

INTRODUCTION

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

Changes in national procedures

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

DFS Drops in information for some bulls due to checking if the herds still register deseases, if not the cows in the herd are dropped

CHR The breeding association for Holstein (mainly red&white) and Simmental revised their breed code assignment for Holstein X Simmental crossbreds.

 This caused a decrease in number of herds/daughters/EDC for some bulls.

GBR Base change

DEU There is no longer a distintion nationally between 1st and 2nd crop of daughters (as conseuencs of genomically proven bulls), thus type of proof is either

 11 (German bull) or 21 (foreign bull), there are quite a number of bulls mentioned as "missing", however most of these appear now with another (correct) ID,
 these are mostly danish bulls

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 Agust 2014

Country	Date
CAN	20140801
DEU	20140812
DFS	20140812
FRA	20140814
GBR	20140717
NLD	20140801
ITA	20140715
BEL	20140401
POL	20140715

Table 2.

Number of bulls in reference population for scs

CAN	24287.0
DEU	1242.0 27499.0
DFS	1102.0 25256.0 25630.0
FRA	1395.0 21983.0 21577.0 23641.0
GBR	22686.0 1092.0 963.0 1221.0 22744.0
NLD	1318.0 25217.0 24821.0 21811.0 1156.0 26378.0
ITA	22256.0 972.0 842.0 1026.0 21904.0 1030.0 22650.0
BEL	503.0 649.0 590.0 636.0 471.0 664.0 484.0 1508.0
POL	136.0 210.0 205.0 264.0 132.0 215.0 137.0 179.0 2748.0

Number of bulls in reference population for mas

CAN	24250.0
DEU	1239.0 26384.0
DFS	1099.0 24197.0 24567.0
FRA	1358.0 20896.0 20525.0 22218.0
GBR	22649.0 1089.0 960.0 1184.0 22707.0
NLD	1315.0 24154.0 23786.0 20752.0 1153.0 25313.0
ITA	22256.0 972.0 842.0 1026.0 21904.0 1030.0 22650.0
POL	136.0 210.0 205.0 264.0 132.0 215.0 137.0 2748.0