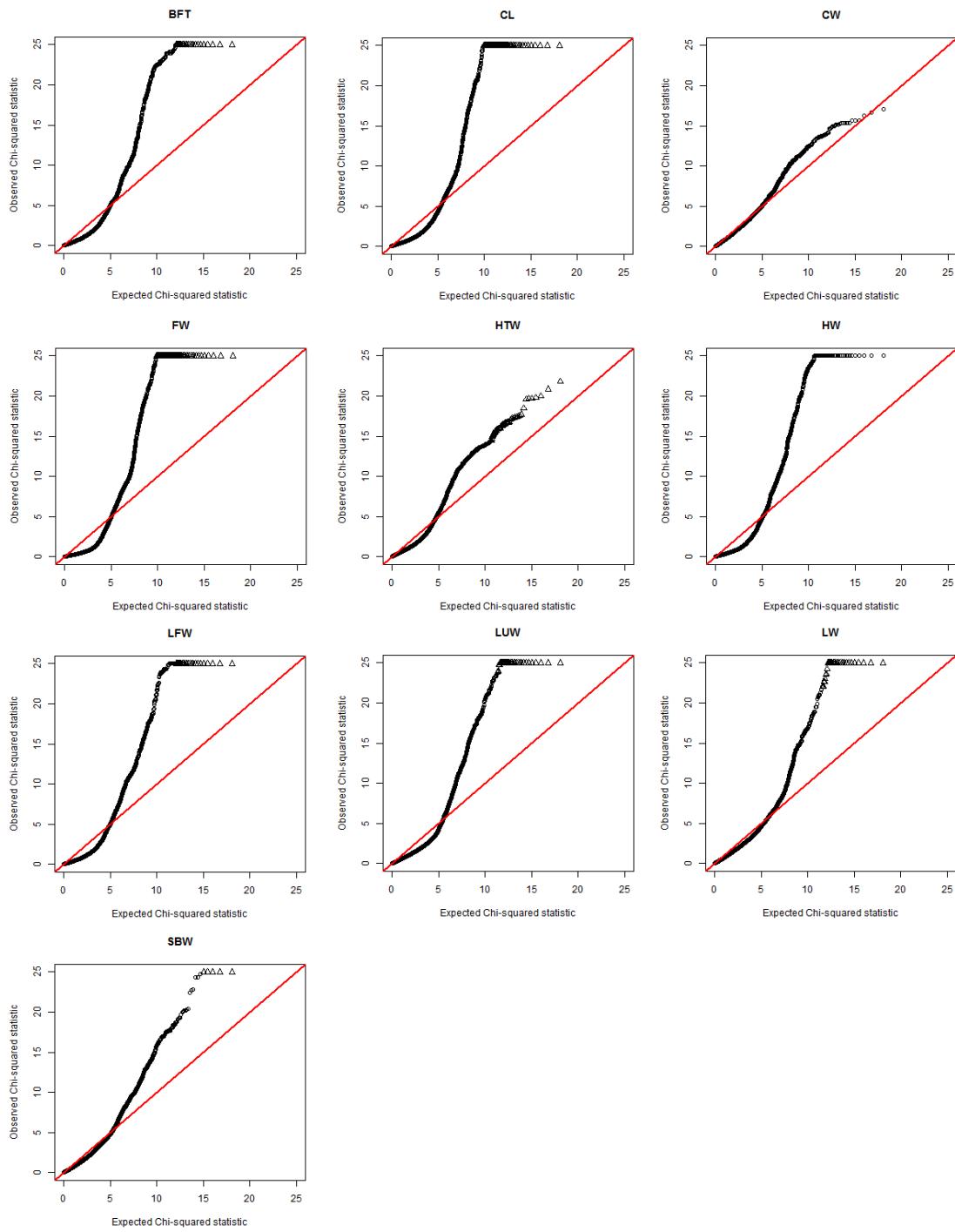
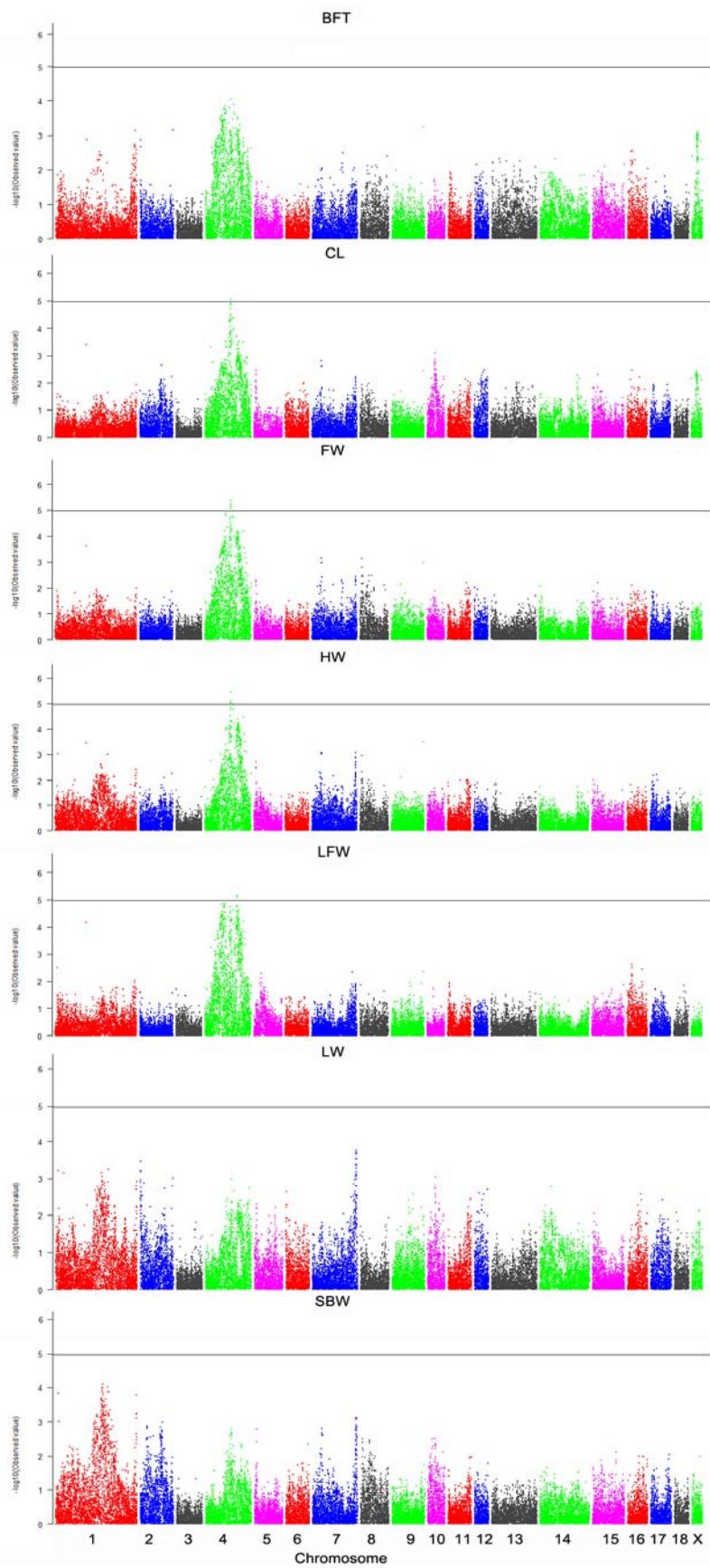


Appendix A The Manhattan plots for CW, HTW and LUW.



Appendix B The Q-Q plots for 10 traits. For each of the eight carcass quality traits, a Q-Q plot of the results derived without adjustment for the inflation factor (λ) are shown in black. Results derived using the genome control (GC) procedure are shown in blue.



Appendix C The Manhattan plots for conditioned GWAS for seven traits.

Appendix D Chromosome-wide significant SNPs for CL, FW and HW after conditioned analysis

SNP	Chr	Position (bp)	P-value
MARC0054004	4	85033158	2.19E-05
CASI0006794	4	85087382	2.10E-05
SIRI0000865	4	85105668	2.33E-05
ALGA0026139	4	85151430	2.47E-05
H3GA0013157	4	85178011	3.44E-05
ASGA0020433	4	85250559	2.10E-05
ALGA0026158	4	85294108	2.19E-05
MARC0033560	4	85556233	2.10E-05
ALGA0124518	4	85608923	2.55E-05
MARC0032957	4	85653759	5.40E-05
MARC0019209	4	85707889	2.19E-05
ALGA0026189	4	86326309	5.33E-05

Appendix E Number of genome-wide effective SNPs in each chromosome and the chromosome-wide significant threshold.

Chr	effective SNPs	P-value
1	1268	3.94E-05
2	436	0.000115
3	580	8.62E-05
4	823	6.08E-05
5	650	7.69E-05
6	563	8.88E-05
7	812	6.16E-05
8	585	8.55E-05
9	654	7.65E-05
10	481	0.000104
11	545	9.17E-05
12	409	0.000122
13	812	6.16E-05
14	819	6.11E-05
15	694	7.2E-05
16	458	0.000109
17	517	9.67E-05
18	383	0.000131
X	550	9.09E-05
Total	12039	