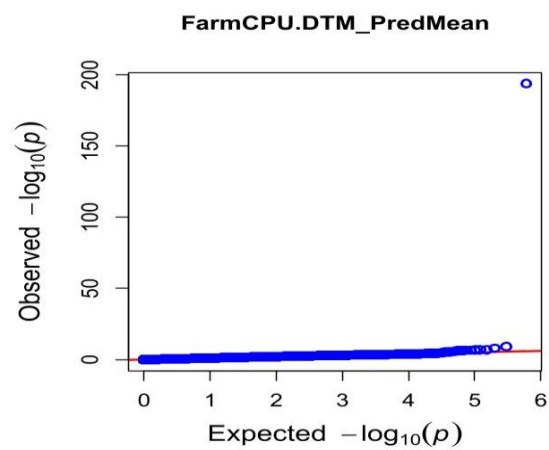
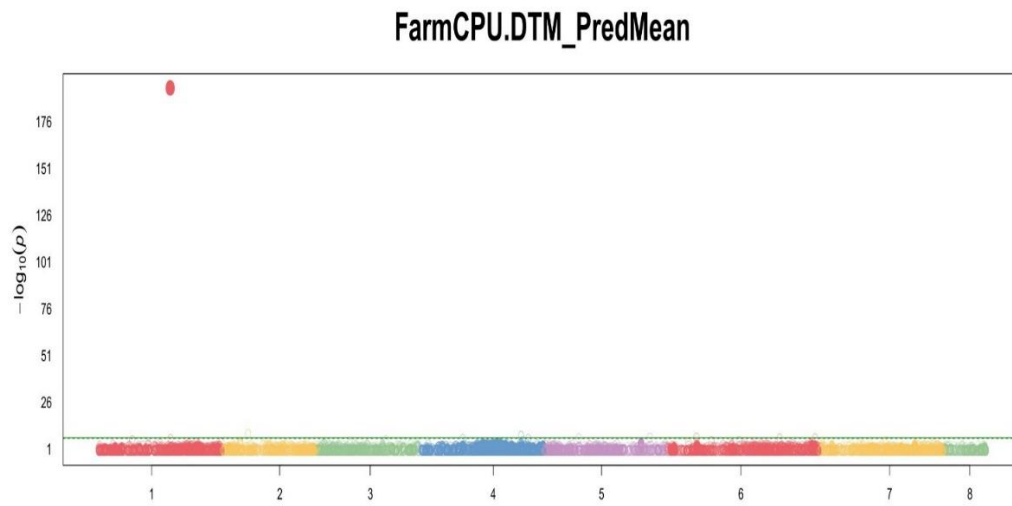
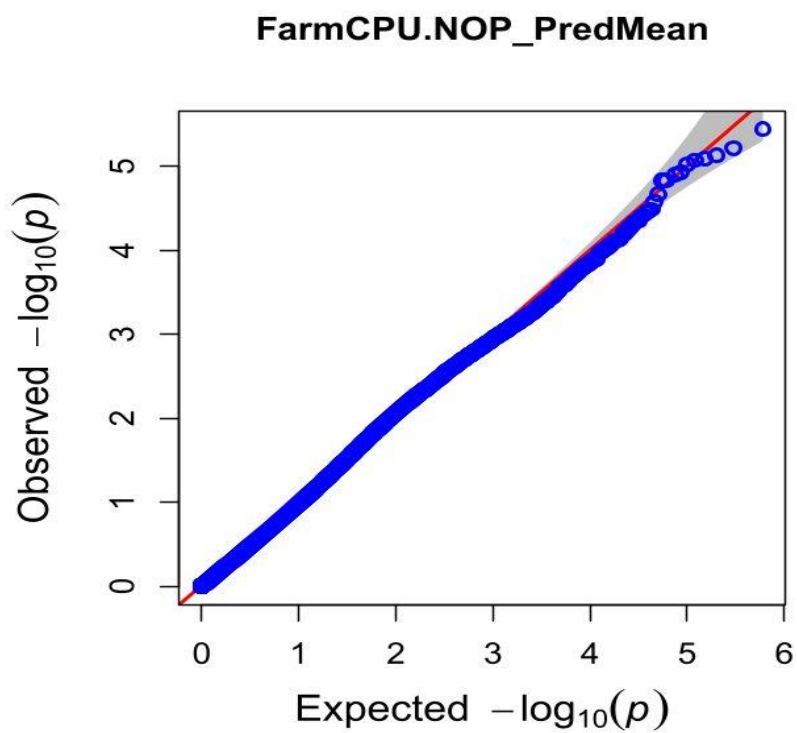
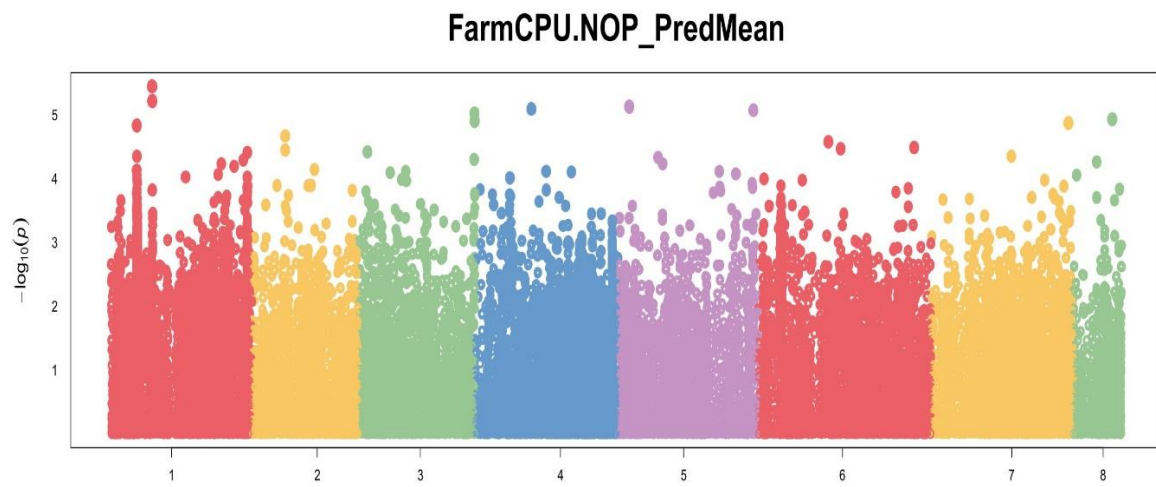


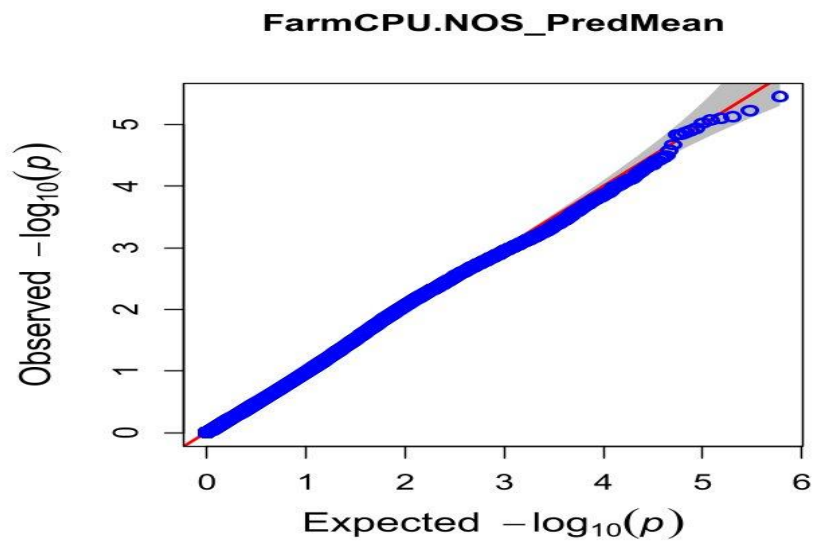
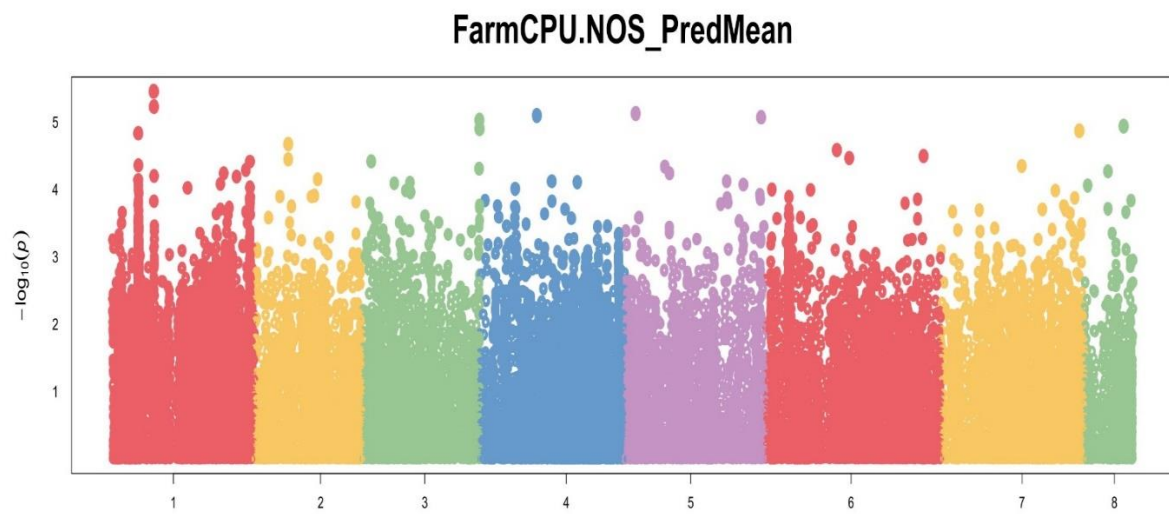
Supplementary Figure6a: Manhattan plot illustrating SNPs linked to Days fifty percentage flowering along with their corresponding statistical significance represented by Q-Q plot.



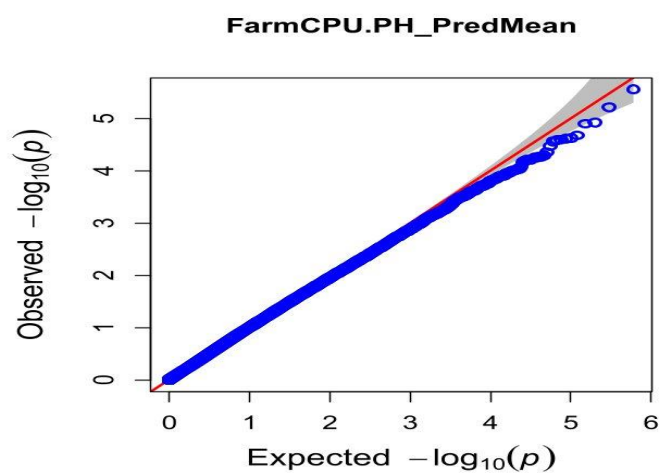
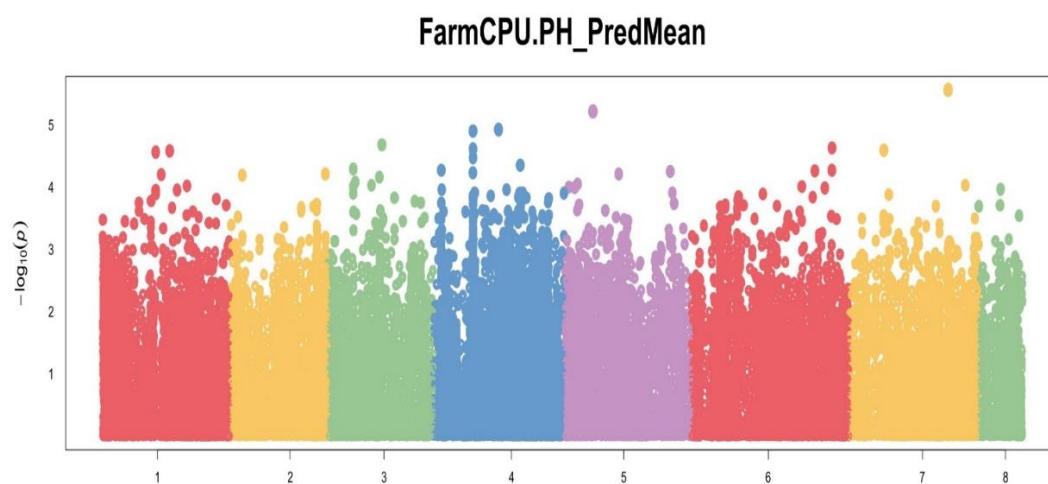
Supplementary figure6b: Manhattan plot illustrating SNPs linked to Days to maturity along with their corresponding statistical significance represented by Q-Q plot.



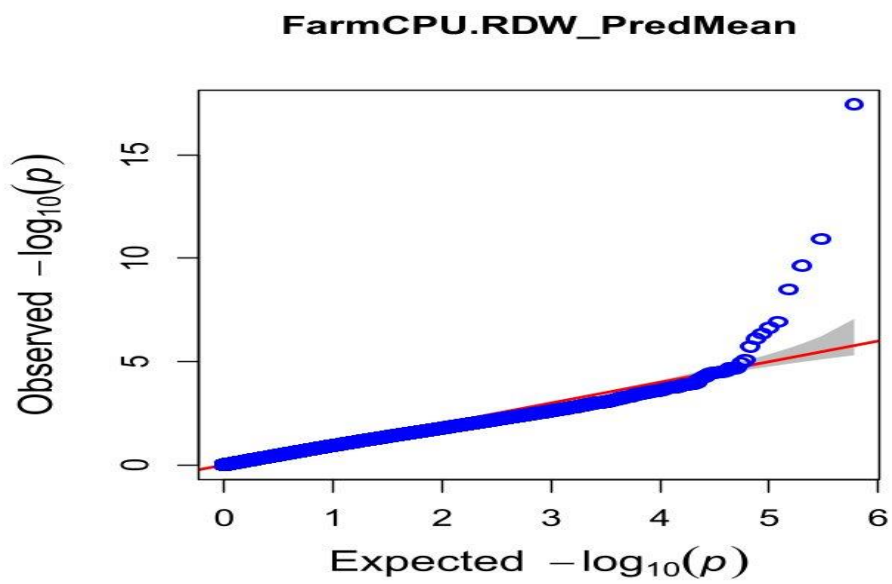
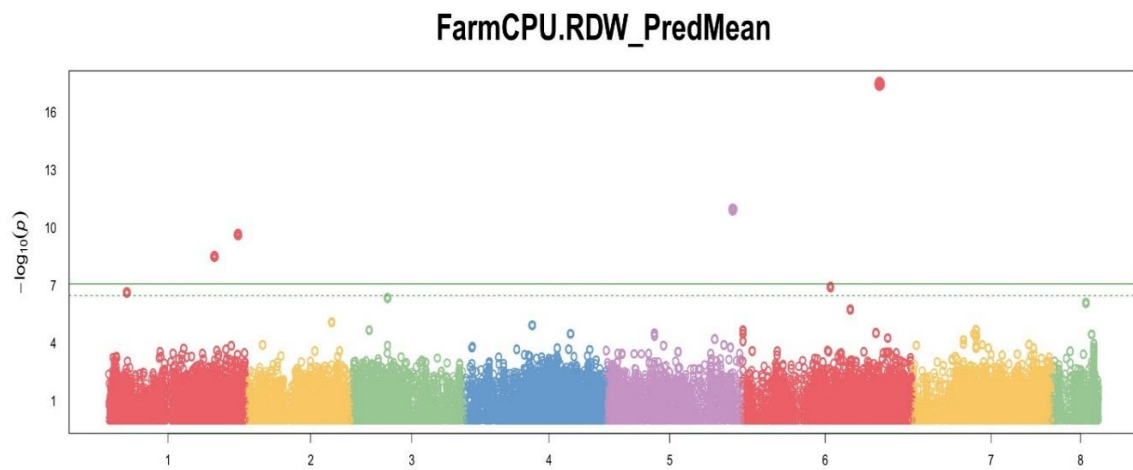
Supplementary Figure6c: Manhattan plot illustrating SNPs linked to number of pods along with their corresponding statistical significance represented by Q-Q plot.



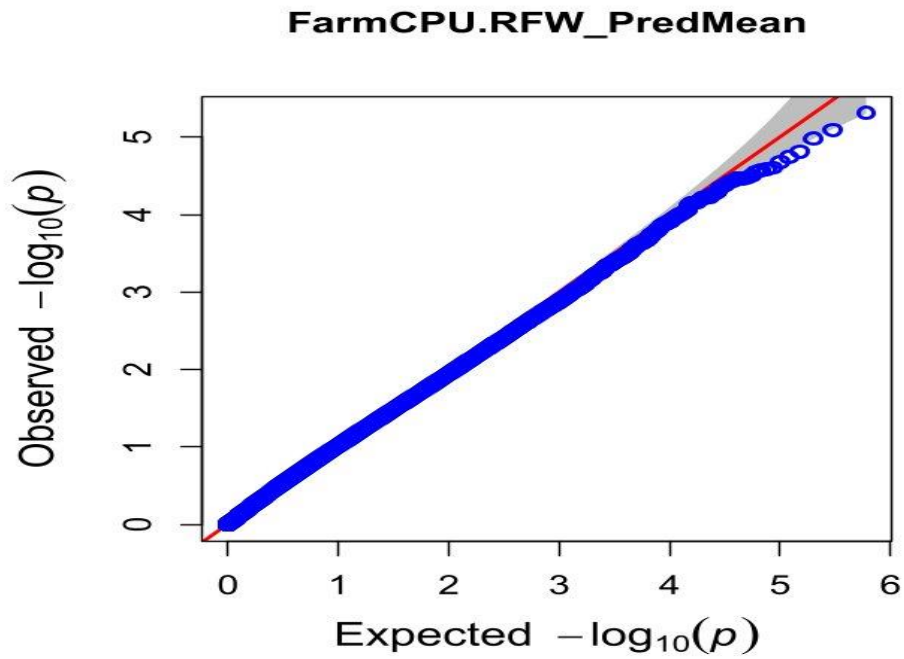
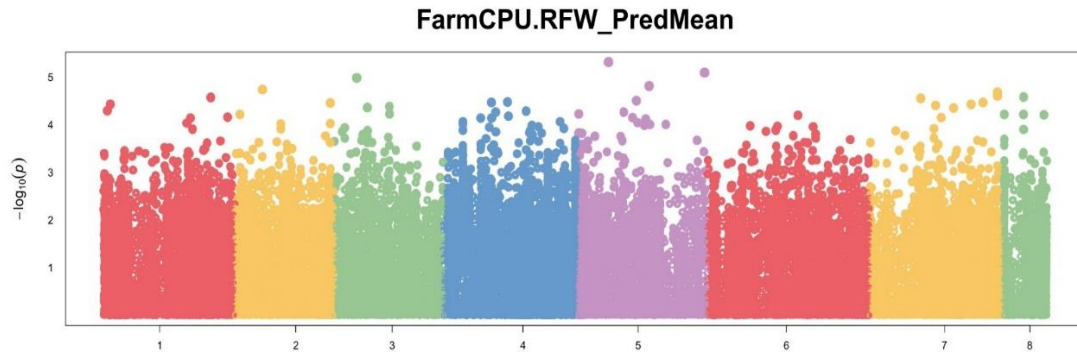
Supplementary Figure6d: Manhattan plot illustrating SNPs linked to number of seeds along with their corresponding statistical significance represented by Q-Q plot



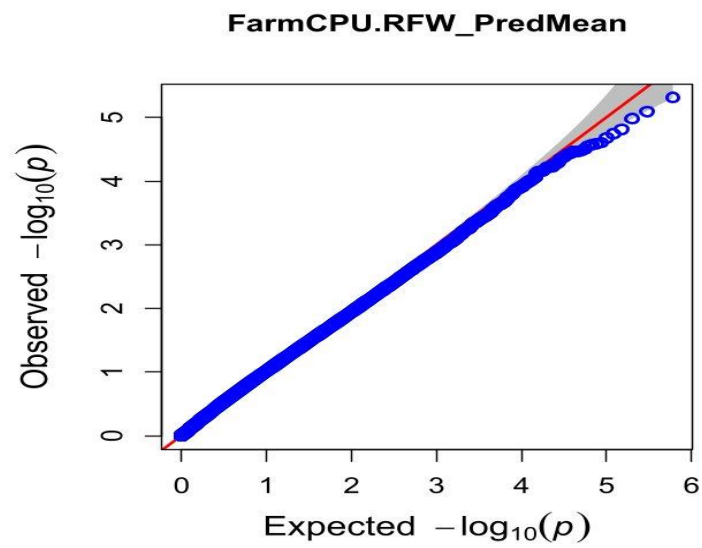
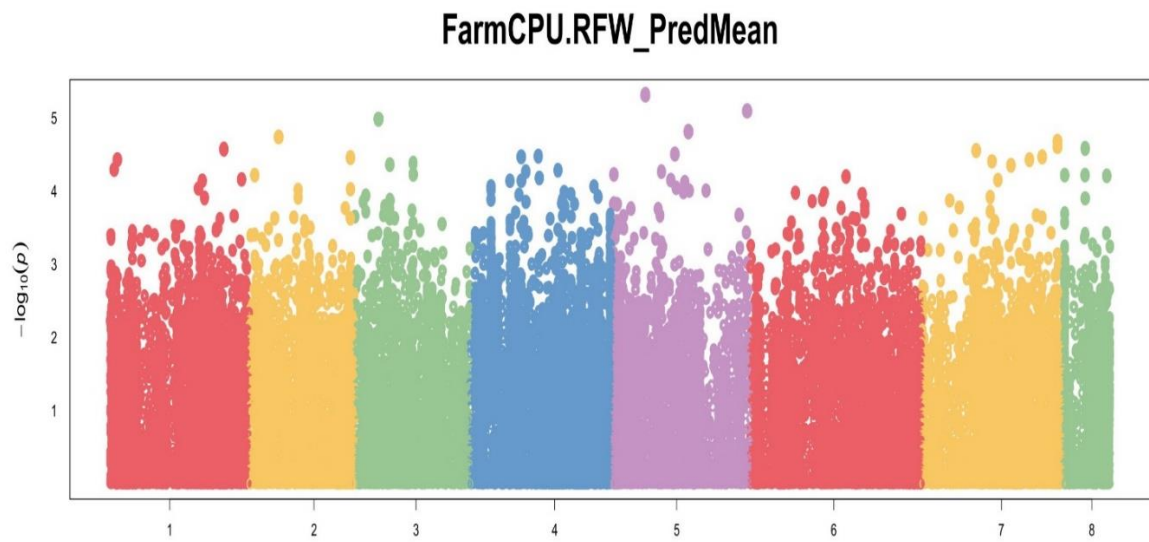
Supplementary Figure6e: Manhattan plot illustrating SNPs linked to plant height along with their corresponding statistical significance represented by Q-Q plot



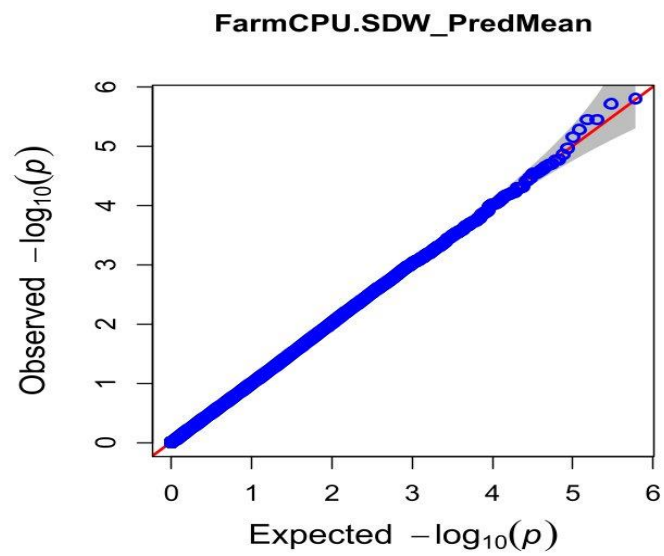
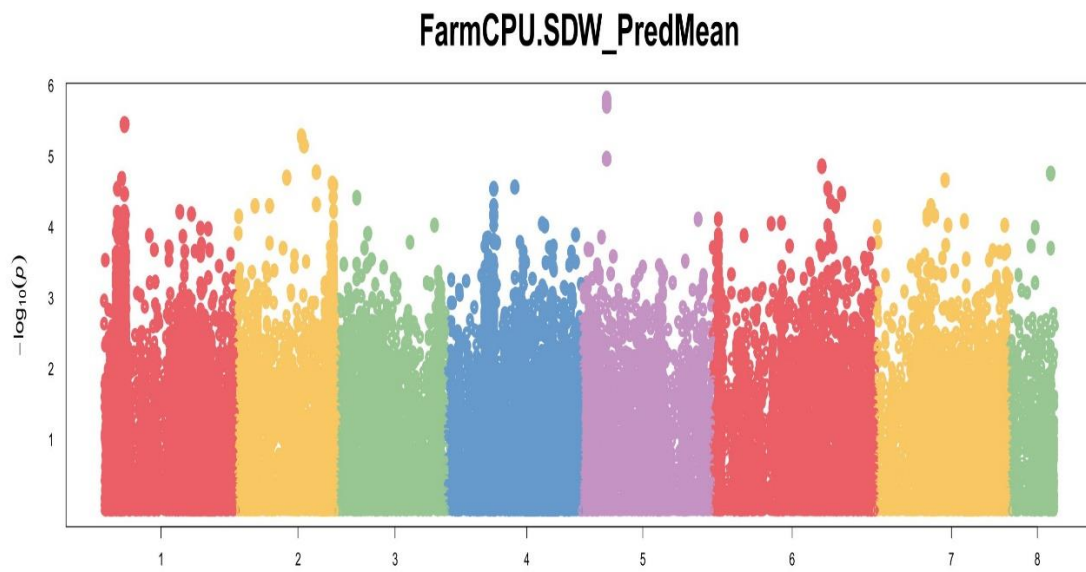
Supplementary Figure6f: Manhattan plot illustrating SNPs linked to root dry weight with their corresponding statistical significance represented by Q-Q plot



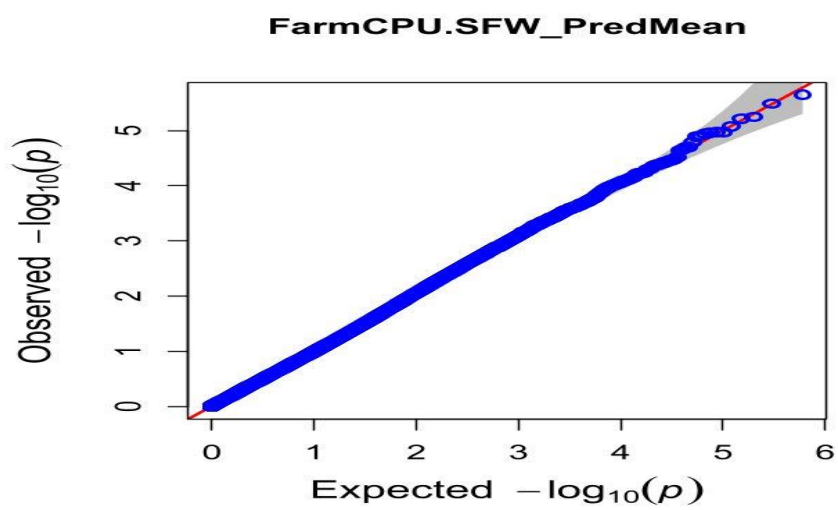
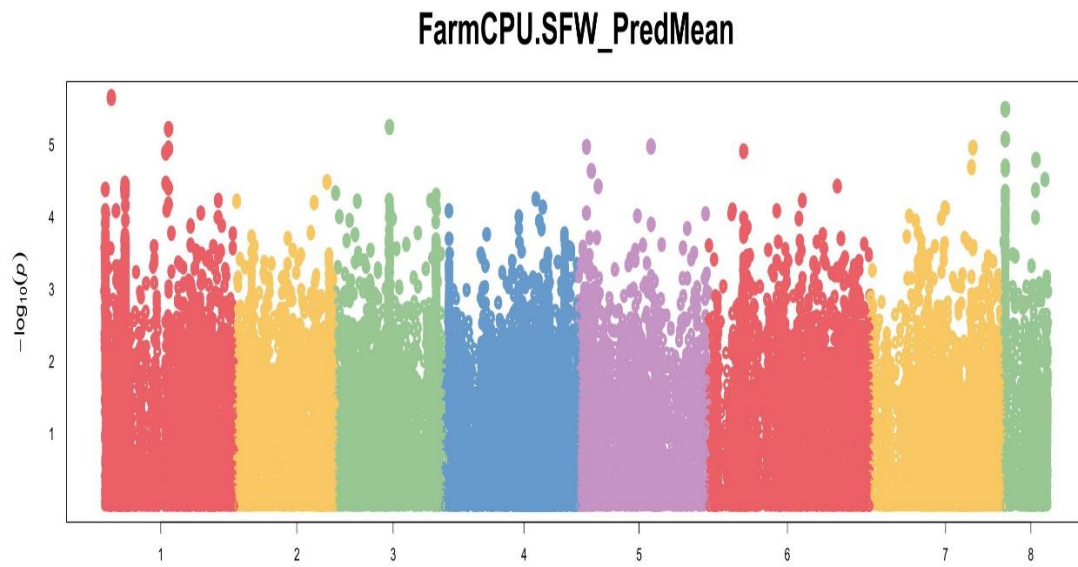
Supplementary Figure6g: Manhattan plot illustrating SNPs linked to root fresh weight with their corresponding statistical significance represented by Q-Q plot



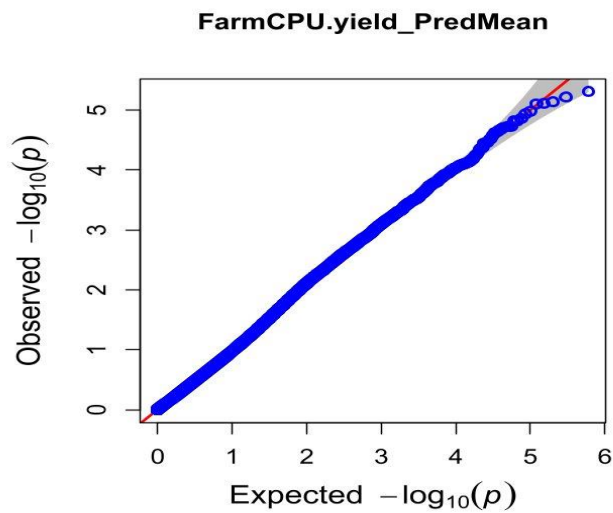
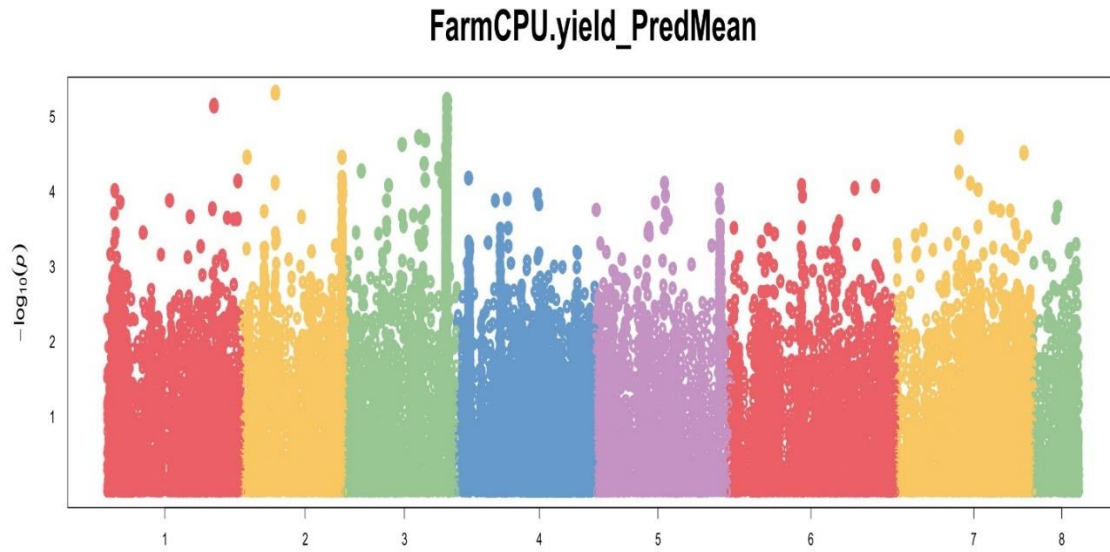
Supplementary Figure6g: Manhattan plot illustrating SNPs linked to root fresh weight with their corresponding statistical significance represented by Q-Q plot



Supplementary Figure6h: Manhattan plot illustrating SNPs linked to shoot dry weight with their corresponding statistical significance represented by Q-Q plot

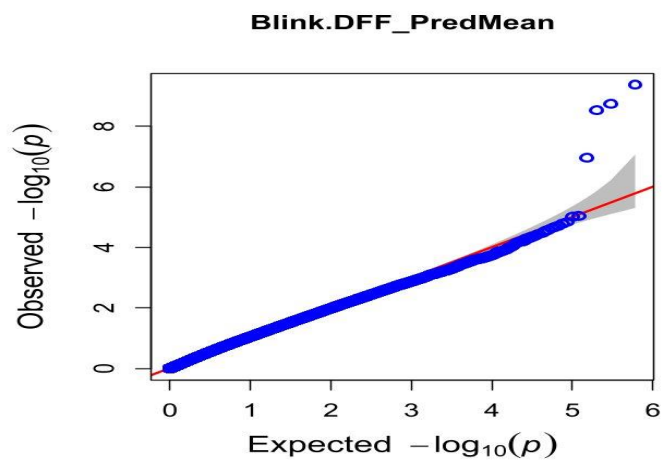
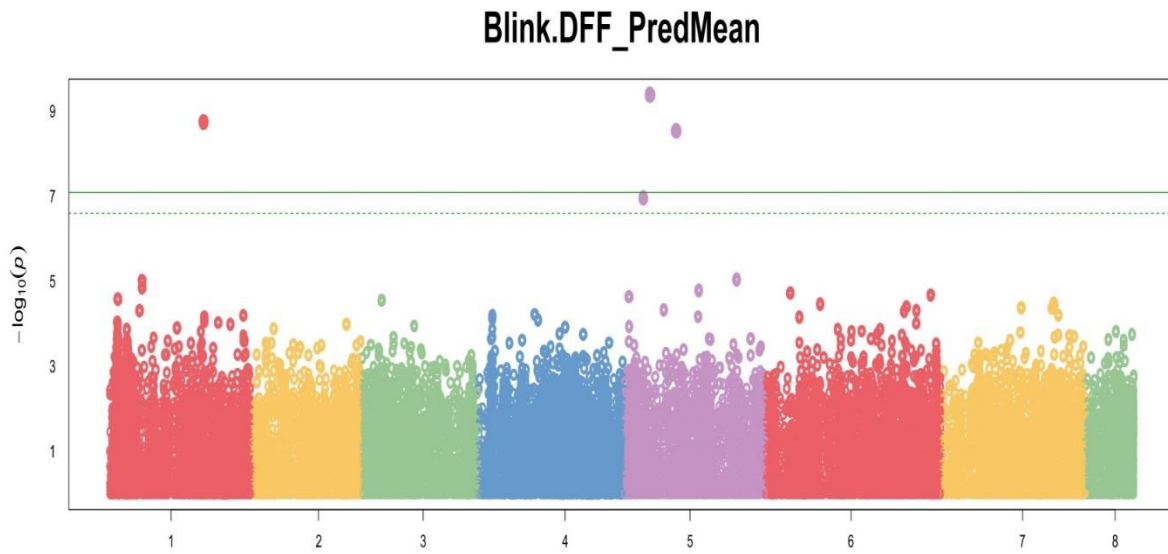


Supplementary Figure6i: Manhattan plot illustrating SNPs linked to shoot fresh weight with their corresponding statistical significance represented by Q-Q plot

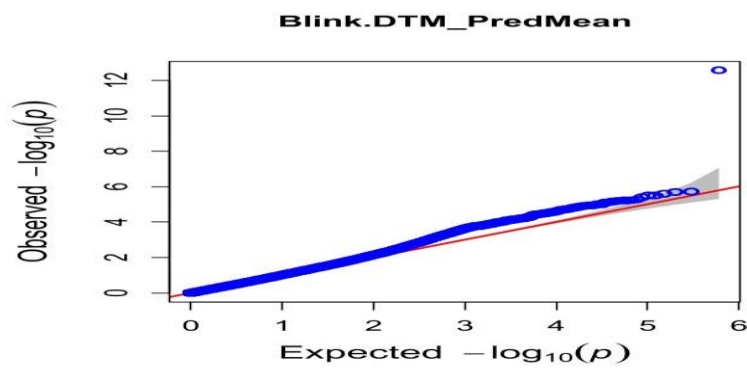
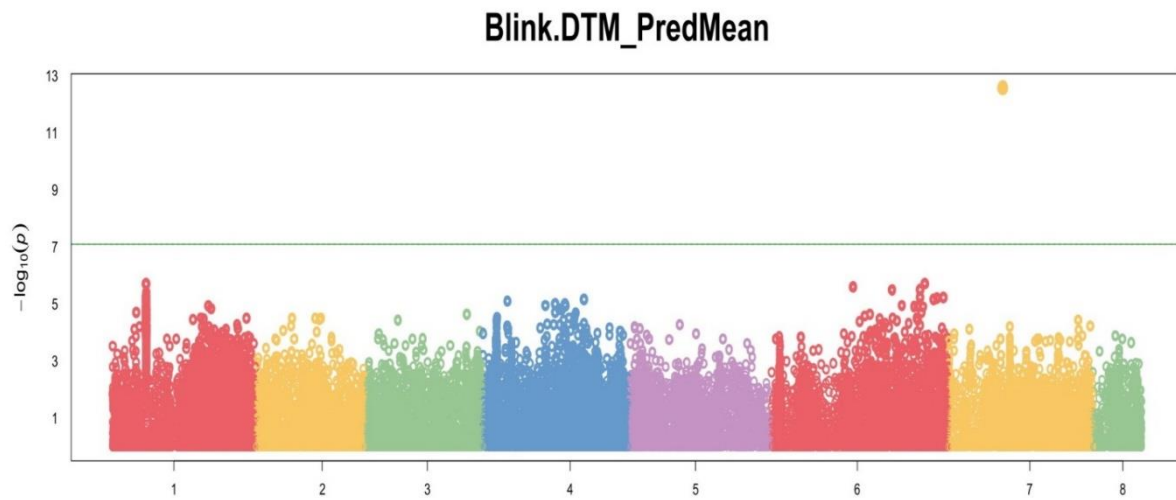


Supplementary Figure6j: Manhattan plot illustrating SNPs linked to yield with their corresponding statistical significance represented by Q-Q plot

Supplementary Figure6:Manhattan plot illustrating SNPs linked to specific chickpea traits, along with their corresponding statistical significance represented by Q-Q plot for location 2 identified from FarmCPU model

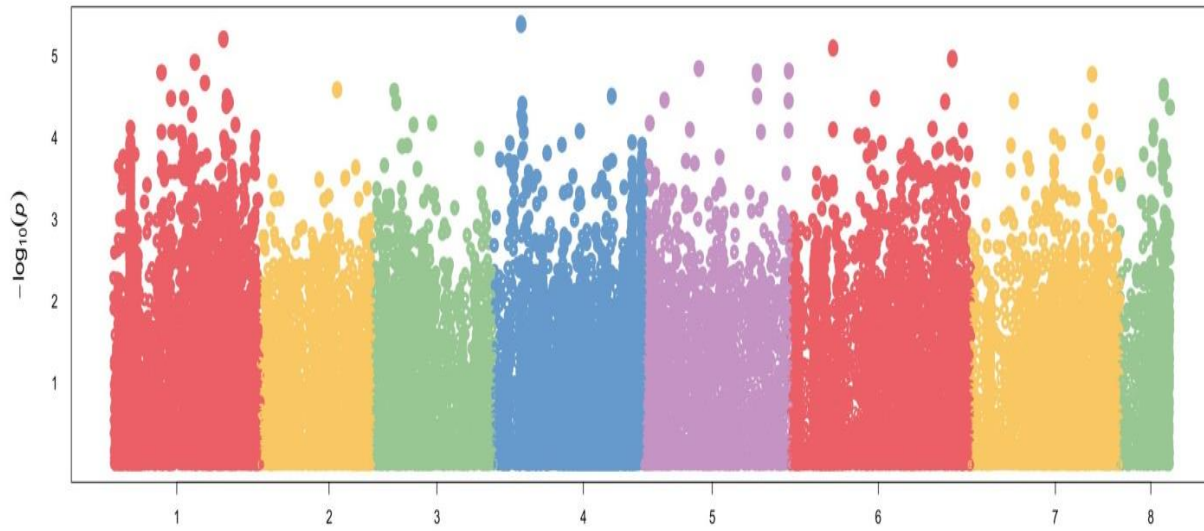


Supplementary Figure7a: Manhattan plot illustrating SNPs linked to Days fifty percentage flowering along with their corresponding statistical significance represented by Q-Q plot.

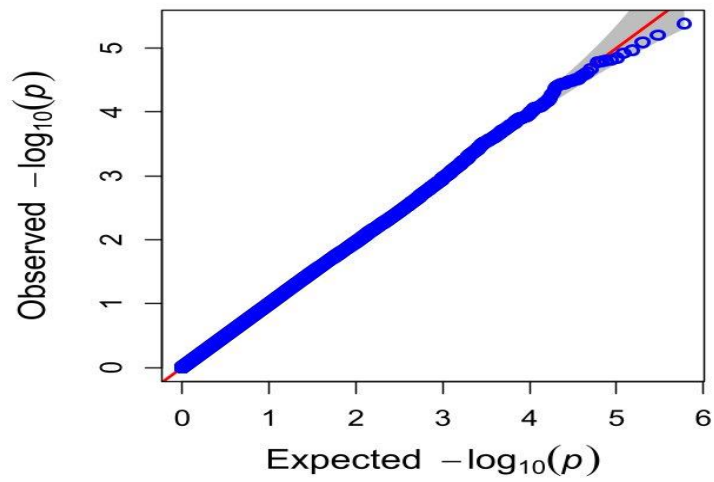


Supplementary Figure7b: Manhattan plot illustrating SNPs linked to Days to maturity along with their corresponding statistical significance represented by Q-Q plot

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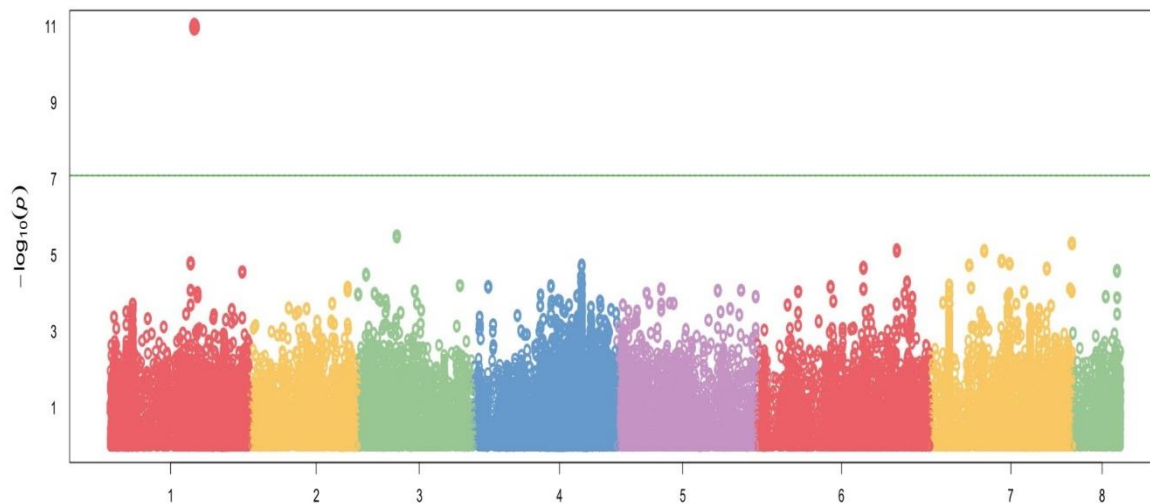


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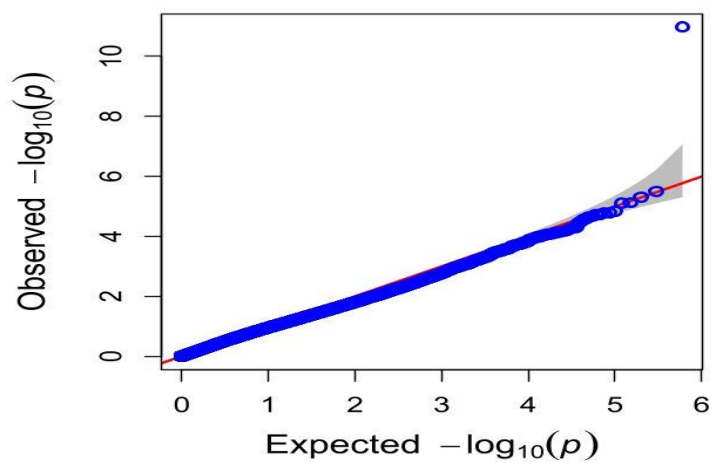


Supplementary Figure7c: Manhattan plot illustrating SNPs linked to number of pods along with their corresponding statistical significance represented by Q-Q plot.

Blink.NOS_PredMean

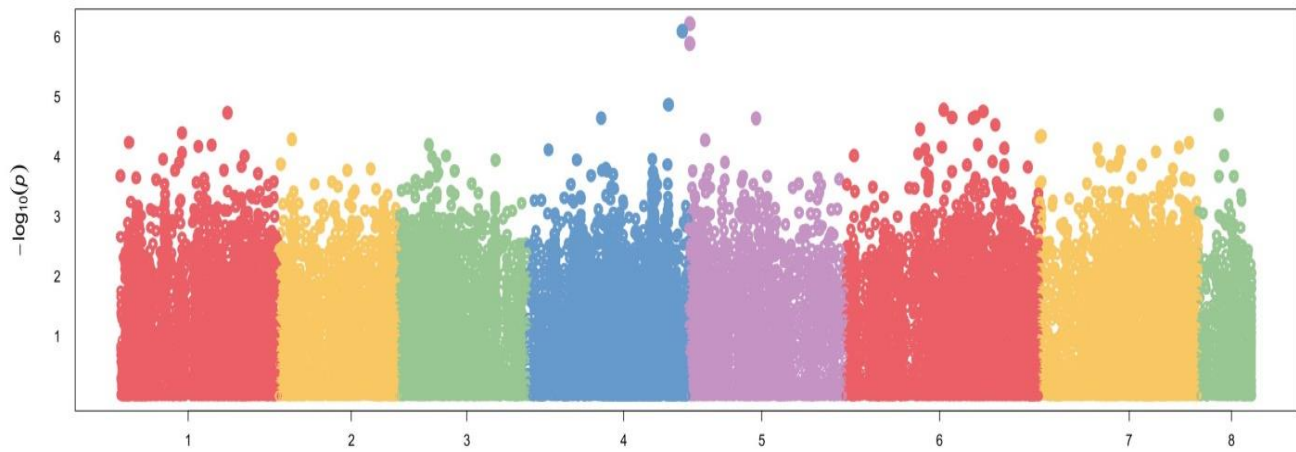


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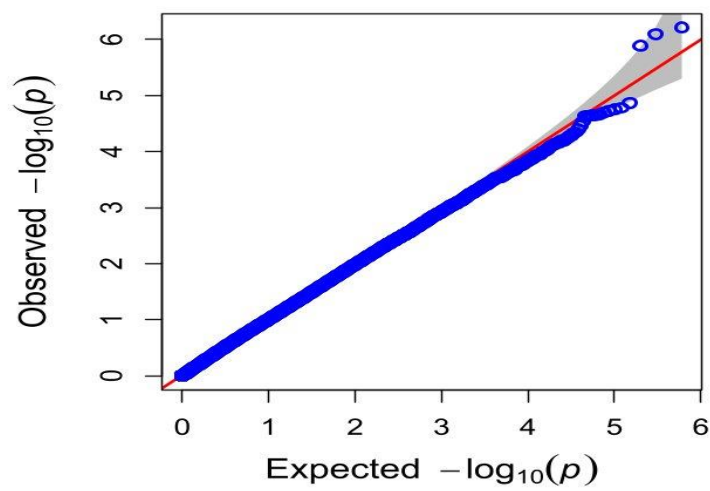


Supplementary Figure7d: Manhattan plot illustrating SNPs linked to number of seeds along with their corresponding statistical significance represented by Q-Q plot.

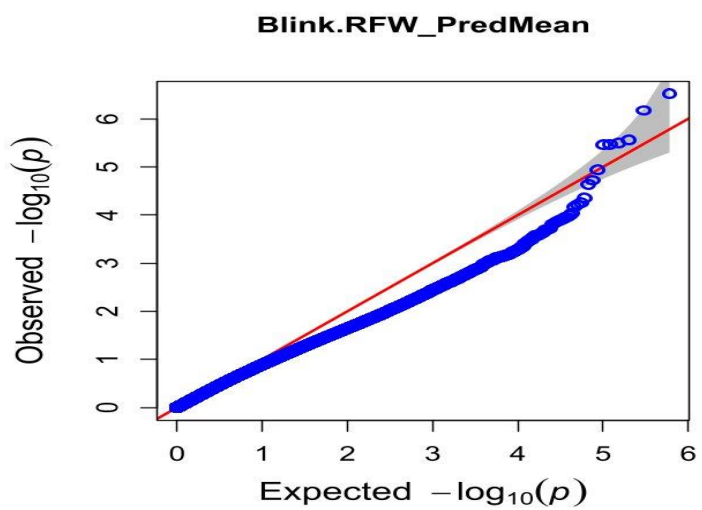
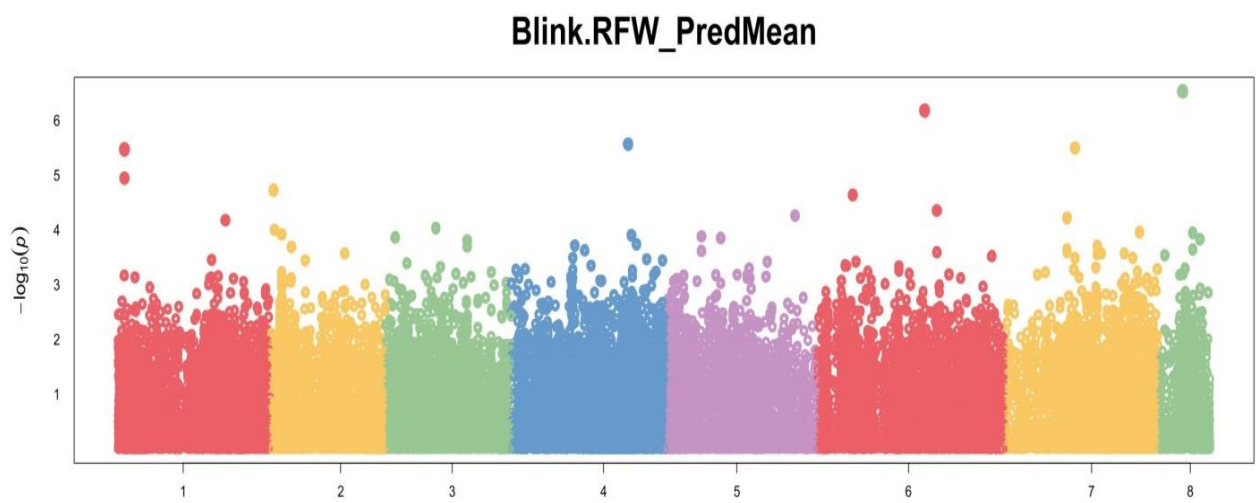
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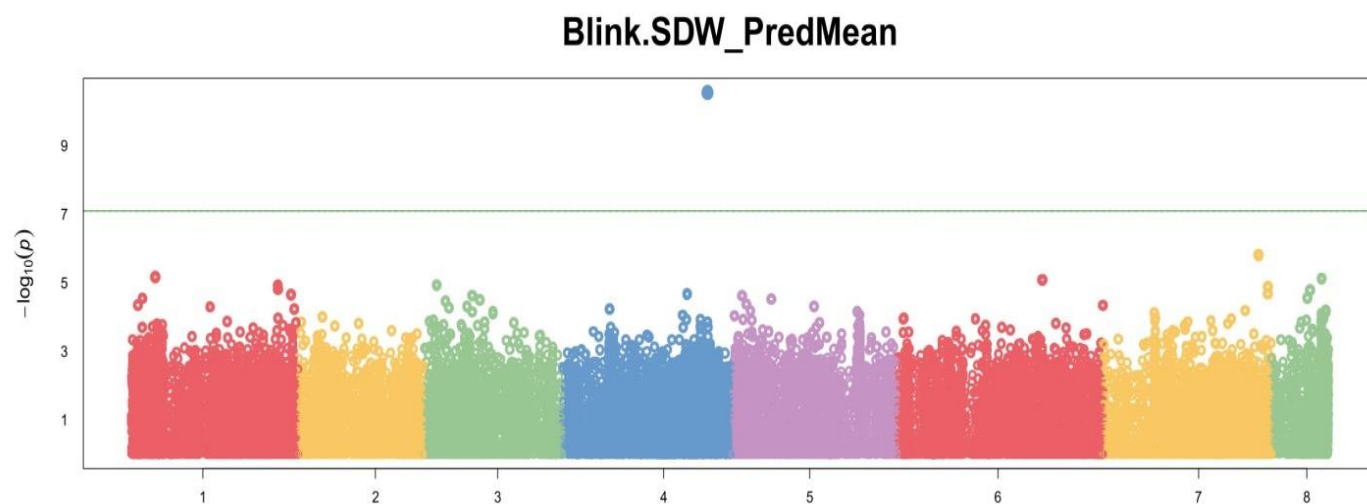
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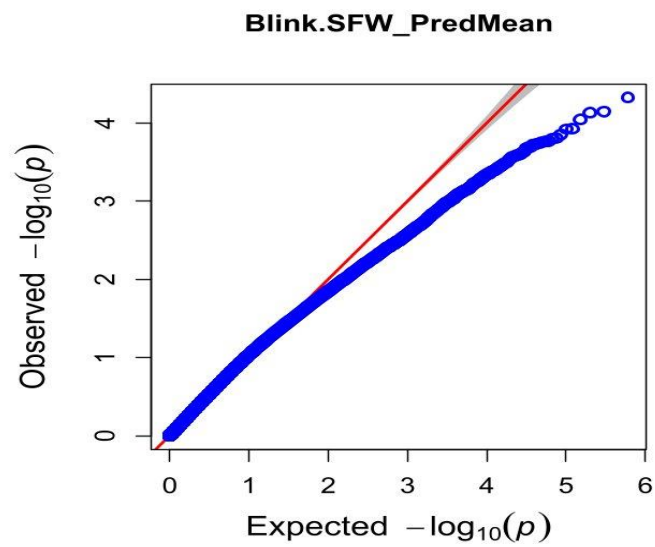
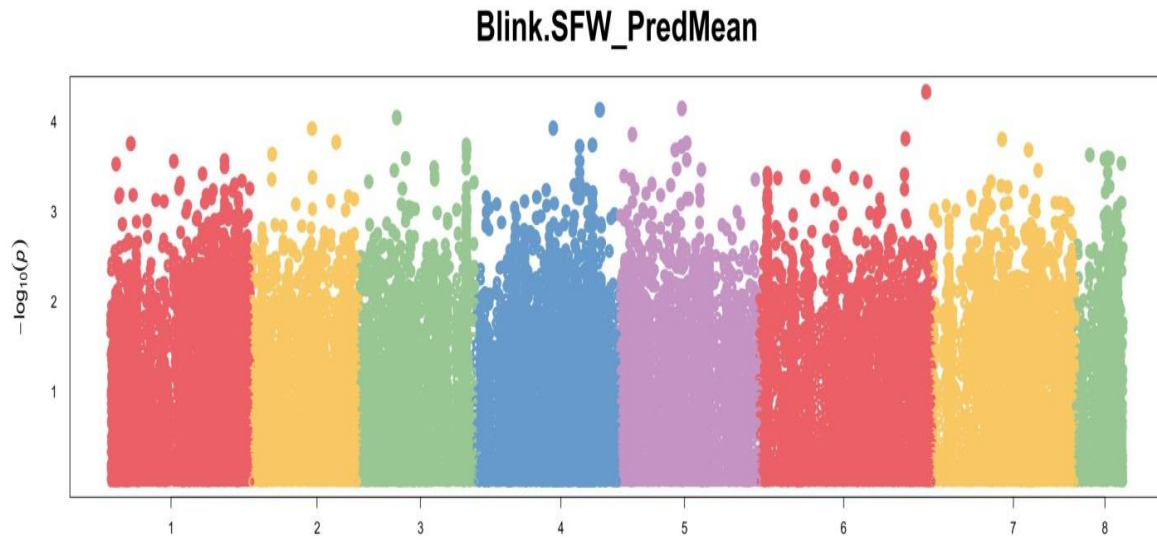
Supplementary Figure7e: Manhattan plot illustrating SNPs linked to plant height along with their corresponding statistical significance represented by Q-Q plot



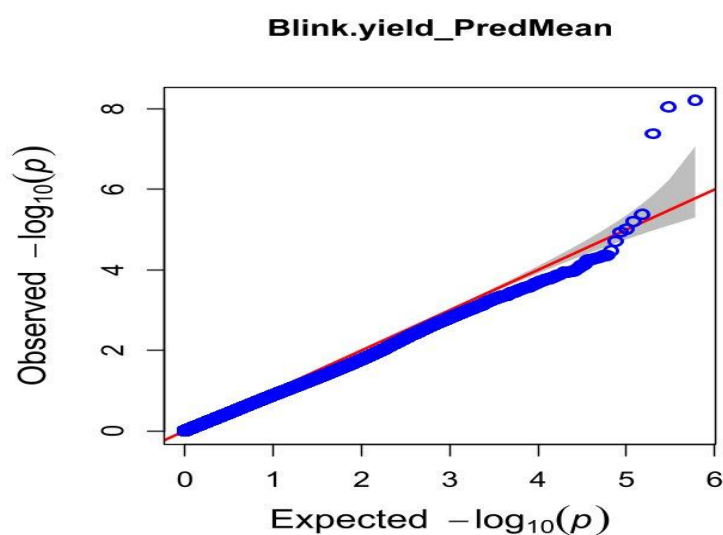
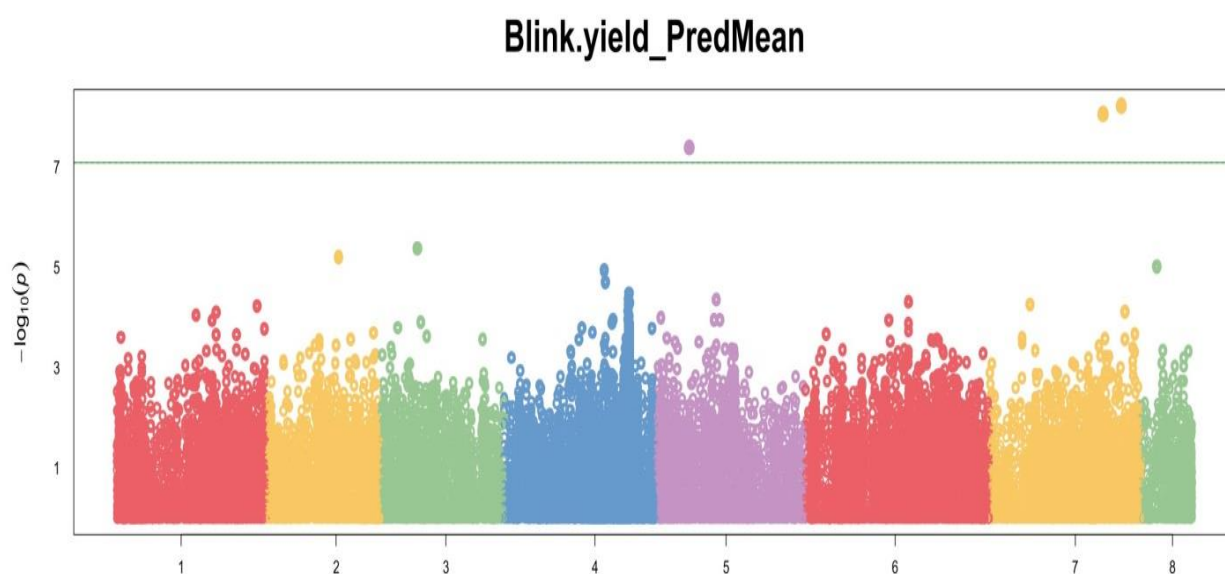
Supplementary Figure7f:Manhattan plot illustrating SNPs linked to root dry weight with their corresponding statistical significance represented by Q-Q plot



Supplementary Figure7h: Manhattan plot illustrating SNPs linked to r shoot dry weight with their corresponding statistical significance represented by Q-Q plot

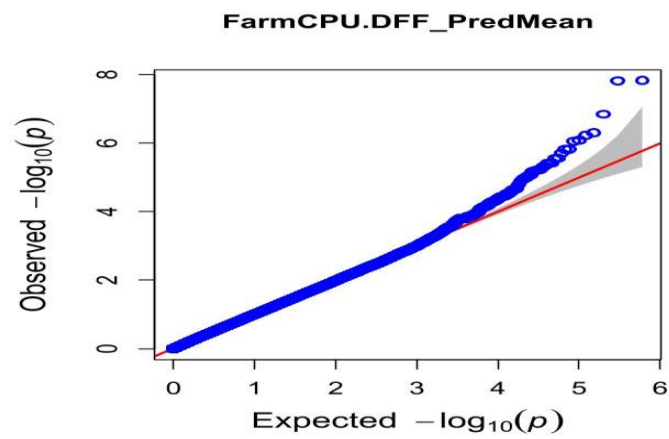
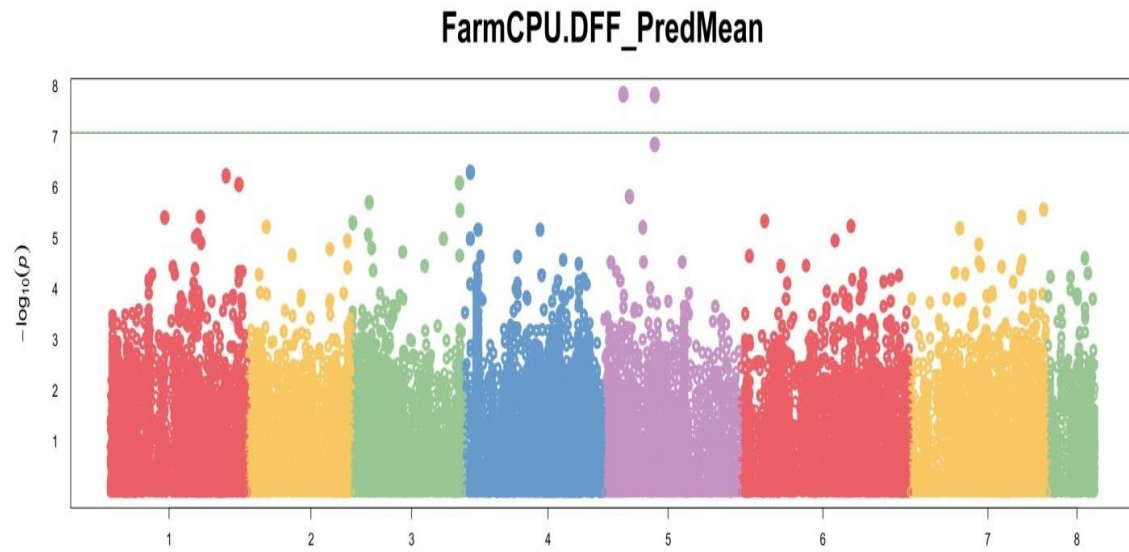


Supplementary Figure7i:Manhattan plot illustrating SNPs linked to shoot fresh weight with their corresponding statistical significance represented by Q-Q plot

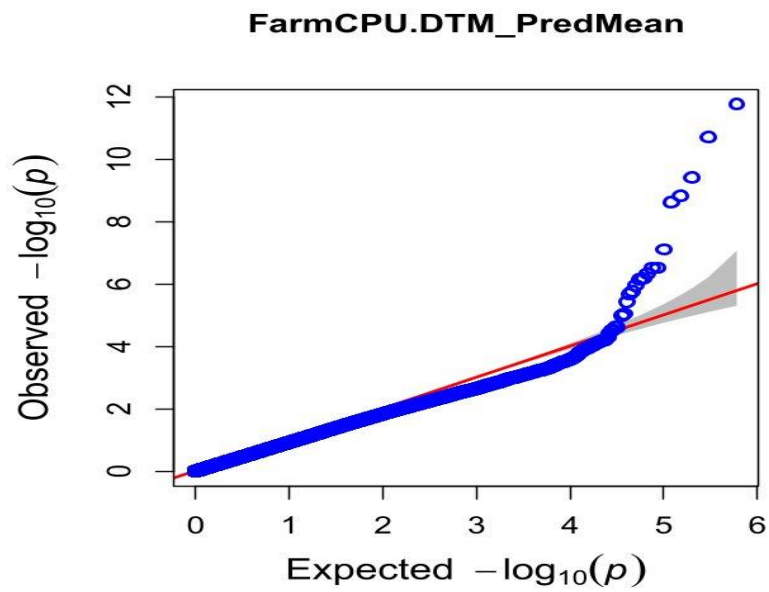
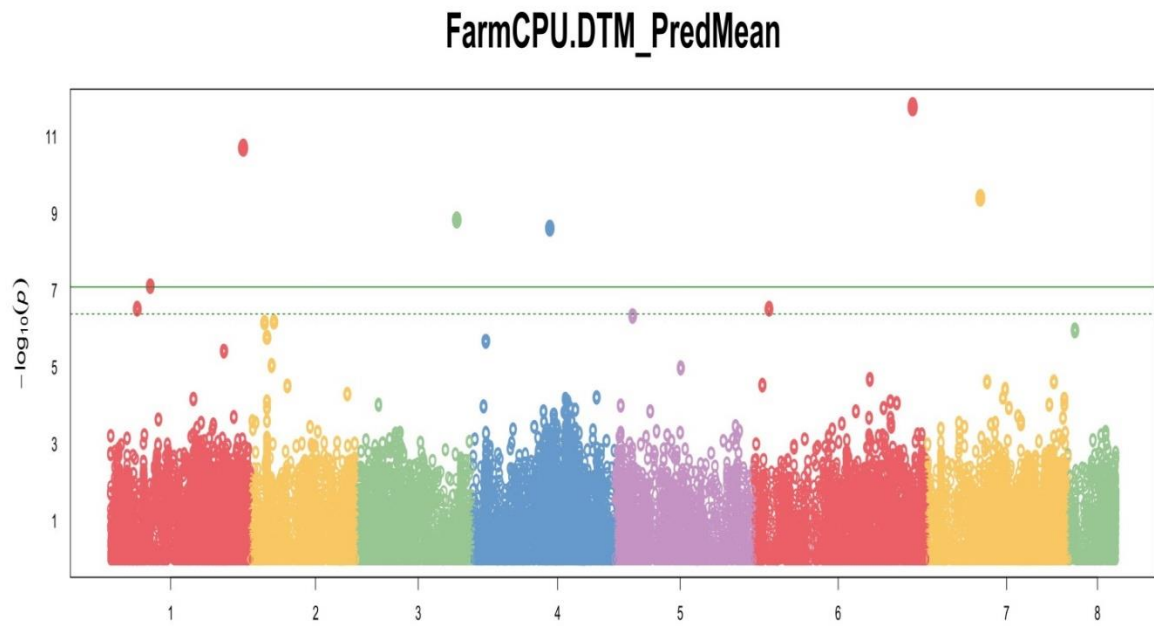


Supplementary Figure7j: Manhattan plot illustrating SNPs linked to yield with their corresponding statistical significance represented by Q-Q plot

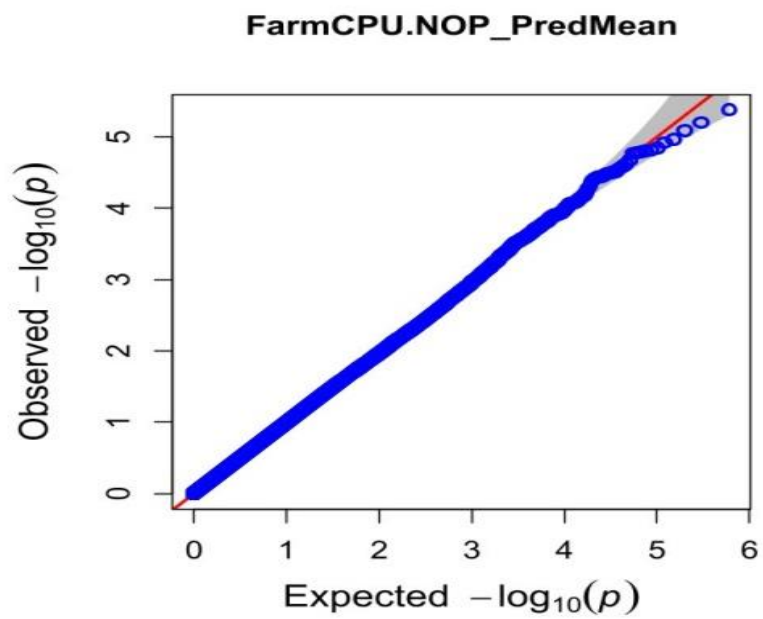
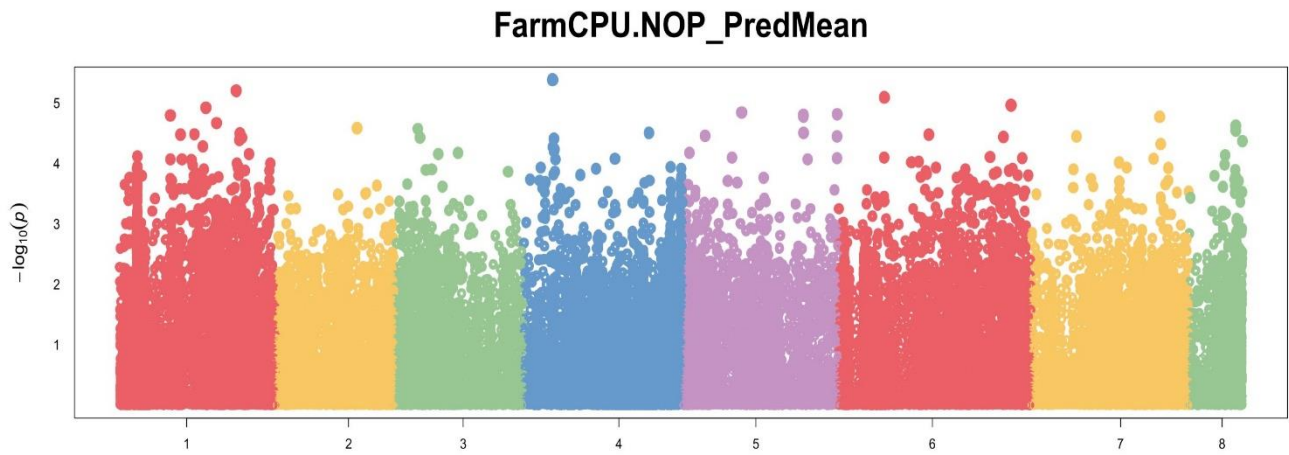
Supplementary Figure7: Manhattan plot illustrating SNPs linked to specific chickpea traits, along with their corresponding statistical significance represented by Q-Q plot for location 3 identified from Blink model



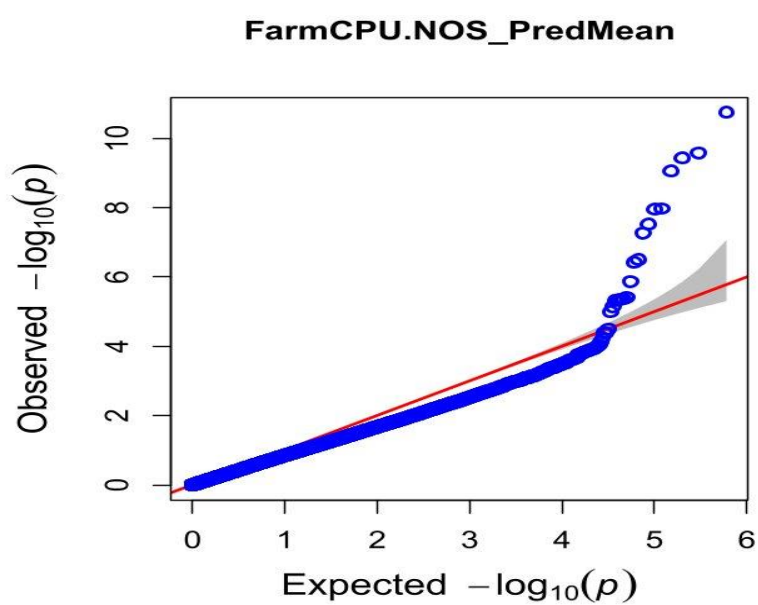
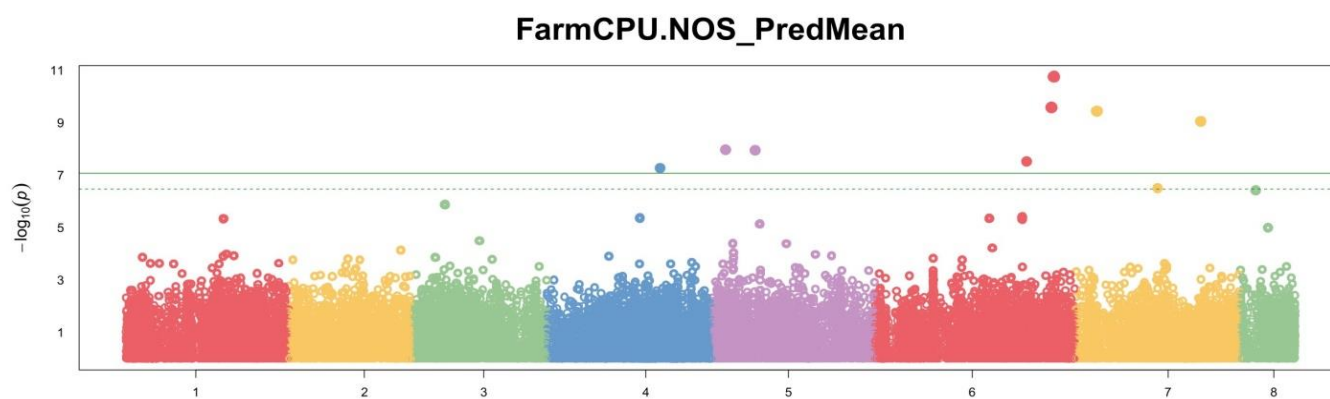
Supplementary Figure8a:Manhattan plot illustrating SNPs linked to Days fifty percentage flowering along with their corresponding statistical significance represented by Q-Q plot.



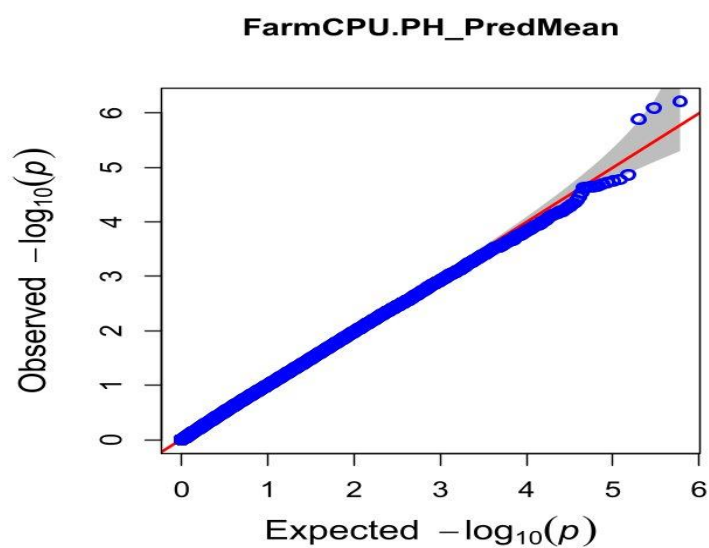
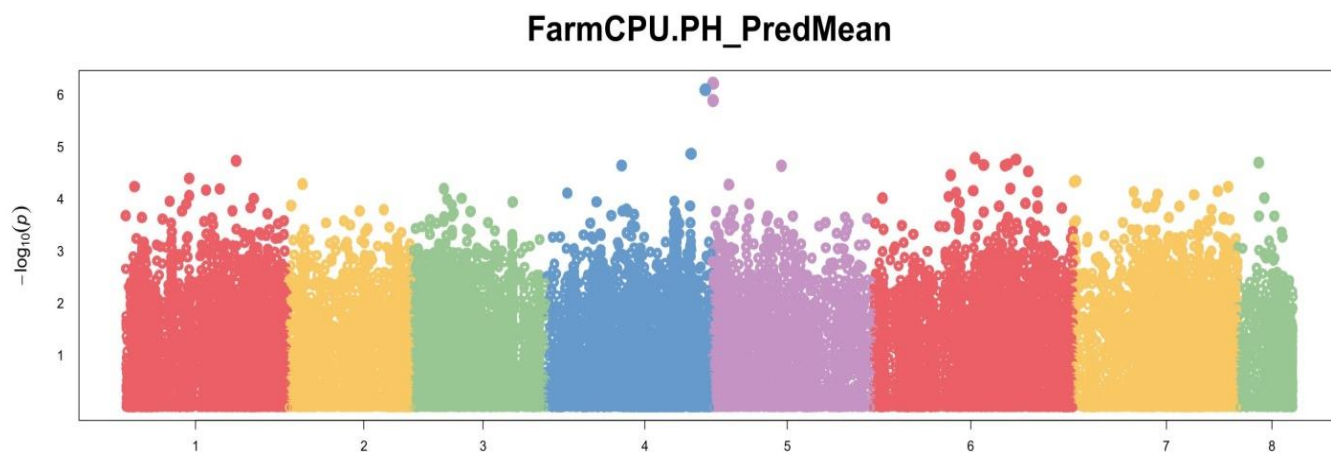
Supplementary Figure8b: Manhattan plot illustrating SNPs linked to Days to maturity along with their corresponding statistical significance represented by Q-Q plot



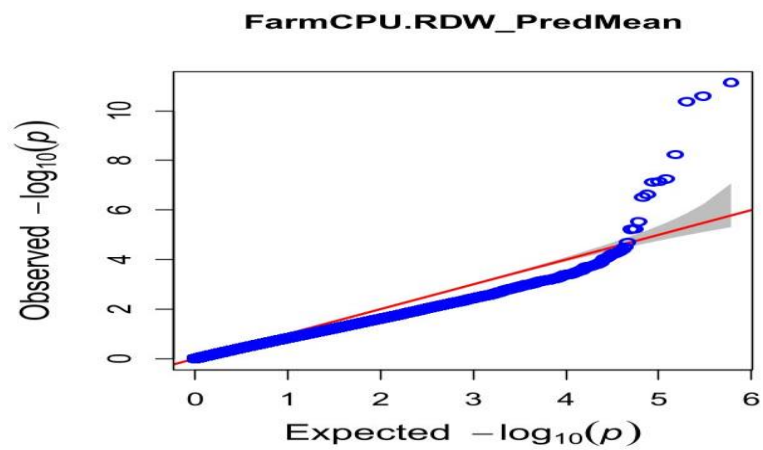
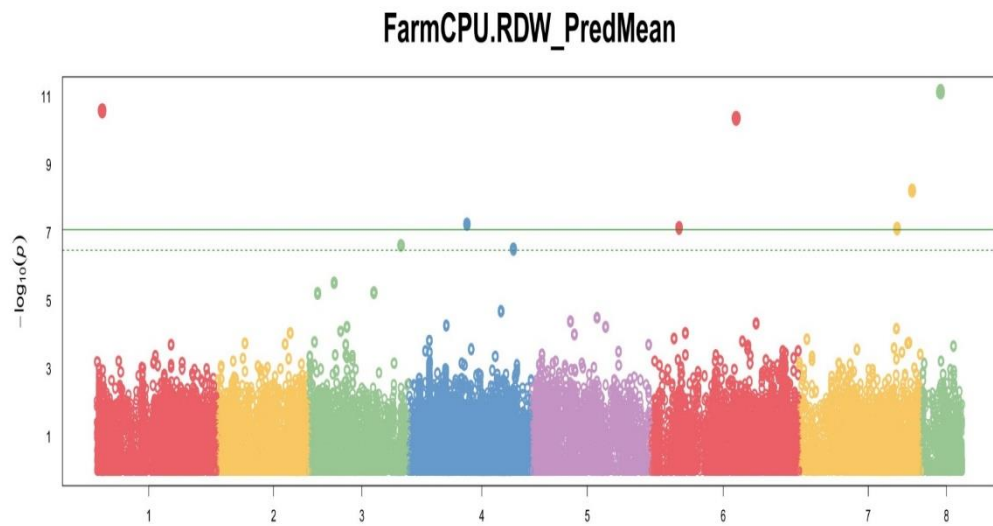
Supplementary Figure8c:Manhattan plot illustrating SNPs linked to number of pods along with their corresponding statistical significance represented by Q-Q plot



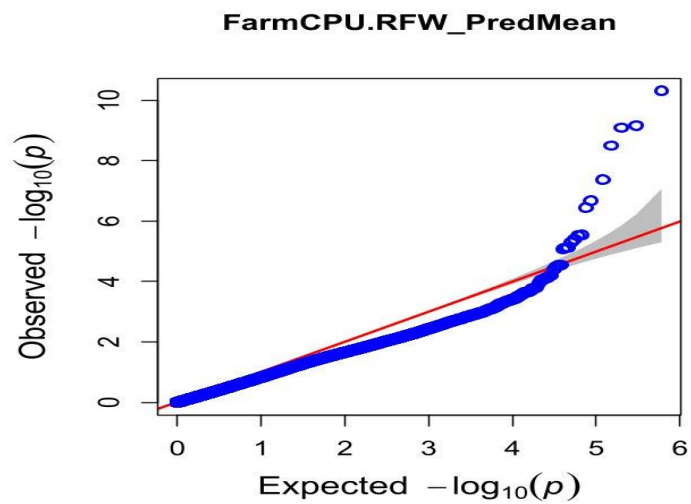
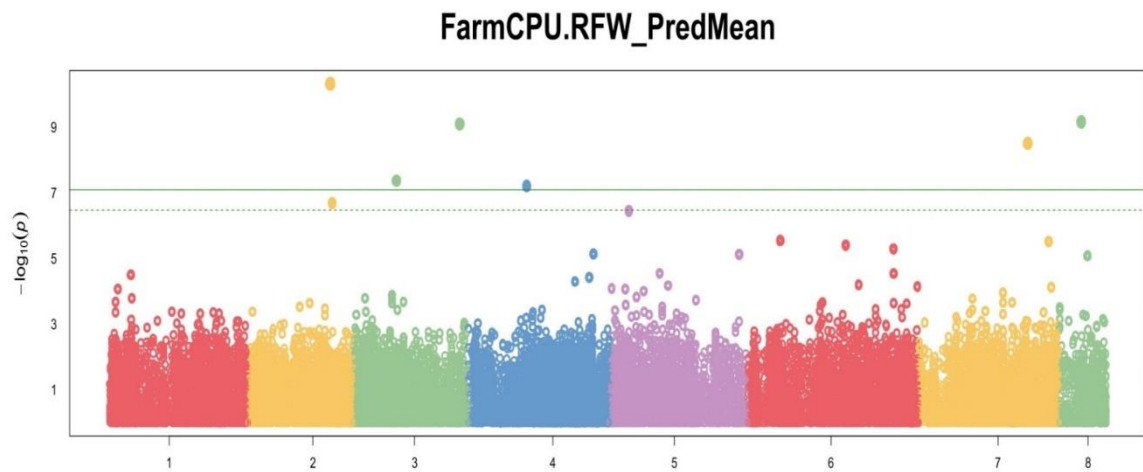
Supplementary Figure8d: Manhattan plot illustrating SNPs linked to number of seeds along with their corresponding statistical significance represented by Q-Q plot



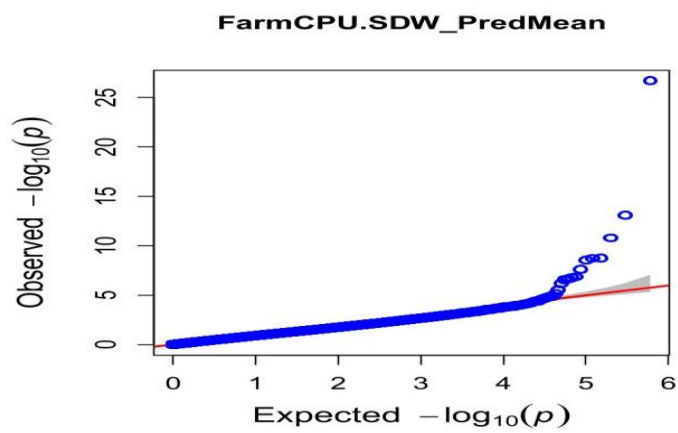
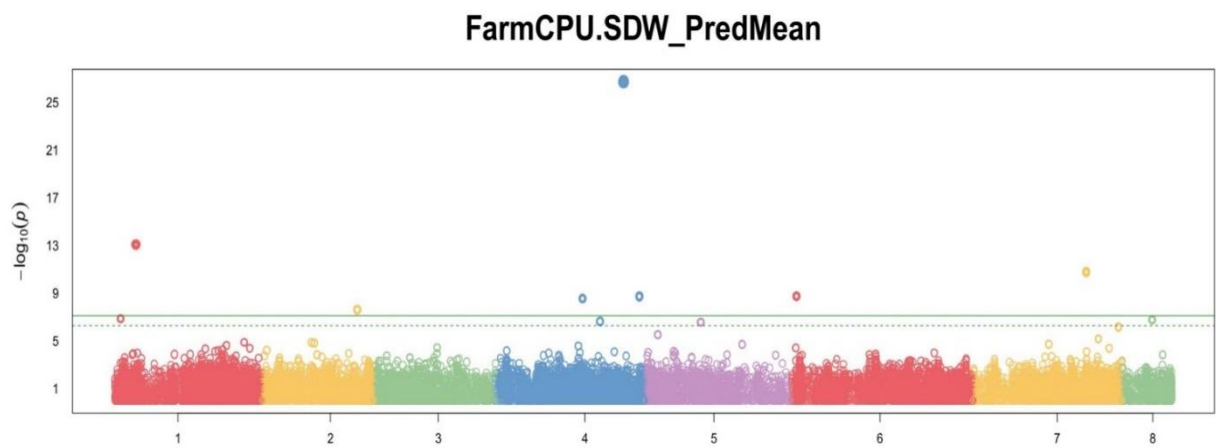
Supplementary Figure8e: Manhattan plot illustrating SNPs linked to plant height along with their corresponding statistical significance represented by Q-Q plot



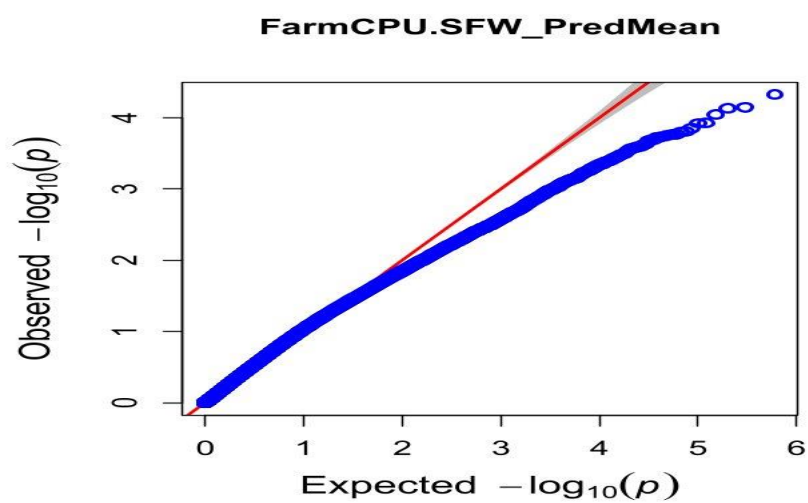
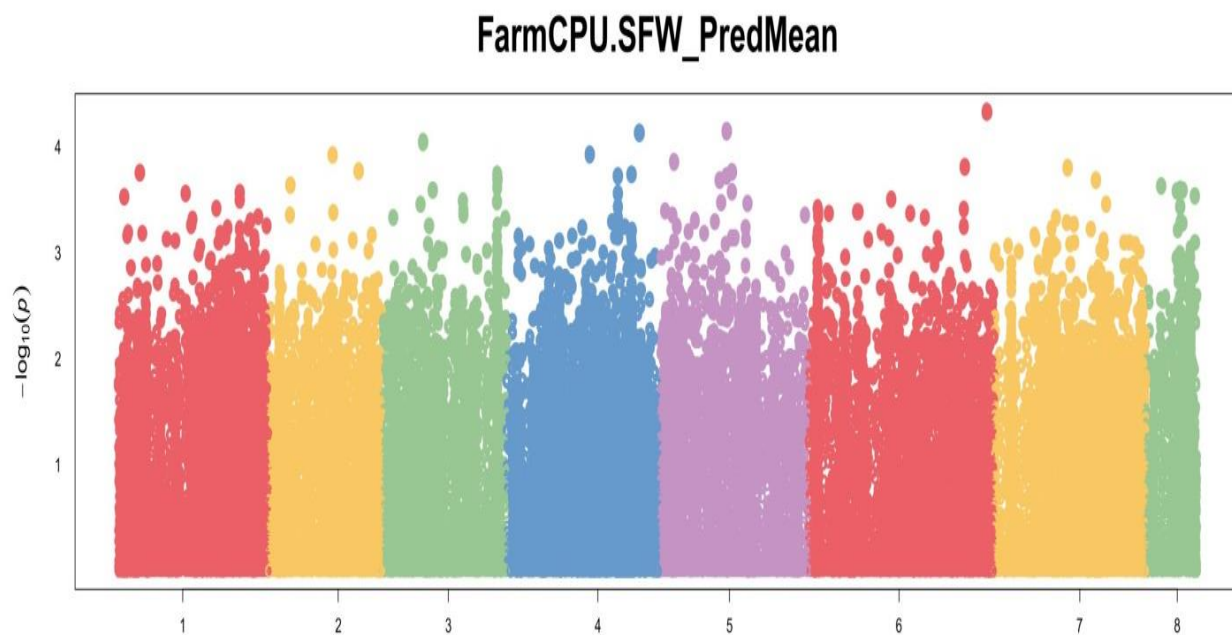
Supplementary Figure8f:Manhattan plot illustrating SNPs linked to root dry weight with their corresponding statistical significance represented by Q-Q plot



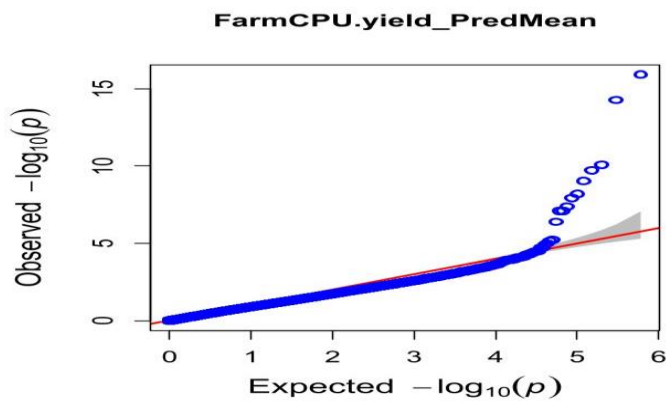
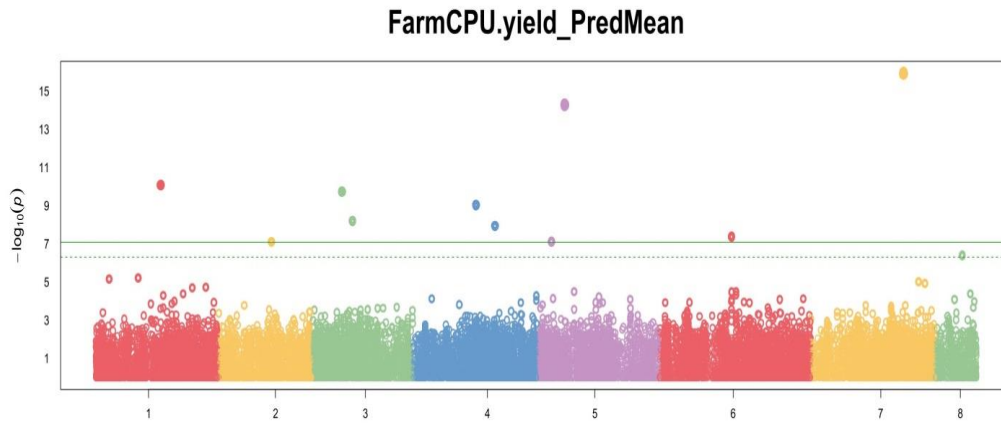
Supplementary Figure8g: Manhattan plot illustrating SNPs linked to root fresh weight with their corresponding statistical significance represented by Q-Q plot



Supplementary Figure8h: Manhattan plot illustrating SNPs linked to shoot dry weight with their corresponding statistical significance represented by Q-Q plot

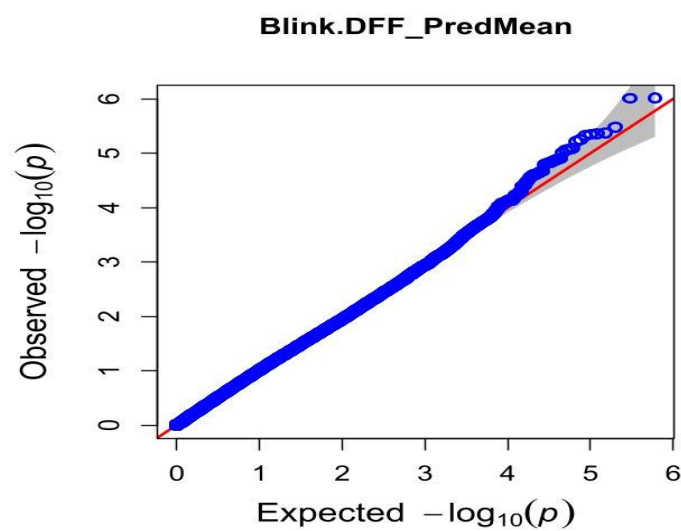
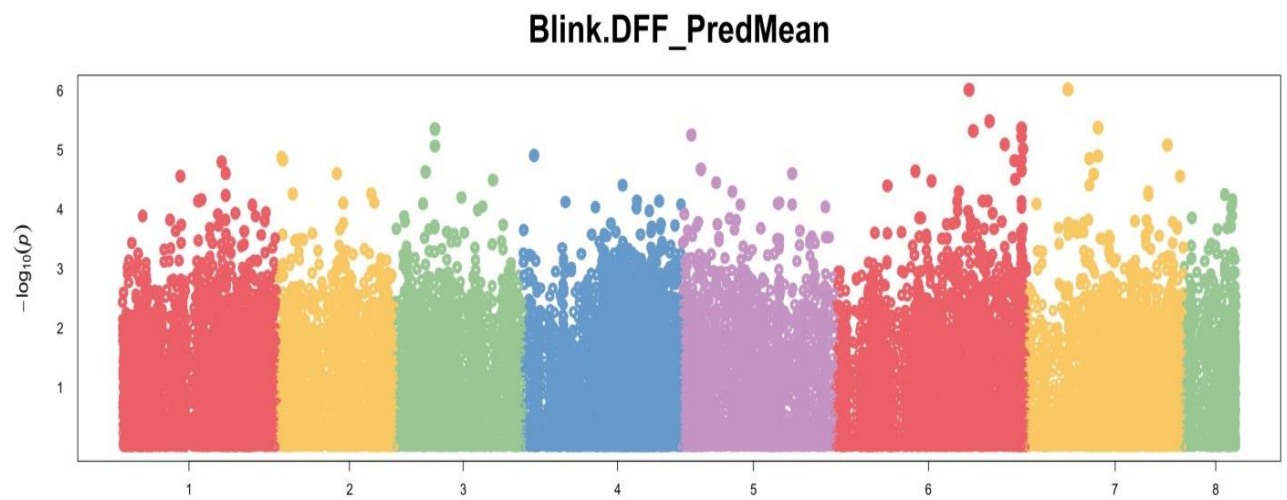


Supplementary Figure8i: Manhattan plot illustrating SNPs linked to shoot fresh weight with their corresponding statistical significance represented by Q-Q plot

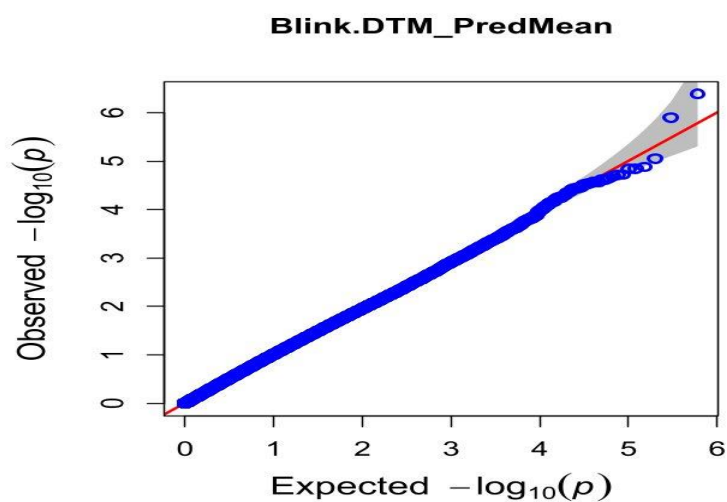
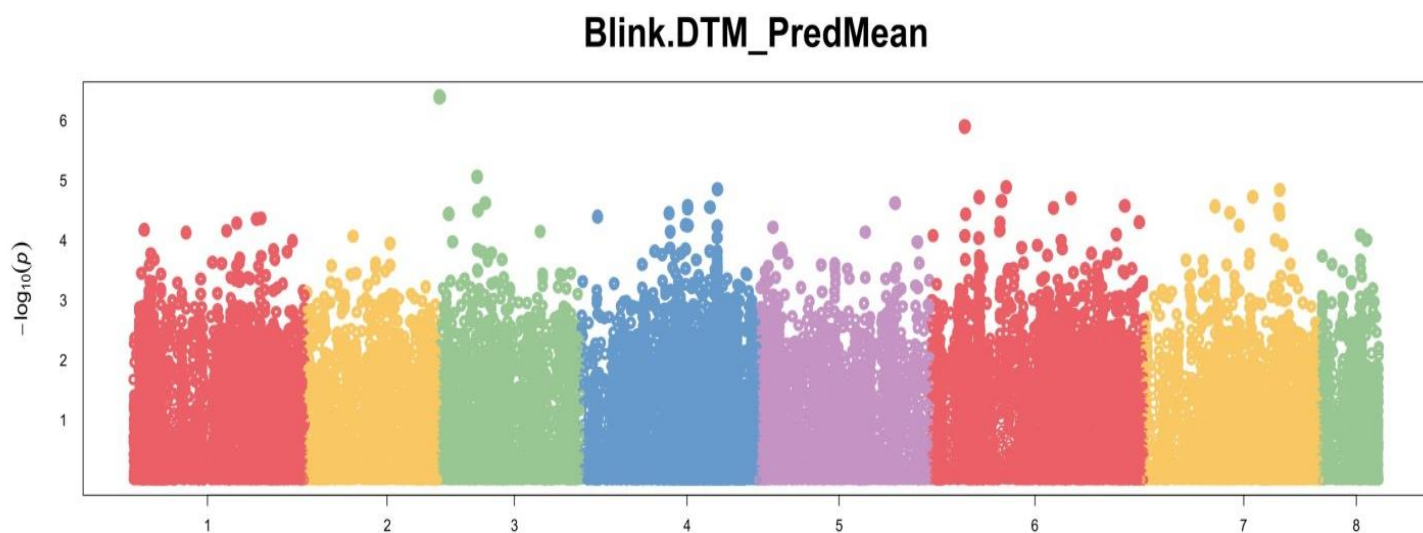


Supplementary Figure8j: Manhattan plot illustrating SNPs linked to yield with their corresponding statistical significance represented by Q-Q plot

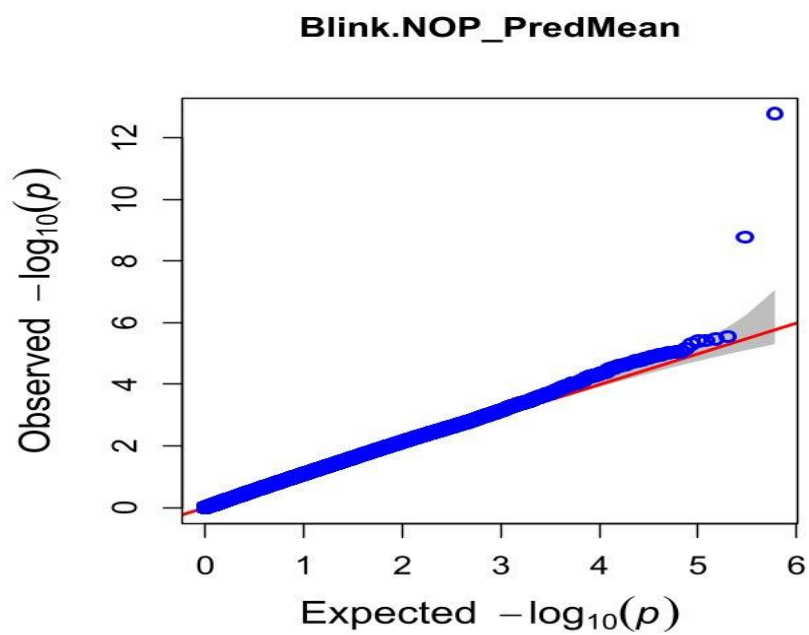
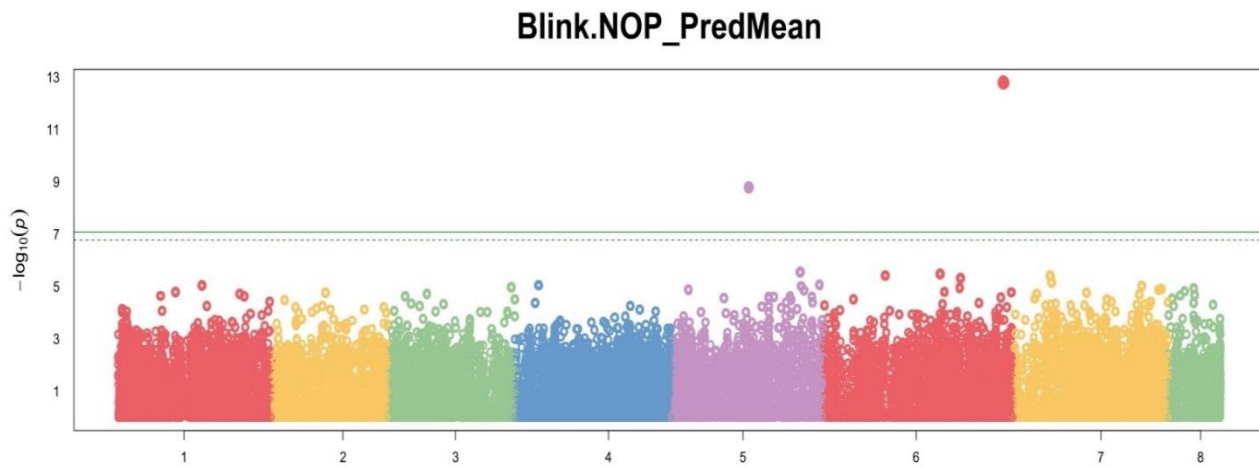
Supplementary Figure8: Manhattan plot illustrating SNPs linked to specific chickpea traits, along with their corresponding statistical significance represented by Q-Q plot for location 3 identified from FarmCPU model



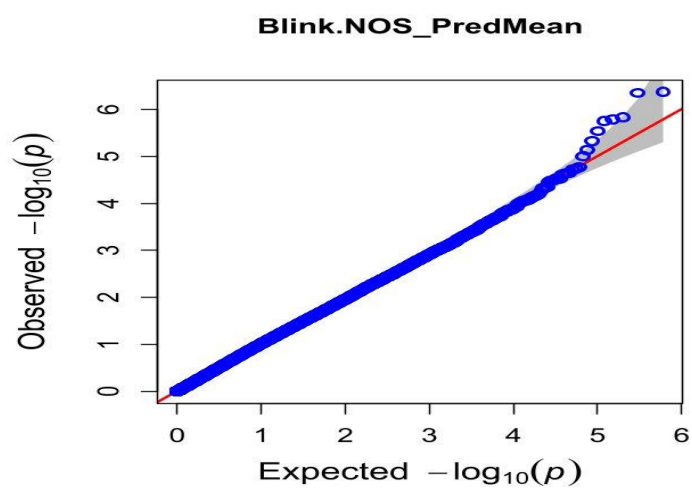
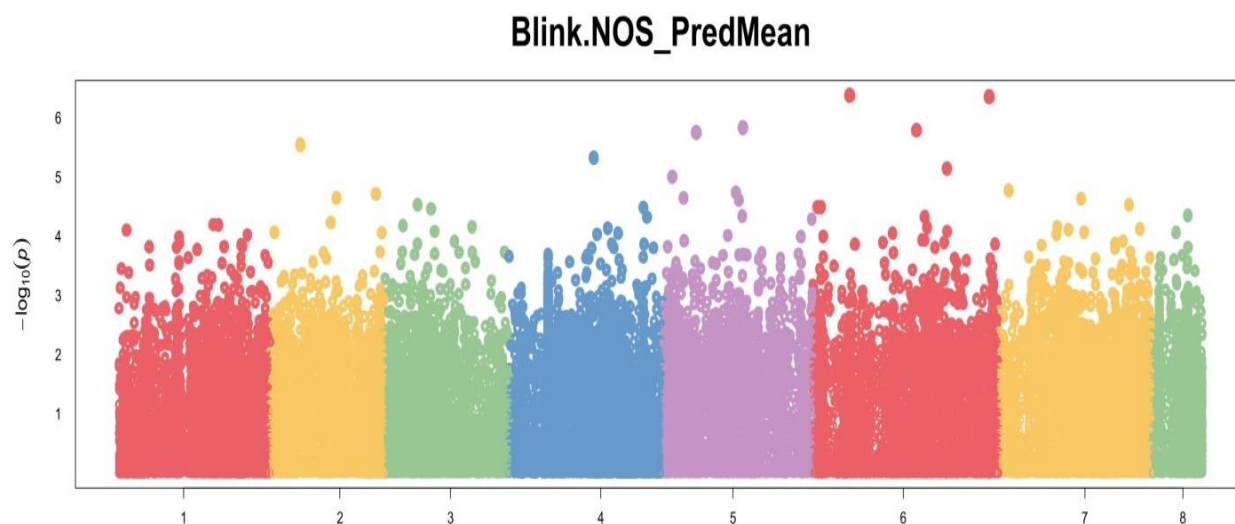
Supplementary Figure9a: Manhattan plot illustrating SNPs linked to Days fifty percentage flowering along with their corresponding statistical significance represented by Q-Q plot



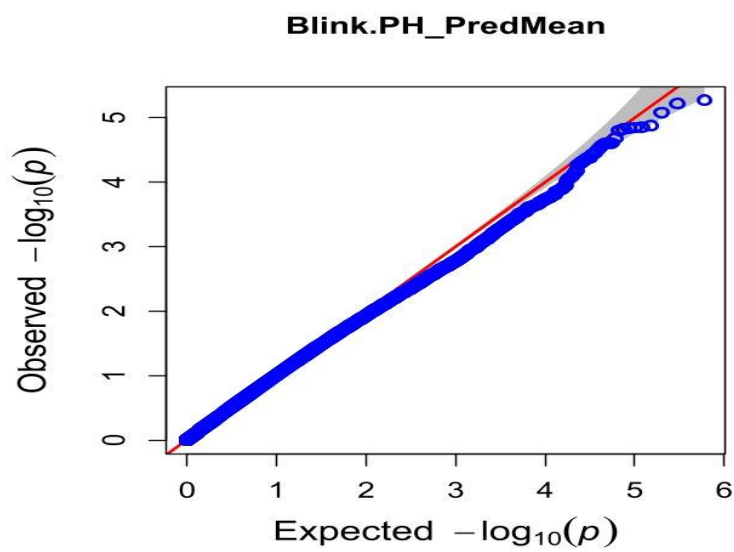
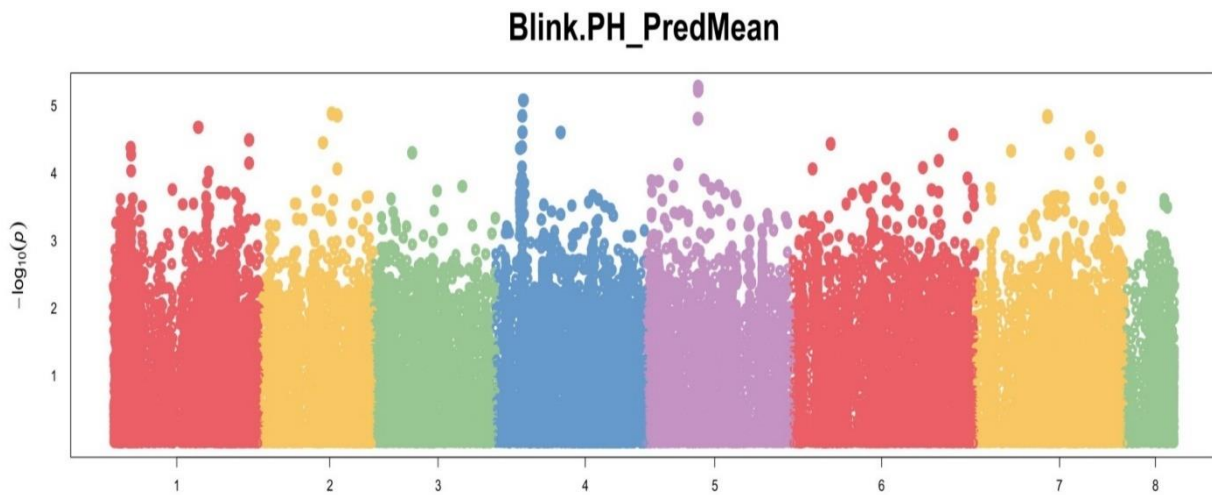
Supplementary Figure9b: Manhattan plot illustrating SNPs linked to Days to maturity along with their corresponding statistical significance represented by Q-Q plot



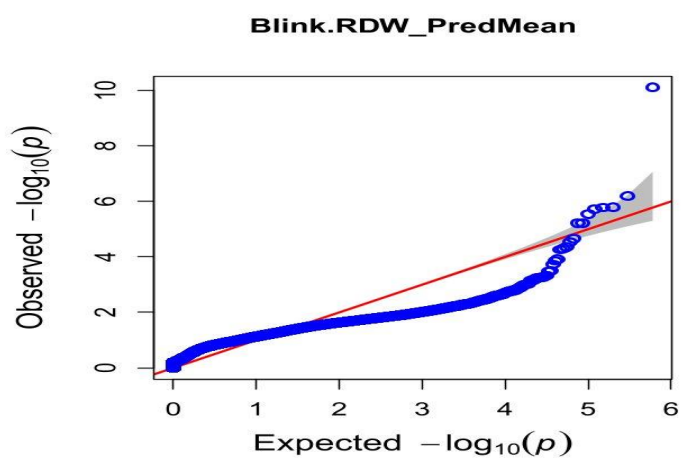
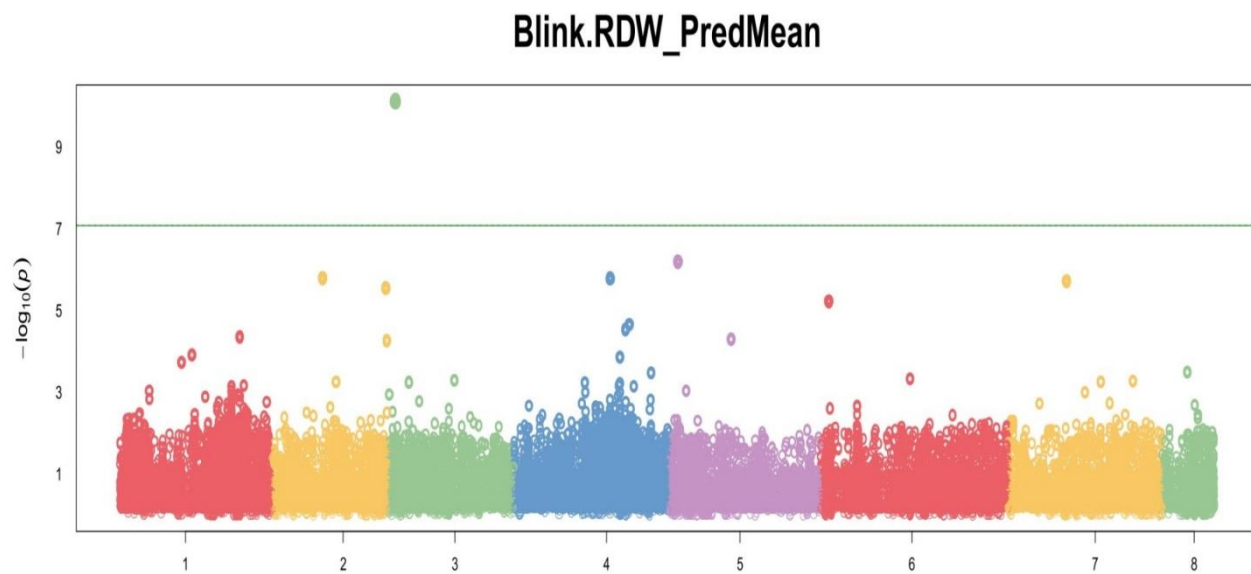
Supplementary Figure9c: Manhattan plot illustrating SNPs linked to number of pods along with their corresponding statistical significance represented by Q-Q plot



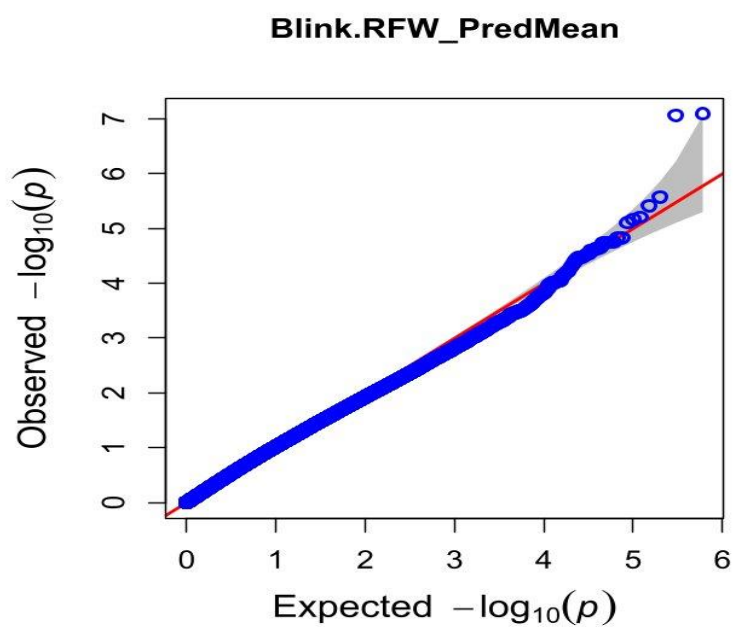
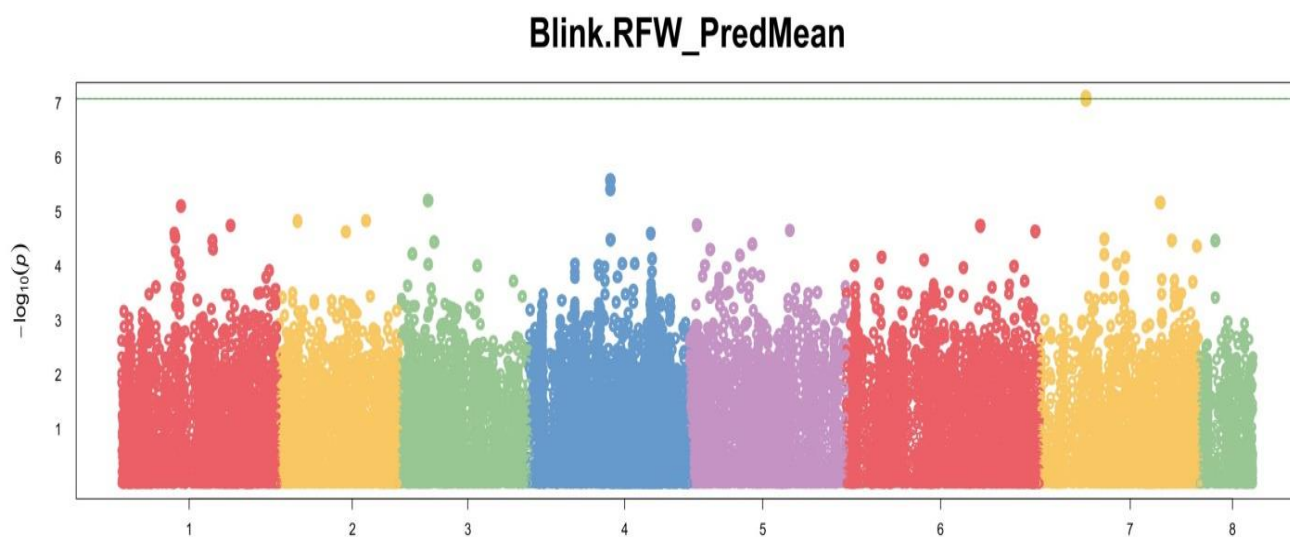
Supplementary Figure9d: Manhattan plot illustrating SNPs linked to number of seeds along with their corresponding statistical significance represented by Q-Q plot.



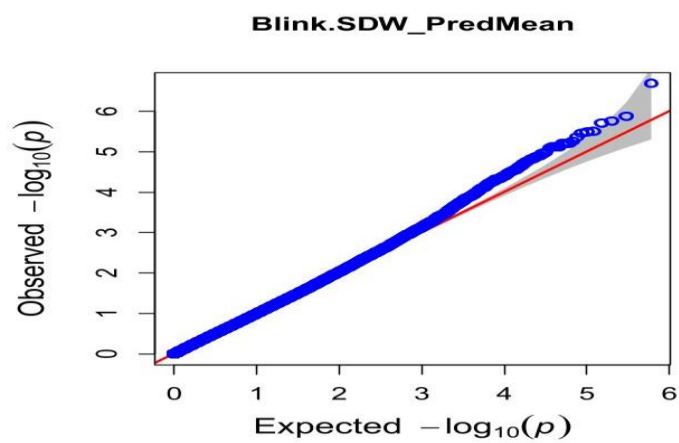
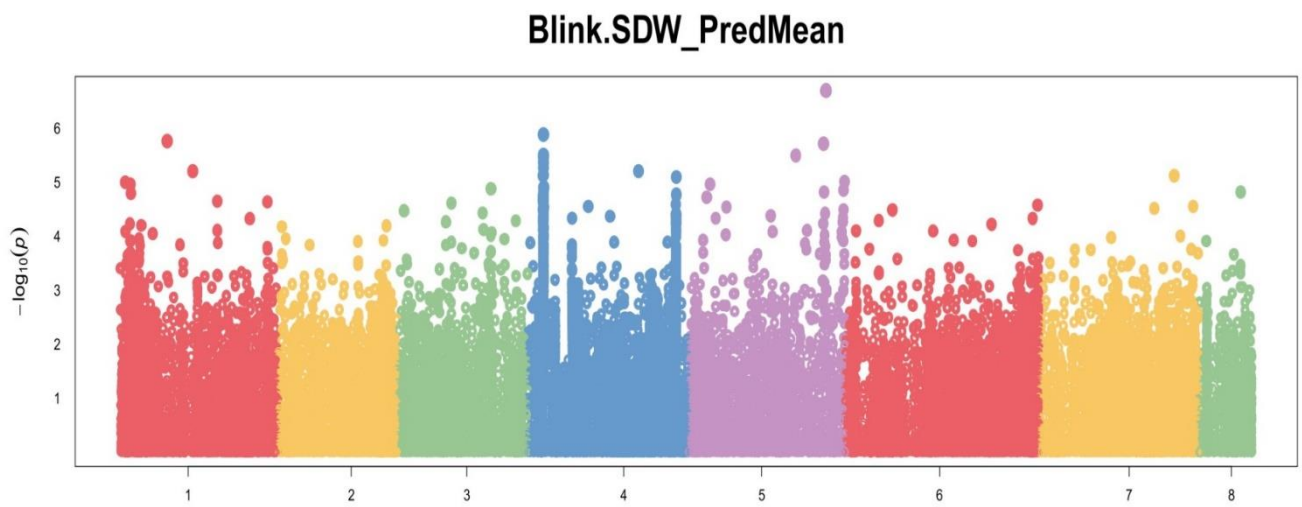
Supplementary Figure9e: Manhattan plot illustrating SNPs linked to plant height along with their corresponding statistical significance represented by Q-Q plot



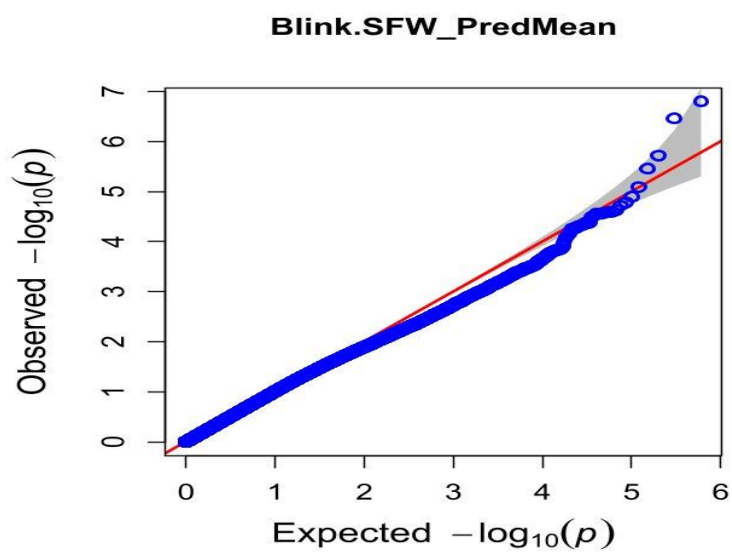
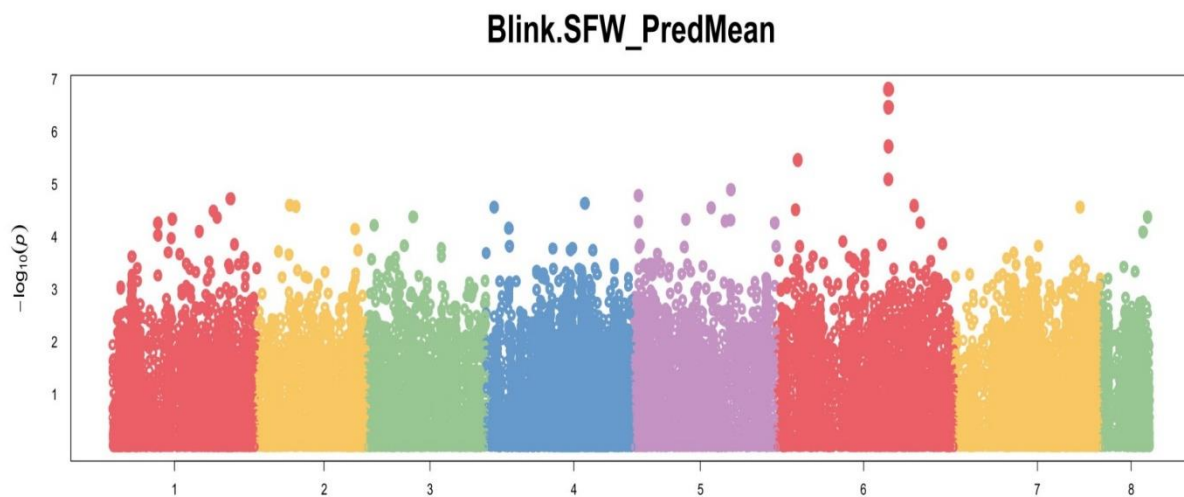
Supplementary Figure9f: Manhattan plot illustrating SNPs linked to root dry weight with their corresponding statistical significance represented by Q-Q plot



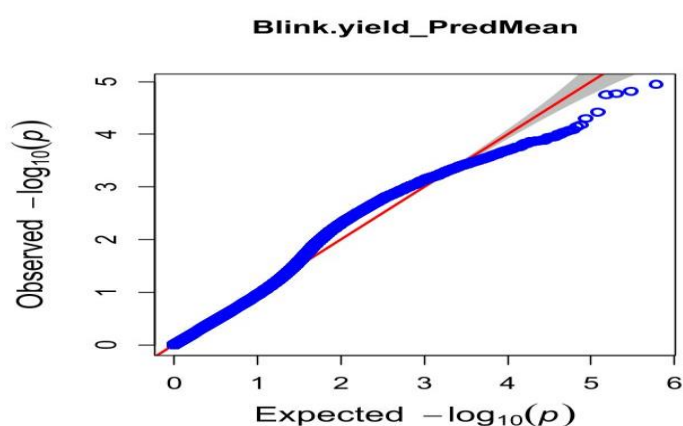
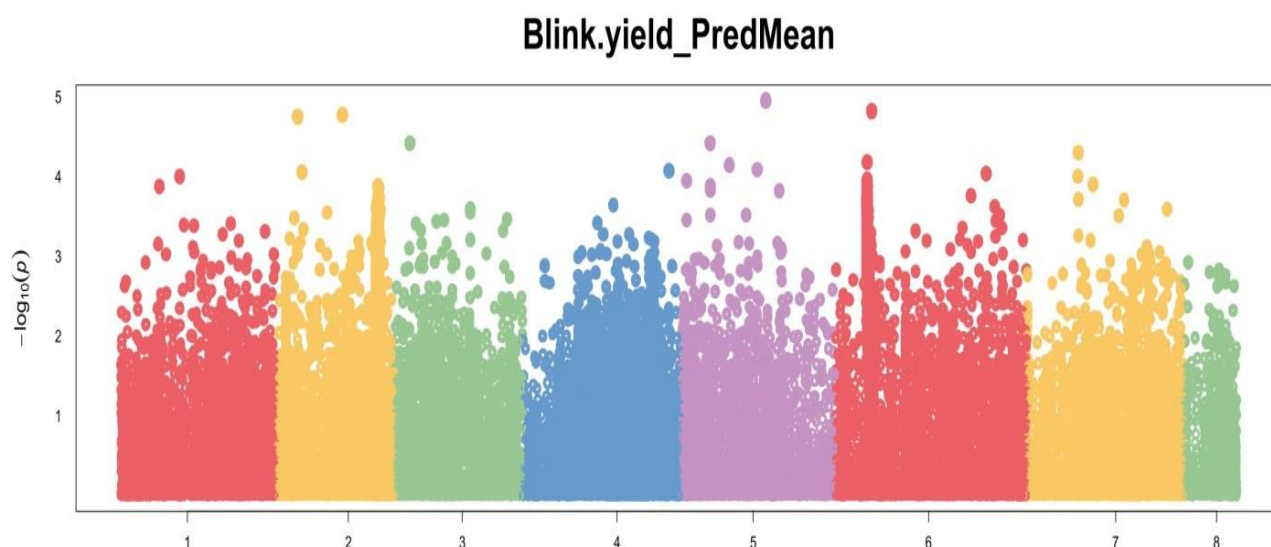
Supplementary Figure9f: Manhattan plot illustrating SNPs linked to root fresh weight with their corresponding statistical significance represented by Q-Q plot



Supplementary Figure9h: Manhattan plot illustrating SNPs linked to r shoot dry weight with their corresponding statistical significance represented by Q-Q plot

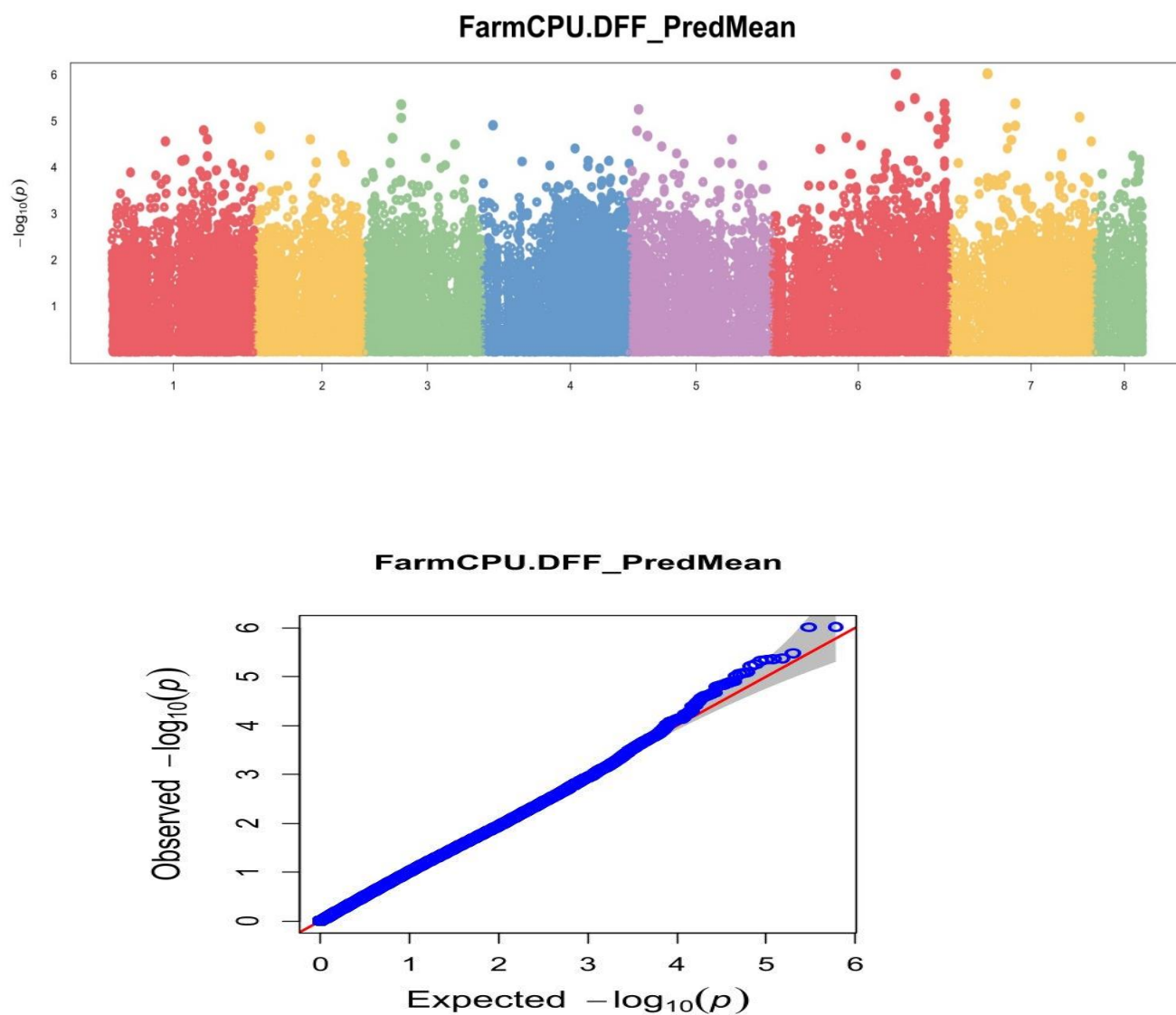


Supplementary Figure9i: Manhattan plot illustrating SNPs linked to shoot fresh weight with their corresponding statistical significance represented by Q-Q plot

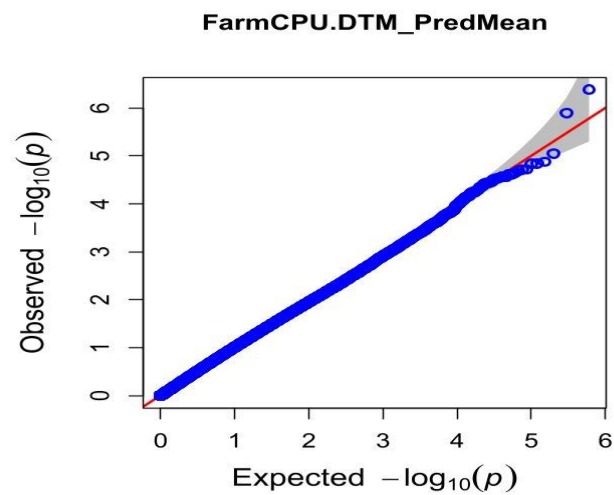
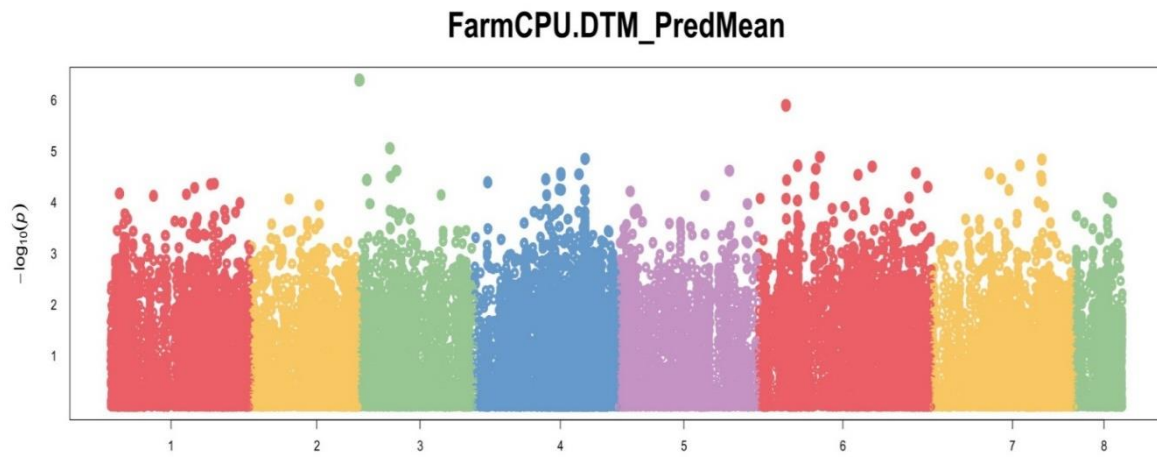


Supplementary Figure9j: Manhattan plot illustrating SNPs linked to yield with their corresponding statistical significance represented by Q-Q plot

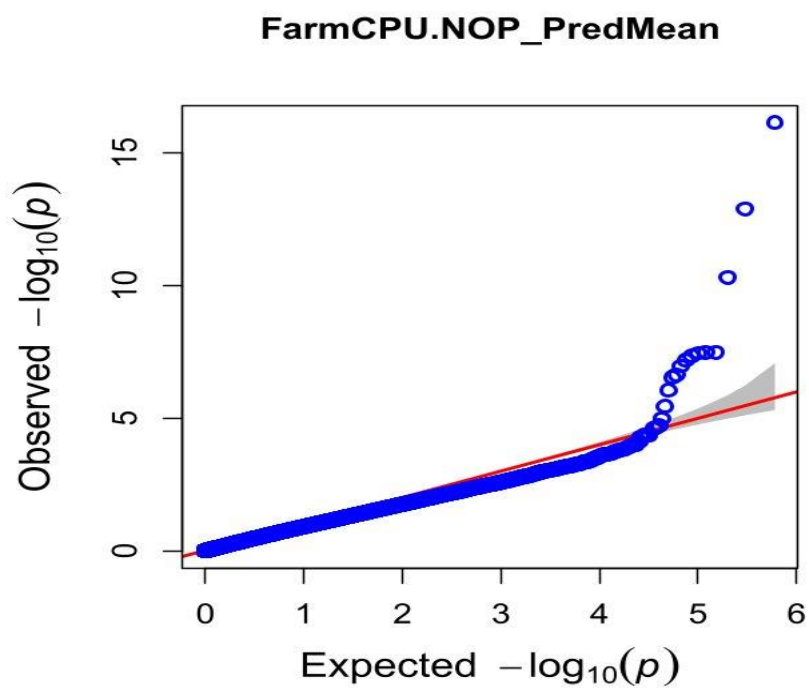
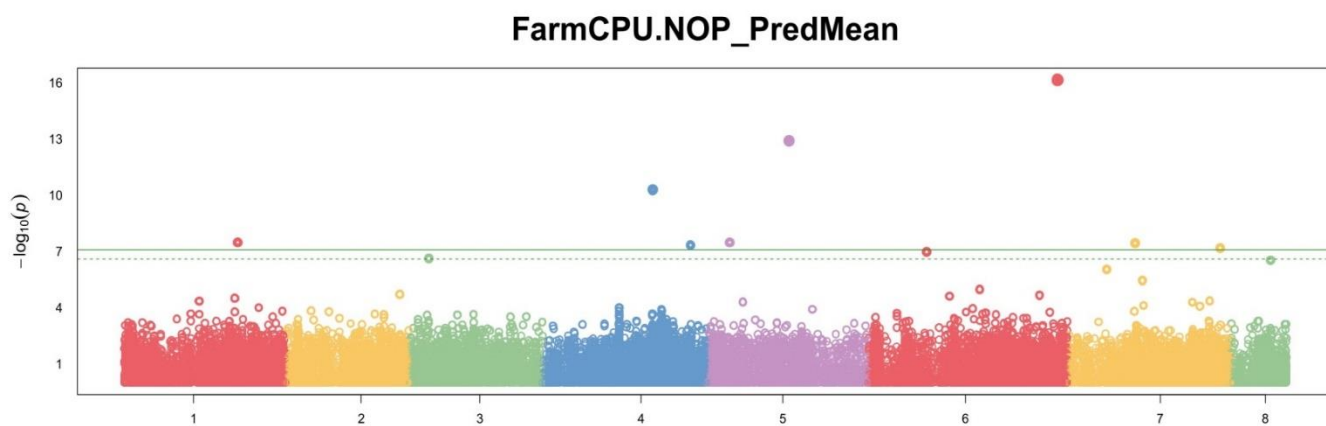
Supplementary Figure9: Manhattan plot illustrating SNPs linked to specific chickpea traits, along with their corresponding statistical significance represented by Q-Q plot for location 4 identified from Blink model



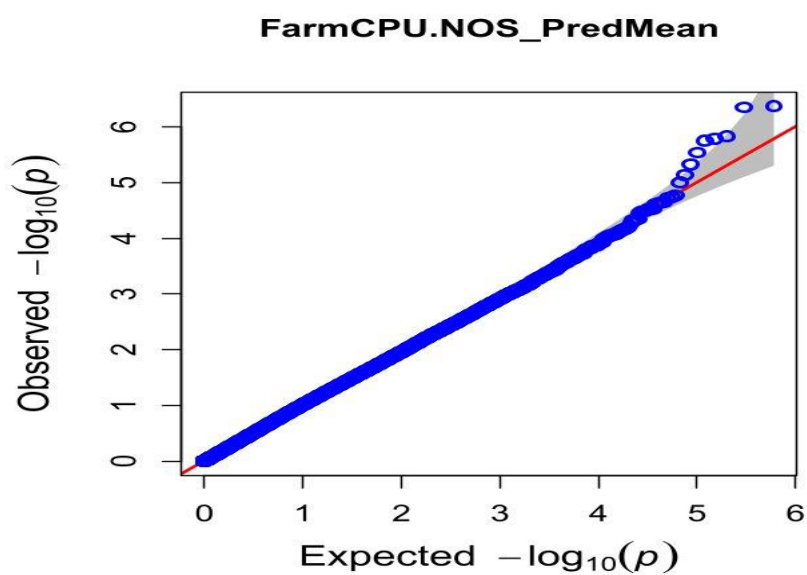
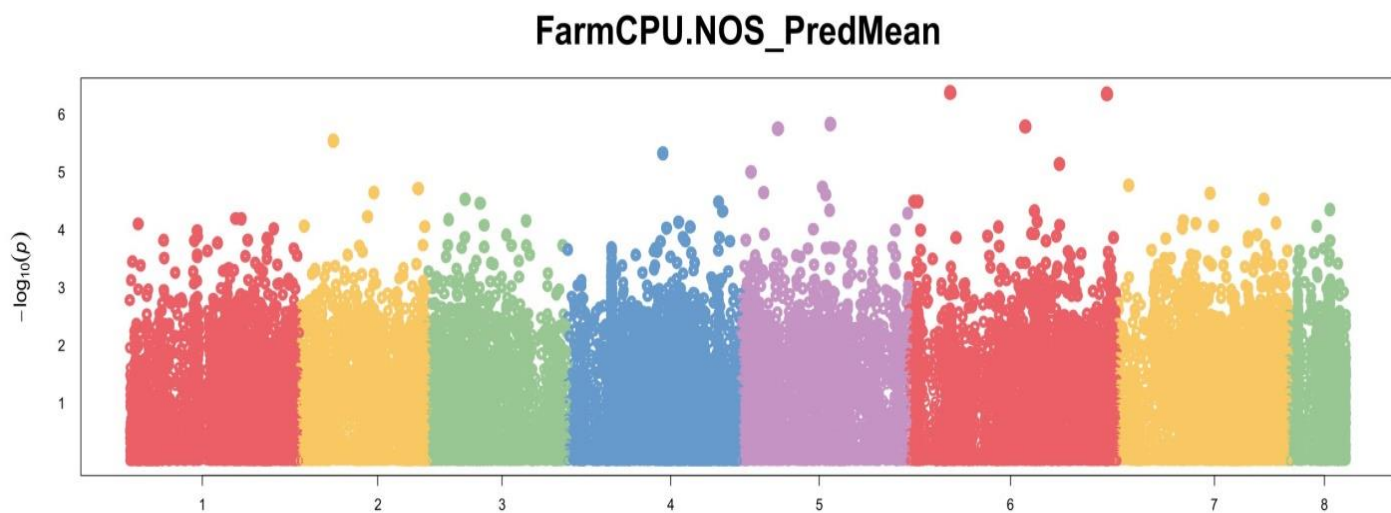
Supplementary Figure10a: Manhattan plot illustrating SNPs linked to Days fifty percentage flowering along with their corresponding statistical significance represented by Q-Q plot.



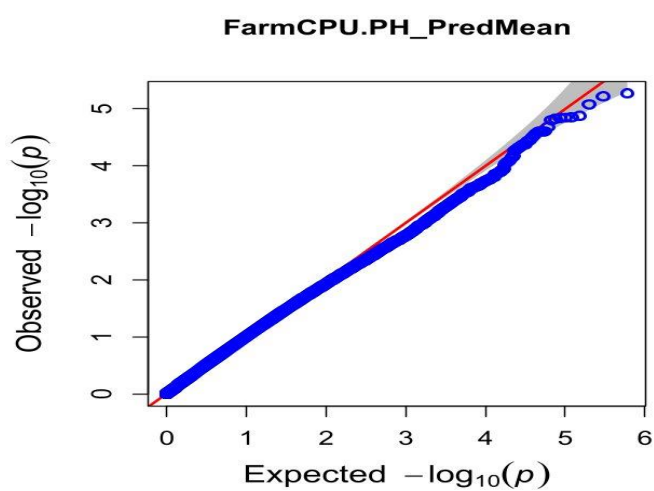
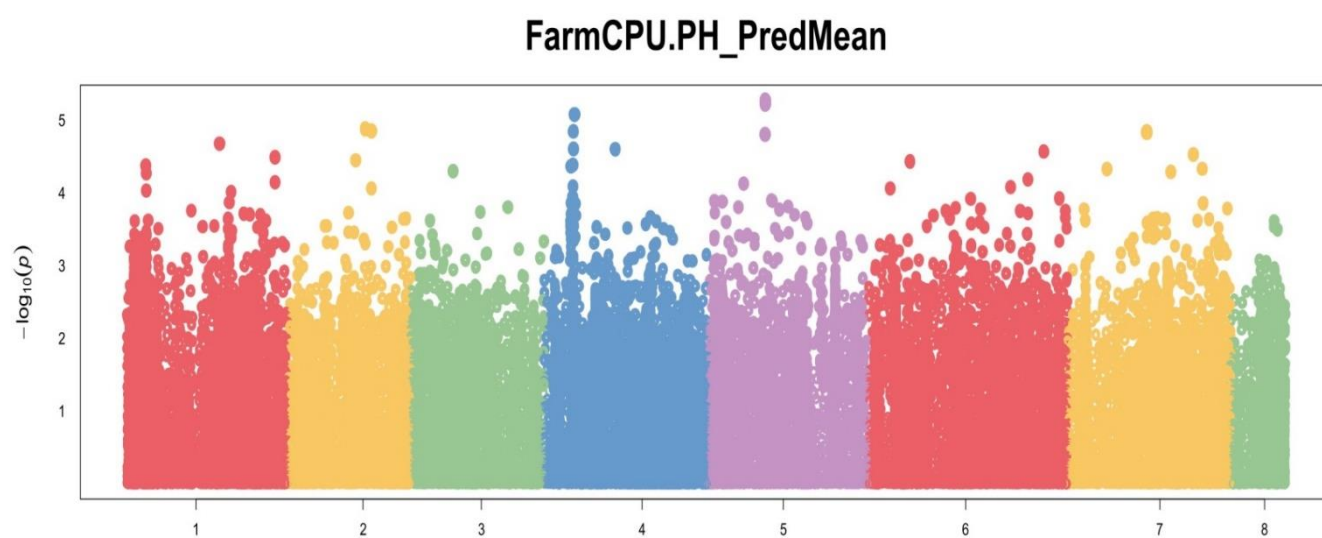
Supplementary Figure10b: Manhattan plot illustrating SNPs linked to Days to maturity along with their corresponding statistical significance represented by Q-Q plot



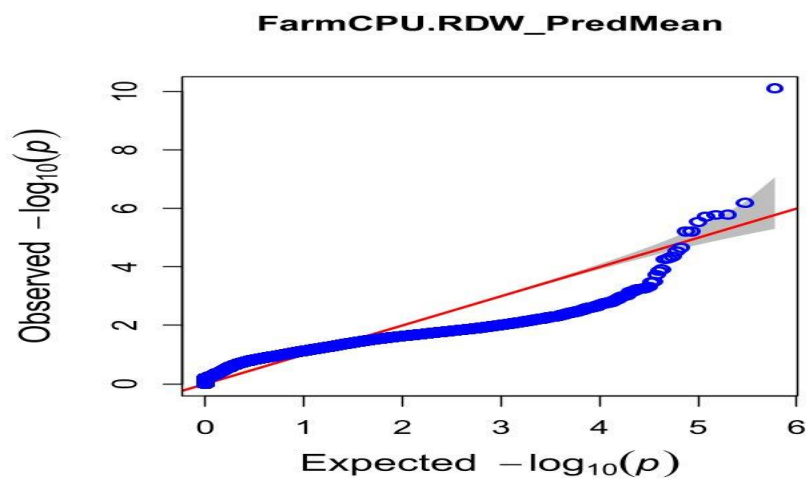
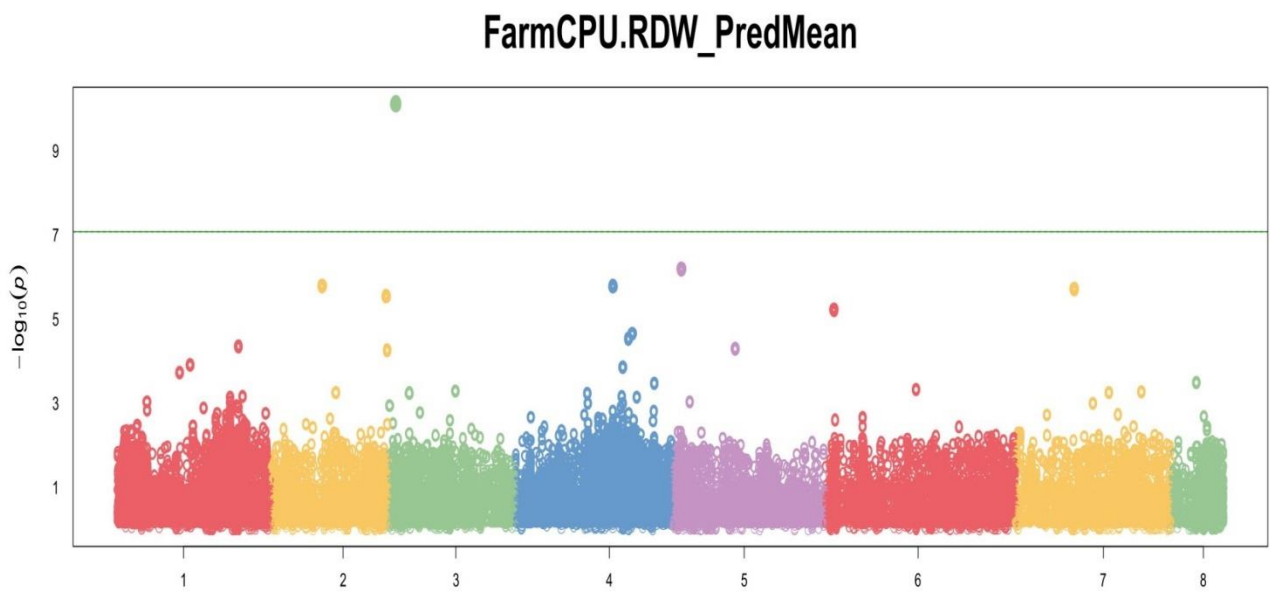
Supplementary Figure10b: Manhattan plot illustrating SNPs linked to number of along with their corresponding statistical significance represented by Q-Q plot



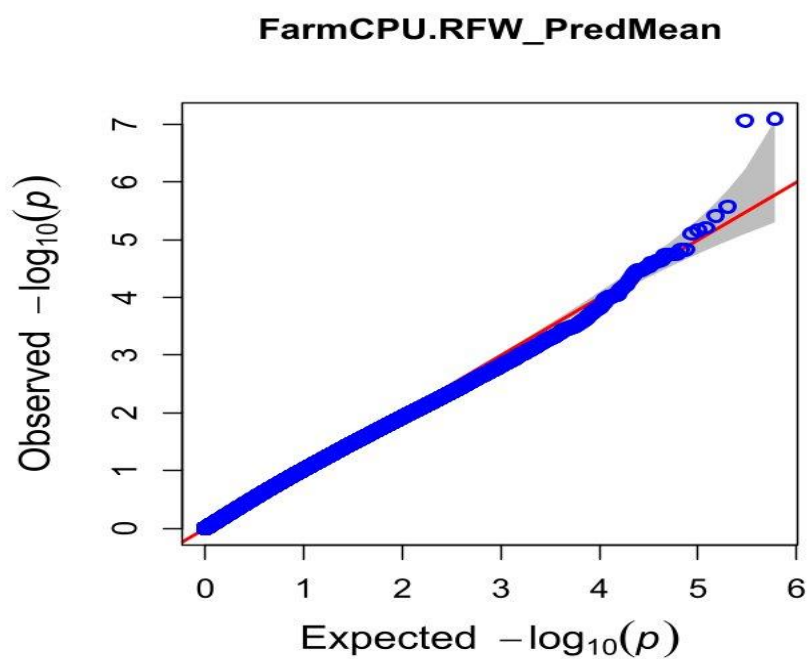
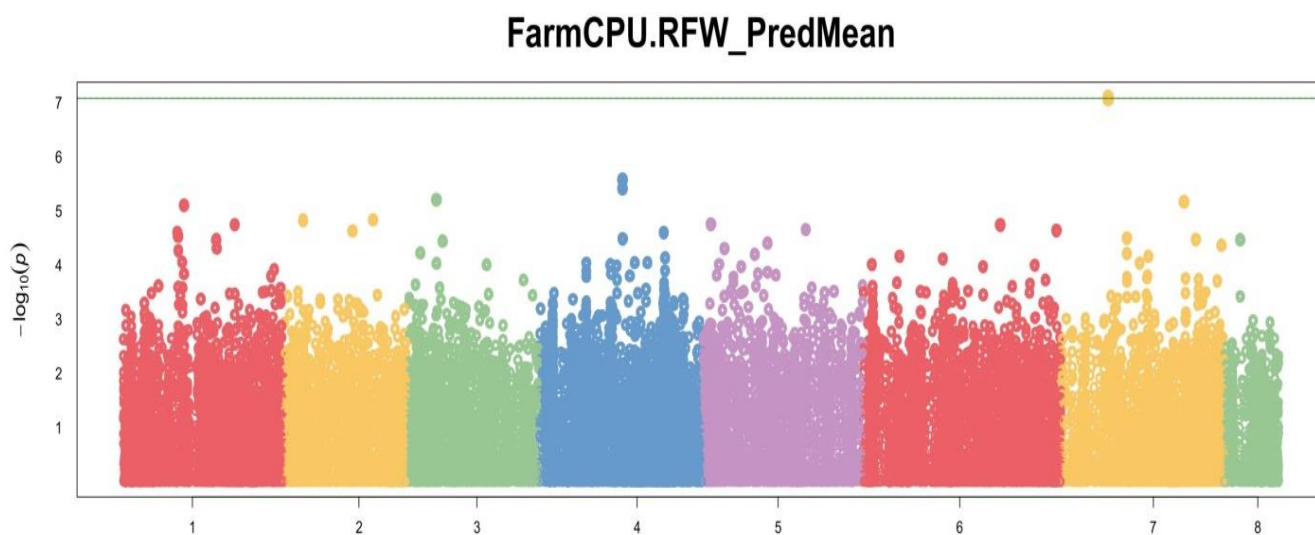
Supplementary Figure10d: Manhattan plot illustrating SNPs linked to number of seeds along with their corresponding statistical significance represented by Q-Q plot



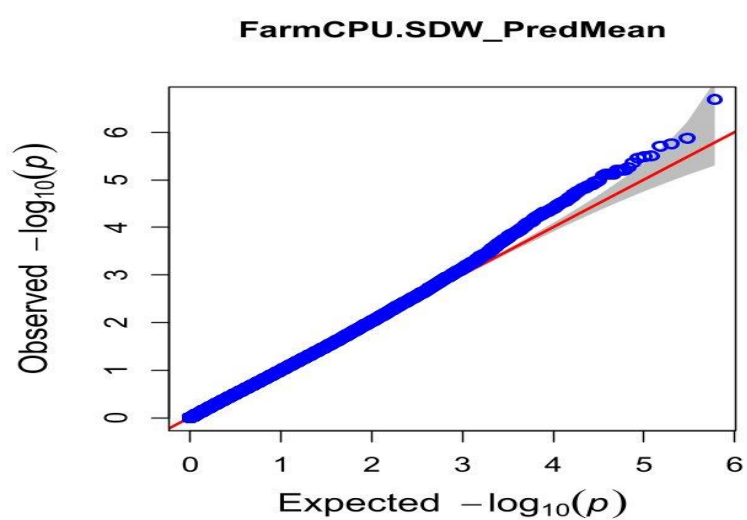
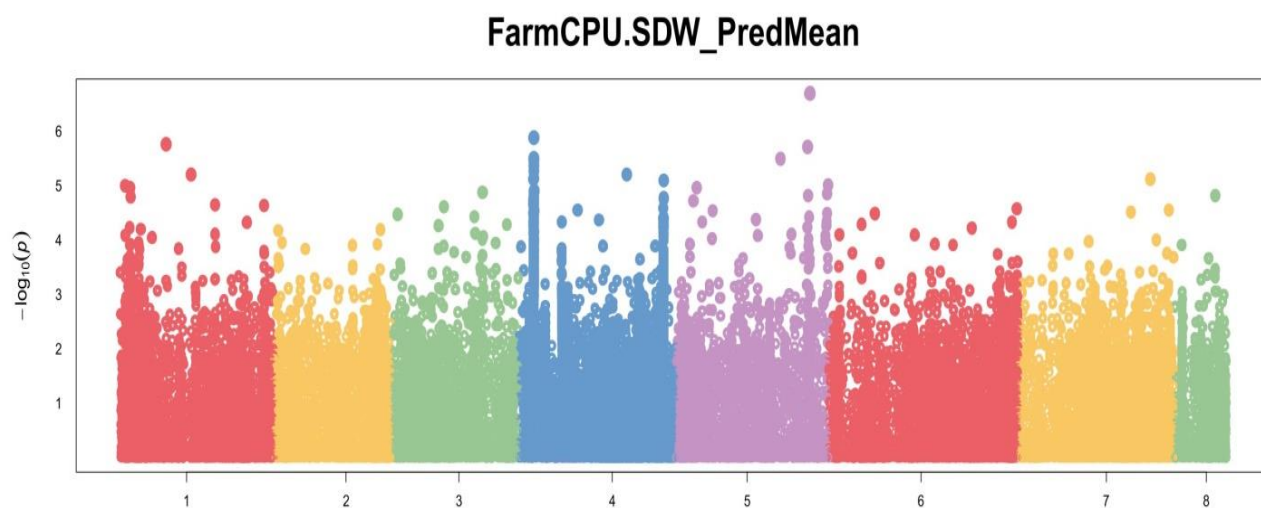
Supplementary Figure10e: Manhattan plot illustrating SNPs linked to plant height along with their corresponding statistical significance represented by Q-Q plot



Supplementary Figure10f: Manhattan plot illustrating SNPs linked to root dry weight with their corresponding statistical significance represented by Q-Q plot

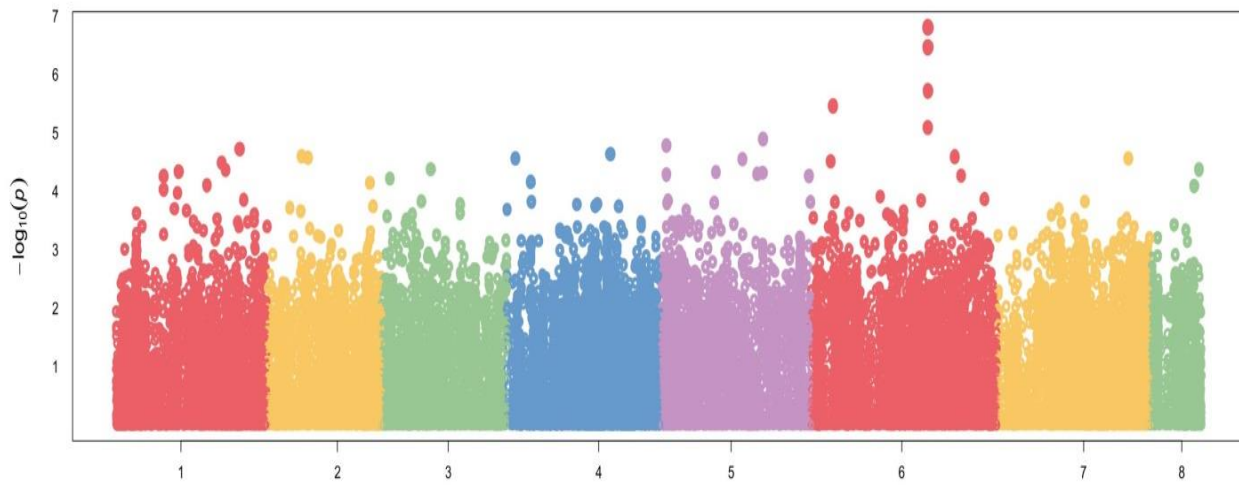


Supplementary Figure10g: Manhattan plot illustrating SNPs linked to root fresh weight with their corresponding statistical significance represented by Q-Q plot

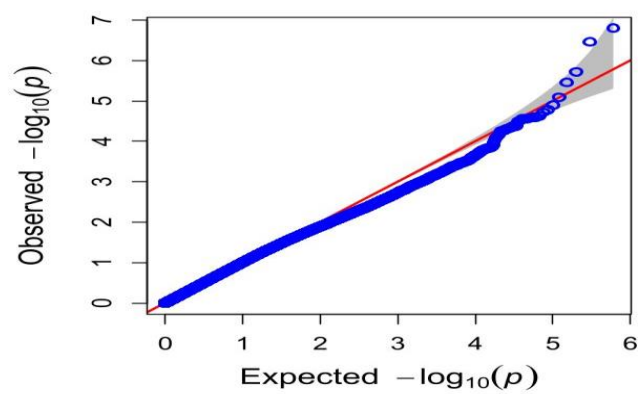


Supplementary Figure10h: Manhattan plot illustrating SNPs linked to shoot dry weight with their corresponding statistical significance represented by Q-Q plot

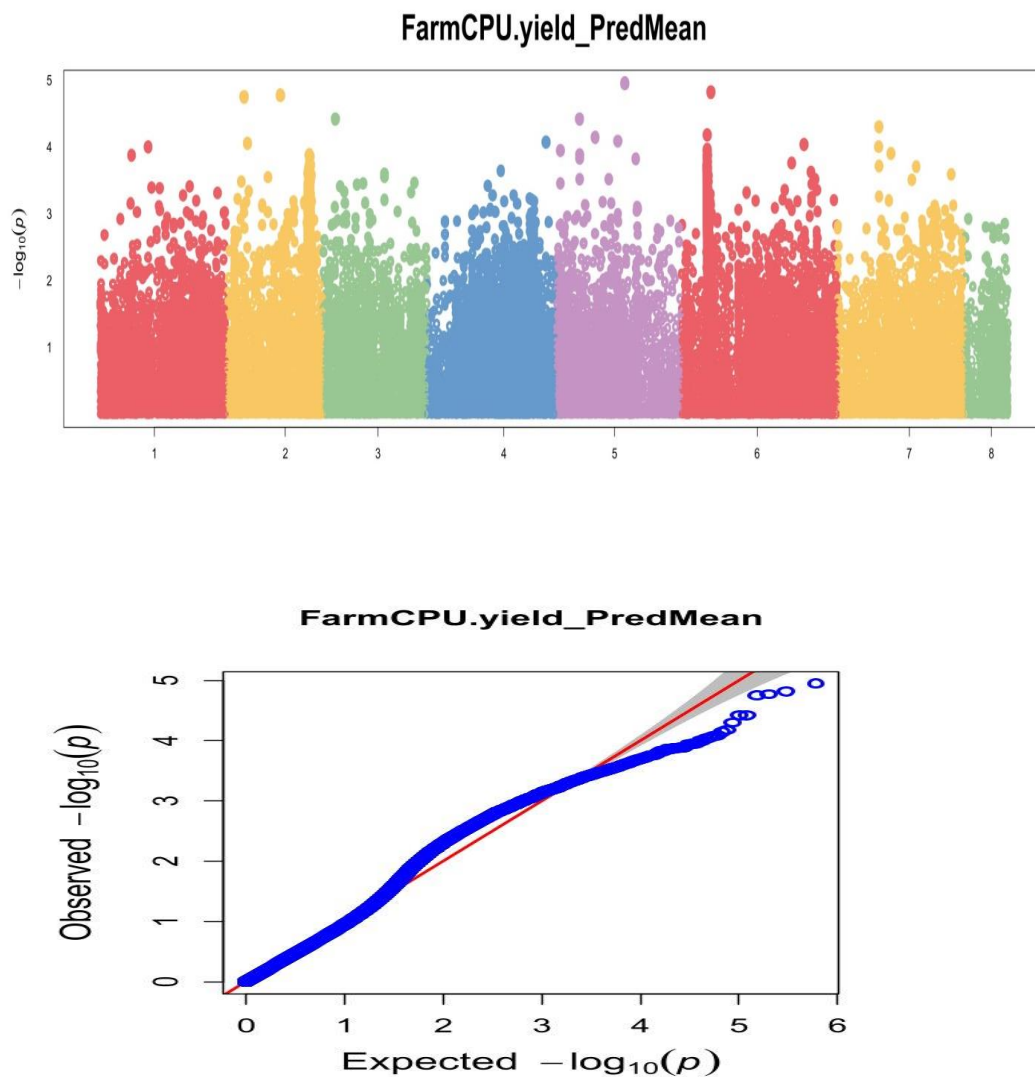
FarmCPU.SFW_PredMean



FarmCPU.SFW_PredMean



Supplementary Figure10i: Manhattan plot illustrating SNPs linked to shoot fresh weight with their corresponding statistical significance represented by Q-Q plot



Supplementary Figure10j: Manhattan plot illustrating SNPs linked to yield with their corresponding statistical significance represented by Q-Q plot

Supplementary Figure10: Manhattan plot illustrating SNPs linked to specific chickpea traits, along with their corresponding statistical significance represented by Q-Q plot for location 4 identified from FarmCPU model

