

FACTS ON SIRE EVALUATION PROCEDURES APPLIED FOR NON-PRODUCTION TRAITS

COUNTRY: SWEDEN

Trait(s):	<u>REPRODUCTION</u> a) Female fertility b) Calving performance <u>HEALTH</u> c) Clinical Mastitis d) Somatic cell count e) Resistance against other diseases <u>MILKABILITY</u> f) Udder conformation <u>LOCOMOTION</u> g) Legs <u>OTHER</u> h) Temperament
Breed(s):	Swedish Friesian, Swedish Red and White
Trait definition and unit(s) of measurement	a) Number of inseminations per service period, heat strength, number of days from calving to first insemination b) Stillbirths defined as deadborn calves or calves dead within 24 h. after calving. Observations on first calving with sire as father of the calf, observations on first calving of the sires daughters with sire as MGS of the calf. c) Diagnosis from 10 days before 1st calving to 150 days after 1st calving d) Cell count e) Ketosis, retained placenta, paresis, teat injuries, leg- and foot diseases, cystocia, other ovary disorders, other fertility disturbances, infectious and metabolic disorders. Diagnosis from 10 days before to 150 days after 1st calving f-h) Linear scoring (1 to 4) for 12 traits and 8 measurements for teats.
Method of measuring and collecting data	a) AI recording b) Codes on the milk recording reports c) Reports from veterinarians, culling reports. d) From the milk recording scheme e) Reports from veterinarians, AI technicians concerning fertility treatments and culling reports from milk recording scheme f,g) Scored by technician h) Farmers opinion (very calm to very nervous)
Time period for data inclusion	a) Inseminations since oct. 1982 b) Within year c,e) 1983/1984 and onwards f-h) 2 to 7 mo. after calving, since 1980

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Age groups considered	a) First and second calvers within sires breed b-f) First calving
Genetic parameters assumed	h^2 : a) 0.02-0.04; b) 0.02; e) 0.02; f) 0.12-0.30; g) 0.06 c,d) Clinical mastitis=0.02; Cell count=0.08 ($r_g=0.7$)
Sire categories evaluated	AI bulls
Environmental effects considered by pre-adjustment	None
by evaluation model	a) Herd*year, year*month, dam's breed b) Year average c,e) Year of calving*season*herd, month, age, dam's breed f,h) Technician*year, stage of lactation g) Technician
Base for age adjustment	-
Use of genetic groups and/or relationship	a,c-h) Relationship matrix used, no groups b) No
Method of evaluation	a,e-h) ST BLUP SM b) SI c,d) ST BLUP SM and SI to combine Clinical mastitis and Cell count
Expression of proof	a) Fertility index, RBV standardized SD=7 b-f) RBV standardized to SD=7
Genetic (reference) base	a,c-f) Rolling base, average RBV of the three last years of tested bulls b) Calving during current year
Criteria for official publication of sire proofs	a,c-e) 70 efficient heifers records b) 100 calvings f-h) 35 daughters
Number of evaluations/publications per year	a,c-e) Two b) Three f-h) Four
Use in total merit index	Yes
Name, address and faxnumber of organization responsible for sire evaluation and publication	Swedish Association for Livestock Breeding and Production Hållsta S-631 84 Eskilstuna, Sweden Fax: +46 16 21216
Key references on methodology applied	Reports 13,45,73,79 from the Department of animal breeding and genetics. Swedish University of Agricultural Sciences S -75007 Uppsala, Sweden