

FACTS ON APPLIED SIRE-EVALUATION PROCEDURES FOR DAIRY PRODUCTION TRAITS

COUNTRY	ISRAEL
Breed(s)	Israeli Holstein
Traits evaluated and units of measurement	Milk, fat and protein (kg)
Number of lactations	1-3, annualized yields
Genetic parameters applied	$h^2=0.2$ for yields $t = 0.5$
Inclusion and extension of records	Records <34 days not included Records 34-274 days extended Records >275 days included without extension Records in progress utilized
Sire categories evaluated	All sires
Effects considered by preadjustments	Age and calving month, days open
by model of evaluation	Herd-year-season, sire, parity, group of sires, cow
Base for age adjustment	2nd lact: 36 months
Use of genetic groups/relationships/pedigree	Bulls by year (bi-annual birth groups)
Method of evaluation used	BLUP, repeatability model
Expression of genetic merit	PD (kg)
Genetic base, kind/definition	Fixed, first lactations initiated in 1980
Minimum requirements for official publication of sire proofs	Rpt. ≥ 0.60
Use of selection index or total merit index	FCM=0.51·kg milk +14·kg fat
Name and address of organization responsible for sire evaluations and publishing of results	"Evaluation programs:" Animal Genetics and Breeding Unit, Institute of Animal Sciences, Volcani Research Center, P.O.B. 6, Bet Dagan 50-250, Israel "Processing and publishing:" Israeli Cattle Breeders' Assoc. Ltd 25 Arlozorov St. Tel Aviv 62488, Israel

Key references on methodology
applied

Ufford, G.R., C.R. Henderson, J.F. Keown and
L.D. Van Vleck 1979. Accuracy of first lac-
tation versus all lactation sire evaluation
by best linear unbiased prediction. J. Dairy
Sci. 62:603.

App. 1

Country: Israel

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

		Predicted differences			
Year of birth of bulls	No. of bulls	Milk kg		Fat kg	
		\bar{x}	S.D.	\bar{x}	S.D.
Breed: Israeli Holstein					
1973	20	-237	245	-4.62	5.50
74	40	-227	278	-5.69	6.70
75	34	-157	297	-4.21	6.76
76	42	-34	378	-1.63	9.57
77	33	-43	289	-2.04	7.74
78	34	54	251	0.53	5.86
79	47	60	284	0.15	5.62
80	32	228	344	3.96	8.09
81	34	211	330	3.41	8.49
82	52	200	320	3.25	7.97

App. 2

Country: Israel

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

Year of calving	Traits	
	Milk kg	Fat kg
Breed: Israeli Holstein		
1976	7656	237.1
77	7619	238.1
78	7833	245.7
79	7921	249.4
80	8178	262.2
81	8422	267.4
82	8621	274.8
83	8893	283.7
84	8815	279.7
85	8859	282.0
86	8915	274.3