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Animal Production Science

Supplementary Material

Phenotypic causal networks between boar taint compounds measured in biopsies and carcasses

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Supplementary Table S1. Posterior means and 95% high probability distribution (HPD) intervals for the dispersion parameters fitting SEM₈₀ and SEM_{90P}.

Parameter ³	Posterior mean	95% HPD Interval
Ψ_{AC}	0.68	[0.62, 0.74]
Ψ_{SC}	0.07	[0.05, 0.09]
Ψ_{IC}	0.07	[0.06, 0.09]
Ψ_{AB}	0.28	[0.17, 0.41]
Ψ_{SB}	0.44	[0.23, 0.63]
Ψ_{IB}	0.45	[0.29, 0.58]
$\sigma_{g_{AC}}^2$	0.59	[0.50, 0.70]
$r_{g_{AC}g_{SC}}$	0.71	[0.65, 0.77]
$r_{g_{AC}g_{IC}}$	0.73	[0.67, 0.79]
$r_{g_{AC}g_{AB}}$	0.09	[-0.43, 0.60]
$r_{g_{AC}g_{SB}}$	-0.10	[-0.73, 0.52]
$r_{g_{AC}g_{IB}}$	-0.26	[-0.62, 0.12]
$\sigma_{g_{SC}}^2$	0.46	[0.42, 0.51]
$r_{g_{SC}g_{IC}}$	0.92	[0.89, 0.94]
$r_{g_{SC}g_{AB}}$	-0.01	[-0.53, 0.49]
$r_{g_{SC}g_{SB}}$	0.22	[-0.43, 0.85]
$r_{g_{SC}g_{IB}}$	0.24	[-0.13, 0.61]
$\sigma_{g_{IC}}^2$	0.28	[0.26, 0.31]
$r_{g_{IC}g_{AB}}$	0.01	[-0.56, 0.58]
$r_{g_{IC}g_{SB}}$	-0.01	[-0.67, 0.71]
$r_{g_{IC}g_{IC}}$	0.06	[-0.33, 0.50]
$\sigma_{g_{AB}}^2$	0.42	[0.23, 0.59]
$r_{g_{AB}g_{SB}}$	0.43	[0.23, 0.62]
$r_{g_{AB}g_{IB}}$	0.57	[0.43, 0.71]
$\sigma_{g_{SB}}^2$	0.82	[0.49, 1.14]
$r_{g_{SB}g_{IB}}$	0.72	[0.55, 0.86]
$\sigma_{g_{IB}}^2$	0.73	[0.52, 0.95]

¹ Structural Equations Model (SEM) considering causal structures obtained with 80-70% high probability distribution (HPD) interval;

² SEM considering causal structures obtained with 90% high probability distribution HPD interval plus priori;

³ ψ_i = residual variance of trait i . i = AC (androstenone in carcass), SC (skatole in carcass), IC (indole in carcass), AB (androstenone in biopsies), SB (skatole in biopsies), IB (indole in biopsies), $\sigma_{g_i}^2$ = additive genetic variance of trait i , $r_{g_i g_{i'}}$ = additive genetic correlation between traits i and i' .