

FACTS ON APPLIED SIRE-EVALUATION PROCEDURES FOR DAIRY PRODUCTION TRAITS

COUNTRY	FRANCE
Breed(s)	Francaise Frisonne (Black and White), Mont-béliearde, Normande, Pie Rouge de l'Est, Brune, Pie Rouge des Plaines, Abondance, Tarentaise
Traits evaluated and unit of measurement	Milk, $\frac{\text{Fat}+1.21 \text{ prot}(\text{kg})}{2}$, $\frac{\text{Fat}+1.21 \text{ prot} \% (\text{g/kg})}{2}$
Number of lactations	1-3 with ind. weightings
Genetic parameters applied	$h^2=0.25$ for yields; 0.45 for %
Inclusion and extension of records	All records used with diff. weightings according to lact. length Actual lactation yields adjusted to 305 days
Sire categories evaluated	All sires
Effects considered by preadjustments	Lact., age at 1st calving or calving interval (CI), dry period, cow-index of mates
by model of evaluation	Region x year x lact., herd, month of calving, age at 1st calving or preceeding CI, present CI, herd-level-class, cow, dam, sire, group of sires
Base for age adjustment	30 months
Use of genetic groups/relationships/pedigree	Sire group by year and pedigree (sire and maternal grandsire)
Method of evaluation used	MCC
Expression of genetic merit	BV (kg, %)
Genetic base, kind/definition	Rolling, average sire BV of cows for bulls whose first daughters calved during the previous 4 years and having ≥ 6 daughters
Minimum requirements for official publication of sire proofs	Rpt. ≥ 0.70
Use of selection index or total merit index	No
Name and address of organization responsible for sire evaluations and publishing of results	"Computing" INRA: Institut National de la Recherche Agronomique Station de Génétique Quantitative et Appliquée Domaine de Vilvert F-78350 Jouy-en-Josas, France "Publishing" ITEB: Institut Technique de l'Élevage Bovin Section Amélioration Génétique M.N.E. 149 rue de Bercy F-75595 Paris Cedex 12, France
Key references on methodology applied	POUTOUS et al. 1981. Méthode de calcul des index laitiers, BTI n° 361, Ministère de l'Agriculture BONAITI, MOCQUOT, POUTOUS 1984. Dairy sire evaluation in France in IDF/EAAP Symp. on progeny testing methods in dairy cattle, Prague Sept 14-16.

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App. 1

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

		Traits: on 1984 Rolling base					
		Milk (kg)		Fat + 1.21 Prot (kg)		Fat + 1.21 Prot % (g/kg)	
Year of birth	No. of bulls	$\bar{x}$	S.D.	$\bar{x}$	S.D.	$\bar{x}$	S.D.
Breed: Française Frisonne							
1970	231	-518		-18		0.3	
71	311	-447		-15		0.4	
72	331	-215		-9		0.0	
73	367	-183		-7		0.1	
74	332	-18		0		0.1	
75	354	-24	736	1	22.7	0.3	1.89
76	351	80	726	3	22.2	0.0	2.04
77	371	225	694	9	23.4	0.1	1.91
78	456	534	682	19	20.5	-0.1	1.85
Breed: Normande							
1970	162	-265		-10		0.4	
71	159	-360		-14		0.2	
72	171	-289		-10		0.5	
73	174	-244		-8		0.5	
74	183	-99		-3		0.2	
75	146	-28	437	-1	17.1	0.1	1.90
76	148	28	475	1	17.4	0.1	1.70
77	158	169	451	6	15.5	-0.2	1.52
78	157	217	400	8	14.8	-0.1	1.36
Breed: Montbéliarde							
1970	54	-223		-7		0.3	
71	67	-190		-8		0.0	
72	75	-236		-7		0.5	
73	78	-2		2		0.5	
74	72	-40		0		0.3	
75	70	-163	453	-5	15.4	0.2	1.52
76	65	84	534	2	17.7	-0.2	1.63
77	82	28	538	1	19.1	0.0	1.48
78	89	199	512	8	17.7	0.2	1.25

Country: France

App 2

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

Year of production	Traits					
	Milk (kg)	Lactation length	Fat (kg)	Fat %	Protein (kg)	Protein %
Breed: Française Frisonne						
1976	3747	290	143	3.83	120	3.21
77	3863	295	147	3.82	123	3.20
78	3990	295	154	3.87	128	3.22
79	4195	297	163	3.88	136	3.24
80	4414	298	171	3.88	143	3.24
81	4484	297	173	3.86	144	3.22
82	4608	299	176	3.83	148	3.22
83	4743	299	183	3.86	153	3.22
84	4789	293	185	3.86	154	3.21
Breed: Normande						
1976	3064	274	126	4.13	107	3.49
77	3218	282	133	4.13	110	3.49
78	3335	282	139	4.19	117	3.49
79	3510	284	148	4.22	123	3.52
80	3693	285	155	4.19	129	3.51
81	3691	282	153	4.16	127	3.46
82	3745	285	153	4.11	129	3.45
83	3843	285	159	4.16	133	3.46
84	3874	278	161	4.14	134	3.46
Breed: Montbéliarde						
1976	3595	284	132	3.67	120	3.32
77	3664	285	135	3.69	122	3.34
78	3608	268	134	3.71	121	3.36
79	3895	287	145	3.72	132	3.38
80	4030	286	149	3.71	135	3.36
81	4044	287	149	3.68	135	3.35
82	4157	288	153	3.68	139	3.35
83	4136	286	153	3.72	138	3.35
84	4099	282	154	3.75	138	3.37