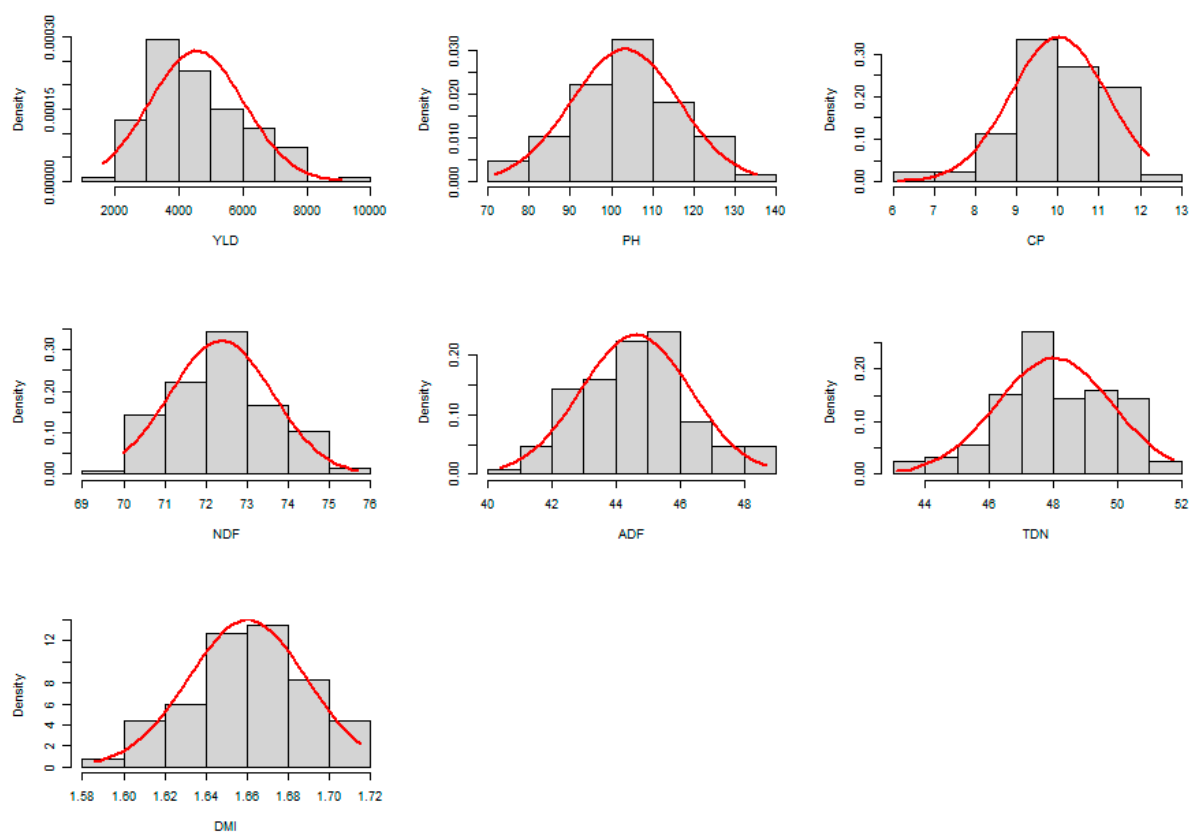
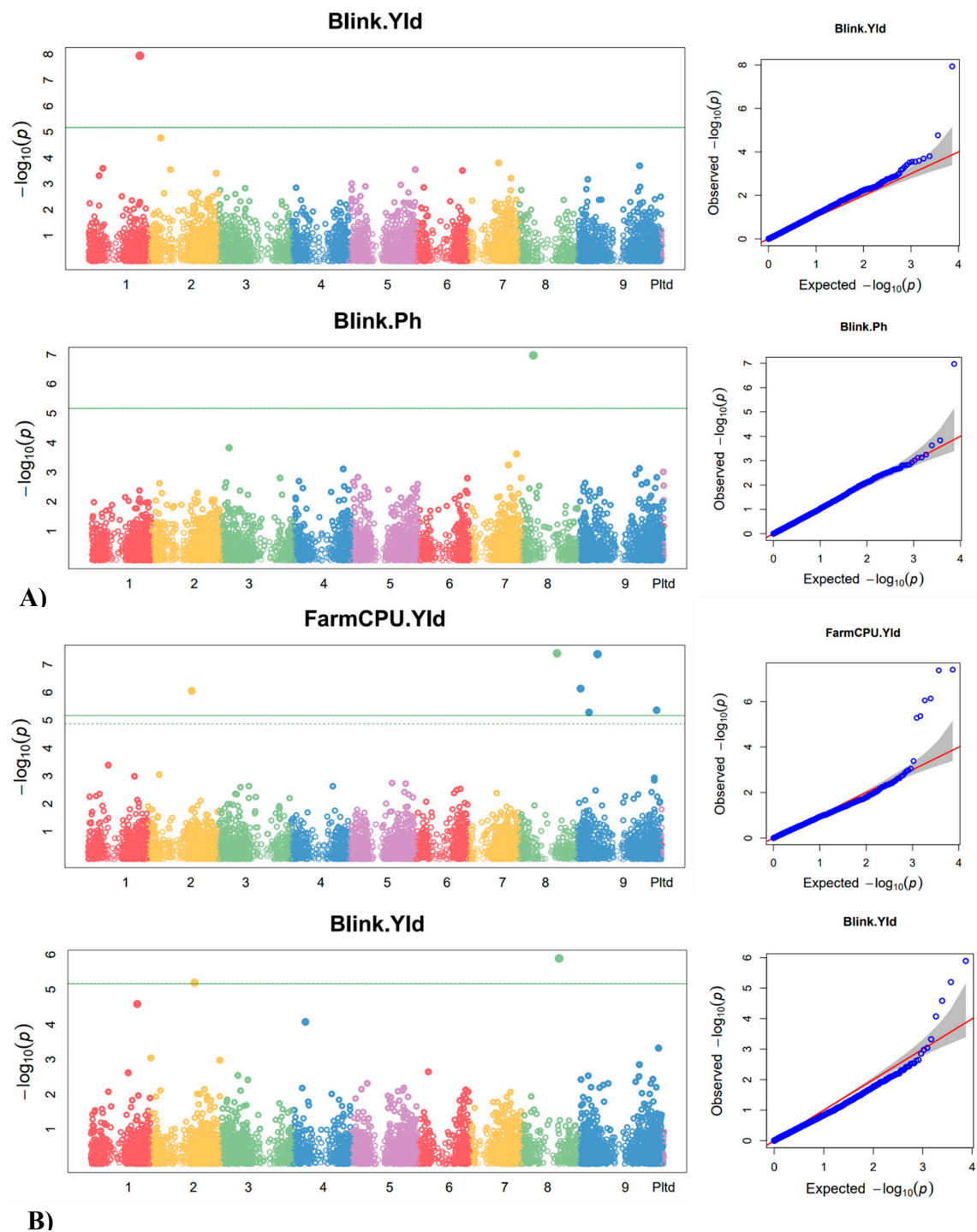


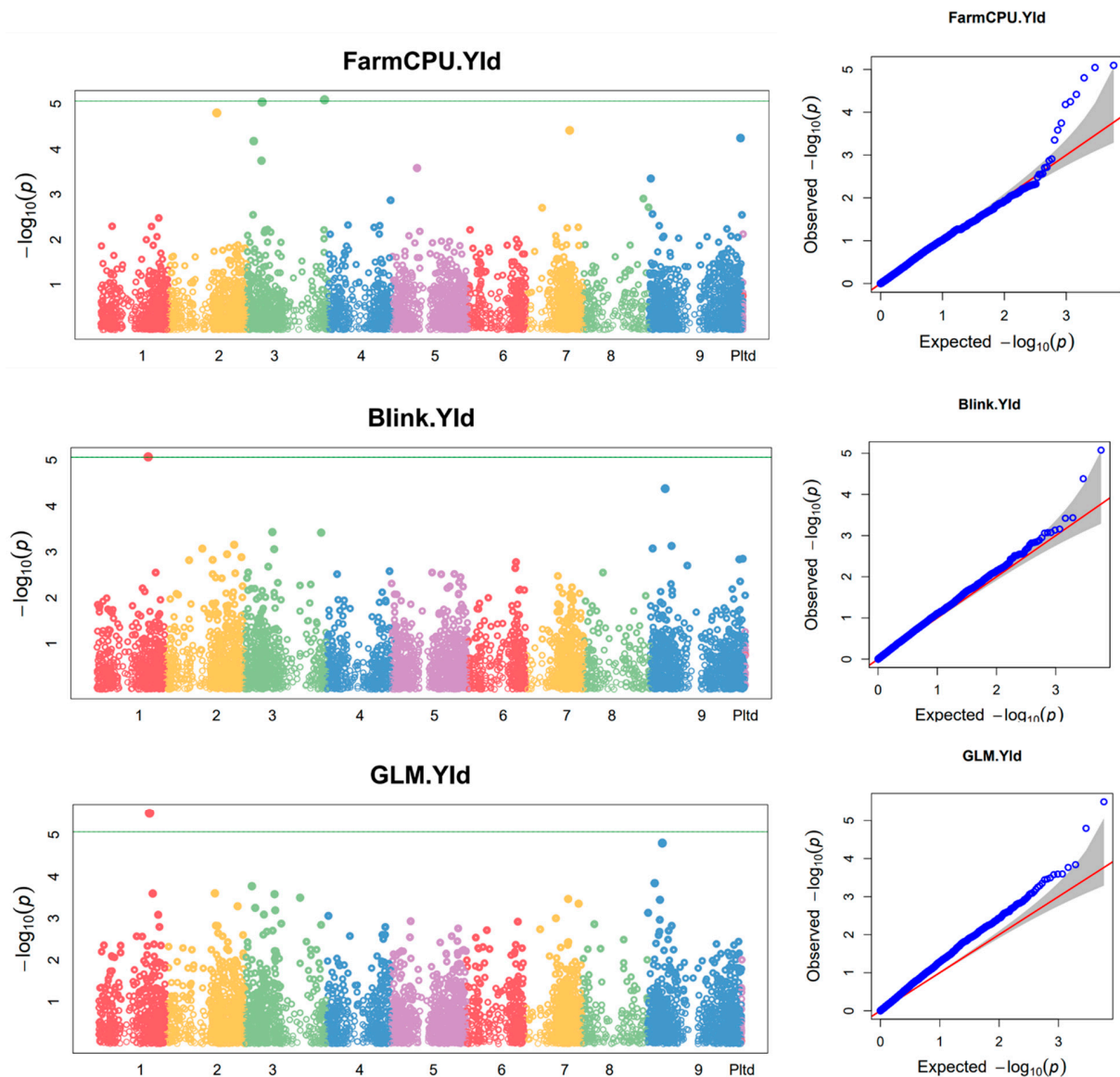
Supplementary Figures



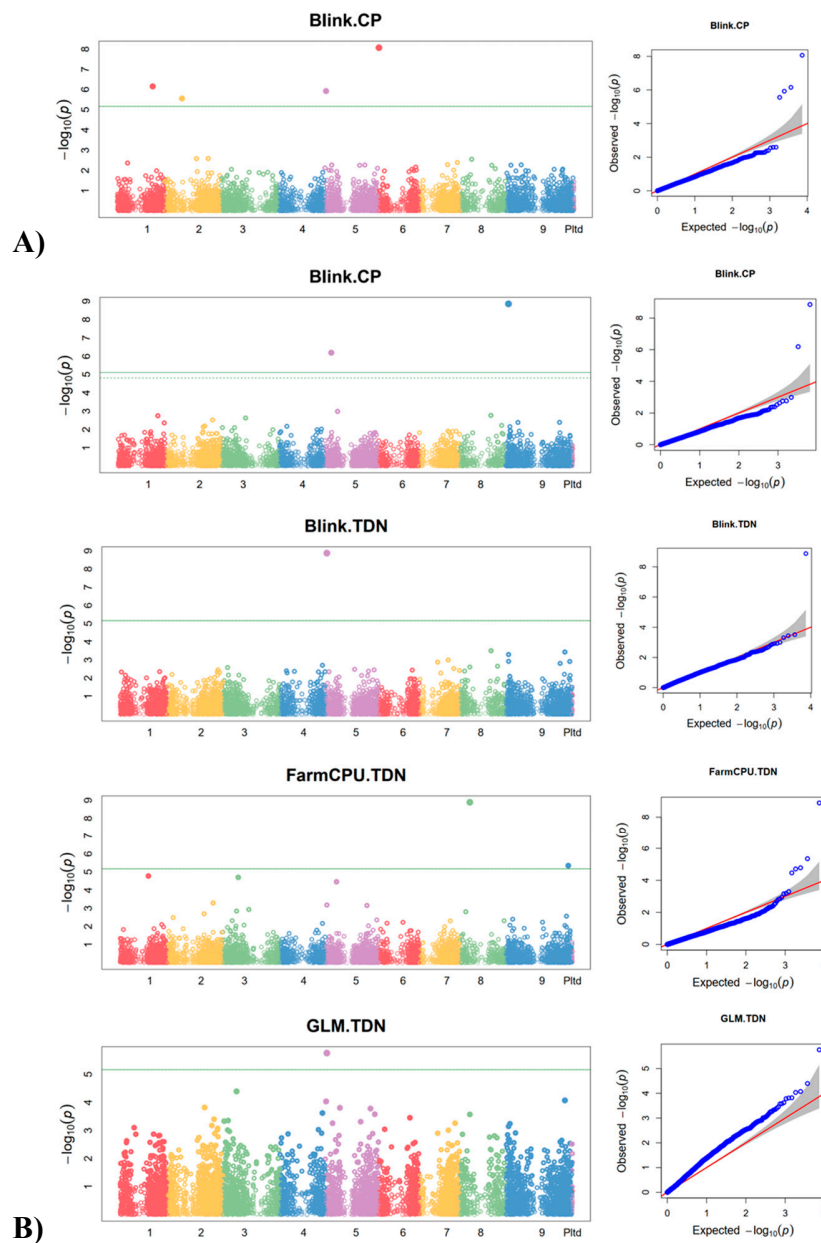
Supplementary Figure S1. Histogram showing data distribution for the different traits. YLD: Biomass yield, PH: Plant height, NDF: Neutral detergent fiber, ADF: Acidic detergent fiber, CP: crude protein, TDN: Total digestible nutrient, DMI: Dry matter intake.



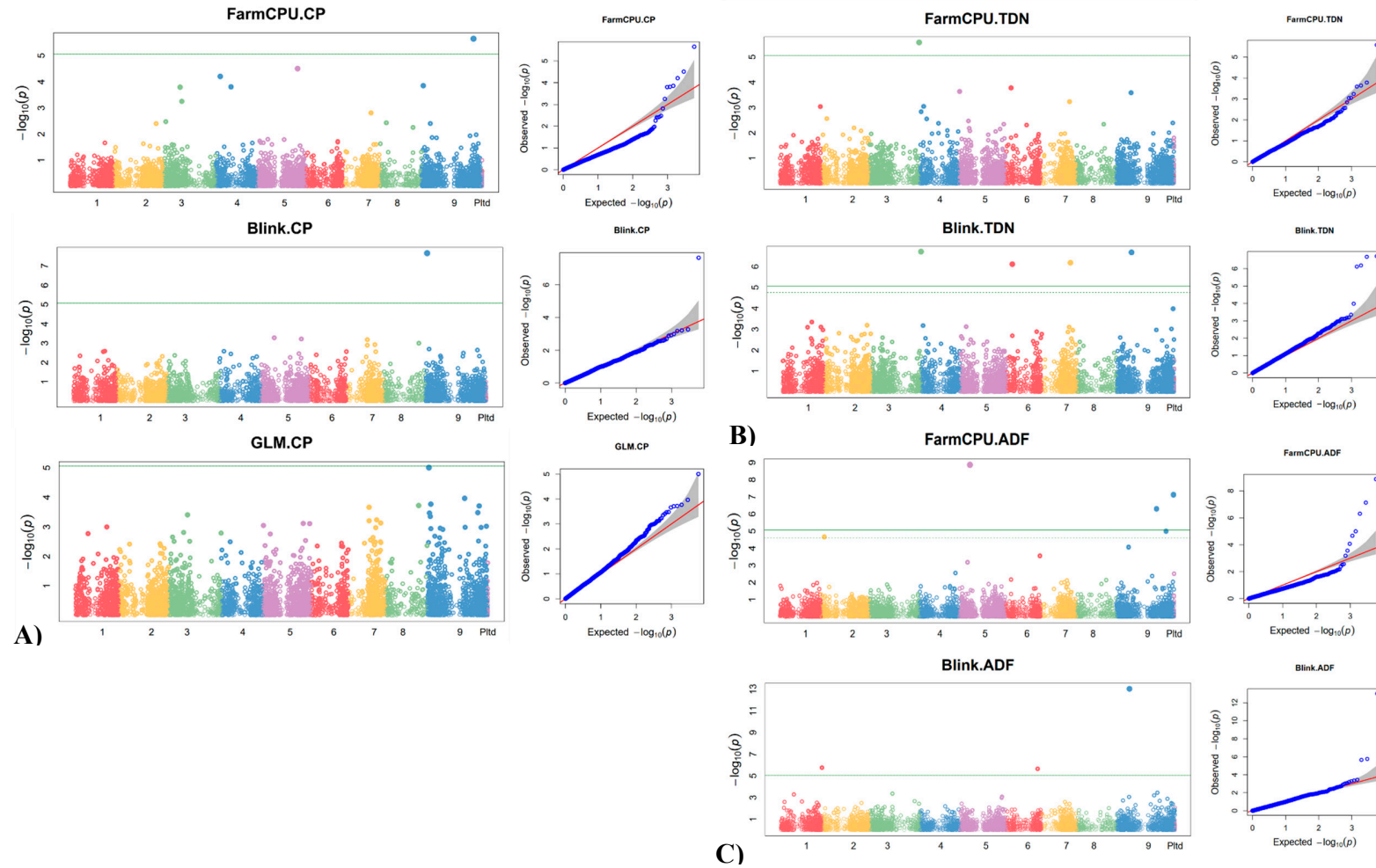
Supplementary Figure S2. SilicoDART markers associated with biomass yield and plant height in 2015 (A) and 2016 (B) growing seasons. On the Manhattan plots, the x-axis is the code of the chromosomes, and the y-axis is the negative log base 10 of the p-values. The green horizontal line indicates the significance level. QQ plot: the y-axis is the observed negative base 10 logarithm of the p-values, and the x-axis is the expected observed negative base 10 logarithm of the p-values. Yld=Biomass yield, Ph=Plant height.



Supplementary Figure S3. SNP markers associated with biomass yield in 2016 growing season. On the Manhattan plots, the x-axis is the code of the chromosomes, and the y-axis is the negative log base 10 of the p-values. The green horizontal line indicates the significance level. QQ plot: the y-axis is the observed negative base 10 logarithm of the p-values, and the x-axis is the expected observed negative base 10 logarithm of the p-values.



Supplementary Figure S4. SilicoDArT markers associated with feed quality traits in buffel grass: A) SilicoDArT marker associated with CP in 2015 growing season, B) SilicoDArT markers associated with CP and TDN in 2016 growing season. On the Manhattan plots, the x-axis is the code of the chromosomes, and the y-axis is the negative log base 10 of the p-values. The green horizontal line indicates the significance level. QQ plot: the y-axis is the observed negative base 10 logarithm of the p-values, and the x-axis is the expected observed negative base 10 logarithm of the p-values.



Supplementary Figure S5. SNP markers associated with feed quality traits detected using different models in buffel grass: A) CP, B) TDN and C) ADF. On the Manhattan plots, the x-axis is the code of the chromosomes, and the y-axis is the negative log base 10 of the p-values. The green horizontal line indicates the significance level. QQ plot: the y-axis is the observed negative base 10 logarithm of the p-values, and the x-axis is the expected observed negative base 10 logarithm of the p-values.