

INTRODUCTION

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The international genetic evaluation for beef, Charolais (CHA), adjusted weaning weight trait took place on October 2021 at Interbull Centre.

Data from 12 countries were included in the evaluation:

IRL, CZE, DFS*, FRA, DEU, CHE, ZAF, AUS, SVN, LVA, EST and ITA

*) DFS => Populations code for Denmark, Finland and Sweden

INTERBULL CHANGES COMPARED TO THE PREVIOUS ROUTINE RUN

- * New countries: EST, ITA;
- * New model and parameters: DFS;
- * New variance components parameters estimated by ICBF;
- * Implementation of the new evaluation workflow.

DATA AND METHOD OF ANALYSIS

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Pedigree data

* Pedigree data were updated by the national evaluation centers on the IDEA interbull database.

Phenotypic data

* DEU data from the last routine run (2101r)

* Other countries:

Phenotypic data were uploaded by the national evaluation centers on the IDEA interbull database.

Variance components

* New parameters estimated by ICBF.

Publication file

* No updates.

Software

* Prediction of genetic merits were performed using Mix99.

* Prediction of reliabilities were performed using MTEDC5.

PUBLICATION OF INTERBEEF ROUTINE RUN

DIRECT PUBLICATION RULES

- 1- The proof from any animal with a national official status in a country was considered as official in that respective country.
- 2- Any animal with ≥ 25 recorded progeny and reliability ≥ 0.5 in at least one scale and with an official status in a country was considered as internationally official in all the countries participating in the analysis.
- 3- Any animal with ≥ 25 recorded progeny and reliability ≥ 0.5 in at least one scale

and with recorded progeny in more than one country was considered as internationally official in all the countries participating in the analysis.

MATERNAL PUBLICATION RULES

- 1-Maternal EBV publishable if direct EBV publishable
 - a) and reliability ≥ 0.3 .
 - b) and number of daughters with performance ≥ 15 .
 - c) and number of progeny with performance ≥ 25 .
- 2-If an animal is publishable /national publication rules in country A, this animal is publishable in country A.
- 3-If an animal fulfills Interbeef publication rules, this animals is publishable in all scales.

Variances component

Direct additive variances:

IRL_aww	451	(0.35)
CZE_aww	699	(0.37)
DFS_aww	178	(0.17)
FRA_aww	244	(0.25)
DEU_aww	396	(0.25)
CHE_aww	381	(0.27)
ZAF_aww	94.3	(0.07)
AUS_aww	189	(0.18)
SVN_aww	918	(0.38)
LVA_aww	252	(0.22)
EST_aww	342	(0.52)
ITA_aww	172	(0.24)

Maternal genetic variances:

IRL_aww	196	(0.15)
CZE_aww	183	(0.1)
DFS_aww	138	(0.13)
FRA_aww	99.5	(0.1)
DEU_aww	332	(0.21)
CHE_aww	96.5	(0.07)
ZAF_aww	59.8	(0.04)
AUS_aww	105	(0.1)
SVN_aww	486	(0.2)
LVA_aww	45.7	(0.04)

MPE variances

IRL_aww	45	(0.04)
CZE_aww	208	(0.11)
DFS_aww	105	(0.1)
FRA_aww	103	(0.1)
CHE_aww	76	(0.05)
ZAF_aww	12	(0.01)
AUS_aww	100	(0.1)

Random contemporary group variances:

CHE_aww	294	(0.21)
CZE_aww	477	(0.25)
DEU_aww	203	(0.13)
LVA_aww	20	(0.02)
SVN_aww	599	(0.24)
ZAF_aww	790	(0.59)

Residual variances:

IRL_aww 647 (0.5)
 CZE_aww 377 (0.2)
 DFS_aww 662 (0.63)
 FRA_aww 586 (0.59)
 DEU_aww 719 (0.46)
 CHE_aww 587 (0.42)
 ZAF_aww 389 (0.29)
 AUS_aww 664 (0.65)
 SVN_aww 626 (0.26)
 LVA_aww 806 (0.72)
 EST_aww 309 (0.48)
 ITA_aww 547 (0.76)

Direct & Maternal genetic correlations:

	IRL_aww	CZE_aww	DFS_aww	FRA_aww	DEU_aww	CHE_aww	ZAF_aww	AUS_aww	SVN_aww	LVA_aww	EST_aww	ITA_aww
IRL_aww	1											
CZE_aww	0.78	1										
DFS_aww	0.8	0.82	1									
FRA_aww	0.77	0.81	0.79	1								
DEU_aww	0.77	0.75	0.78	0.74	1							
CHE_aww	0.79	0.77	0.75	0.76	0.77	1						
ZAF_aww	0.77	0.76	0.79	0.75	0.75	0.78	1					
AUS_aww	0.75	0.75	0.76	0.75	0.74	0.75	0.75	1				
SVN_aww	0.72	0.8	0.72	0.72	0.71	0.72	0.72	0.72	1			
LVA_aww	0.86	0.76	0.75	0.75	0.75	0.76	0.75	0.75	0.75	1		
EST_aww	0.71	0.7	0.71	0.71	0.81	0.71	0.71	0.71	0.71	0.85	1	
ITA_aww	0.73	0.72	0.73	0.73	0.72	0.73	0.73	0.73	0.72	0.76	0.71	1
IRL_aww	-0.19	0	0	0	0	0	0	0	0	0	0	0
CZE_aww	0	-0.19	0	0	0	0	0	0	0	0	0	0
DFS_aww	0	0	0.65	1	0	0	0	0	0	0	0	0
FRA_aww	0	0	-0.16	0	0	0	0	0	0	0	0	0
DEU_aww	0	0	0.74	0.65	1	0	0	0	0	0	0	0
CHE_aww	0	0	0	-0.26	0	0	0	0	0	0	0	0
ZAF_aww	0	0	0.67	0.6	0.67	1	0	0	0	0	0	0
AUS_aww	0	0	0	0	-0.22	0	0	0	0	0	0	0
SVN_aww	0	0	0.7	0.63	0.71	0.66	1	0	0	0	0	0
LVA_aww	0	0	0	0	0	-0.19	0	0	0	0	0	0
EST_aww	0	0	0.79	0.65	0.73	0.67	0.71	1	0	0	0	0
ITA_aww	0	0	0	0	0	0	-0.17	0	0	0	0	0
IRL_aww	0	0	0.76	0.65	0.77	0.67	0.7	0.74	1	0	0	0
CZE_aww	0	0	0	0	0	0	0	-0.27	0	0	0	0
DFS_aww	0	0	0.67	0.61	0.67	0.65	0.65	0.67	0.67	1	0	0
FRA_aww	0	0	0	0	0	0	0	0	0	0	-0.27	1
DEU_aww	0	0	0.57	0.53	0.57	0.54	0.56	0.56	0.56	0.57	0.57	0.57
CHE_aww	0	0	0	0	0	0	0	0	0	0	0	0
ZAF_aww	0	0	0.66	0.65	0.67	0.68	0.67	0.68	0.68	0.67	0.68	0.67
AUS_aww	0	0.54	1									
SVN_aww	0	0	0	0	0	0	0	0	0	0	0	0
LVA_aww	-0.03	0	0	0.66	0.65	0.67	0.68	0.67	0.68	0.67	0.68	0.67
EST_aww	0.67	0.55	1									