

<b>COUNTRY'S NAME</b>	<b>SWITZERLAND – HOL</b>
<b>Production traits</b>	<b>Milk, fat, and protein</b>
<b>Breed</b>	Holstein
<b>Trait definition and unit of measurement</b>	Milk, fat and protein yield (kg): 305-days standard lactation records; milk recording with ICAR A4-method. Fat and protein content (%).
<b>Criteria for inclusion &amp; extension of records</b>	The cow, which almost all have full pedigree information, has to be $\geq 50\%$ HOL. All records from the official milk recording scheme are used. Records in progress: If DIM $\geq 80$ extended to 305 days. Terminated records and records from culled cows: if $80 \leq \text{DIM} \leq 269$ are extended to 305 days, if DIM $\geq 270$ adjusted for lactation length. A multiplicative extension method is used.
<b>Time period for data inclusion</b>	Lactation data since calving year 1979 is used
<b>Sire categories</b>	90% of data from AI-sires; 10% from NS-sires; all data (AI first and second crop and NS) is used in the evaluations; $>80\%$ of first lactation cows are bred to young bulls; we test about 35 bulls per year. In 1998 there were a total of 70 NS bulls with CHE origin, 28 AI bulls with CHE origin, 4 AI imported young bull and 12 AI second crop.
<b>Number of lactations included in the evaluation</b>	Lactations 1-5 are used with a repeatability model; no weightings
<b>Environmental effects: Pre-adjustment</b>	Calving age, lactation number, and lactation length (current)
<b>Base for age pre-adjustment</b>	First calving, 30 months; last updated 1995
<b>Method (model) of genetic evaluation</b>	ST – R – BLUP – AM
<b>Environmental effects in the genetic evaluation model</b>	Fixed: Herd or herd-class * time-period * parity, year * calving season Random: PE
<b>Use of genetic groups</b>	Full relationship matrix and genetic groups for unknown parents based on sex, year of birth and origin (all foreign countries collected together).
<b>Genetic parameters in the evaluation</b>	Milk ( $h^2 = 0.29$ , $t = 0.53$ ); fat yield ( $h^2 = 0.27$ , $t = 0.50$ ); fat % ( $h^2 = 0.64$ , $t = 0.78$ ); protein yield ( $h^2 = 0.25$ , $t = 0.51$ ); protein % ( $h^2 = 0.53$ , $t = 0.65$ )
<b>System validation</b>	Genetic trends were validated according to Interbull rules (method I).
<b>Expression of genetic evaluations</b>	EBV
<b>Genetic (reference) base</b>	Fixed base, cows born in 1990
<b>Next base change</b>	April 2000
<b>Criteria for official publication of evaluations</b>	Reliability of 65% for AI-proven bulls 10 daughters for NS-proven bulls
<b>Number of evaluations / publications per year</b>	4 evaluations; January, April, July and October
<b>Use in production / total merit index</b>	A total merit index introduced in Summer 1999
<b>Anticipated changes in the near future</b>	Introduction of test day model evaluation in April 2000
<b>Key reference on methodology applied</b>	Casanova, L. 1991: Zuchtwertschätzung mit einem Wiederholbarkeits-Tiermodell beim Schweizer Braunvieh. Diss. ETH Nr. 9389 Casanova et al. 1992: Inbreeding in Swiss Braunvieh and its influence on Breeding Values predicted from a Repeatability Animal Model. J. Dairy Sci. 75, 1119-1126.
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COUNTRY: Switzerland

Average of adjusted production records (kg, %) included in the most recent evaluation run, by daughters' year of calving (YC), number of cows (NC) and breed.

YC	NC	Milk		Fat		Protein		Fat %		Protein %	
		X	SD	X	SD	X	SD	X	SD	X	SD
Breed		Holstein									
1971		4802		174		154		3.62		3.21	
1972		4832		177		155		3.67		3.21	
1973		4831		178		154		3.69		3.20	
1974		4875		180		155		3.70		3.18	
1975		4917		182		156		3.70		3.18	
1976		4931		182		156		3.70		3.17	
1977		5045		187		159		3.72		3.15	
1978		5129		194		162		3.78		3.17	
1979		5144		194		163		3.78		3.17	
1980		5212		198		165		3.81		3.17	
1981		5343		206		168		3.86		3.16	
1982		5371		208		169		3.88		3.16	
1983		5388		210		170		3.90		3.15	
1984		5431		213		170		3.93		3.13	
1985		5514		220		173		3.99		3.13	
1986		5597		225		175		4.03		3.13	
1987		5660		230		178		4.07		3.14	
1988		5695		231		180		4.07		3.16	
1989		5724		233		181		4.08		3.16	
1990		5771		232		182		4.04		3.15	
1991		5840		235		184		4.03		3.16	
1992		5936		240		189		4.05		3.19	
1993		6078		245		193		4.04		3.18	
1994		6258		252		199		4.04		3.18	
1995		6414		257		203		4.02		3.17	
1996		6676		265		211		3.99		3.16	