INTRODUCTION

The latest genomic international evaluation for dairy **production traits** took place as scheduled at the Interbull Centre. Data 32 countries were included in this evaluation.

International genetic evaluations for milk, fat and protein yields of bulls from Australia, Austria-Germany, Belgium, Canada, Czech Republic, Denmark-Finland-Sweden, Estonia, France, Hungary, Ireland, Israel, Italy, Japan, Latvia, Lithuania, Netherlands, New Zealand, Norway, Poland, Republic of South Africa, Slovak Republic, Slovenia, Spain, Switzerland, the United Kingdom, the United States of America, Portugal, Korea and Uruguay were computed.
Holstein breed data were included in this evaluation.

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

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

CHANGES IN NATIONAL PROCEDURES

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

DEU (HOL) Bulls older than 17 months year old and not selected yet have been removed from the national evaluation

ESP (HOL) Elimination of many Eurogenomics bulls from the national evaluation. These bulls had already MACE proof or have not been selected for AI

INTERBULL CHANGES COMPARED TO THE DECEMBER ROUTINE RUN

No changes in Interbull procedures

DATA AND METHOD OF ANALYSIS

Eleven 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 eleven 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.

SCIENTIFIC LITERATURE

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

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

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 routine 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 minimizing the need to resort to conversions.

At the same time, all recipients of Interbull results are expected to honor 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.

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Table 1. National evaluation dates in GMACE run August 2016
Country Date
     20160801
CAN
DEU
         20160809
       20160809
DFS
       20160811
FRA
       20160629
20160801
ITA
NLD
       20160629
GBR
       20080407
AUS
BEL
         20160801
       20160721
ESP
       20160710
POL
_____
_____
Number of bulls in reference population for mil
______
CAN 32831.0
DEU 2094.0 33425.0
DFS 1876.0 31297.0 32244.0
FRA 2318.0 29495.0 29321.0 31597.0
ITA 25457.0 1518.0 1253.0 1588.0 25957.0
NLD 2285.0 31906.0 31679.0 29929.0 1584.0 33728.0
GBR 26714.0 1909.0 1718.0 2099.0 25343.0 2080.0 27070.0
AUS 519.0 382.0 368.0 380.0 310.0 480.0 523.0 3369.0

BEL 1253.0 915.0 823.0 961.0 713.0 941.0 815.0 223.0 2549.0

ESP 1936.0 30819.0 30788.0 29655.0 1291.0 31373.0 1755.0 369.0 857.0 31643.0

POL 145.0 2496.0 2620.0 2573.0 142.0 2629.0 169.0 107.0 175.0 2630.0 2746.0
Number of bulls in reference population for
CAN 32832.0
DEU 2094.0 33425.0
DFS 1876.0 31297.0 32244.0
FRA 2318.0 29495.0 29321.0 31597.0
ITA 25457.0 1518.0 1253.0 1588.0 25957.0
NLD 2285.0 31906.0 31679.0 29929.0 1584.0 33728.0
GBR 26714.0 1909.0 1718.0 2099.0 25343.0 2080.0 27070.0
AUS 519.0 382.0 368.0 380.0 310.0 480.0 523.0 3369.0 BEL 1253.0 915.0 823.0 961.0 713.0 941.0 815.0 223.0 2549.0 ESP 1936.0 30819.0 30788.0 29655.0 1291.0 31373.0 1755.0 369.0 857.0 31643.0
     145.0 2496.0 2620.0 2573.0 142.0 2629.0 169.0 107.0 175.0 2630.0 2746.0
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ESP 1936.0 30819.0 30788.0 29655.0 1291.0 31373.0 1755.0 369.0 857.0 31643.0
POL 145.0 2496.0 2620.0 2573.0 142.0 2629.0 169.0 107.0 175.0 2630.0 2746.0
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