Supplementary Material 6: Manhattan graph and Q-Q plot graph to visualize the distribution of association P-values from the genome-wide association study for anthocyanidins content in cooked tubers of *Solanum tuberosum* L. Group Phureja.

CMLM.Cyanidin
Observed $-\log_{10}(p)$
Expected $-\log_{10}(p)$
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
0
1
2
3
4

CMLM.Delphinidin
−log10(p)
1
2
3
4
1
2
3
4
5
6
7
8
9
10
11
12

CMLM.Delphinidin
Observed $-\log_{10}(p)$
Expected $-\log_{10}(p)$
0
1
2
3
4

CMLM.Pelargonidin
−log10(p)
1
2
3
4
5
6
1
2
3
4
5
6
7
8
9
10
11
12

CMLM.Pelargonidin
Observed $-\log_{10}(p)$
Expected $-\log_{10}(p)$
0
1
2
3
4
5
0
1
2
3
4

CMLM.Peonidin
−log10(p)
1
2
3
4
1
2
3
4
5
6
7
8
9
10
11
12

CMLM.Peonidin
Observed $-\log_{10}(p)$
Expected $-\log_{10}(p)$
0
1
2
3
4

CMLM.Petunidin
−log10(p)
1
2
3
4
1
2
3
4
5
6
7
8
9
10
11
12

CMLM.Petunidin
Observed $-\log_{10}(p)$
Expected $-\log_{10}(p)$
0
1
2
3
4