

News from genetic evaluation run April 2010

- 5 years base shift for milk production traits
- yearly shift of base for relative breeding values

5 years base shift for milk production traits

Breeding values for milk production traits are defined on a cow base and shifted every 5 years according to Interbull recommendation. With the current April 2010 evaluation the base is shifted from cows born in 2000 to cows born in 2005. Due to genetic progress in the population the shift results in the following changes of all breeding values for cows and bulls:

Table: Changes of breeding values for milk production traits due to shift of base to cows born in 2005 (before cows born in 2000)

	M kg	F %	F kg	P %	P kg
Holstein	-423	0.06	-11.7	0.02	-12.8
Red Hol.	-337	0.02	-12.6	0.00	-11.4
R&W d p	-226	0.01	-8.9	0.01	-7.3
Angler	-502	0.07	-18.2	0.07	-16.0
Jersey	-146	-0.00	-8.6	0.00	-6.3

Positive values = new base is lower than before and breeding values are higher

Yearly change of base for relative breeding values

With the spring evaluation – like every year – the base for relative breeding values is shifted. The new base are A.I. bulls born 2000-2002 (before 1999-2001) for Holstein/Red Holstein respectively A.I. bulls born 1996-2002 (before 1995-2001) for other breeds with smaller breeding program. The changes of relative breeding values due to the shift of base are given in the table:

Table: Changes of relative breeding values due to yearly shift of base to now A.I. bulls born 2000-2002 (before 1999-2001) for Holstein/Red Holstein respectively A.I. bulls born 1996-2002 (before 1995-2001) for other breeds with smaller breeding program

	RZM	RZS	RZE	RZN	RZR	RZG	D.Type	Body	F&L	Udder	RZD
Holstein	-0.7	-0,5	-1.8	-1.2	0.1	-1.5	-1.6	-0.8	-0.5	-1.8	-0.8
Red Hol.	-2.3	0.2	-2.6	-0.8	1.0	-2.5	-1.4	-1.5	-0.9	-2.5	-0.3
R&W d p	-0.5	0.9	-2.5	0.7	1.0	-0.4	-2.4	0.2	-2.1	-2.0	-0.1
Angler	-3.5	-1.1	-1.9	0.2	1.3	-3.0	-2.1	-1.3	-0.7	-1.7	-0.3
Jersey	4,8	4.2	n.a.	2.9	-0.5	n.a.					

Positive values = new base is lower than before and breeding values are higher

The current base differences between the breeds are given in the table next page (differences to Holstein base).

Table: Base differences of other breeds to Holstein

April 2010	SBT Hol.	RBT Red Hol.	Angler RDC	DN Dual purp.	DSN Friesian	Jersey
RZM	0	-9,0	n.v. *	-26,3	-45,6	n.v. *
RZS	0	-1,5	3,4	-1,3	1,6	0,2
RZE	0	-7,1	-14,9	-26,5	- **	-
RZN	0	-0,4	4,0	-1,9	16,2	7,7
RZR	0	5,1	14,1	25,1	36,8	16,5
Milch-kg / milk kg	0	-467	-835	-856	-1381	-2123
Fett-% / fat %	0	0,10	0,41	0,13	0,16	1,41
Fett-kg / fat kg	0	-11,4	-3,5	-26,7	-45,0	-14,7
Eiweiß-% / protein %	0	0,03	0,16	0,07	0,09	0,50
Eiweiß-kg / protein %	0	-13,0	-16,4	-24,1	-40,3	-46,7
RZD / milking speed	0	-2,8	-5,5	-6,2	- **	-
MVH / temperament	0	-0,5	-0,6	-3,1	- **	-
Milchtyp / dairy type	0	-5,0	-19,3	-21,6	- **	-
Körper / body	0	-3,0	-20,2	-16,7	- **	-
Fundament / feet&legs	0	-4,0	-0,1	-0,5	- **	-
Euter / udder	0	-6,0	-14,6	-32,8	- **	-
Rastzeit / CFI	0	4,7	14,6	19,9	28,8	17,7
Konzeption / conception	0	3,5	8,9	18,4	27,2	10,3
NR-Rinder / NR heifer	0	0,4	3,1	14,6	14,0	-1,3
VZ-Rinder/ 1st-last heif.	0	1,9	7,4	16,7	21,9	5,5
NR-Kühe / NR cows	0	1,6	3,6	11,5	19,0	4,2
VZ-Kühe/ 1st-last cows	0	5,7	12,8	20,0	29,2	18,5
KV mat./cal. ease mat.***	0	-2,2	1,2	0,9	-0,9	2,8
KV pat./cal. ease pat.***	0	-0,7	0,7	-0,1	0,4	9,0
TG mat./still birth mat.***	0	1,7	3,8	3,8	3,6	2,6
TG pat./still birth pat.***	0	1,1	-0,5	-1,1	0,0	3,4

*) no fix base difference because of different weighting of traits n index

**) no base difference because of separate evaluation models

***) base difference 08-2009; shift of base in 08-2010

Base differences for the linear traits and the single daughter fertility traits can be found in the description of breeding values (e.g. www.vit.de, BULLI/INTERBULLI CD).

Next publication is planed for August 17th 2010 according to the Interbull schedule.

vit-Verden, April 2010