

Description of Additional Supplementary Files

File name: Supplementary Data 1

Description: Summary of categorized SNPs.

File name: Supplementary Data 2

Description: Summary of categorized SNPs in exonic regions.

File name: Supplementary Data 3

Description: IBD information.

File name: Supplementary Data 4

Description: The average number of recombination events per generation per chromosome.

File name: Supplementary Data 5

Description: Information of recombination break points.

File name: Supplementary Data 6

Description: Summary of QTL via sGWAS.

File name: Supplementary Data 7

Description: Genes with nonsynonymous SNPs in sQTL.

File name: Supplementary Data 8

Description: The estimated heritability for each trait and summary of QTL number and their contributions to total PVE.

File name: Supplementary Data 9

Description: Summary of QTL via hGWAS.

File name: Supplementary Data 10

Description: Genes with non-synonymous SNPs in hQTL.

File name: Supplementary Data 11

Description: List of significant epistatic pairs.

File name: Supplementary Data 12

Description: The number and proportion of significant epistatic pairs of different type.

File name: Supplementary Data 13

Description: Information of epiQTLs linked with significant loci identified by sGWAS.

File name: Supplementary Data 14

Description: Bin information across the whole genome.