**Genetics of heat tolerance for milk yield and quality in Holsteins**

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Supplementary Table S1. Posterior means of the ratio () and correlation between intercept and slope () for additive genetic and permanent environmental effects for milk yield and quality traits in Holsteins

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Effect | Trait | First lactation | |  | Second lactation | |  | Third lactation | |
|  |  |  |  |  |  |  |  |
| additive | Milk (kg) | 0.02 | -0.23 |  | 0.04 | -0.21 |  | 0.07 | -0.20 |
| Fat (%) | 0.02 | -0.75 |  | 0.02 | -0.85 |  | 0.03 | -0.72 |
| Protein (%) | 0.01 | -0.78 |  | 0.02 | -0.35 |  | 0.04 | -0.33 |
| SCS | 0.05 | -0.30 |  | 0.04 | 0.04 |  | 0.06 | 0.07 |
|  |  |  |  |  |  |  |  |  |  |
| permanent | Milk (kg) | 0.01 | -0.27 |  | 0.04 | -0.25 |  | 0.07 | -0.20 |
| Fat (%) | 0.04 | 0.22 |  | 0.02 | -0.34 |  | 0.03 | -0.32 |
| Protein (%) | 0.03 | -0.02 |  | 0.02 | -0.04 |  | 0.02 | -0.24 |
| SCS | 0.01 | 0.15 |  | 0.02 | -0.33 |  | 0.03 | -0.31 |

SCS = somatic cell score