

INTRODUCTION

The latest genomic routine international evaluation for calving traits took place as scheduled at the Interbull Centre. Data from fourteen (16) countries were included in this evaluation.

International genetic evaluations for calving traits of bulls from Australia, Austria-Germany, Belgium, Canada, Denmark-Finland-Sweden, France, Germany, Hungary, Ireland, Israel, Italy, Netherlands, Norway, Switzerland, the United Kingdom, and the United States of America were computed. Holstein data were included in this evaluation.

CHANGES IN NATIONAL PROCEDURES

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

DEU (HOL) Some bulls are no longer published as they are no longer AI bulls and some appear now with a new ID.

ITA (HOL) Cut one year of data (1999) and applied the base change

NLD (HOL) Base change

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 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 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.

Table 1. National evaluation dates in GMACE run April 2015

Country Date

CAN 20150401
 DEU 20150408
 DFS 20150203
 GBR 20150314
 ITA 20150312
 NLD 20150401

Table 2.

Number of bulls in reference population for dce

CAN 24703.0
 DEU 1491.0 25770.0
 DFS 1381.0 24049.0 24447.0
 GBR 23499.0 1340.0 1229.0 23568.0
 ITA 22739.0 1088.0 964.0 22639.0 23176.0
 NLD 1419.0 18745.0 18480.0 1281.0 1047.0 19821.0

Number of bulls in reference population for mce

CAN 18959.0
 DEU 1423.0 25977.0
 DFS 1325.0 24290.0 24678.0
 GBR 18084.0 1276.0 1180.0 18132.0
 ITA 17772.0 1065.0 948.0 17708.0 17957.0
 NLD 1351.0 19034.0 18765.0 1223.0 1017.0 19747.0

Number of bulls in reference population for dsb

CAN 22446.0
 DEU 1486.0 25399.0
 DFS 1377.0 23802.0 24212.0
 ITA 20569.0 1084.0 960.0 21001.0
 NLD 1400.0 18410.0 18249.0 1030.0 19166.0

Number of bulls in reference population for msb

CAN 17286.0
 DEU 1410.0 25806.0
 DFS 1309.0 24146.0 24541.0
 ITA 16165.0 1056.0 935.0 16345.0
 NLD 1323.0 18916.0 18656.0 992.0 19554.0