

**FACTS ON SIRE EVALUATION PROCEDURES APPLIED FOR  
PRODUCTION TRAITS**

**COUNTRY: SWEDEN**

Breed(s)	Swedish Friesian, Swedish Red and White Cattle
Trait(s) evaluated and unit(s) of measurement	Milk, FCM (kg), fat and protein (kg, %).
Number of lactations	1
Genetic parameters assumed	$h^2 = 0.25$ all traits
Criteria for inclusion and extension of records	Sire and maternal grandsire of the same breed. Age at calving 20-36 months, 46-305 days in lactation, records of culled cows and records in progress shorter than 305 days are extended
Sire categories evaluated	All sires with daughters contemporary with daughters of AI sires
Environmental effects considered by pre-adjustment	Age at calving, month, DO
by evaluation model	Herd*year*season, group of sires, group of MGS
Base for age adjustment (months)	28 months
Use of genetic groups and/or relationships	Genetic groups and relationships between sires based on sire and MGS
Method of evaluation	ST BLUP MGS model
Expression of proof	RBV (kg, %)
Genetic (reference) base	Rolling base, average RBV of the three last years of tested bulls = 100
Criteria for official publication of sire proofs	15 efficient daughters with 305 days lactation
Number of evaluations/publications per year	
Use of production index	Milk index = RBV protein kg which is included in total merit index
Name, address and faxnumber of organization responsible for sire evaluation and publication	Swedish Association for Livestock Breeding and Production Hållsta S-631 84 Eskilstuna, Sweden Fax: +46 16 21216
Key references on methodology applied	Danell, B. 1984. Sire evaluation for milk production in Swedish dairy cattle breeding. IDF/EAAP Symposium on progeny testing methods in dairy cattle breeding, Prague 14-16 sept. IDF Doc. 183, 139-150.

COUNTRY: SWEDEN											
Number of AI bulls (NB) tested, means (X) and standard deviations (SD) of proofs (RBV) from most recent run, by bull's year of birth (YB) and breed											
		Milk		Fat		Protein		Fat %		Protein %	
YB	NB	X	SD	X	SD	X	SD	X	SD	X	SD
Breed:		Swedish Red and White (SRB)									
1975	181	94	6	93	6	93	5	99	4		
1976	157	93	6	93	5	94	5	100	5		
1977	164	94	6	95	6	95	5	101	6		
1978	196	95	6	95	6	96	6	100	5		
1979	156	96	6	95	6	96	6	98	4		
1980	174	97	7	97	6	98	6	99	6		
1981	188	98	6	97	7	99	6	98	6		
1982	174	98	6	98	6	98	6	100	5		
1983	171	99	6	99	6	99	5	101	6		
1984	161	100	7	100	6	100	6	100	6		
1985	153	102	7	101	6	101	6	99	6		
1986	102	104	6	100	7	103	6	97	5		
Breed:		Swedish Friesian (SLB)									
1975	85	95	8	93	8	95	7	98	6	100	5
1976	80	94	9	92	8	95	8	98	5	102	4
1977	74	96	8	95	7	97	7	99	5	101	5
1978	83	95	7	95	7	97	7	100	5	102	4
1979	97	96	8	95	8	98	7	99	5	102	3
1980	91	95	9	95	8	98	8	100	6	103	4
1981	99	96	8	95	7	98	7	98	5	102	5
1982	128	97	6	96	6	98	6	99	5	101	4
1983	90	98	7	98	7	98	6	100	5	100	4
1984	114	99	7	101	7	99	6	102	7	100	4
1985	87	103	8	101	8	102	8	98	5	99	4
1986	54	103	9	101	8	102	8	98	6	99	3

COUNTRY: SWEDEN					
Average of adjusted production records (kg) included in the most recent evaluation run, by daughters' year of calving (YC) and breed					
YC	Milk	Fat	Protein	Fat %	Protein %
Breed: Swedish Red and White (SRB)					
1981	5180	218		4.21	3.42
1982	5316	222		4.20	3.43
1983	5518	232	190	4.22	3.45
1984	5573	236	191	4.24	3.43
1985	5536	237	192	4.28	3.46

<b>COUNTRY: SWEDEN</b>					
<b>Average of adjusted production records (kg) included in the most recent evaluation run, by daughters' year of calving (YC) and breed</b>					
<b>YC</b>	<b>Milk</b>	<b>Fat</b>	<b>Protein</b>	<b>Fat %</b>	<b>Protein %</b>
1986	5522	237	192	4.29	3.47
1987	5683	246	200	4.32	3.52
1988	5743	247	196	4.31	3.41
1989	5872	252	198	4.29	3.37
1990	6178	265	208	4.28	3.36
1991	6218	269	209	4.32	3.37
<b>Breed:</b>	<b>Swedish Friesian (SLB)</b>				
1981	5380	211		3.93	3.37
1982	5451	214		3.94	3.40
1983	5593	221	190	3.95	3.40
1984	5657	225	192	3.98	3.40
1985	5625	227	193	4.03	3.43
1986	5614	227	193	4.05	3.44
1987	5815	234	200	4.02	3.43
1988	5900	238	196	4.03	3.33
1989	5966	243	196	4.07	3.28
1990	6250	256	205	4.10	3.28
1991	6281	259	206	4.13	3.29