

**Table S4 GEBV accuracies from prediction of crossbred genetic merit from purebred training data using GBLUP (scenarios 12-17) – LEAST 50% related animals between training and validation populations**

Trait	Scenario	$r^2$	N training		F1	Accuracy	
			DL	LW		GBLUP <sup>cv</sup>	Bias*
AFI	12	0.45	1067	1389	144	-0.18	-2.34
TNB	12	0.47	1066	1383	140	0.09	0.80
LBW	12	0.79	1070	1385	143	0.32	0.66
LVR	12	0.52	1069	1385	143	0.35	1.19

DL - Dutch Landrace, LW - Large White, F1 - cross between DL and LW

AFI- age at first insemination, TNB- total number of piglets born, LBW- litter birth weight, LVR- litter variation

<sup>cv</sup> - Estimate obtained by 20-random training-prediction populations

\* - Regression coefficient of the GEBV on the DEBV

$r^2$  - Mean reliability of deregressed estimated breeding values from the training population