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Supporting Online Material for

Genome-wide association studies for conformation traits in the Turkish Holstein cattle population

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This PDF file includes:

Supplementary Figures 1 to 4 (SF1 to SF4)

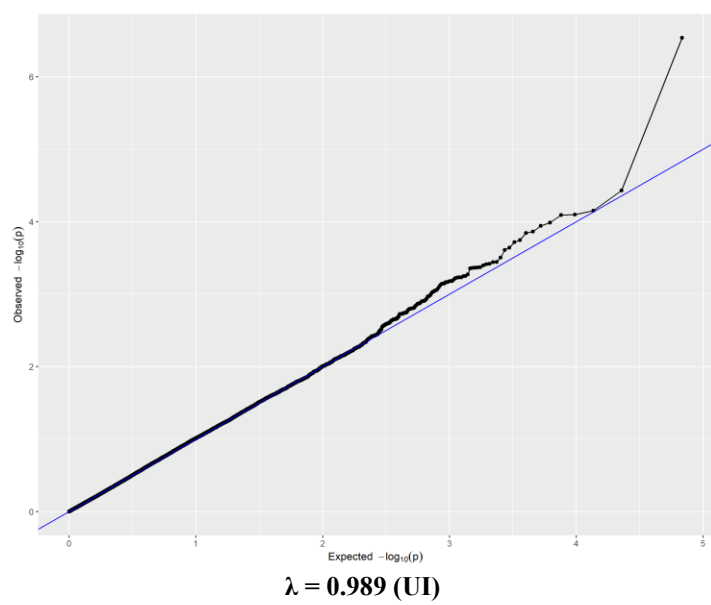
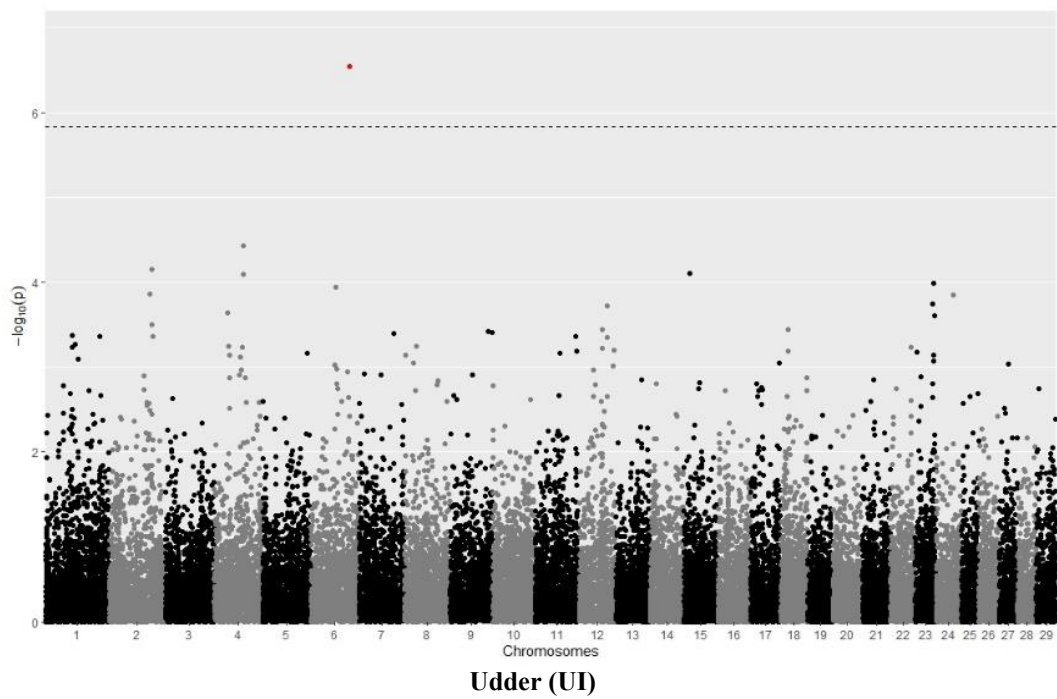
Supplementary Figures

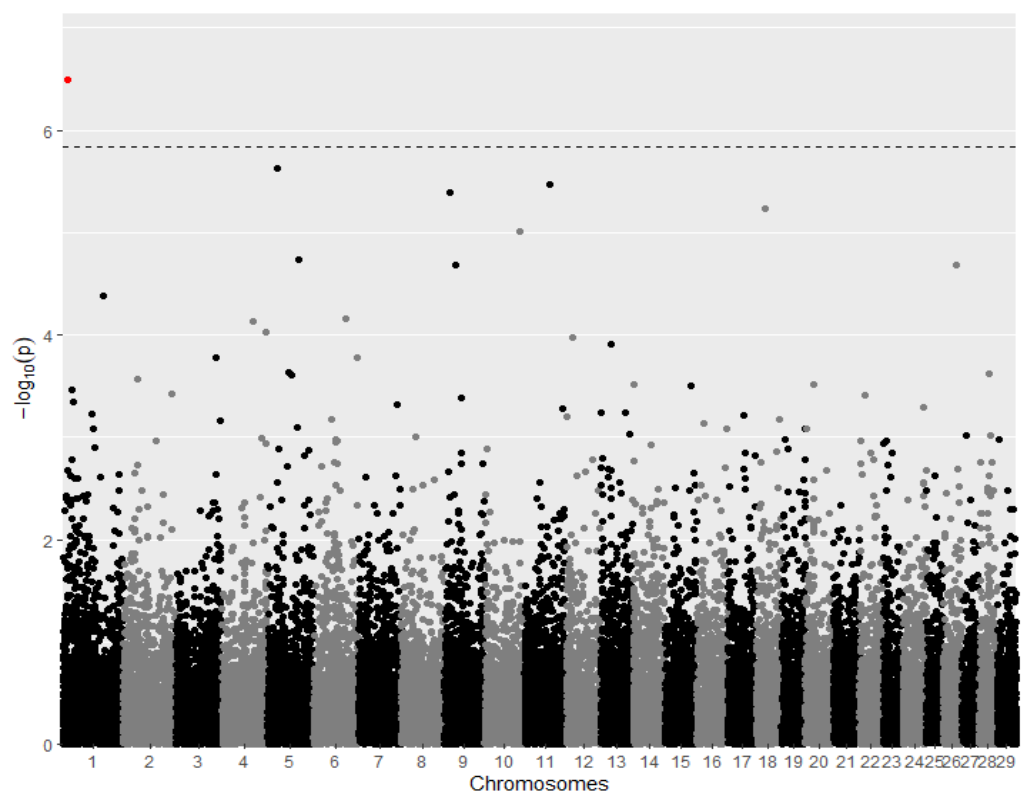
SF1: Manhattan plots and Q-Q plots from GWAS in Turkish Holstein dairy cattle. In the Manhattan plot, above the gray dashed threshold line indicates a significant SNPs. 1: UI: Udder index, FUA: Fore udder attachment, US: Udder support, UD: Udder depth, FTP: Front teat placement, FTL: Front teat length, RTP: Rear teat placement, RUH: Rear udder height, DC: Dairy character, LF: Leg foot, HQ: Hock quality, RLRV: Rear leg rear view, RLA: Rear leg angle, HD: Heel depth, BO: Body, BD: Body depth, CW: Chest width, RW: Rump width, RA: Rump angle, TY: Type, and GN: General

SF2: The pathways of ECM-receptor interaction

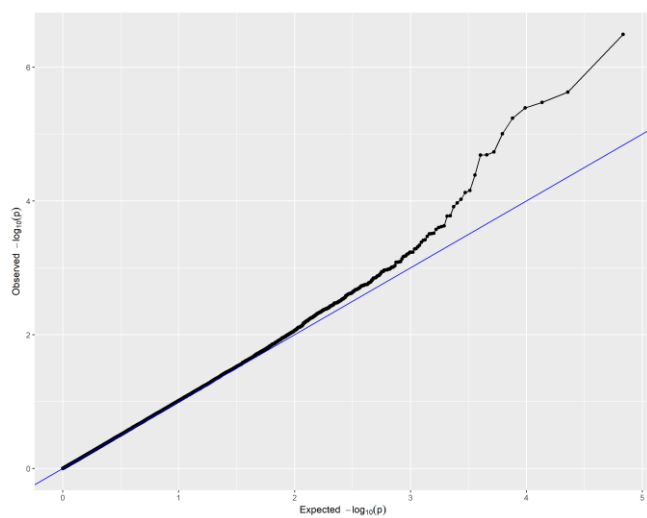
SF3: The pathways of axon guidance

SF4: The pathways of focal adhesion

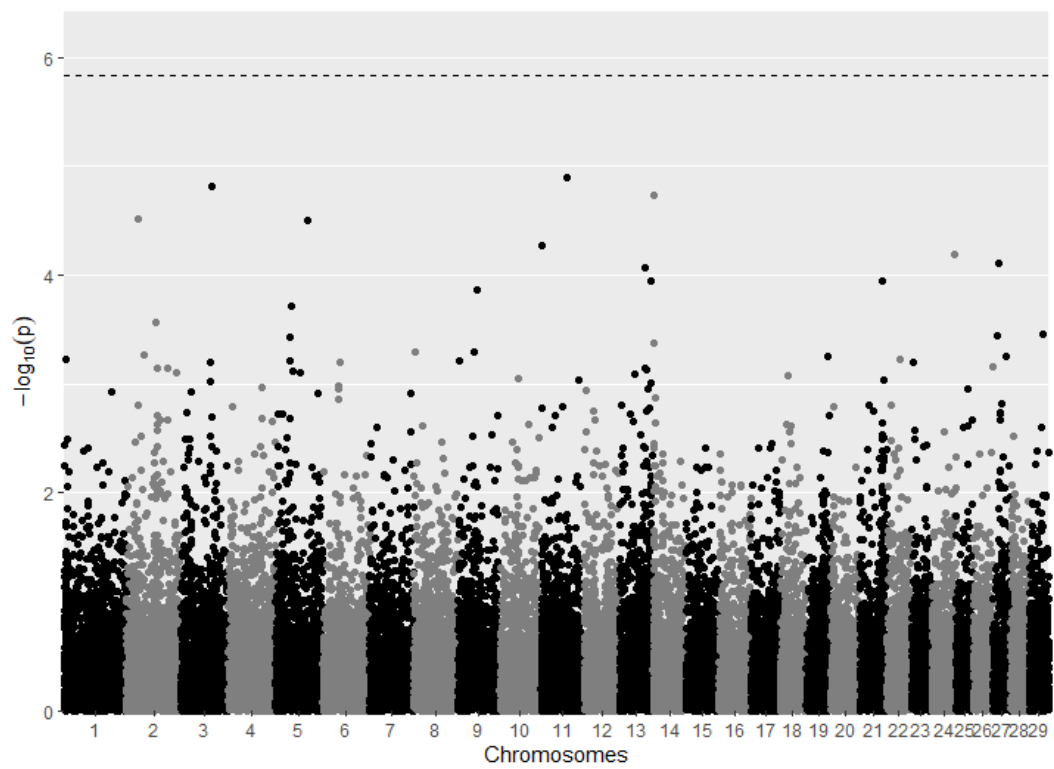




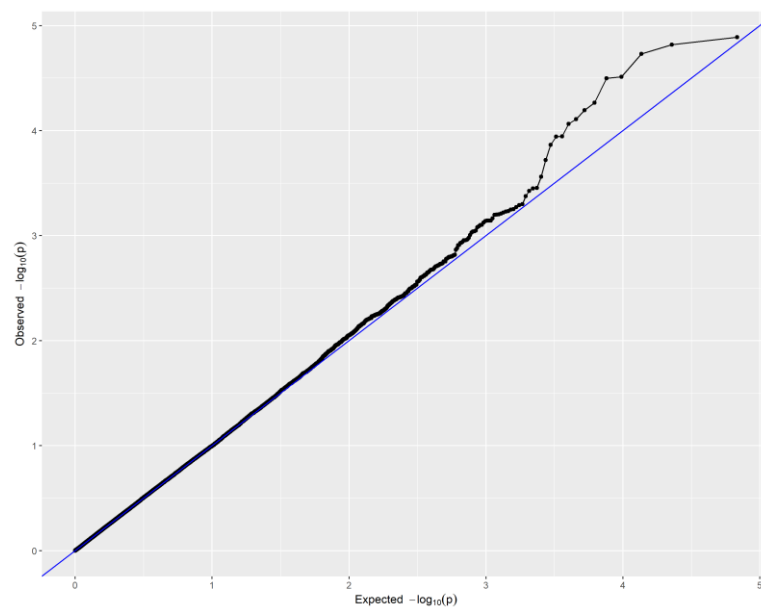
Fore udder attachment (FUA)



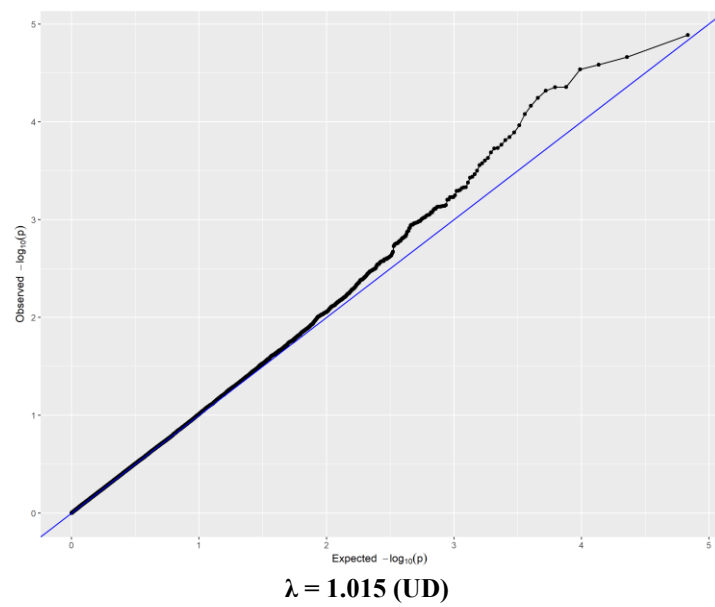
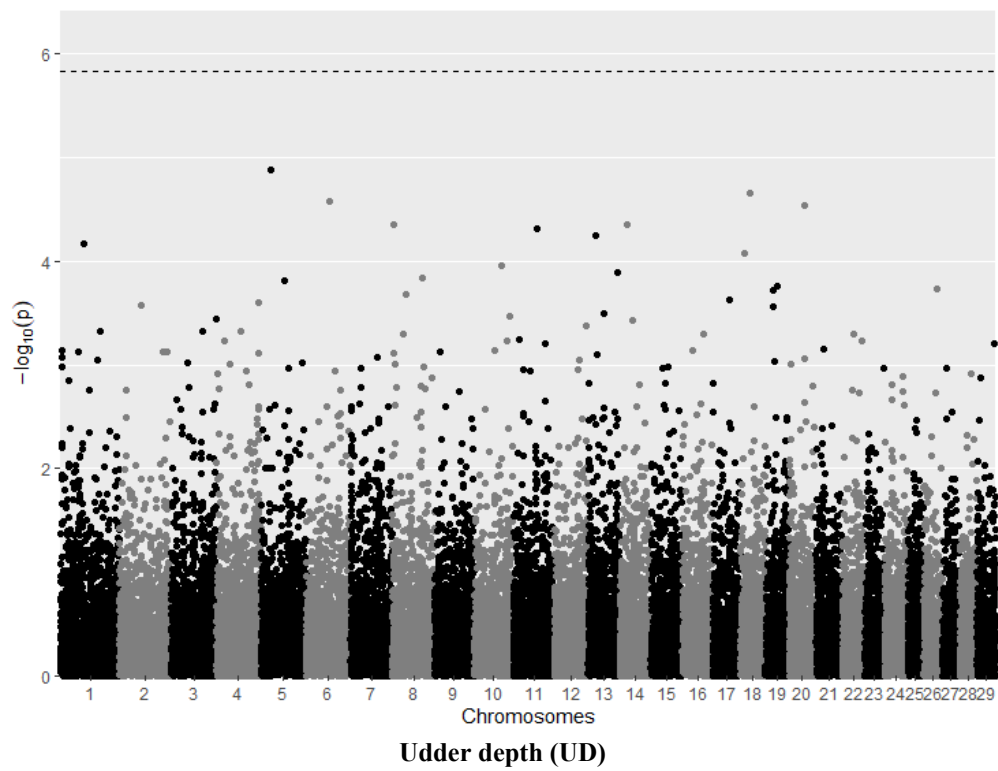
$\lambda = 1.014$ (FUA)

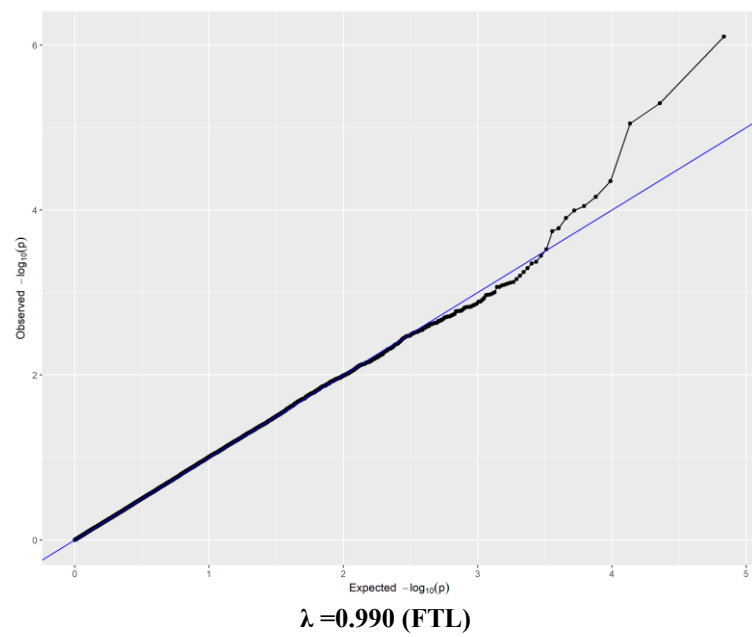
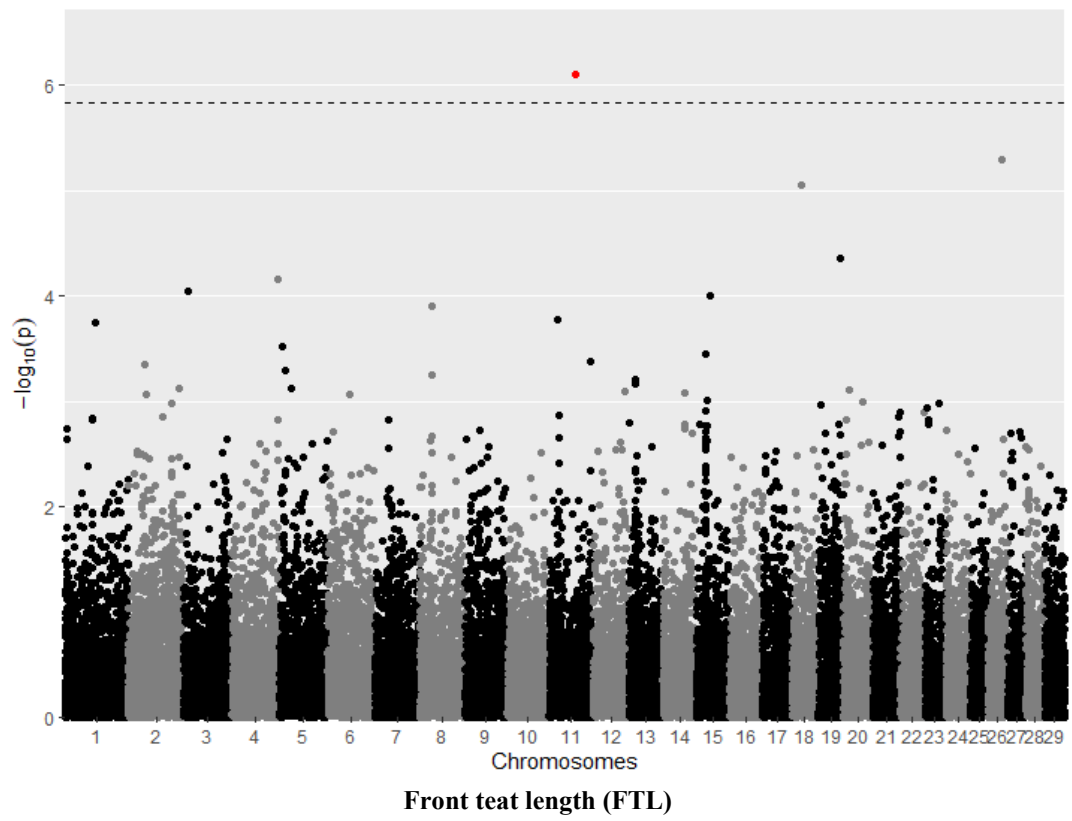


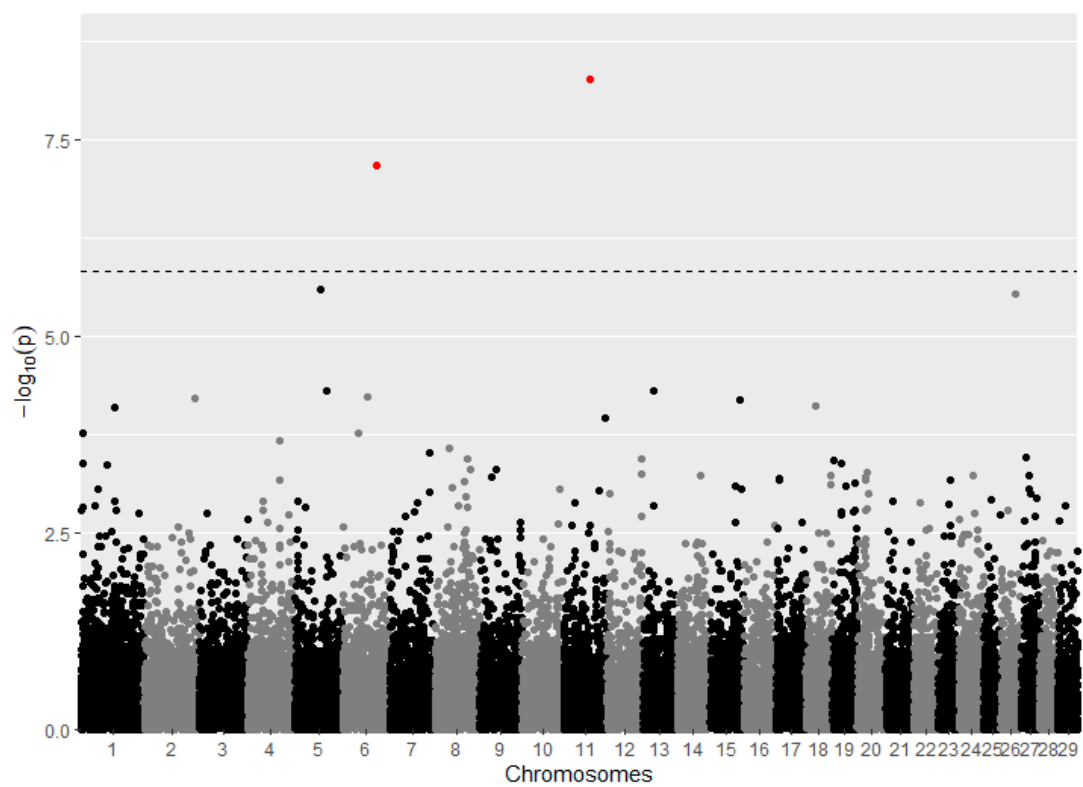
Udder support (US)



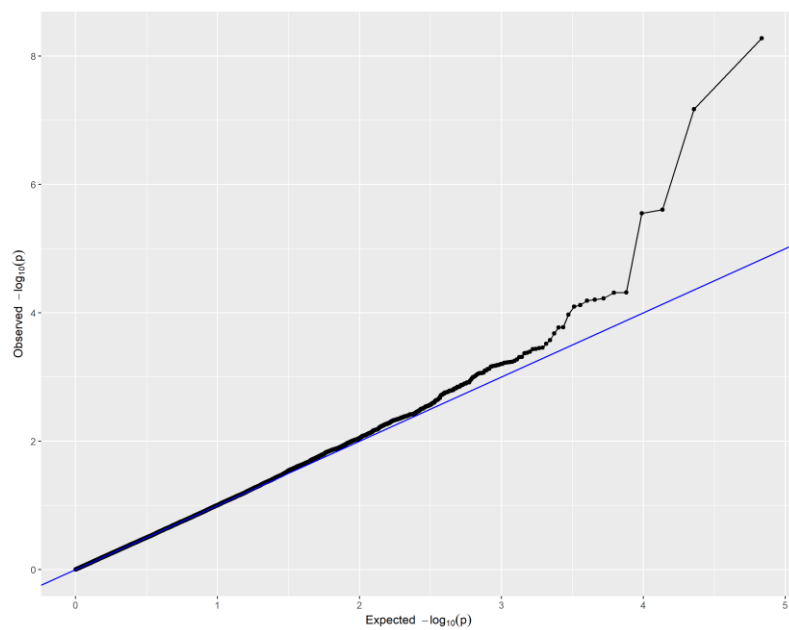
$\lambda = 1.016$ (US)



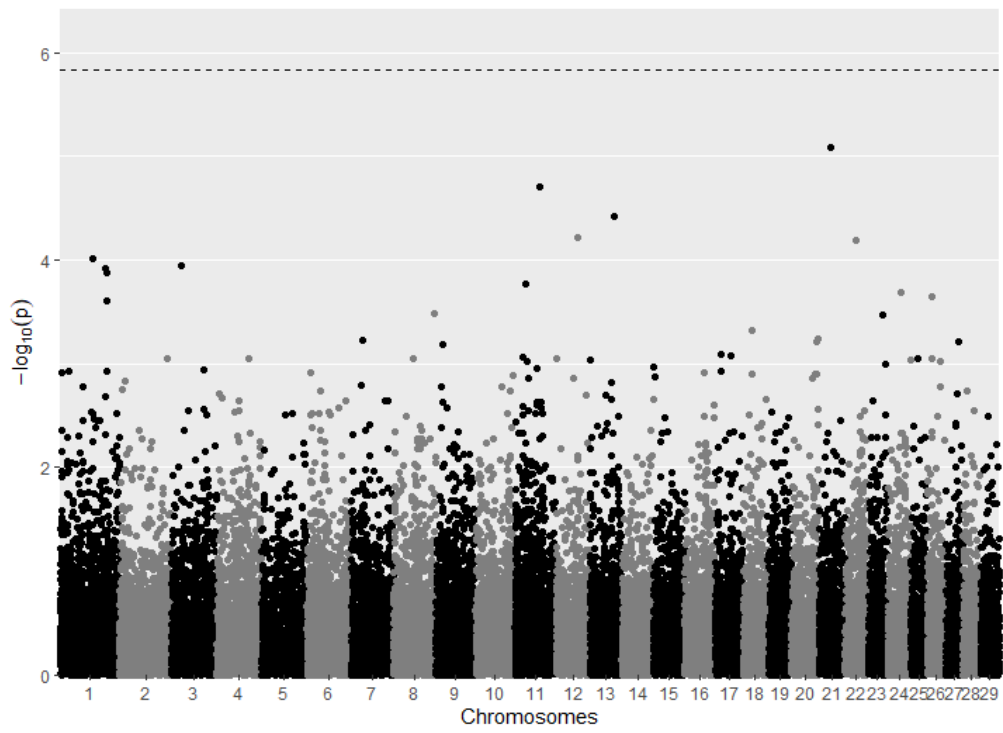




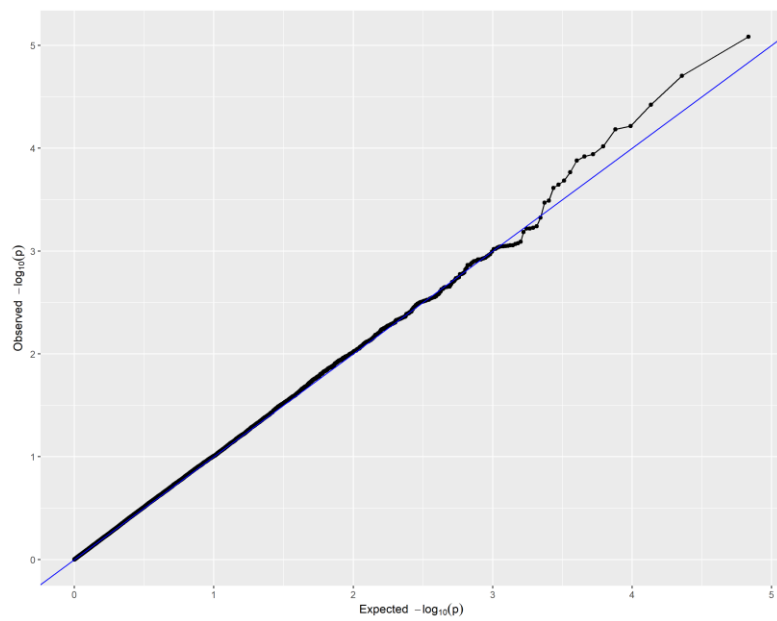
Front teat placement (FTP)



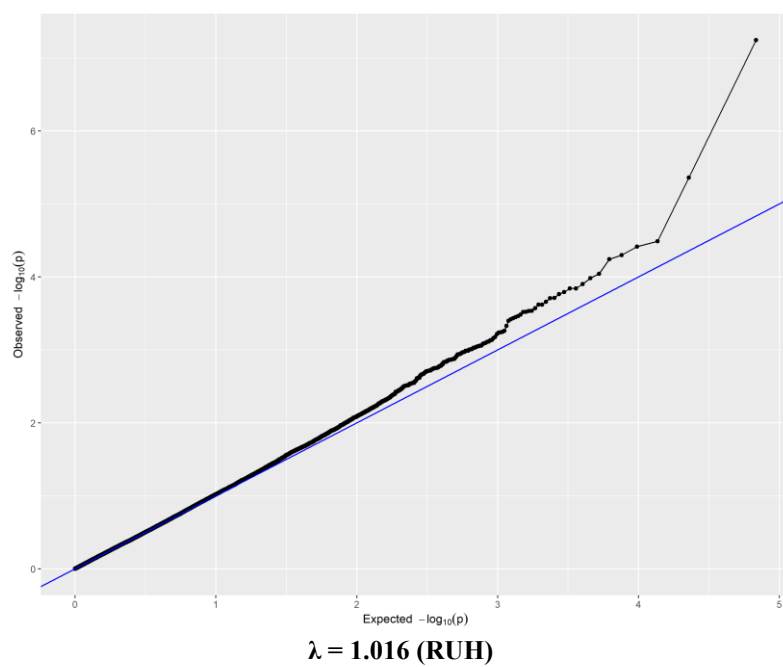
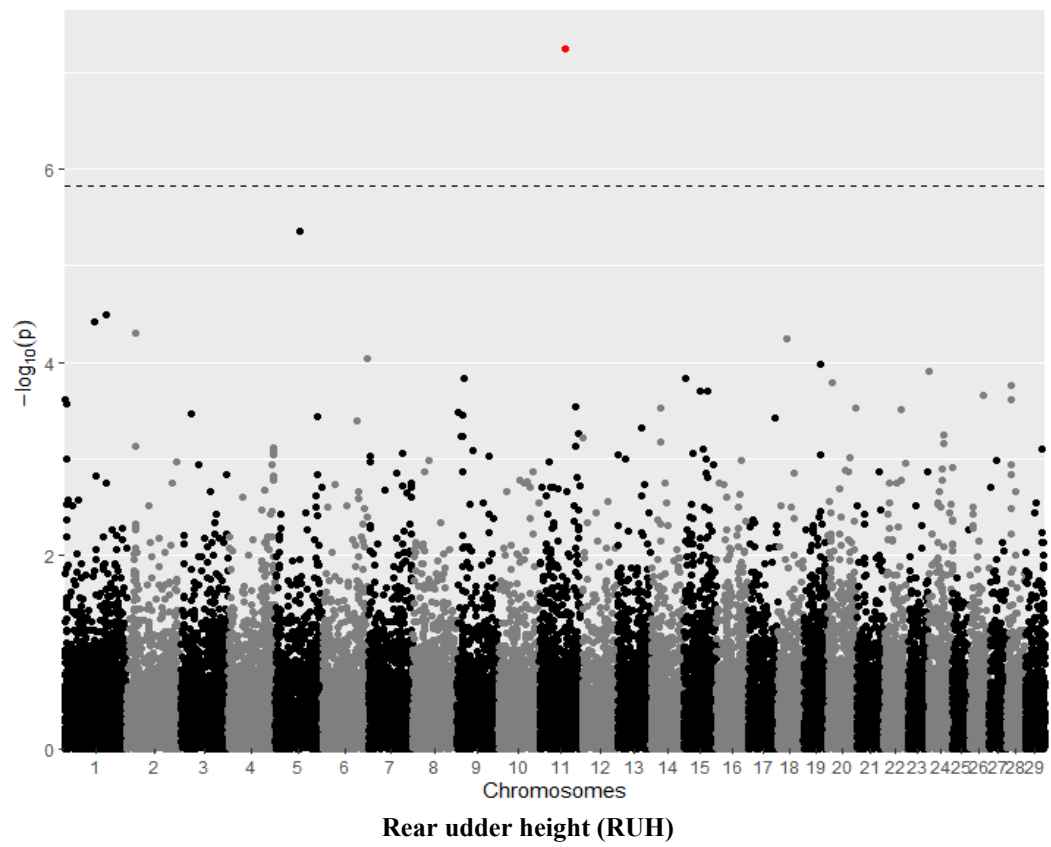
$\lambda = 0.990$ (FTP)

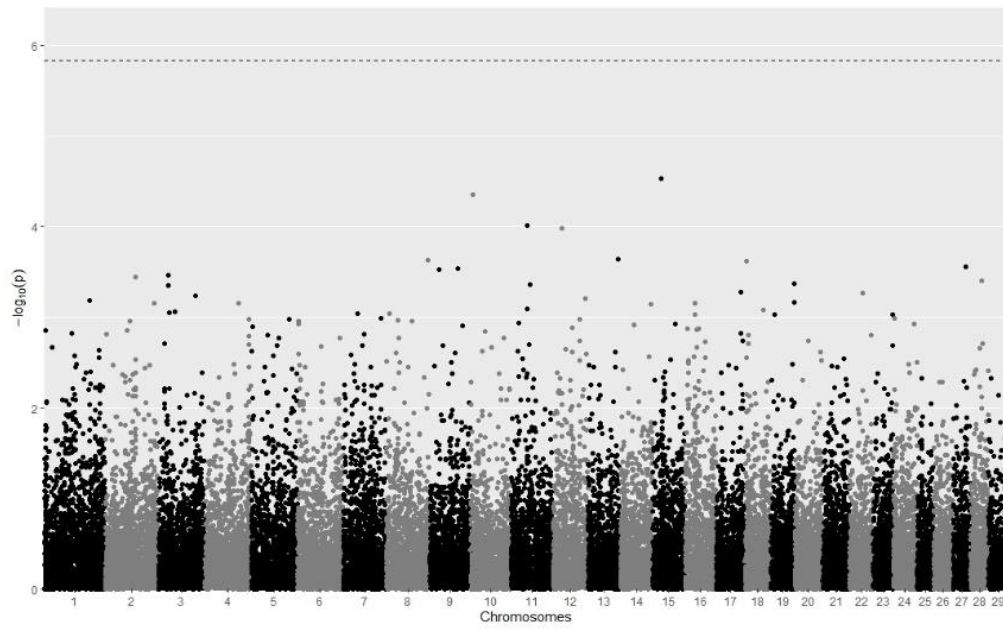


Rear test placement (RTP)

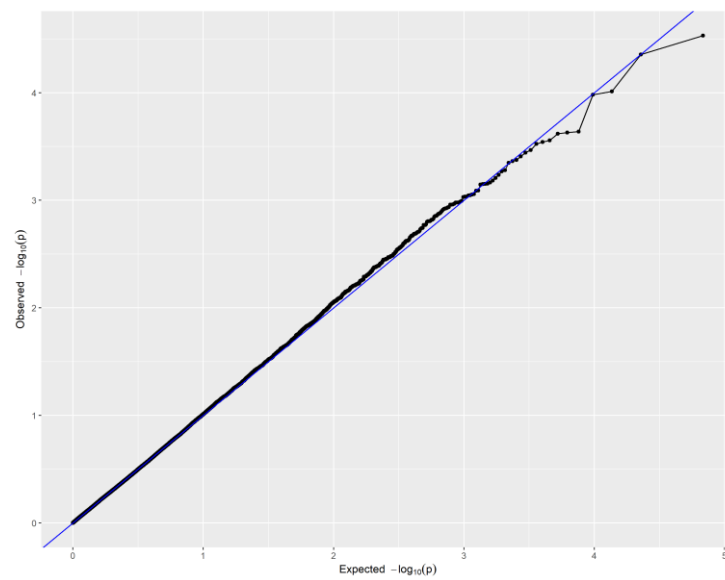


$\lambda = 1.023$ (RTP)

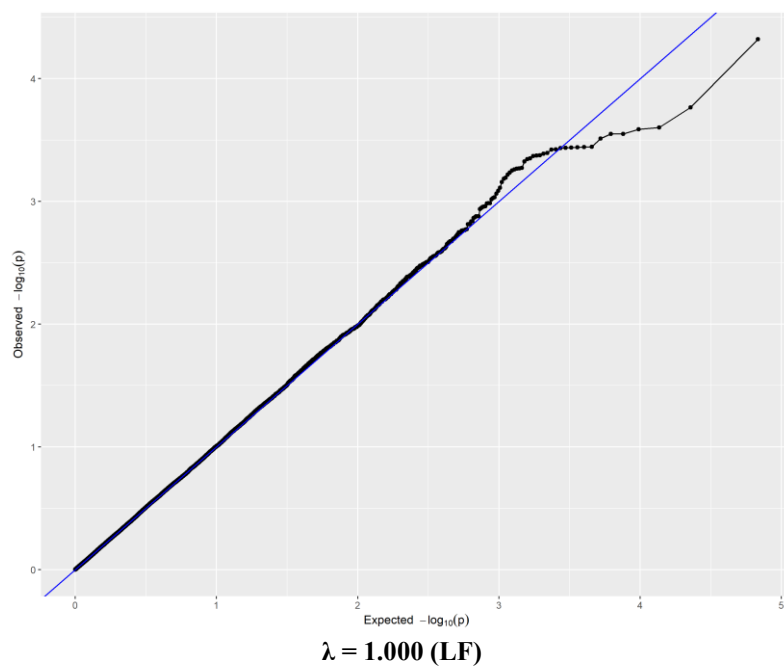
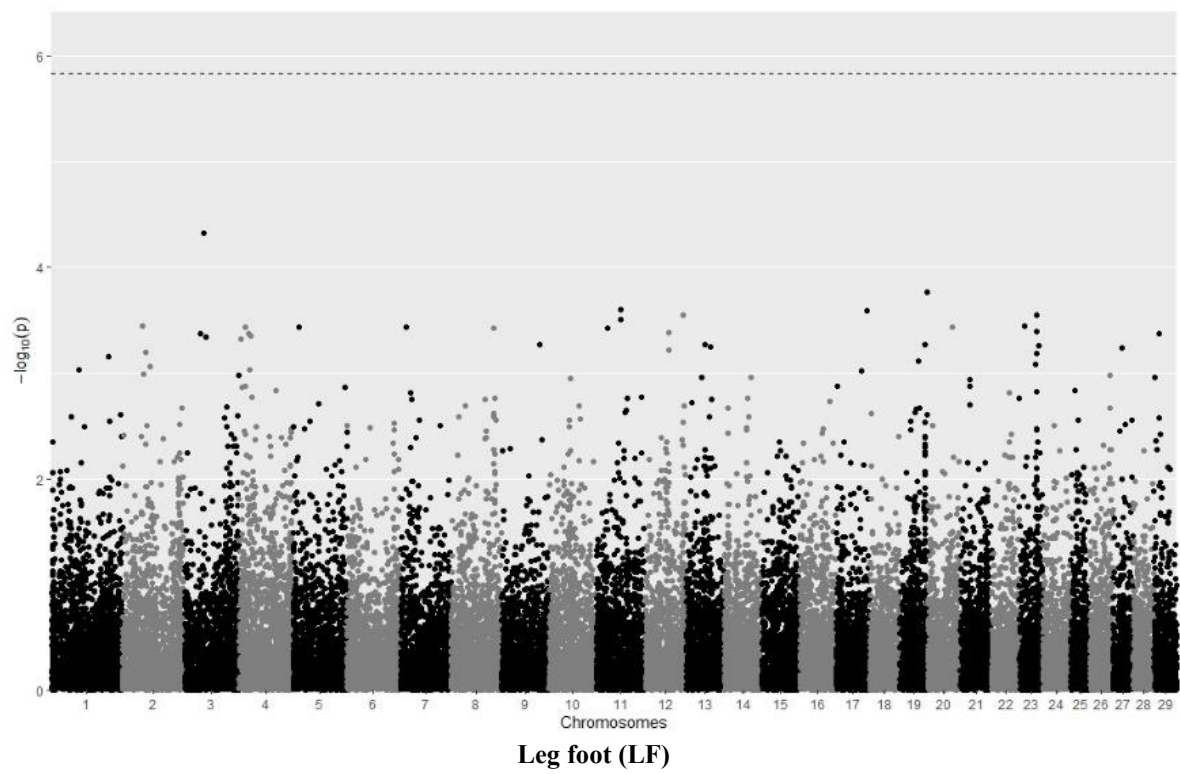


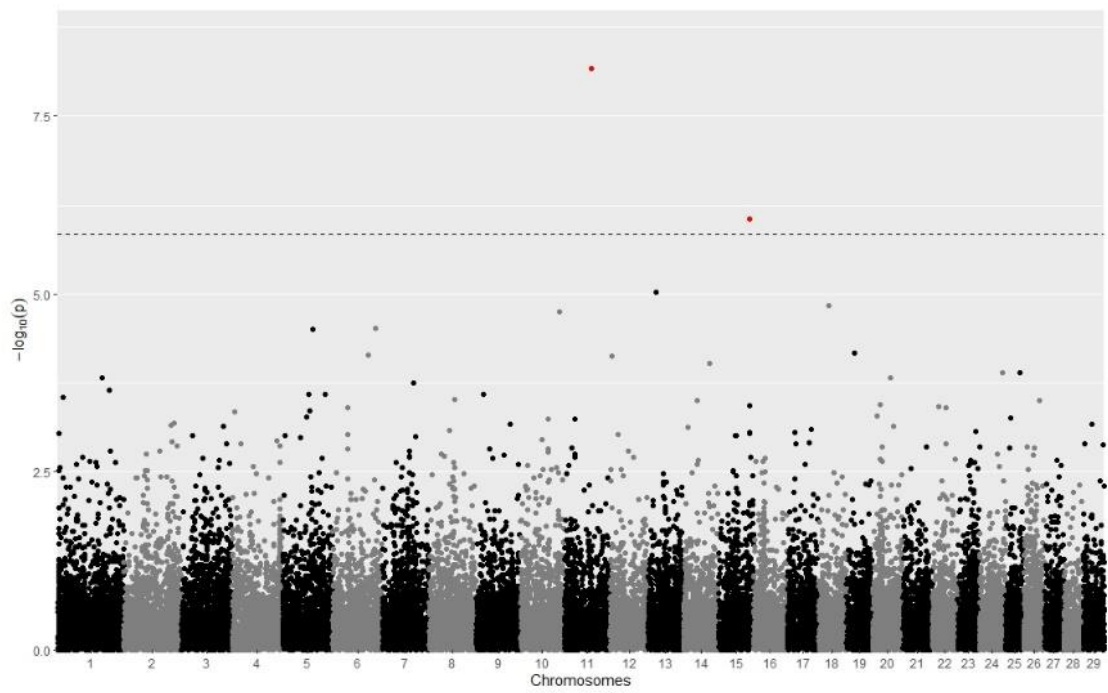


Dairy character (DC)

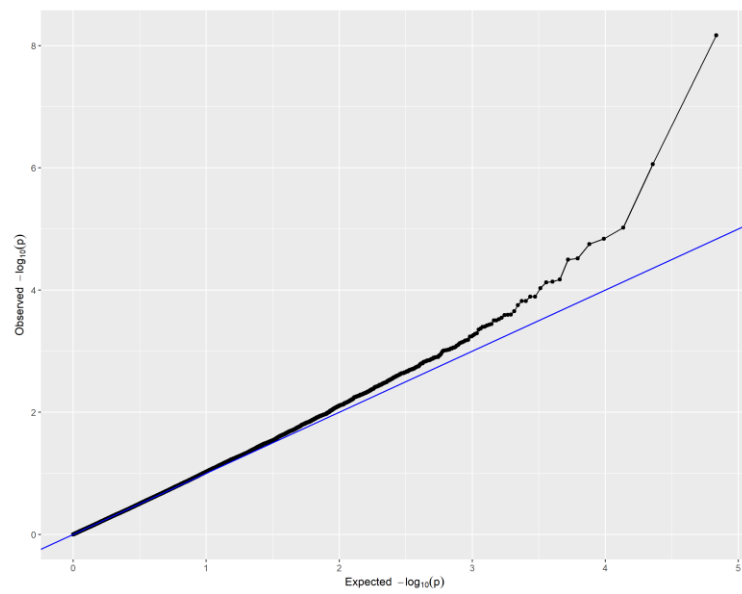


$\lambda = 0.994$ (DC)

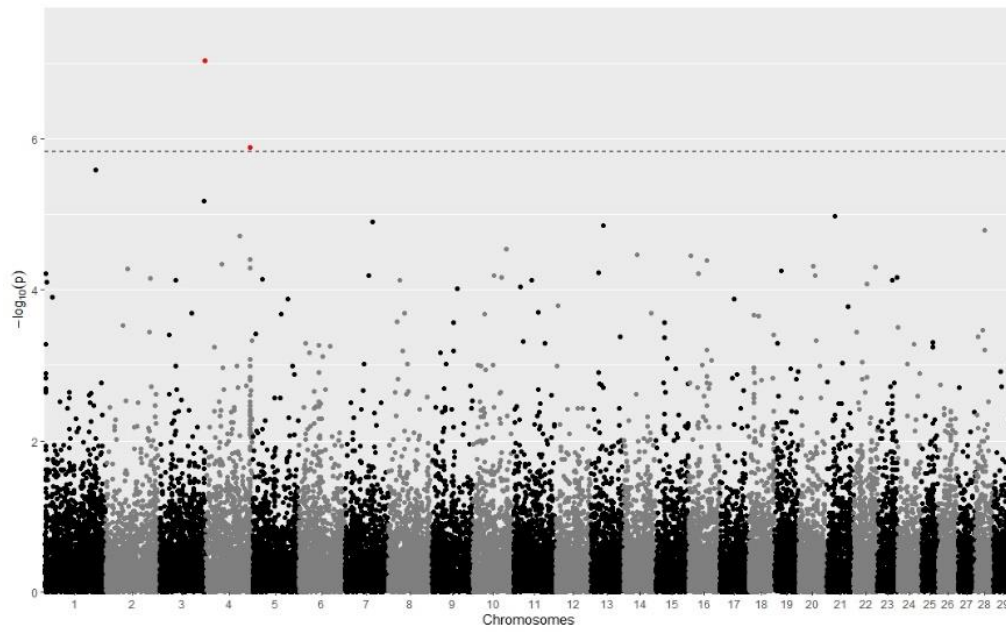




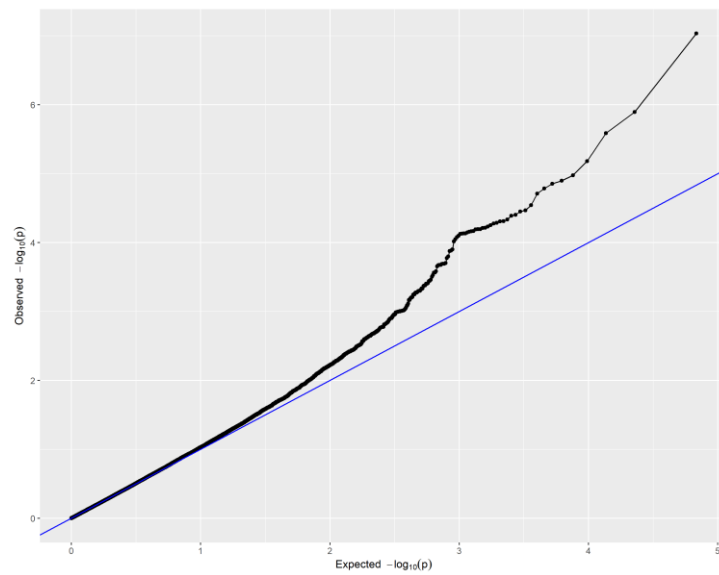
Hock quality (HQ)



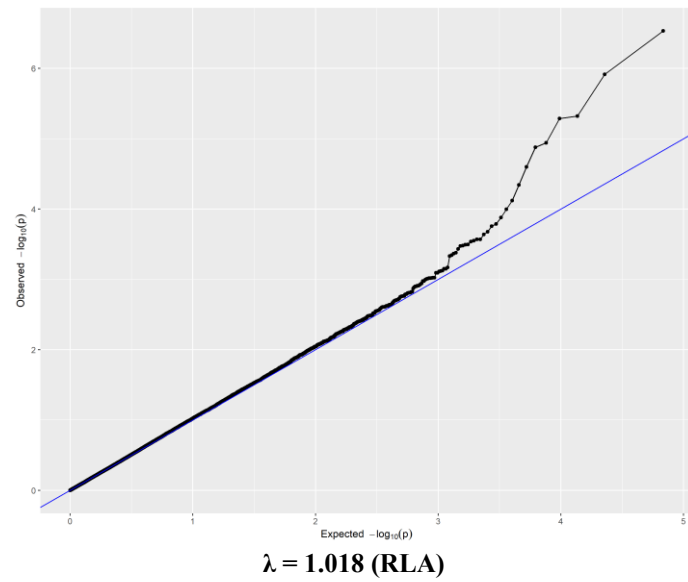
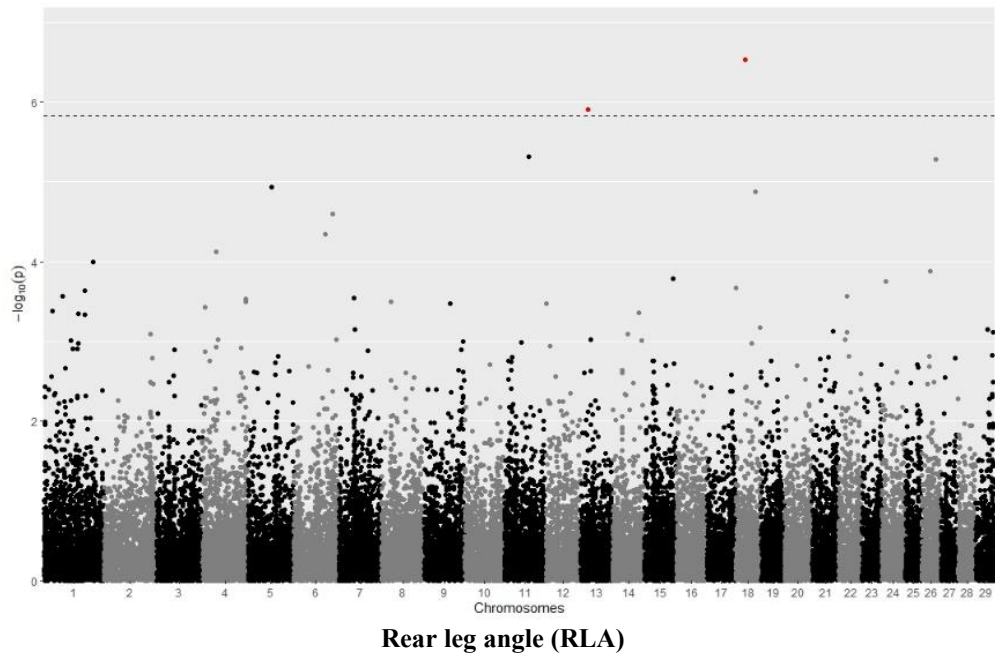
$\lambda = 1.014$ (HQ)

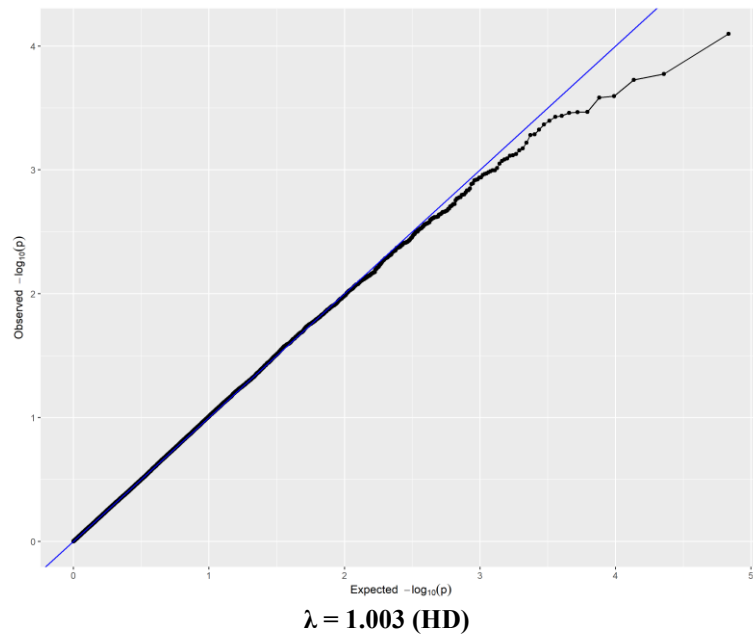
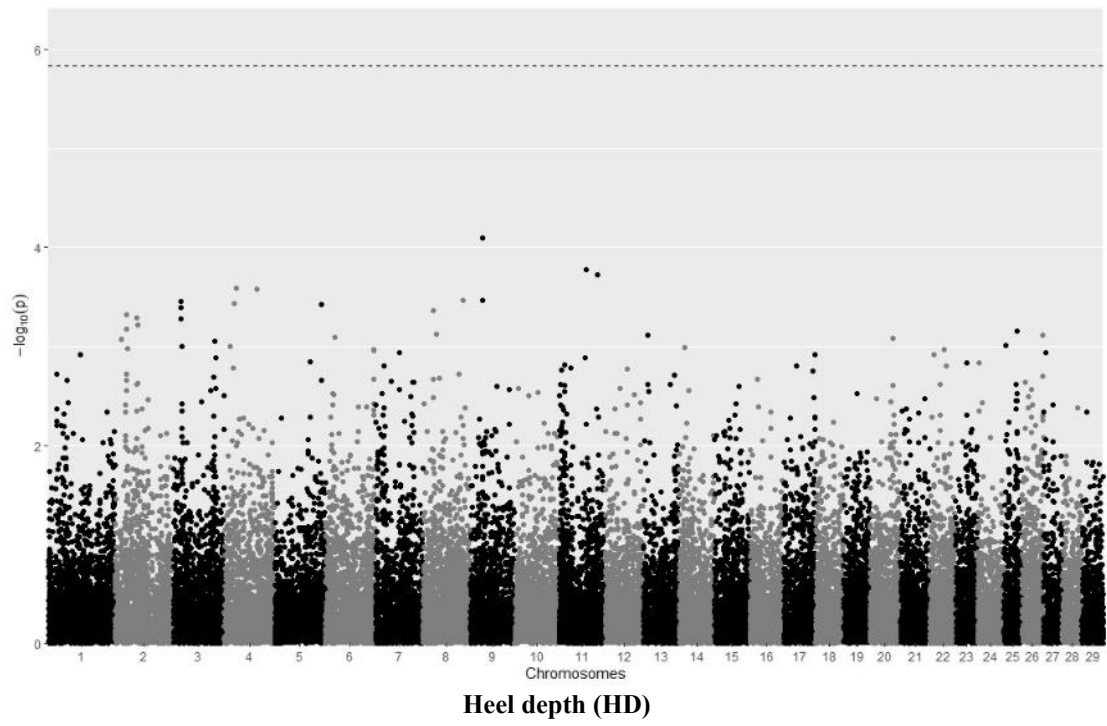


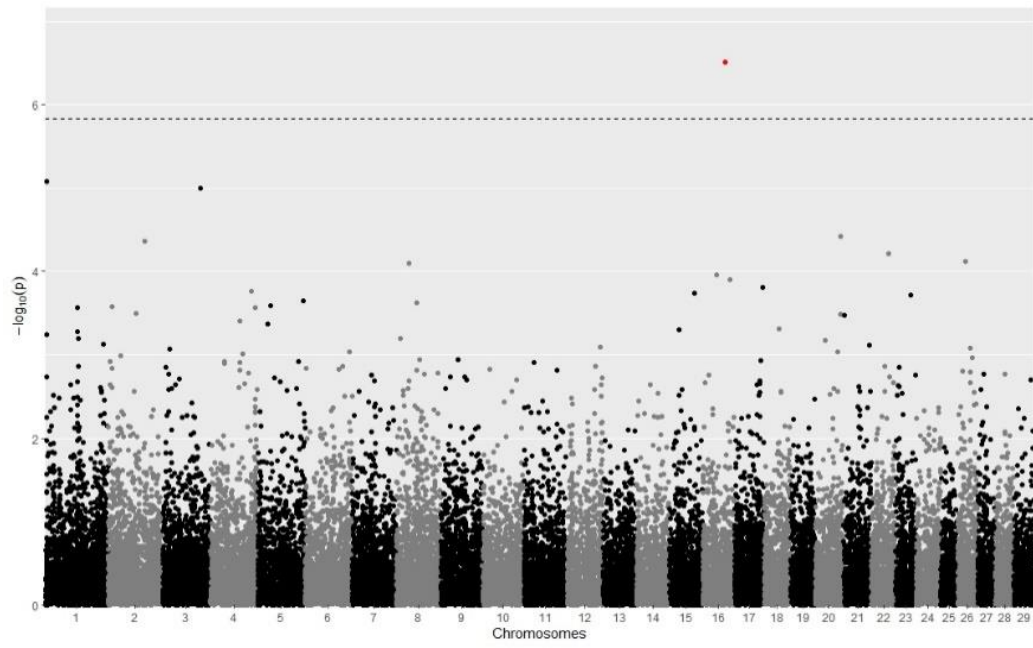
Rear leg rear view (RLRV)



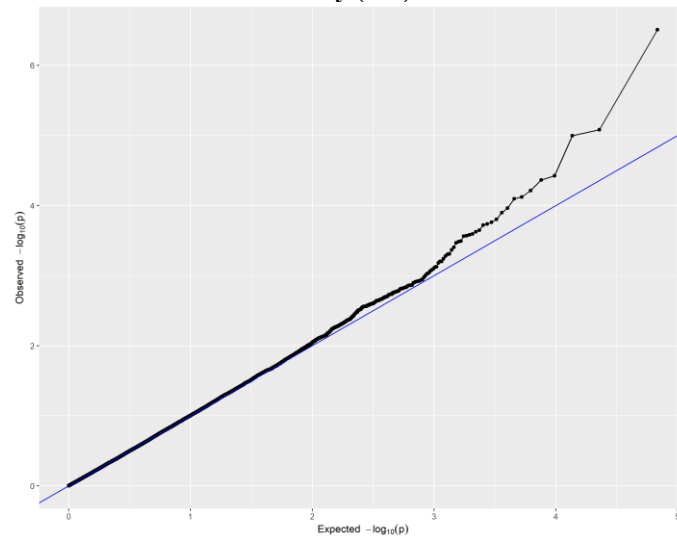
$\lambda = 1.007$ (RLRV)



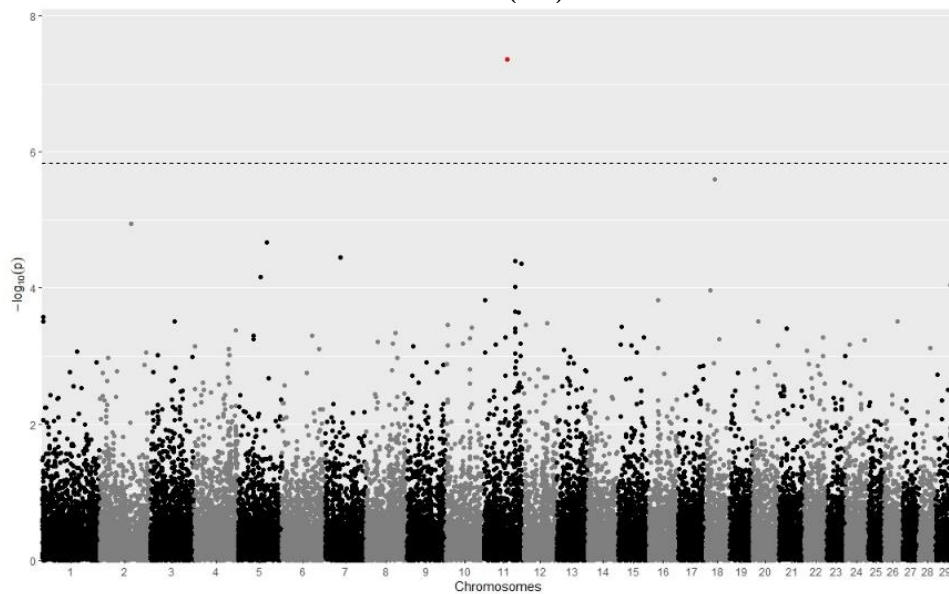




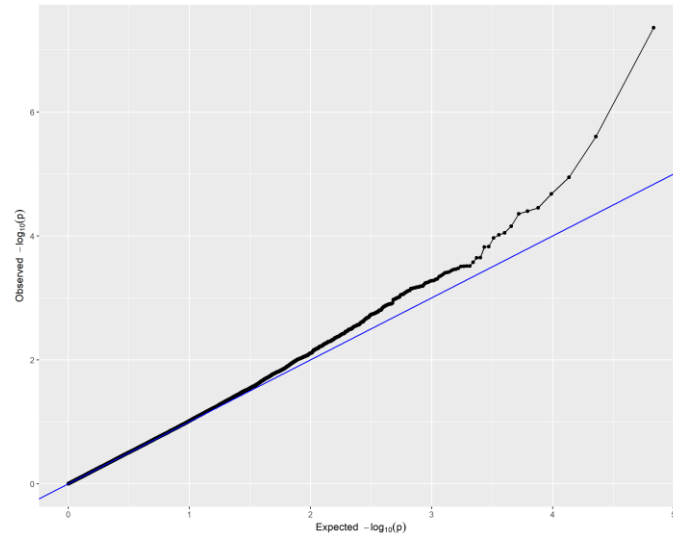
Body (BO)



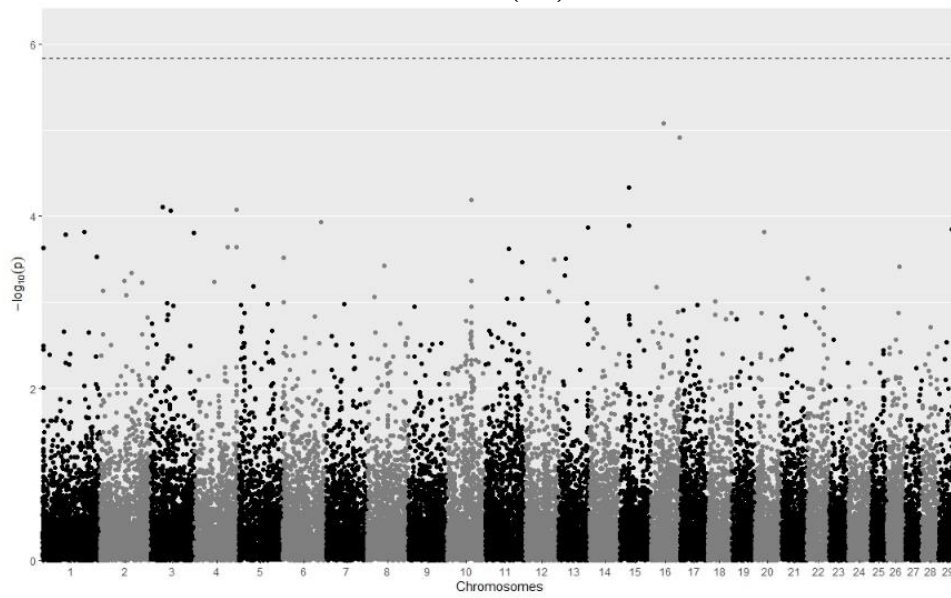
$\lambda = 0.985$ (BO)



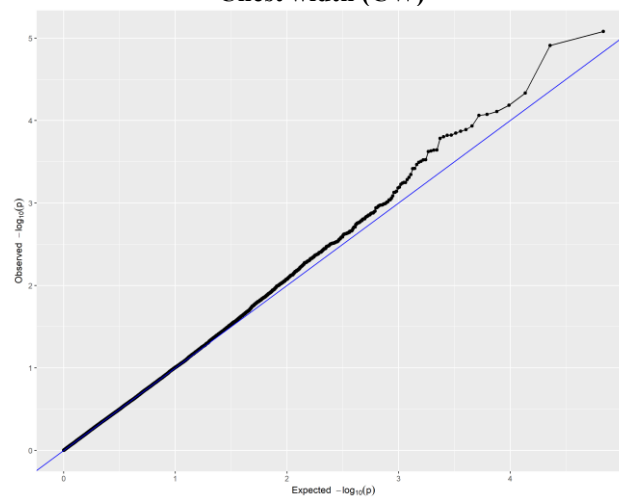
Body depth (BD)



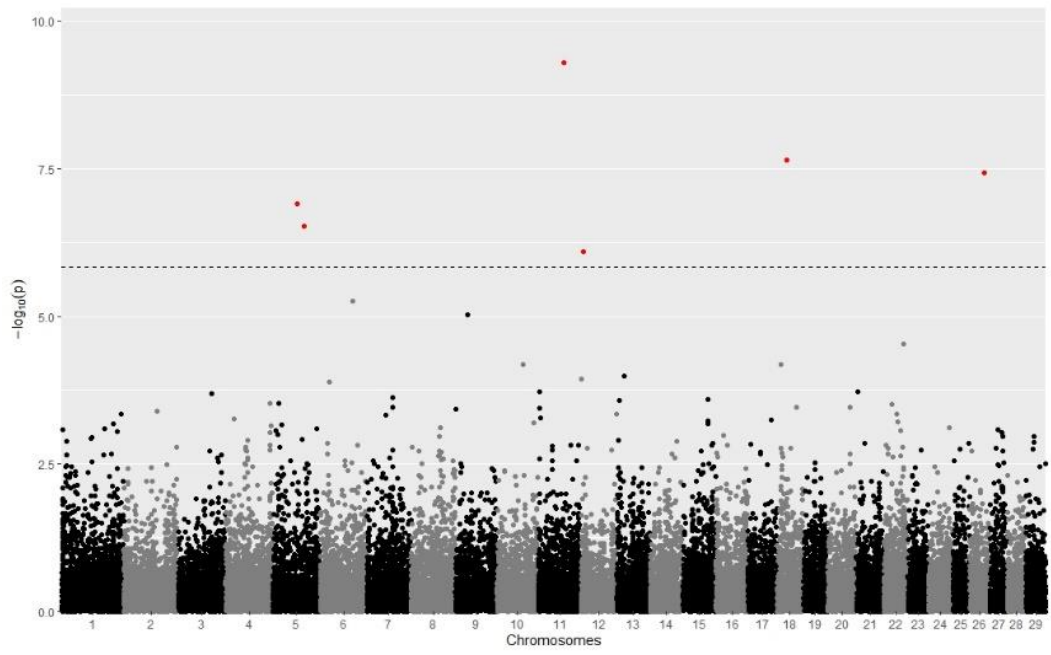
$\lambda = 1.012$ (BD)



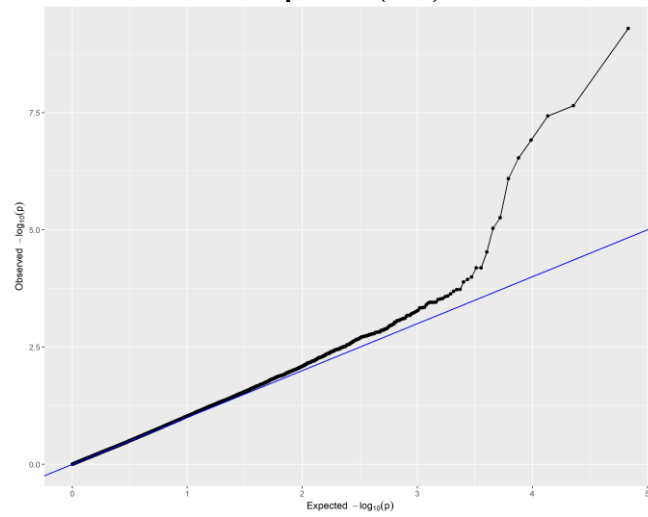
Chest width (CW)



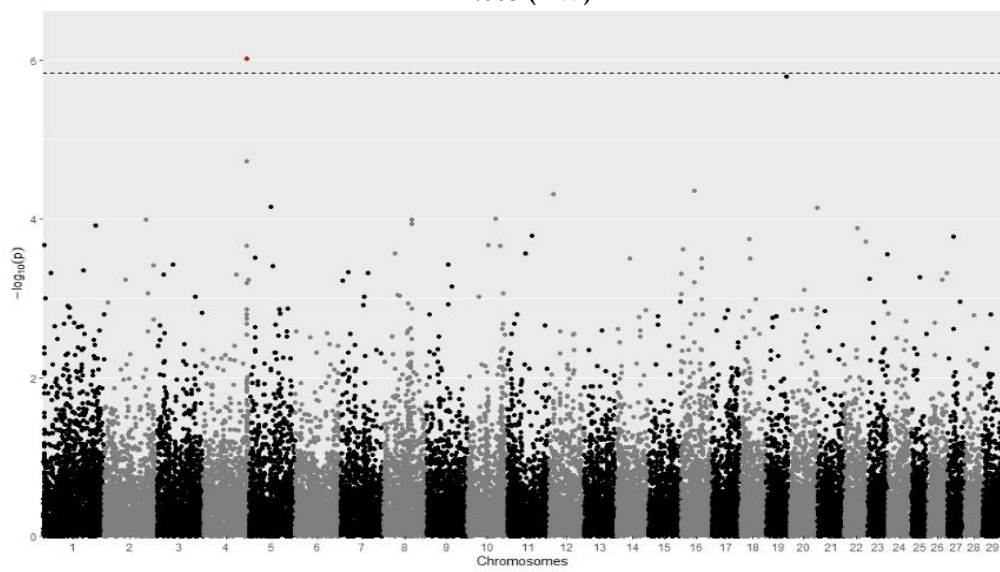
$\lambda = 1.014$ (CW)



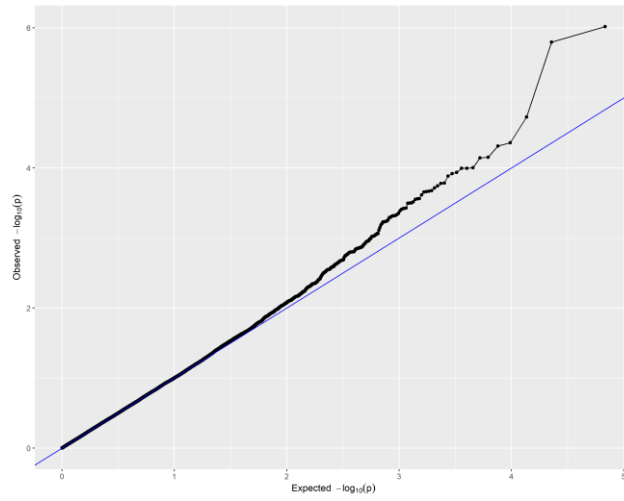
Rump width (RW)



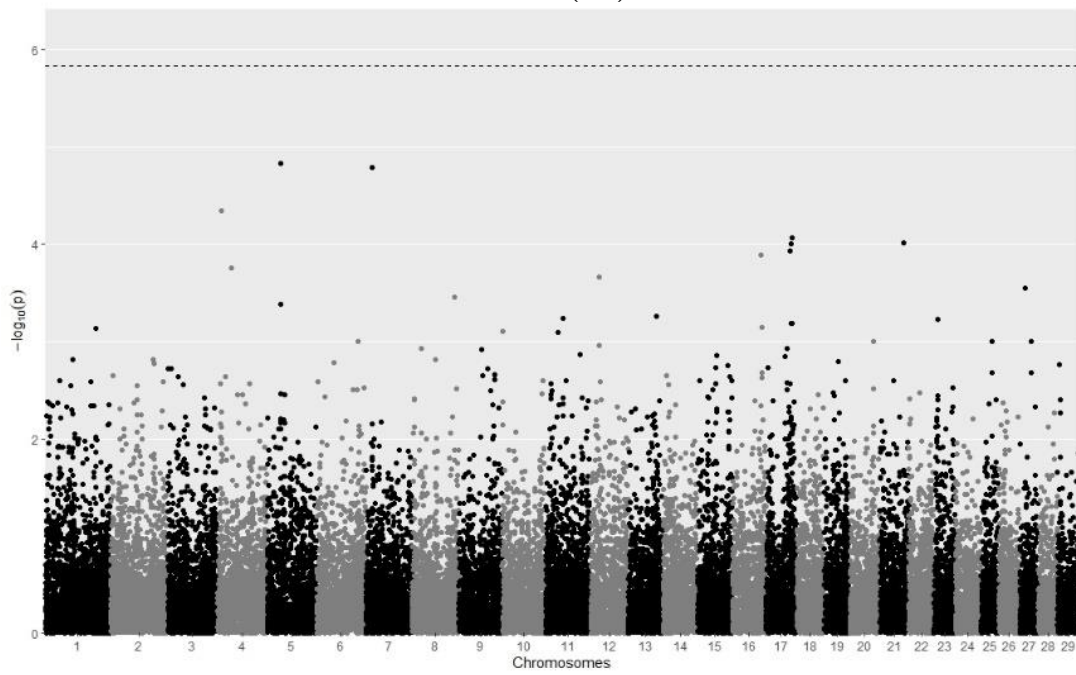
$\lambda = 1.003$ (RW)



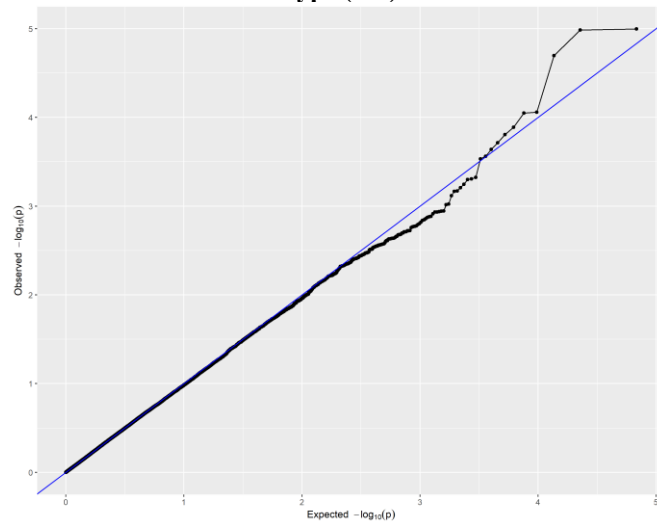
Rump angle (RA)



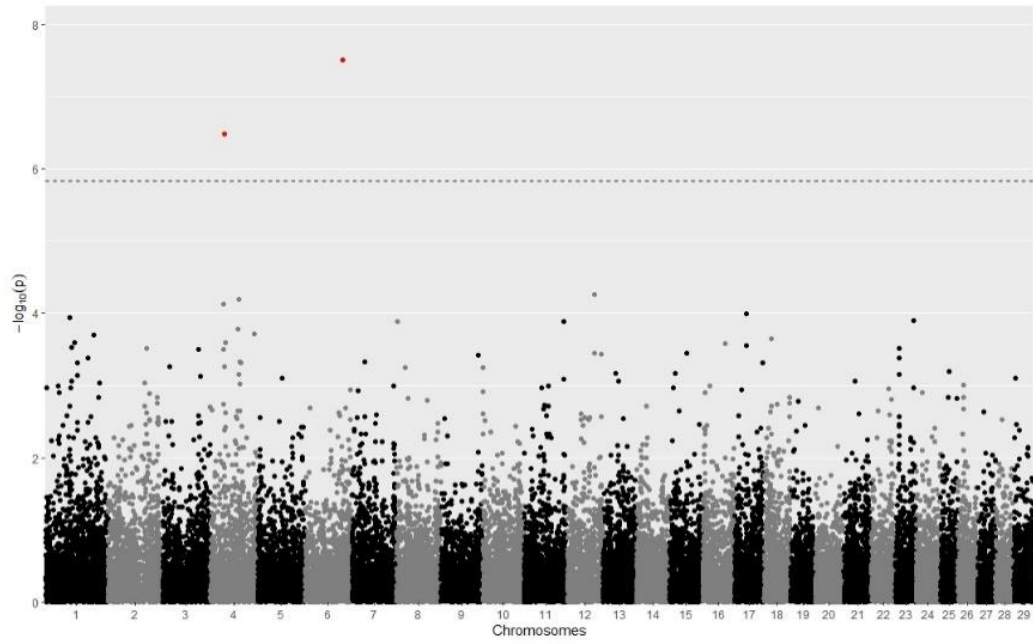
$\lambda = 1.002$ (RA)



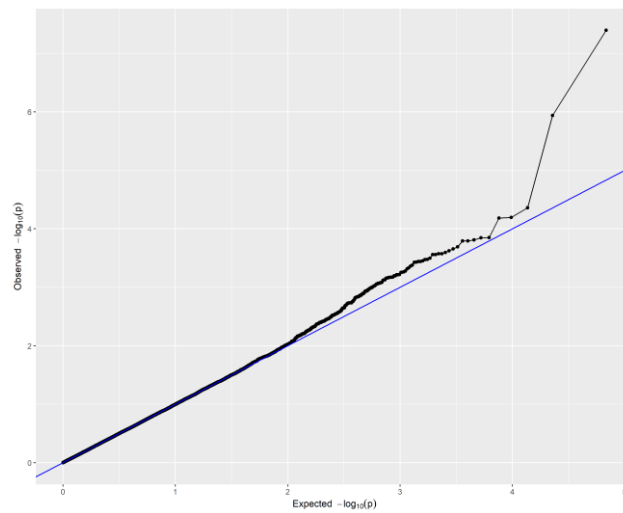
Type (TY)



$\lambda = 0.989$ (TY)

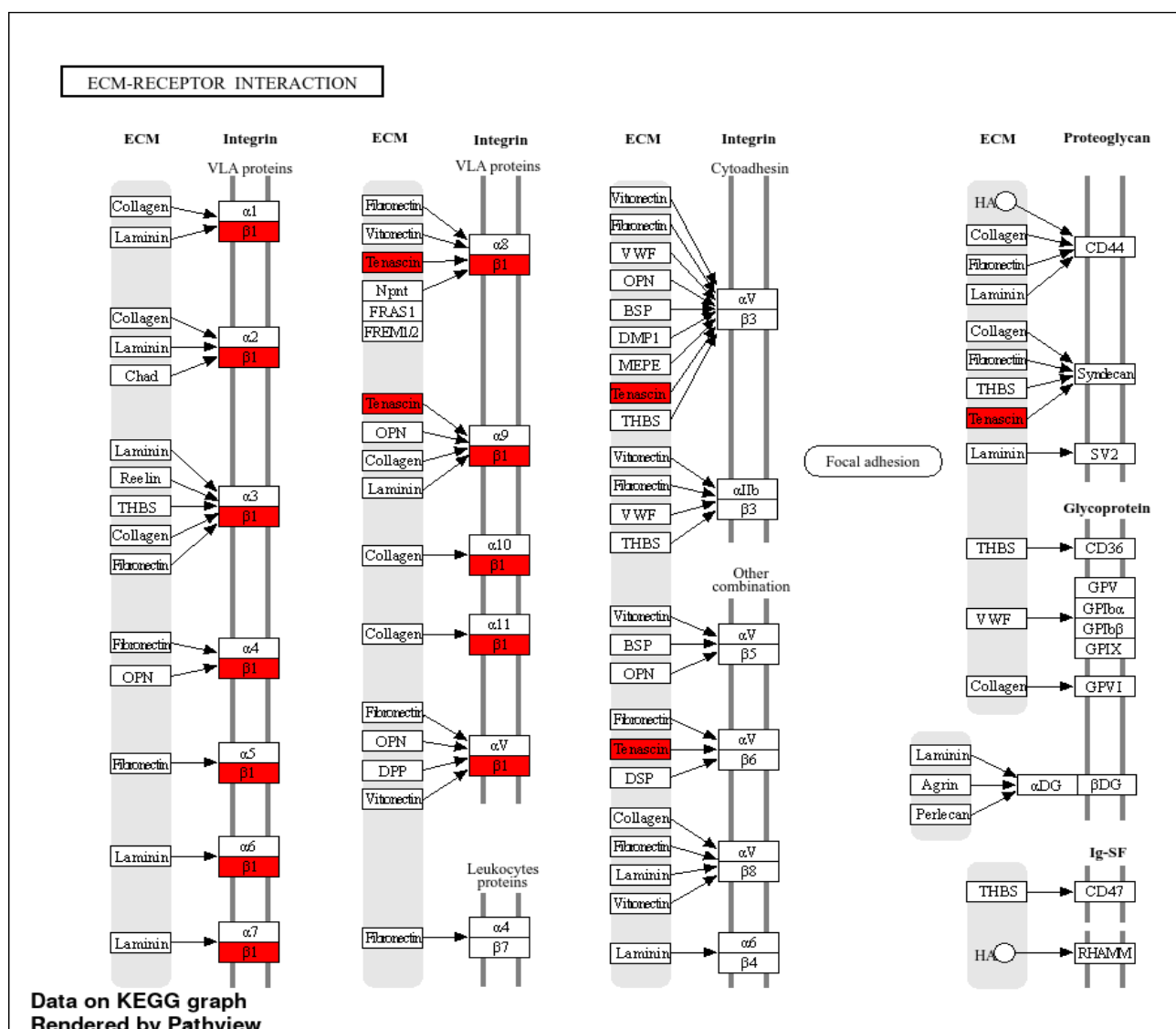


General (GN)

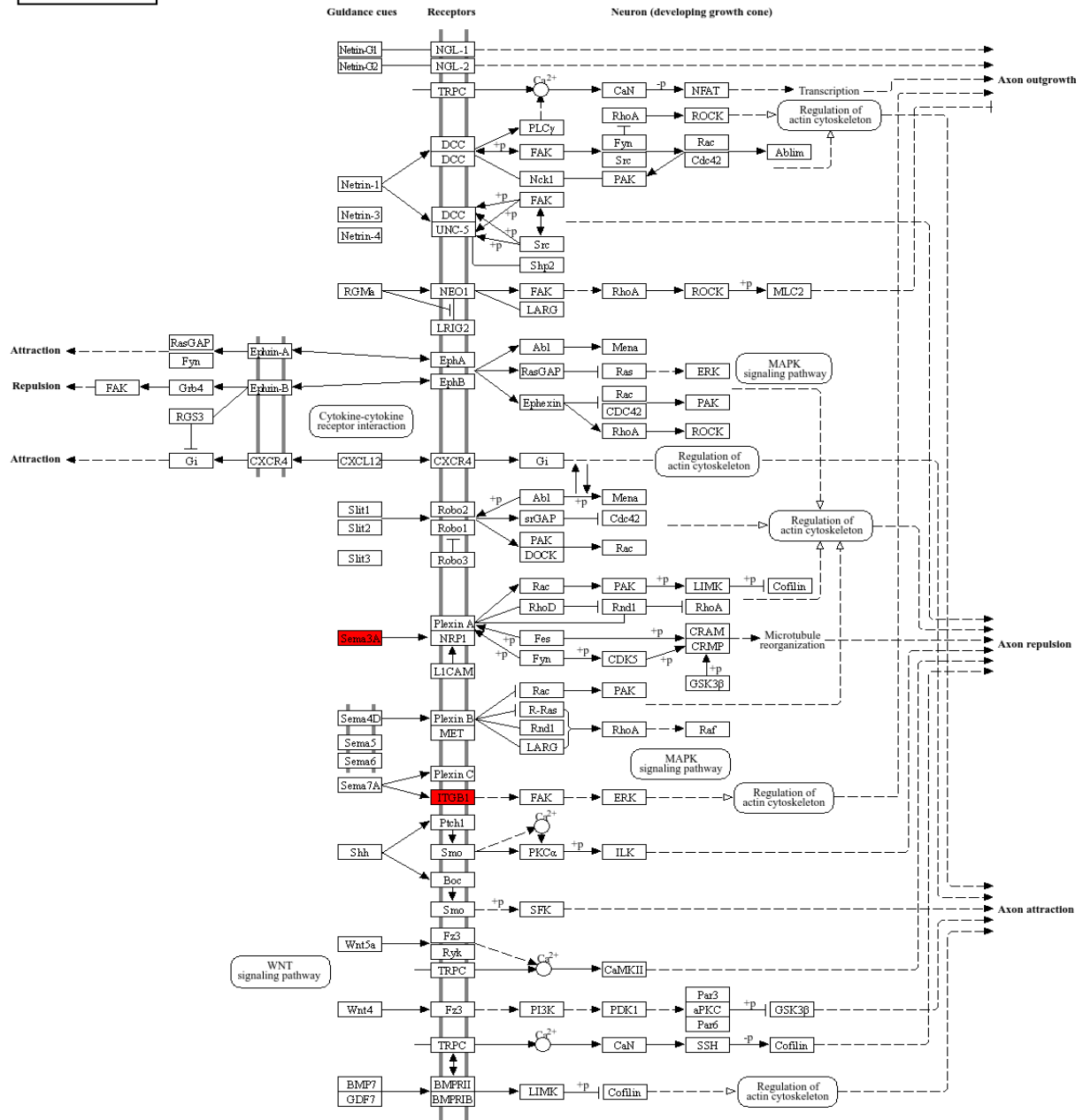


$\lambda = 1.001$ (GN)

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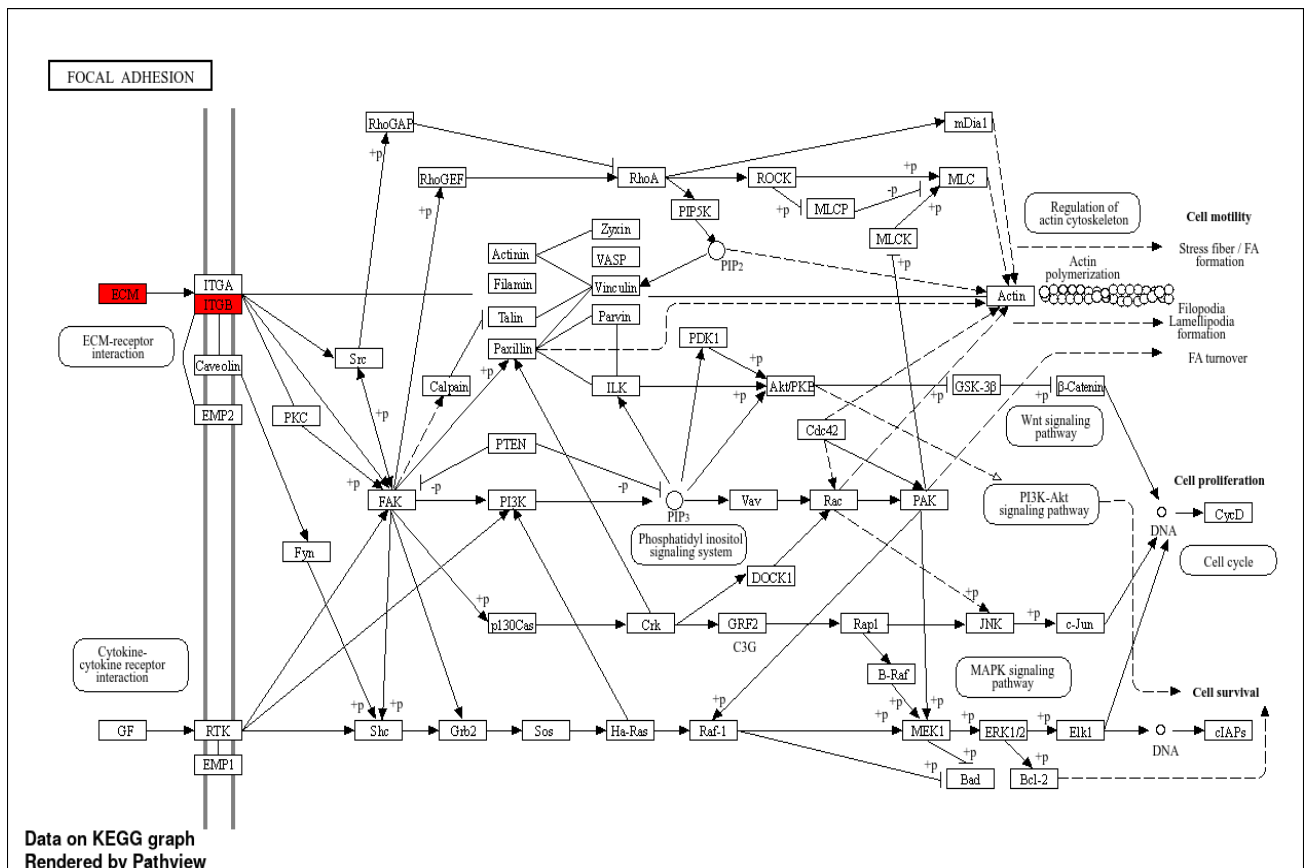


AXON GUIDANCE



Data on KEGG graph
Rendered by Pathview

SF3: The pathways of axon guidance



SF4: The pathways of focal adhesion