

COUNTRY'S NAME	CZECH REPUBLIC																															
Production traits	Milk, fat, and protein																															
Breed	Simmental, Holstein																															
Trait definition and unit of measurement	Direct: Traits recorded: milk yield, fat and protein %. The unit for lactation yield is kg. Indirect: Fat and protein yield																															
Criteria for inclusion and extension of records	All records are included (10% have missing sire). Naturally terminated lactations included if DIM \geq 240, no extension. Long records cut at 305 days. Records in progress included if there exists \geq 3 test days, extended to 294 days. Records of culled cows included if there exists \geq 3 test days, extended to 282 days. Extension method: Multiple regression with measurements of test days as cause variables. Same extension method, with different regression coefficient, for different parities.																															
Time period for data inclusion	Without limits (usually 10 years)																															
Sire categories	NS: SIM=7, HOL=5 AI: SIM=150, HOL=5 Imported: SIM=20, HOL=60 ET: SIM=25, HOL=5																															
Number of lactations included in the evaluation	First 3 lactations, without weightings.																															
Environmental effects pre-adjustment	Age at calving, days open of current lactation, calving interval of previous lactation																															
Base for age adjustment	Average calving age of all cows during last 3 years (separate for each lactation).																															
Method (model) of genetic evaluation	ST – ML – BLUP – AM																															
Environmental effects in the genetic evaluation model	Fixed: Herd-year-season Random: Animal																															
Use of genetic groups	Relationship matrix with phantom parents determined according to breed, years of birth and country of origin (6 origins for each breed)																															
Genetic parameters in the evaluation	<table border="1"> <thead> <tr> <th rowspan="2">h²:</th> <th colspan="3">Lactations</th> <th rowspan="2">r_{g12}</th> <th rowspan="2">r_{g13}</th> <th rowspan="2">r_{g23}</th> </tr> <tr> <th>I.</th> <th>II.</th> <th>III.</th> </tr> </thead> <tbody> <tr> <td>milk</td> <td>0,26</td> <td>0,24</td> <td>0,22</td> <td>0,686</td> <td>0,545</td> <td>0,728</td> </tr> <tr> <td>fat</td> <td>0,25</td> <td>0,24</td> <td>0,23</td> <td>0,676</td> <td>0,527</td> <td>0,778</td> </tr> <tr> <td>protein</td> <td>0,24</td> <td>0,23</td> <td>0,22</td> <td>0,643</td> <td>0,513</td> <td>0,765</td> </tr> </tbody> </table>	h ² :	Lactations			r _{g12}	r _{g13}	r _{g23}	I.	II.	III.	milk	0,26	0,24	0,22	0,686	0,545	0,728	fat	0,25	0,24	0,23	0,676	0,527	0,778	protein	0,24	0,23	0,22	0,643	0,513	0,765
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System validation	Correlations between dams and daughters, etc. For international purposes: Interbull method II.																															
Expression of genetic evaluations	EBV (kg, %) and RBV																															
Genetic (reference) base	Average of BV of cows born in 1990																															
Next base change	2 000																															
Criteria for official publication of evaluations	Reliability at least 70 %, min. 20 herds																															
Number of evaluations / publications per year	1 official (print) publication in November, 6 unofficial (internet) publications.																															
Use in production / total merit index	No index																															
Anticipated changes in the near future	New definition of herd-year-season effect																															
Key references on methodology applied	ČERMÁK, V. – VACEK, M.: Odhad plemenných hodnot sledovaných vlastností u dojeného skotu v ČR. <i>Náš chov</i> , 59, č. 3, 1999, str. 23 - 25.																															
Key organization: name, address, phone, fax, e-mail, web site	Czech-Moravian Breeders Corporation, Ltd. 252 09 Hradištko phone: +420-2-9941268 fax: +420-2-9941491 e-mail: sppcr@login.cz (it will be changed)																															

COUNTRY: Czech Republic											
Number of AI bulls (NB) tested, means (X) and standard deviations (SD) of proofs (BV) from most recent run, by bull's year of proof (YP) and breed.											
YP	NB	Milk		Fat		Protein		Fat %		Protein %	
		X	SD	X	SD	X	SD	X	SD	X	SD
Breed Simmental											
1980	403	-145.02	171.10	-3.36	9.98			0.06	0.15		
1981	361	-154.84	205.33	-4.22	10.66			0.05	0.15		
1982	328	-149.26	224.23	-6.21	12.12			0.00	0.17		
1983	281	-127.50	207.59	-7.00	12.67			-0.03	0.20		
1984	345	-105.35	228.88	-5.19	13.48			-0.01	0.21		
1985	318	-60.55	232.41	-3.31	12.64			-0.01	0.20		
1986	365	-25.44	211.53	-1.99	11.78			-0.01	0.20		
1987	405	-73.80	211.01	-3.10	11.45			0.00	0.17		
1988	394	-29.76	252.64	-4.41	13.16			-0.07	0.18		
1989	428	74.19	284.63	-1.79	14.03			-0.10	0.21		
1990	356	78.57	324.99	-2.79	14.60	2.92	10.62	-0.13	0.19	0.00	0.10
1991	363	5.04	305.05	-4.85	14.18	0.56	10.16	-0.11	0.18	0.00	0.10
1992	274	60.60	307.74	-3.33	13.52	1.81	9.49	-0.12	0.20	-0.01	0.11
1993	249	48.04	300.14	-3.08	12.83	1.91	9.29	-0.11	0.20	0.00	0.11
1994	176	71.48	325.44	-3.15	15.72	2.19	10.47	-0.13	0.22	-0.01	0.11
1995	157	33.54	367.47	-3.85	17.67	0.99	12.84	-0.11	0.22	0.00	0.11
1996	159	102.31	384.11	-1.98	18.09	3.60	13.04	-0.13	0.20	0.00	0.13
1997	117	-38.62	354.41	-3.73	15.78	2.13	12.46	-0.04	0.20	0.07	0.10
1998	98	-22.52	334.97	0.34	14.79	1.98	11.88	0.03	0.17	0.05	0.09
Breed Holstein											
1980	57	-224.95	209.72	-5.01	8.32			0.09	0.10		
1981	84	-218.67	261.67	-5.46	9.82			0.08	0.10		
1982	50	-240.88	235.71	-6.28	9.17			0.08	0.11		
1983	48	-233.66	241.81	-5.66	9.31			0.09	0.11		
1984	35	-177.86	280.46	-3.77	10.94			0.08	0.13		
1985	47	-123.13	268.05	-1.40	10.25			0.08	0.14		
1986	41	-116.39	341.22	-1.58	13.02			0.07	0.16		
1987	101	-125.23	339.81	-0.95	12.79			0.09	0.16		
1988	84	-77.40	377.20	-0.61	13.82			0.06	0.17		
1989	77	-39.06	439.42	0.68	15.38			0.05	0.20		
1990	83	-20.63	420.97	0.46	14.86	3.24	12.37	0.03	0.20	0.08	0.09
1991	81	14.78	461.89	2.54	16.97	4.54	13.95	0.04	0.21	0.08	0.10
1992	78	-35.31	439.09	0.19	16.12	2.86	13.44	0.04	0.19	0.08	0.09
1993	86	65.32	488.61	3.96	17.52	5.92	15.06	0.03	0.22	0.07	0.10
1994	76	51.69	473.37	2.95	16.53	5.28	14.25	0.02	0.22	0.07	0.11
1995	72	5.64	437.11	0.84	16.05	3.39	13.61	0.02	0.25	0.06	0.11
1996	73	4.98	478.46	1.99	16.20	4.94	15.43	0.04	0.19	0.09	0.10
1997	84	300.98	527.30	7.31	19.29	14.74	17.59	-0.09	0.26	0.08	0.11
1998	100	201.46	394.06	8.36	14.26	11.96	12.68	0.00	0.25	0.09	0.11

COUNTRY: Czech Republic											
Average of adjusted production records (kg, %) included in the most recent evaluation run, by daughters' year of production (YP) and breed*.											
YP	Milk		Fat		Protein		Fat %		Protein %		
	X	SD	X	SD	X	SD	X	SD	X	SD	
Breed Simmental											
1980	2914		119					4.10			
1981	3033		123					4.07			
1982	3033		124					4.08			
1983	3104		125					4.03			
1984	3238		130					4.00			
1985	3300		134					4.04			
1986	3361		136					4.03			
1987	3317		136					4.11			
1988	3261		135					4.13			
1989	3326		138					4.13			
1990	3424		142					4.15			
1991	3388		142					4.17			
1992	3389		143					4.21			
1993	3499		148					4.20			
1994	3988		169		132			4.21		3.30	
1995	4178		180		139			4.31		3.33	
1996	4472		195		150			4.36		3.36	
1997	4594		201		153			4.37		3.34	
1998	4659		203		158			4.36		3.38	
Breed Holstein											
1980	3337		132					3.97			
1981	3346		135					4.02			
1982	3457		139					4.01			
1983	3352		132					3.94			
1984	3423		139					4.06			
1985	3720		151					4.07			
1986	3566		147					4.11			
1987	3638		147					4.04			
1988	3994		162					4.04			
1989	3965		162					4.05			
1990	4021		164					4.06			
1991	3990		165					4.12			
1992	3982		165					4.12			
1993	4140		171					4.10			
1994	4586		189		145			4.10		3.15	
1995	4537		194		146			4.27		3.23	
1996	5339		227		173			4.26		3.24	
1997	5587		239		179			4.27		3.21	
1998	5851		247		190			4.23		3.26	

* Averages in this table are for the first lactation up to 1993 and for the first three lactations since 1994.