FACTS ON APPLIED SIRE-EVALUATION PROCEDURES FOR DAIRY PRODUCTION

TRĂÍTS				
COUNTRY	AUSTRALIA			
Breed(s) Traits evaluated and units of measurement	Friesian, Jersey, Ayrshire, Illawarra, Dairy Shorthorn, Guernsey Milk (1), Fat (kg), fat % Victoria, Tasmania and New South Wales also evaluate Protein (kg) and protein %			
Number of lactations	A11			
Genetic parameters applied	h² milk,fat, protein yield = 0.16 Repeatability = 0.40			
Inclusion and extension of records	Normally terminated lact. of 120-300 days included without extension Rec. of >120 days from culled cows included without extension Rec. in progress included using comparison with test day information Age at calving >18months			
Sire categories evaluated	All sires			
Effects considered				
by preadjustments	Age at calving, month of calving			
by model of evaluation	Herd-year-season, additive genetic merit (sire, cow), non-additive gen. merit plus permanent environment effecet (cow)			
Base of age adjustment	7 years of age			
Use of genetic groups/ relationships/pedigree	No groups. Rel.ship matrix used/all relation- ships linking males are used. Direct links between females used only if in the same herd			
Method of evaluation used	Single trait BLUP			
Expression of genetic merit	BV (1, kg)			
Genetic base, kind/definition	Fixed, average BV of sires of all cows in file up to 1981/82			
Minimum requirements for official publication of sire proofs	20 eff. daughters in ≥5 herds (Friesian, Jersey) 10 eff. daughters in ∋3 herds (other breeds)			
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	Australian Dairy Herd Improvement Scheme Victorian Department of Agriculture & Rural Affairs P.O. Box 500 East Melbourne 3001 Australia			
Key references on methodology applied	JONES, L.P. 1985. Breeding Values: Their calculation and significance. Proc. 5th Conf. Aust. Assoc. Anim. Breed. Genetics.			
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Country: Australia

App. 1

Number of bulls tested, means of genetic merit (BV) by year of birth

Year of birth	No. of bulls	BV		
		Milk \bar{x}	Fat x	
Breed: Friesi	an			
1969	41	-175	-11	
70	37	-197	- 7	
71	35	-162	-8	
72	40	-221	-10	
73	50	-193	-4	
74	31	-142	-8	
75	53	-152	-4	
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Breed: Jersey	,			
1969	17	-141	-10	
70	10	-3	-6	
71	14	-71	-4	
72	11	-61	-3	
73	21	-62	-6	
74	16	-113	-7	
75	14	-224	-13	
76	15	-150	- 7	