

INTRODUCTION

The international genetic evaluation for beef, Charolais (CHA), adjusted weaning weight trait took place in winter 2022 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

* No changes.

DATA AND METHOD OF ANALYSIS

Pedigree data

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

Phenotypic data

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

Variance components

* Parameters from the previous run were used.

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 comtemporany 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
AUS_aww	SVN_aww	LVA_aww	EST_aww	ITA_aww	IRL_aww	CZE_aww	DFS_aww					
FRA_aww	DEU_aww	CHE_aww	ZAF_aww	AUS_aww	SVN_aww	LVA_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	0.72	1		
EST_aww	0.71	0.7	0.71	0.71	0.81	0.71	0.71	0.71	0.85	0.71	1	
ITA_aww	0.73	0.72	0.73	0.73	0.72	0.73	0.73	0.72	0.76	0.73	0.71	1
IRL_aww	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	-0.16	0	0	0	0	0	0	0	0	0
IRL_aww	0	0.65	1									
DFS_aww	0	0	0.74	0.65	1							

FRA_aww	0	0	0	-0.260	0	0	0	0	0	0
0	0.67	0.6	0.67	1						
DEU_aww	0	0	0	0	-0.220	0	0	0	0	0
0	0.7	0.63	0.71	0.66	1					
CHE_aww	0	0	0	0	0	-0.190	0	0	0	0
0	0.79	0.65	0.73	0.67	0.71	1				
ZAF_aww	0	0	0	0	0	0	-0.170	0	0	0
0	0.76	0.65	0.77	0.67	0.7	0.74	1			
AUS_aww	0	0	0	0	0	0	0	-0.270	0	0
0	0.67	0.61	0.67	0.65	0.65	0.67	0.67	1		
SVN_aww	0	0	0	0	0	0	0	0	-0.270	0
0	0.57	0.53	0.57	0.54	0.56	0.56	0.57	0.54	1	
LVA_aww	0	0	0	0	0	0	0	0	0	-0.030
0	0.66	0.65	0.67	0.68	0.67	0.68	0.67	0.67	0.55	1