

INTRODUCTION

This GMACE run includes GEBV data from the following countries:
CAN DEU DFS GBR ITA NLD

CHANGES IN NATIONAL PROCEDURES

Changes in the national genetic/genomic evaluation of calving traits are as follows:

GBR Base change
NOR Base change

INTERBULL CHANGES COMPARED TO THE MARCH ROUTINE RUN

No changes in Interbull procedures

SCIENTIFIC LITERATURE

The GMACE procedure is based on the following scientific publications:

GMACE implementation:

Sullivan, P.G. and VanRaden, P.M. 2010. Interbull Bulletin 41:3-7
Sullivan, P.G. et al., 2011. Interbull Bulletin 44: 87-94
Sullivan, P.G. and Jakobsen, J.H. 2012. Interbull Bulletin 45: 3-7.
VanRaden, P.M. and Sullivan, P.G. 2010. Gen. Sel. Evol. 42: 7
Sullivan, P.G. 2013. GMACE reliability approximation. Interbull Bulletin 47: 1-4
Sullivan, P.G. 2013. GMACE variance estimation. Interbull Bulletin 47: 5-9
Sullivan, P.G. 2013. GMACE weighting factors. Interbull Bulletin 47: 10-14.

International genetic evaluation computation:

Schaeffer. 1994. J. Dairy Sci. 77:2671-2678
Klei, 1998. Interbull Bulletin 17:3-7

Verification and Genetic trend validation:

Klei et al., 2002. Interbull Bulletin 29:178-182.
Boichard et al., 1995. J. Dairy Sci. 78:431-437

Weighting factors:

Fikse and Banos, 2001. J. Dairy Sci. 84:1759-1767

De-regression:

Sigurdsson and G. Banos. 1995. Acta Agric. Scand. 45:207-219
Jairath et al. 1998. J. Dairy Sci. Vol. 81:550-562

Genetic parameter estimation:

Klei and Weigel, 1998, Interbull Bulletin 17:8-14
Sullivan, 1999. Interbull Bulletin 22:146-148

Post-processing of estimated genetic correlations:

Mark et al., 2003, Interbull Bulletin 30:126-135
Jorjani et al., 2003. J. Dairy Sci. 86:677-679
<https://wiki.interbull.org/public/rG%20procedure?action=print&rev=17>

Time edits

Weigel and Banos. 1997. J. Dairy Sci. 80:3425-3430

International reliability estimation

Harris and Johnson. 1998. Interbull Bulletin 17:31-36

NEXT ROUTINE INTERNATIONAL EVALUATION

According to time schedule in <http://www.interbull.org/ib/servicecalendar>

NEXT TEST INTERNATIONAL EVALUATION

According to the time schedule on <http://www.interbull.org/ib/servicecalendar>

PUBLICATION OF INTERBULL GMACE RUN

Rules regarding publication of test evaluations should be observed.

Table 1. National evaluation dates in GMACE run August 2014

Country	Date
DFS	20140812
ITA	20140715
NLD	20140801
GBR	20140717
DEU	20140812

Table 2.

Number of bulls in reference population for dce

DFS	22792.0				
ITA	841.0	22142.0			
NLD	22028.0	1028.0	23448.0		
GBR	962.0	21427.0	1153.0	22131.0	
DEU	22510.0	970.0	22436.0	1089.0	24633.0

Number of bulls in reference population for mce

CAN	18128.0				
DFS	1089.0	23256.0			
ITA	16872.0	834.0	17049.0		
NLD	1273.0	22473.0	1001.0	23551.0	
GBR	17149.0	952.0	16748.0	1123.0	17193.0
DEU	1222.0	22965.0	958.0	22900.0	1075.0 25110.0

Number of bulls in reference population for dsb

CAN	21267.0				
DFS	1097.0	22499.0			
ITA	19579.0	837.0	19964.0		
NLD	1292.0	21734.0	1011.0	22778.0	
DEU	1235.0	22206.0	966.0	22097.0	24268.0

Number of bulls in reference population for msb

DFS	23145.0				
ITA	830.0	15476.0			
NLD	22365.0	980.0	23343.0		
DEU	22851.0	953.0	22778.0	24964.0	