FACTS ON APPLIED SIRE-EVALUATION PROCEDURES FOR DAIRY PRODUCTION TRAITS

COUNTRY	NORWAY
Breed(s)	Norwegian Red Cattle
Traits evaluated and units of measurement	Fat-protein-corrected milk yield, FPCM (kg)
Number of lactations	1
Genetic parameters applied	$h^2 = 0.20$
Inclusion and extension of records	<120 days, not included ≥120 days, included after extension Terminated lact., included without extension Records in progress (1:st year) and rec. from culled cows are used in the same way
Sire categories evaluated	Only AI sires
Effects considered	
by preadjustments	Age, season and days open
by model of evaluation	Herd-year, sire, maternal grandsire
Base of age adjustment	Adult M.E. (Mature equivalent)
Use of genetic groups/relationships/pedigree	Relationship matrix used/sire and maternal grandsire, no grouping
Method of evaluation used	Single trait BLUP
Expression of genetic merit	Relative breeding value, RBV (% of mean)
Genetic base, kind/definition	Rolling base, average of the three last batches (years) of young bulls
Minimum requirements for official publication of sire proofs	100 daughters
Use of selection index or total merit index	Total merit index used
Name and address of organization responsible for sire evaluations and publishing of results	Norwegian Red Cattle Association Institutt for Husdyravl N-1432 Ås-NLH Norway
Key references on methodology applied	Fimland, E. 1984. Progeny testing procedures in Norway. IDF/EAAP Symp., Prague, Sept. 14-16, 1984, 16 pp.

Country: Norway

Number of AI bulls tested, means and standard deviations of proofs by year

		FPCM* index	
Year of first proof	Number of bulls	x̄	S.D.
Breed: Norwegian Red Cattle			
1979	112	**	6.2
80	109	**	6.8
81	110	**	6.3
82	104	**	6.4
83	107	**	5.4
84	114	100.6	5.4
85	117	102.5	5.8

*FPCM=M(0.22+0.075f+0.15p)

where M=milk yield; f=fat %; p=protein %

** No other base used than the bulls progenytested that year, average index is 100.

Country: Norway

Average phenotypic levels of (adjusted) production records included in the sire evaluation procedures

	Traits			
Year of calving	Milk kg	Fat %	Protein %	FPCM
Breed: Norwegian Red Cattle				
1979	5607	4.04	3.32	5725
80	5750	4.02	3.30	5845
81	5706	4.04	3.29	5800
82	5809	4.02	3.25	5861
83	5782	4.06	3.25	5879
84	5734	4.04	3.22	5768