

INTRODUCTION

The latest genomic test international evaluation for dairy production traits took place as scheduled at the Interbull Centre. Data from 29 countries were included in this evaluation.

International genetic evaluations for milk, fat and protein yields of bulls were computed from:
AUS BEL CAN CHE CZE DEU DFS ESP EST FRA GBR HUN IRL ISR ITA JPN KOR LTU LVA NLD NZL POL PRT SVK SVN URY USA ZAF HRV

Holstein breed data were included in this evaluation.

AUS, CAN, CZE, DEU, DFS, ESP, FRA, GBR, HUN, ITA, NLD, POL submitted GEBVs.

fat: AUS, CAN, CZE, DEU, DFS, ESP, FRA, GBR, HUN, ITA, NLD, POL
mil: AUS, CAN, CZE, DEU, DFS, ESP, FRA, GBR, HUN, ITA, NLD, POL
pro: AUS, CAN, CZE, DEU, DFS, ESP, FRA, GBR, HUN, ITA, NLD, POL

CHANGES IN NATIONAL PROCEDURES

Changes in the national genetic evaluation of production traits are as follows:

FRA (HOL) Drop in reliability due to pedigree updates
AUS (HOL) Bulls changed from official to unofficial due to update of the bull status and publication status
AUS (HOL) Drop in reliability due to pedigree updates
CZE (HOL) Drop in reliability due to the update of reliability calculation software
BEL (HOL) Participating with MACE data due to very old data and no more qualifying young bulls

INTERBULL CHANGES COMPARED TO THE DECEMBER ROUTINE RUN

No changes in Interbull procedures

DATA AND METHOD OF ANALYSIS

Thirteen Holstein populations sent GEBV data for up to 38 traits, while classical EBVs for the same traits were used in the analyses. Young bull GEBVs from the GEBV providers have been converted to the scales of all countries participating in classical MACE. A bull will get a MACE EBV or a GMACE EBV but not both.
From those thirteen countries, National GEBVs of bulls less than seven years of age and with no classical MACE proofs were included for the breeding value prediction with a further requirement of either a MACE-PA or a GMACE-PA (for young genomic bulls with young genomic sires) being available.

The parameter-space approach is used for the GMACE genetic evaluations (Sullivan, 2016)

SCIENTIFIC LITERATURE

The international genetic evaluation procedure is based on international work described in the following scientific publications:

Sullivan, P.G. 2016. Defining a Parameter Space for GMACE. Interbull Bulletin 50, p 85-93.

VanRaden, P.M. and Sullivan, P.G. 2010. International genomic evaluation methods for dairy cattle. Gen. Sel. Evol. 42:7

Sullivan, P.G. and Jakobsen, J.H. 2012. Robust GMACE for young bulls methodology. Interbull Bulletin 45, Article 1.

Sullivan, P.G. 2012a. GMACE reliability approximation. Report to the GMACE working group of Interbull. GMACE_rels 2013

Sullivan, P.G. 2012b. GMACE variance estimation. Report to the GMACE working group of Interbull. GMACE_vce 2013

Sullivan, P.G. 2012c. GMACE Weighting Factors. Report to the GMACE working group of Interbull. GMACE_gedcs 2013

Jakobsen, J.H. and Sullivan, P.G. 2013. Trait specific computation of shared reference population. Reference sharing Nov 2013

NEXT ROUTINE INTERNATIONAL EVALUATION

Dates for next routine run can be found on <http://www.interbull.org/ib/servicecalendar>

NEXT TEST INTERNATIONAL EVALUATION

Dates for next test run can be found on <http://www.interbull.org/ib/servicecalendar>

PUBLICATION OF INTERBULL ROUTINE RUN

Results were distributed by the Interbull Centre to designated representatives in each country. The international evaluation file comprised international proofs expressed on the base and unit of each country included in the analysis. Such records readily provide more information on bull performance in various countries, thereby minimising the need to resort to conversions.

At the same time, all recipients of Interbull results are expected to honour the agreed code of practice, decided by the Interbull Steering Committee, and only publish international evaluations on their own country scale. Evaluations expressed on another country scale are confidential and may only be used internally for research and review purposes.

Table 1. National evaluation dates in GMACE run August 2026

Country	Date
CAN	20260801
DEU	20260811
DFS	20260811
FRA	20260812
ITA	20260720
NLD	20260812
GBR	20260714
AUS	20241203
ESP	20260721
CZE	20260727
HUN	20260722
POL	20260610

Table 2.

Number of bulls in reference population for												mil
CAN	48533.0											
DEU	14360.0	51455.0										
DFS	7906.0	41315.0	42539.0									
FRA	5807.0	37969.0	36437.0	39872.0								
ITA	42453.0	14518.0	7928.0	5309.0	44442.0							
NLD	4258.0	36924.0	35393.0	34931.0	3602.0	38786.0						
GBR	41204.0	15522.0	8949.0	6281.0	41891.0	4595.0	44522.0					
AUS	1501.0	959.0	817.0	807.0	1326.0	812.0	1279.0	4596.0				
ESP	47353.0	51124.0	42423.0	39858.0	43336.0	38781.0	43453.0	4595.0	161891.0			
CZE	2429.0	2899.0	2127.0	1962.0	2386.0	1735.0	2383.0	416.0	4313.0	4374.0		
HUN	2292.0	8295.0	7824.0	7645.0	2275.0	7827.0	2517.0	769.0	9065.0	1434.0	9115.0	
POL	5042.0	34316.0	33148.0	32716.0	4551.0	32029.0	5532.0	695.0	35960.0	2568.0	7640.0	35973.0

Number of bulls in reference population for fat

CAN	48533.0
DEU	14360.0 51453.0
DFS	7906.0 41315.0 42538.0
FRA	5807.0 37969.0 36437.0 39872.0

