Supplementary Material

Understanding the genetic landscape of flowering time variation in *Brassica juncea* (L.) Czern. and its diploid progenitors: unravelling the role of selection and cytoplasmic backgrounds

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Fig. S1. Figure demonstrating multi-track Q-Q plots for selection of best fit model in *B. rapa*. Multi-track Q-Q plot for IF (a-c), *FIF* (d f), *HUN* (g-i) and maturity (j-l) traits for both the seasons (season 1 and season 2) as well as for pooled data. Blink or MLMM seemed as best fit algorithms for the test traits.
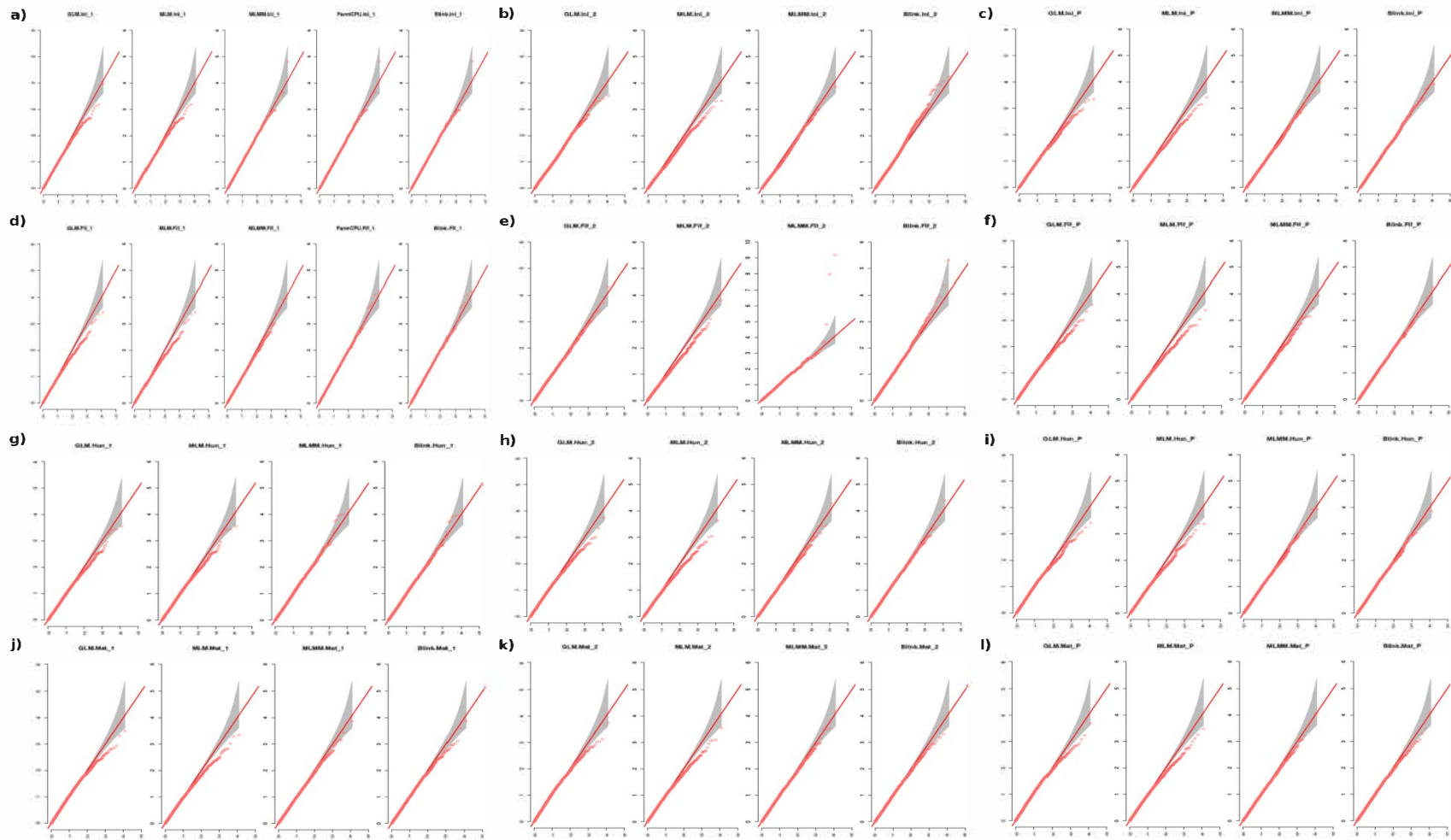
Fig. S2. Figure demonstrating multi-track Q-Q plots for selection of best fit model in *B. juncea*. Multi-track Q-Q plot for IF (a-c), FIF (d-f), HUN (g-i) and maturity (j-l) traits for both the seasons as well as for pooled data. Blink or FarmCPU seemed as best fit algorithms for the test traits.
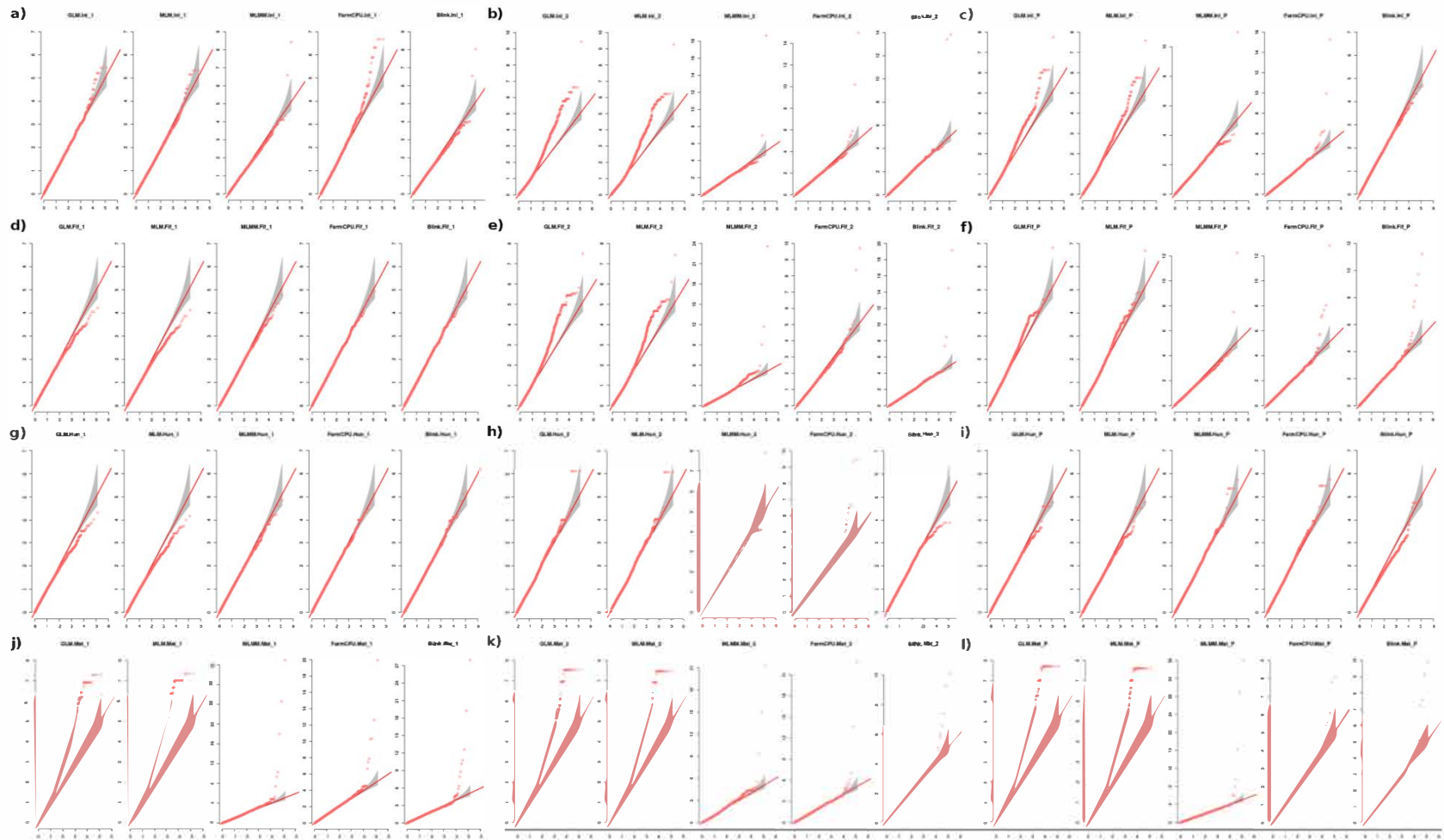
Fig. S3. Manhattan plots depicting marker trait associations for IF (a-c), *FIF* (d-f), *HUN* (g-i) and maturity (j-l) traits for both the seasons (season 1 and season 2) as well as for pooled data in *B. rapa.*
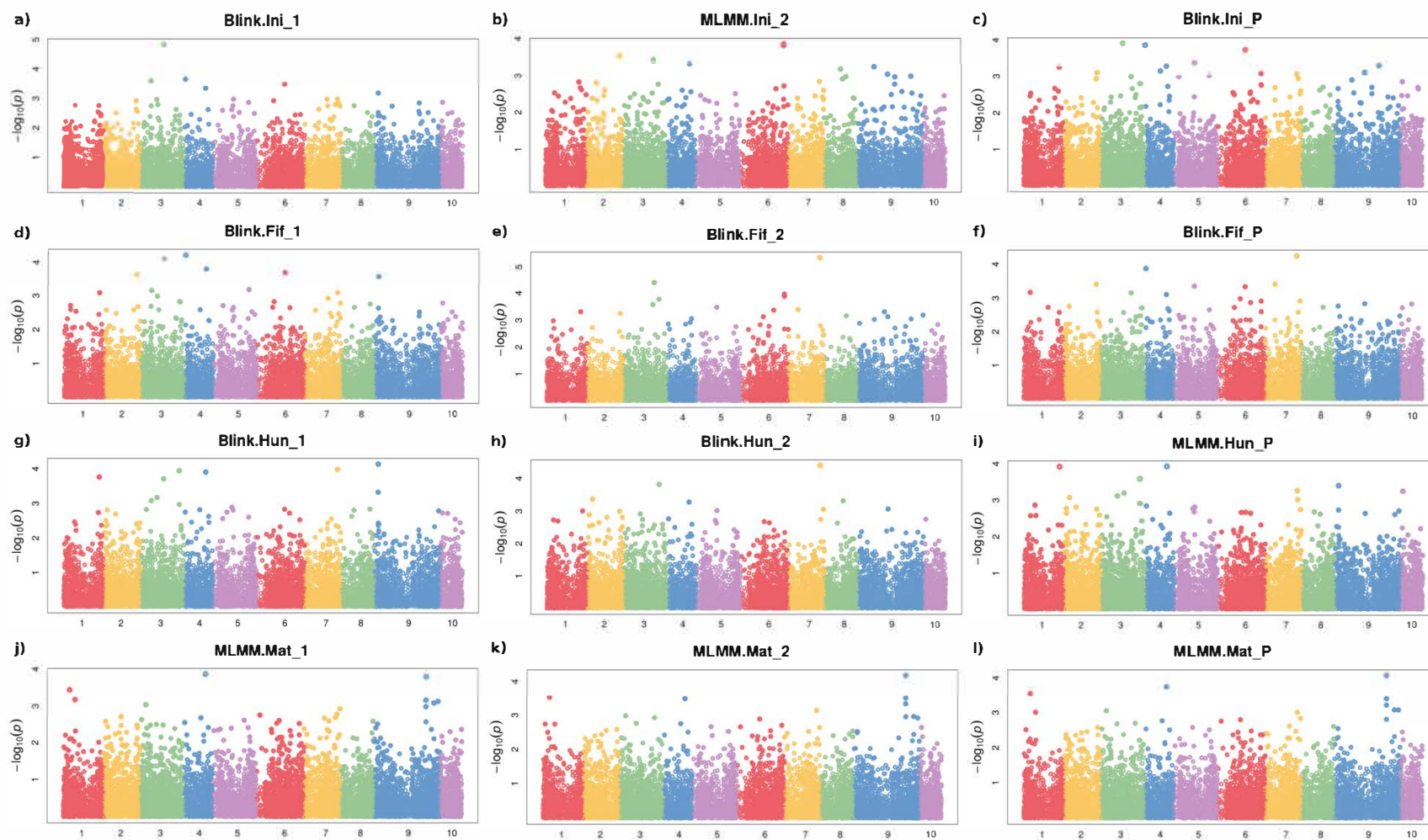
Fig. S4. Manhattan plots depicting marker trait associations for IF (a-c), *FIF* (d-f), *HUN* (g-i) and maturity (j-l) traits for both the seasons (season 1 and season 2) as well as for pooled data in *B. juncea.*