



FigureS2 : Expected estimates in the transmissibility model compared to parameters in the true model $y_i = x_i\beta + a_i + \text{epi}_i + \text{sp}_i + e_i$

$H^2 = \frac{\sigma_a^2 + \sigma_{\text{epi}}^2 + \sigma_{\text{sp}}^2}{\sigma_a^2 + \sigma_{\text{epi}}^2 + \sigma_{\text{sp}}^2 + \sigma_e^2} = 0.6$, $r = \frac{\sigma_a^2}{\sigma_a^2 + \sigma_{\text{epi}}^2 + \sigma_{\text{sp}}^2} = 0.5$, $\delta = \frac{\sigma_{\text{sp}}^2}{\sigma_a^2 + \sigma_{\text{epi}}^2 + \sigma_{\text{sp}}^2}$, δ = single parent path coefficient of transmission, λ_s, λ_d : sire and dam epigenetic path coefficients of transmission.

Parameters in the transmissibility model: $\tau^2 = \frac{\sigma_t^2}{\sigma_t^2 + \sigma_e^2}$, ω_s and ω_d sire and dam path coefficient of transmission. Values in the transmissibility model have been obtained using the maximum of expected likelihood