

**FACTS ON SIRE EVALUATION PROCEDURES APPLIED FOR  
PRODUCTION TRAITS**

**COUNTRY: SOUTH AFRICA**

Breed(s)	Ayrshire, Friesian, Guernsey, Jersey
Trait(s) evaluated and unit(s) of measurement	Milk (kg), fat and protein (kg,%)
Number of lactations	1
Genetic parameters assumed	$h^2 = 0.25$
Criteria for inclusion and extension of records	All first lactations within the range 16-40 months for age at calving are considered. Normally terminated records of 240-300 days are utilized. Records of cows culled from herds and records in progress are excluded
Sire categories evaluated	All sires
Environmental effects considered by pre-adjustment	240-299 days (normally terminated) lactation standardized to 300 days.
by evaluation model	Herd*year*grade, age at calving
Base for age adjustment (months)	-
Use of genetic groups and/or relationships	All relationship used
Method of evaluation	ST BLUP AM
Expression of proof	RBV (% of mean)
Genetic (reference) base	Rolling, average yield of daughters (cows) of all sires (AI+NS) with production last year
Criteria for official publication of sire proofs	Rpt. $\geq 0.40$
Number of evaluations/publications per year	2
Use of production index	No total merit index used
Name, address and faxnumber of organization responsible for sire evaluation and publication	Animal and Dairy Science Research Institute Private Bag X2, Irene 1675 Rep. of South Africa
Key references on methodology applied	Nat. dairy cattle performance prog. testing scheme annual report, 1991, Volume 11

**COUNTRY: SOUTH AFRICA**

Average of adjusted production records (kg) included in the most recent evaluation run, by daughters' year of calving (YC) and breed

YC	Milk	Fat	Protein	Fat %	Protein %
<b>Breed:</b>	Friesian				
1980	3971	145	131		
1981	4087	148	136		
1982	4175	152	139		
1983	4323	155	142		
1984	4321	154	142		
1985	4399	157	145		
1986	4420	159	143		
1987	4466	159	143		
1988	4305	155	140		
1989	4317	155	141		
<b>Breed:</b>	Jersey				
1980	2859	134	107		
1981	2992	138	115		
1982	3066	143	118		
1983	3172	144	120		
1984	3120	142	119		
1985	3190	143	120		
1986	3180	143	117		
1987	3223	145	120		
1988	3164	143	119		
1989	3138	143	118		
<b>Breed:</b>	Ayrshire				
1980	3543	134	120		
1981	3584	135	124		
1982	3777	144	130		
1983	3727	139	128		
1984	3933	145	135		
1985	3826	144	131		
1986	3886	147	131		
1987	3873	146	131		
1988	3886	147	133		
1989	3880	147	133		
<b>Breed:</b>	Guernsey				
1980	3015	130	104		
1981	3265	138	115		
1982	3653	160	131		
1983	3600	157	128		
1984	3507	149	126		

**COUNTRY: SOUTH AFRICA****Average of adjusted production records (kg) included in the most recent evaluation run, by daughters' year of calving (YC) and breed**

YC	Milk	Fat	Protein	Fat %	Protein %
1985	3488	145	124		
1986	3589	152	125		
1987	3582	150	124		
1988	3542	154	126		
1989	3534	153	126		