FACTS ON APPLIED SIRE-EVALUATION PROCEDURES FOR DAIRY PRODUCTION TRAITS

COUNTRY	ITALY
Breed(s)	Black and White (Italian Friesian)
Traits evaluated and units of measurement	Milk (kg), fat and protein %
Number of lactations	1

Genetic parameters applied	h^2 milk yield (kg) =0.25
	    fat % =0.50
	    protein % =0.40

Inclusion and extension of records	Age at calving <36 months. Records >90 days included after extension
Sire categories evaluated	All sires

Effects considered
  by preadjustments
 	
  by model of evaluation
	
	Age, season, lactation length, no. of milkings
	Herd-year-season, group of sires, sire, MGS

Base for age adjustment	M.E. (7 years)
Use of genetic groups/ relationships/pedigree	Group of sires by year of birth and country of origin. Rel.ships matrix used.
Method of evaluation used	Single trait BLUP, MGS model
Expression of genetic merit	BV (kg, %)
Genetic base, kind/definition	Fixed base: weighted average of sires of first calvers that calved in 1982
Minimum requirements for official publication of sire proofs	20 daughters in 5 herds
Use of selection index or total merit index	No total merit index used
Name and address of organiza- tion responsible for sire evaluations and publishing of results	Associazione Nazionale Allevatori Frisona Italiana Via Bergamo 292 26100 Cremona, Italia
Key references on methodology applied	Everett, R.W., Quaas, R.L., & McClintock, A.E., 1979. Daughters' maternal grandsire in sire evaluation. J. Dairy Sci., 62:1304-1313. Eriksson, J.-Å., & Danell, B., 1984. Sire evaluation for milk yield corrected for non-random matings within herds by considering the maternal grandsire of the daughter. Acta Agric. Scand. 34:84-96

Country: Italy

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

Year of birth of bulls	No. of bulls	Breeding values				
		Milk kg $\overline{x}$	Fat kg $\overline{x}$	Prot. kg $\overline{x}$	Fat % $\overline{x}$	Prot. % $\overline{x}$
Breed: Black and White (Italian Friesian)						
1972	181	−19	−2.1	−0.4	−0.02	0.00
73	145	9	1.5	0.7	0.02	0.01
74	150	128	3.6	3.4	−0.01	−0.01
75	122	150	2.3	2.5	−0.05	−0.03
76	99	239	7.0	5.3	−0.02	−0.03
77	110	215	7.1	6.7	−0.01	0.00
78	90	−33	0.6	0.0	0.03	0.01
79	56	30	1.9	1.3	0.01	0.01
80	42	326	15.7	11.7	0.05	0.02
81	27	482	25.2	15.3	0.11	0.00
82	15	648	23.4	17.5	0.00	−0.04

Standard deviation of sire proofs with $R^2_{TI} > 0.70$

1972–82	1303	645	22.3	18.1	0.20	0.10

Country: Italy

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

Year of calving	Traits		
	Milk kg	Fat %	Protein %*
Breed: Black and White (Italian Friesian)			
77	6294	3.70	3.18
78	6387	3.68	3.17
79	6617	3.65	3.18
80	6676	3.64	3.14
81	6661	3.60	3.14
82	6843	3.54	3.14
83	6993	3.55	3.14
84	7081	3.49	3.14
85	7228	3.49	3.14
86	7373	3.50	3.13
87	7722	3.49	3.12
88	7945	3.49	3.12

*=not adjusted records