# Supplementary Figure 1.

**Genetic gain measured at stage of and standardized by the standard deviation of the**

Genetic gain was investigated for stage as:

where and are the mean TBVs of the groups in cycle 1 and in later cycles ( = 2 to 25), and is the standard deviation of the true breeding values at cycle 1.



# Supplementary Figure 2.

**Genetic gain measured at stage of and standardized by the standard deviation of the .**

Genetic gain was investigated for stage as:

where and are the mean TBVs of the and groups in cycle 1 and in later cycles ( = 2 to 25), and is the standard deviation of the true breeding values at cycle 1.

