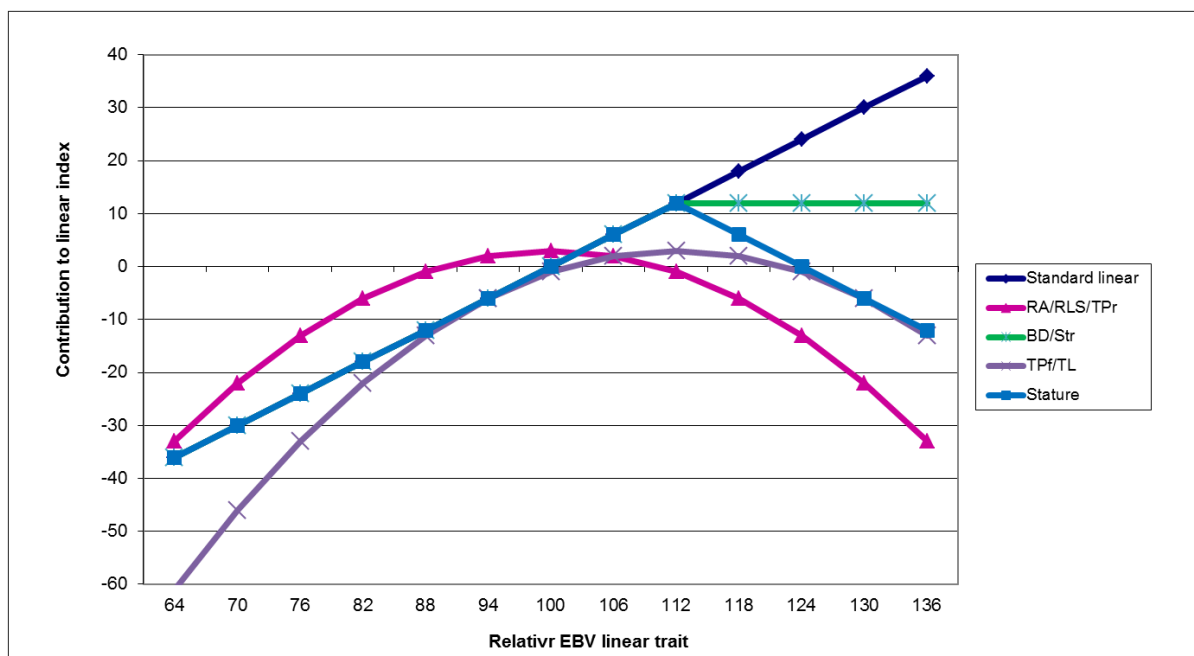
Feet&Legs:

- Rear Legs Side View now optimum 100 (before 88)
- Locomotion now 30% (before 20%)
- Rear Legs Side View now 15% (before 20%)
- Foot Angle now 15% (before 20%)
- Weight linear index to overall score now 75% : 25% (before 50% : 50%)

Udder:

- Teat Placement Front now optimum trait with 112 as optimum (before linear positive)
- Teat Length now with optimum 112 (before 100).

The figure illustrates the kind of non-linear weights for optimum traits:



The impact of these changes are limited to +/- few points in the composites – except for few bulls. Changes in overall conformation index RZE due to new weights are very limited i.e. >95% of bulls change max. +/-2 points.

vit-Verden, April 2017

Estimated base differences other breeds to Holstein

April 2017	SBT Hol.	RBT Red Hol.	Angler RDC.	DN Dual purp.	DSN Friesian	Jersey
RZM	0	-8,1	n.v. *	19,1	-29,6	n.v. *
RZS	0	-0,8	0,4	-2,9	0,6	-2,3
RZE	0	-5,4	-16,5	-30,1	- **	-
RZN	0	1,9	-1,2	-1,3	11,3	8,0
RZR	0	4,2	11,0	17,2	24,0	7,8
RZKm	0	-0,6	0,1	-0,4	-0,9	+0,2
Milch-kg / milk kg	0	-509	-996	-1011	-1487	-2305
Fett-% / fat %	0	0,11	0,51	0,19	0,28	1,25
Fett-kg / fat kg	0	-11,8	-3,0	-28,3	-45,7	-21,1
Eiweiß-% / protein %	0	0,06	0,18	0,09	0,12	0,49
Eiweiß-kg / protein %	0	-12,1	-20,8	-27,9	-42,4	-51,6
RZD / milking speed	0	-1,5	-5,8	-5,0	- **	-
MVH / temperament	0	0,9	-4,4	1,0	- **	-
Milchtyp / dairy type	0	-6,2	-22,8	-22,7	- **	-
Körper / body	0	-3,4	-15,6	-10,2	- **	-
Fundament / feet&legs	0	-0,5	0,9	-6,7	- **	-
Euter / udder	0	-5,5	-20,7	-38,4	- **	-
Größe / stature	0	-5,8	-26,1	-33,1	- **	-
Milchcharakter/angularity	0	-5,5	-17,9	-17,0	- **	-
Körpertiefe / body depth	0	-2,3	-5,0	-1,1	- **	-
Stärke / strength	0	0,4	3,0	22,0	- **	-
Beckenneig. / rump angle	0	1,4	1,5	16,2	- **	-
Beckenbreite / rump width	0	-0,4	-8,0	1,9	- **	-
Hinterbeinwink./ RLSV	0	-0,5	3,8	-4,2	- **	-
Klauenwinkel/foot angle	0	-0,5	-2,4	-3,9	- **	-
Sprunggelenke / hock	0	-0,8	2,0	-12,0	- **	-
Hinterbeinstell. / RLRV	0	0,8	2,2	3,8	- **	-
Bewegung / locomotion	0	-0,4	1,2	-2,3	- **	-
Hintereuter / rear udder	0	-4,6	-17,2	-36,9	- **	-
Zentralband / ligament	0	-5,0	-9,9	-26,7	- **	-
Strichplatz. vorne/ TPF	0	-4,0	-10,2	-19,2	- **	-
Vordereuter / fore udder	0	-1,2	-9,7	-14,9	- **	-
Eutertiefe / udder depth	0	-2,4	-11,4	-21,3	- **	-
Strichlänge / teat length	0	-2,1	-5,3	4,0	- **	-
Strichplatz.hinten / TPR	0	-5,4	-16,3	-29,8	- **	-
BCS	0	4,8	12,3	31,1	- **	-
Rastzeit / CFI	0	4,1	8,8	15,1	20,5	12,4
Konzeption / conception	0	2,7	8,0	12,1	17,0	3,2
NR-Rinder / NR heifer	0	-0,3	1,9	5,7	5,6	-3,9
VZ-Rinder/ 1st-last heif.	0	1,4	7,4	9,5	13,9	-4,8
NR-Kühe / NR cows	0	2,2	4,6	8,8	11,6	3,5
VZ-Kühe/ 1st-last cows	0	3,9	10,2	13,0	20,0	8,5
KV mat./cal. ease mat.	0	-0,5	0,3	-0,3	-1,4	0,7
TG mat./still birth mat.	0	-0,8	-0,1	-0,5	-0,2	-0,2
KV dir./cal. ease dir.	0	-1,4	-0,9	-1,2	-1,8	6,7
TG dir./still birth dir.	0	-1,4	-1,1	-2,0	-0,8	3,4
RZKd/RZKd	0	-1,4	-1,0	-1,6	-1,3	5,0

*) no fix base difference because of different relative weights of traits

***) no base difference because of separate evaluation for breed