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Animal Production Science

Supplementary Material

An attempt of using public ambient temperature data in swine genetic evaluation for litter-size traits at birth in Japan<xref ref-type="fn" rid="FN1">†</xref>

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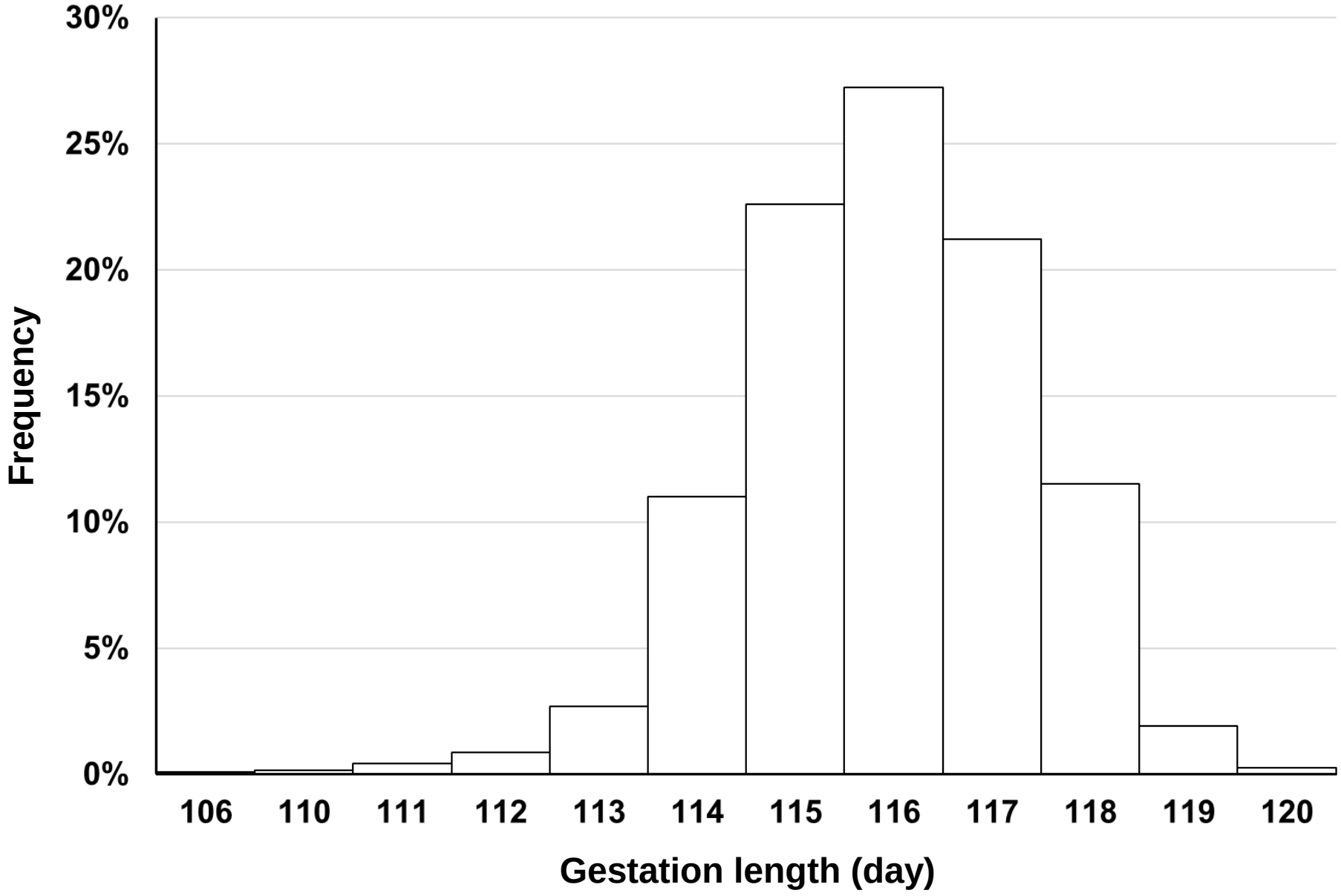

Fig. S1. Histogram of gestation length for 1,146 farrowing records, after removing 15 records exhibiting gestation length of shorter than 5 days probably due to incorrect information on the date of mating.

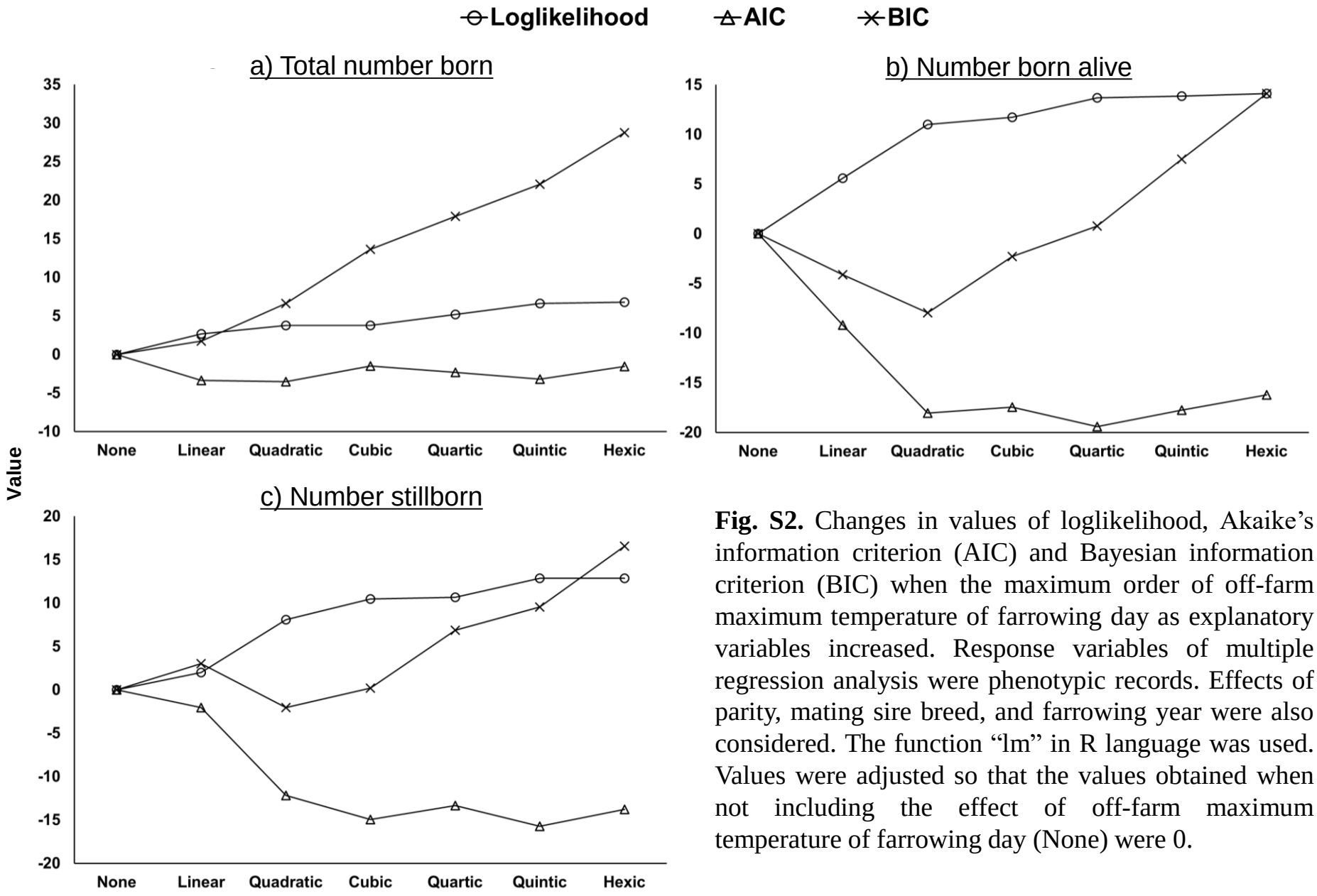

Fig. S2. Changes in values of loglikelihood, Akaike's information criterion (AIC) and Bayesian information criterion (BIC) when the maximum order of off-farm maximum temperature of farrowing day as explanatory variables increased. Response variables of multiple regression analysis were phenotypic records. Effects of parity, mating sire breed, and farrowing year were also considered. The function "lm" in R language was used. Values were adjusted so that the values obtained when not including the effect of off-farm maximum temperature of farrowing day (None) were 0.

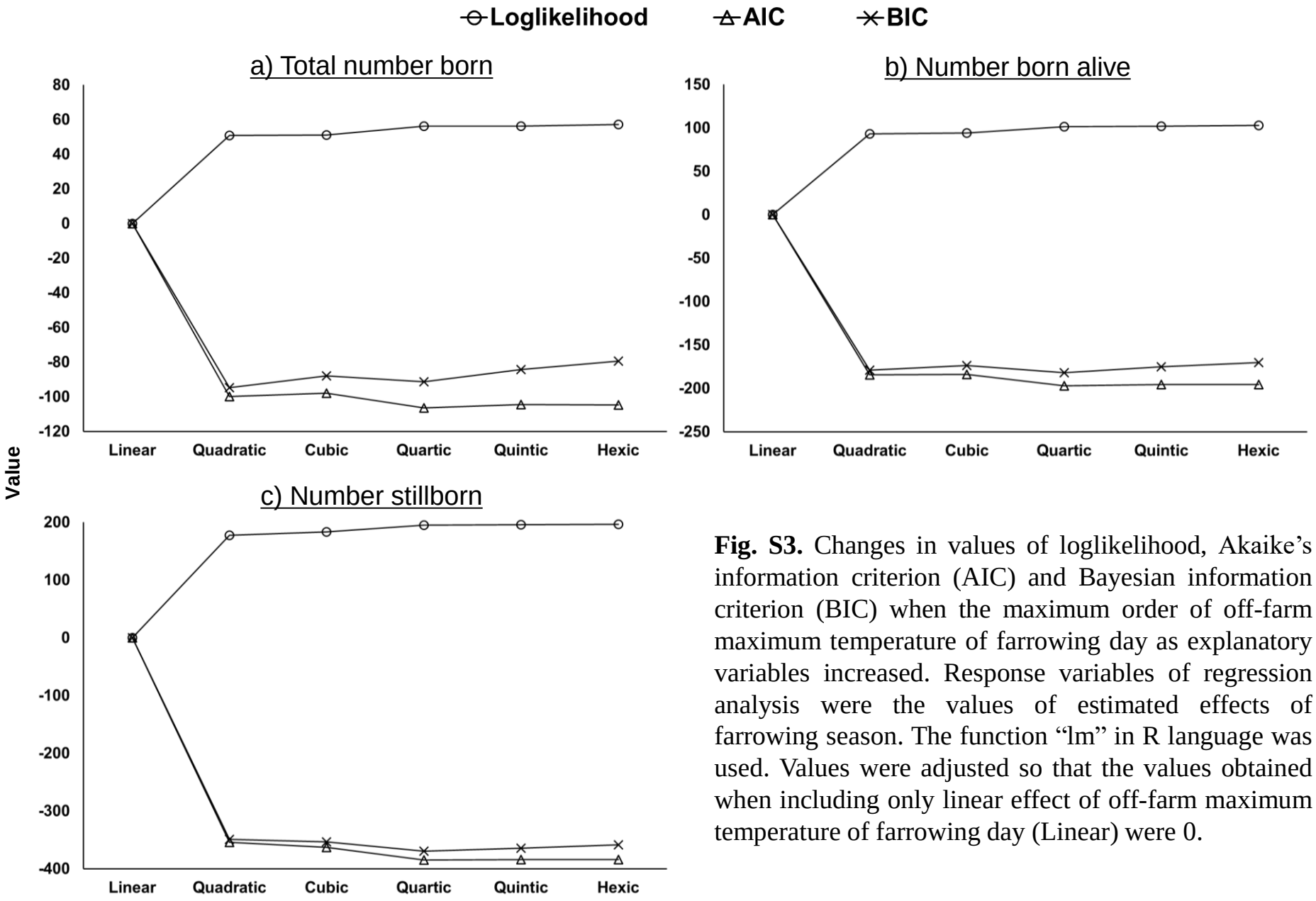

Fig. S3. Changes in values of loglikelihood, Akaike's information criterion (AIC) and Bayesian information criterion (BIC) when the maximum order of off-farm maximum temperature of farrowing day as explanatory variables increased. Response variables of regression analysis were the values of estimated effects of farrowing season. The function "lm" in R language was used. Values were adjusted so that the values obtained when including only linear effect of off-farm maximum temperature of farrowing day (Linear) were 0.

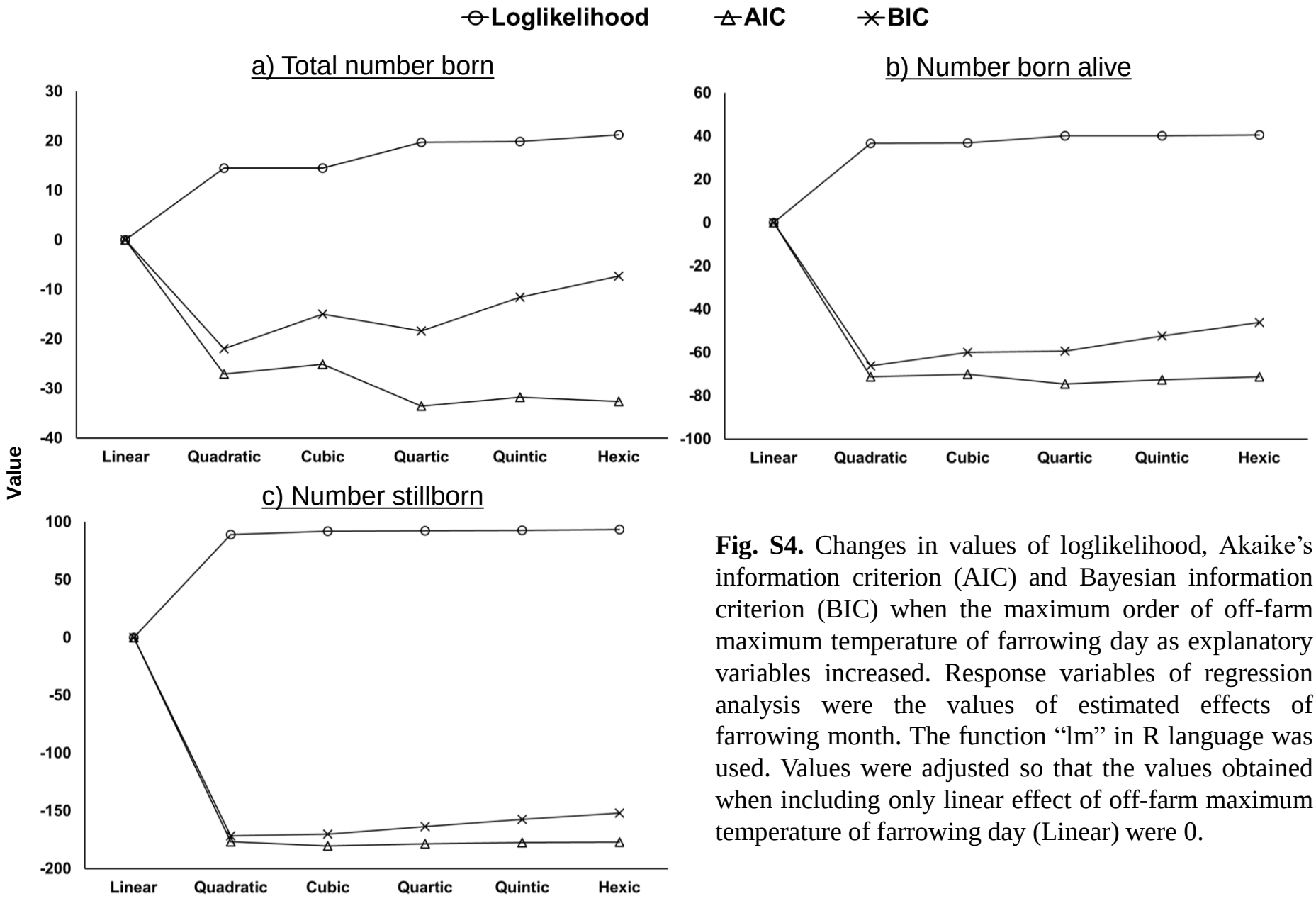

Fig. S4. Changes in values of loglikelihood, Akaike's information criterion (AIC) and Bayesian information criterion (BIC) when the maximum order of off-farm maximum temperature of farrowing day as explanatory variables increased. Response variables of regression analysis were the values of estimated effects of farrowing month. The function "lm" in R language was used. Values were adjusted so that the values obtained when including only linear effect of off-farm maximum temperature of farrowing day (Linear) were 0.

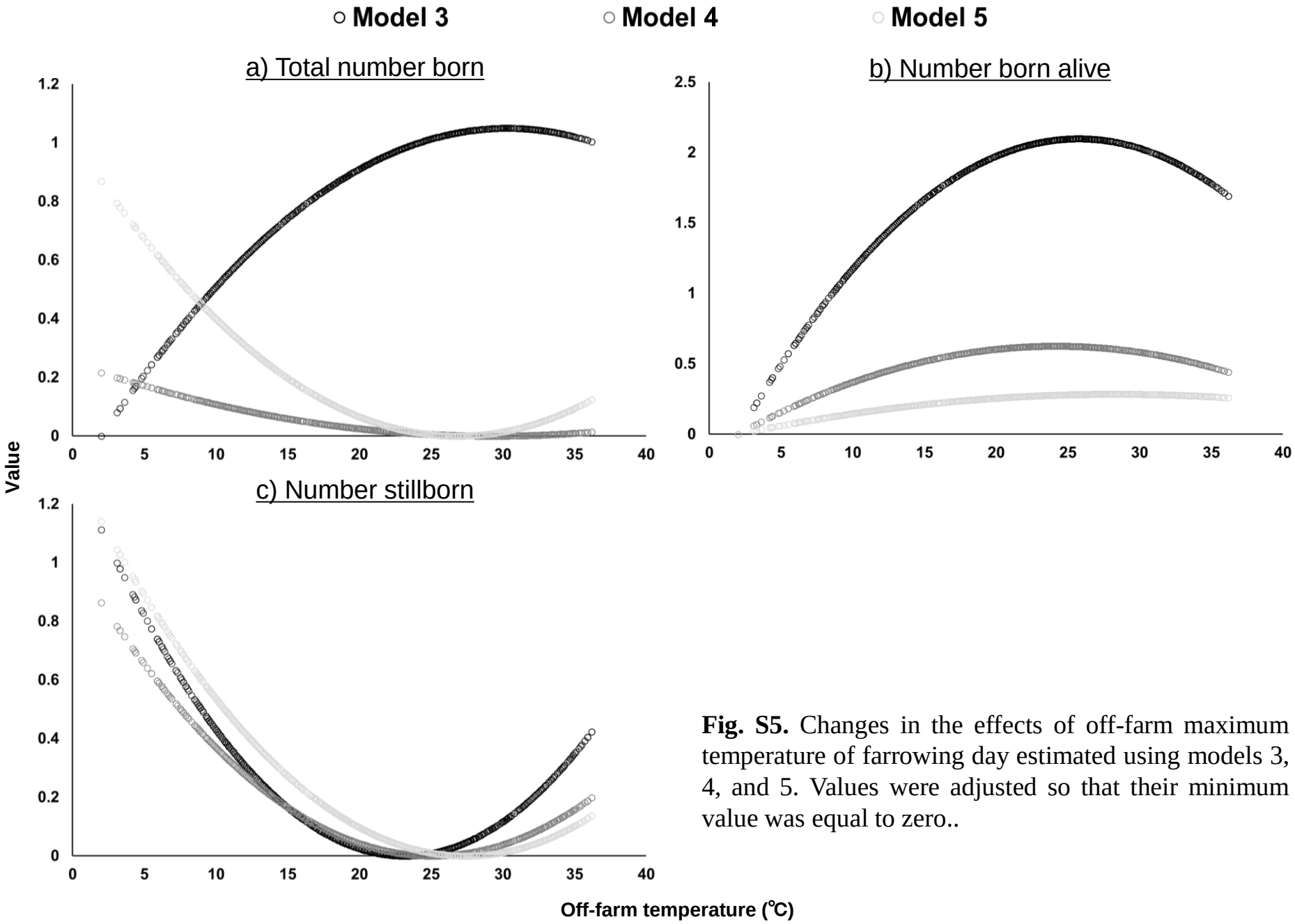

Fig. S5. Changes in the effects of off-farm maximum temperature of farrowing day estimated using models 3, 4, and 5. Values were adjusted so that their minimum value was equal to zero..