Figure S12. Global representation along chromosomes of the most significant SNPflowering time associations, meta QTL obtained by Chardon et al. [10], differentiation indexes $F_{S T}$ and $F_{S T B}$, overall diversity $H_{T}$ and linkage disequilibrium pairwise measures. The 10 chromosomes were ordered and depicted on 10 different pages. Centromere boundaries are indicated by two vertical grey dashed lines. Red vertical dashed lines with marker numbers starting by \# indicate the positions of SNPs significantly associated with female flowering time (FFLW8) and/or under selection (described in Table 3). From the top to the bottom: the first Manhattan plot shows the position of SNPs displaying the most significant associations ( $P$-value $<10^{-5}$ ) with female flowering time (FFLW8), male flowering time (MFLW8) and anthesis to silking intervals (ASI8) with the $\mathrm{Q}_{55 \text { SSRs }}+\mathrm{K}_{\text {IBS(94SSRs) }}$ model. Blue rectangles correspond to meta QTL of flowering time, as described in [10]. The second Manhattan plot recalls additional associations for female flowering time ( $P$-value < $10^{-3}$ ). The next three plots show the variation in differentiation indexes $\boldsymbol{F}_{\boldsymbol{S T}}$ and $\boldsymbol{F}_{\boldsymbol{S T B}}$ and the overall diversity $\boldsymbol{H}_{\boldsymbol{T}}$ calculated for 242 non-admixed lines (assignment to one group $>0.8$ ). $\boldsymbol{F}_{\boldsymbol{S T}}$ corresponds to differentiation using r-Hierfstat [46]. $\boldsymbol{F}_{\boldsymbol{S T}}$ and $\boldsymbol{H}_{\boldsymbol{T}}$ were averaged over a sliding window of 1 Mb moving along the chromosomes by steps of $500 \mathrm{~kb} . \boldsymbol{F}_{\boldsymbol{S T B}}$ corresponds to differentiation calculated with BayeScan [47]. Finally, the last graph displays pairwise LD $\left(r^{2}>0.2\right)$ estimated with Plink [50], presented as a triangle plot.

## Chr 1



## Chr 2



## Chr 3



## Chr 4



## Chr 5



## Chr 6



Chr 7


## Chr 8



## Chr 9



## Chr 10



