

# The development of a novel SNP genotyping assay to differentiate cacao clones

Jocelyn De Wever, Helena Everaert, Frauke Coppieters, Hayley Rottiers, Koen Dewettinck, Steve Lefever, Kathy Messens

## Appendix 1: DMAS-qPCR Scatterplots

Two dimensional plot created by plotting the mean Cq values of the two parallel DMAS-qPCR reactions on opposite axes, either detecting the reference or alternative allele. In these plots, samples with a heterozygous genotype, having two low Cq values, are grouped in the lower left corner of the plot while homozygous samples appear either in the upper left or lower right corner. The plots below display the results of each DMAS-qPCR SNP assay used for genotyping different cacao accessions.

### X/Y values

**x-axis:** Cq value reference allele for that specific SNP marker

**y-axis:** Cq value alternative allele for that specific SNP marker

### Color code

**Black:** Left upper corner, Low Cq value for the reference allele in combination with a high Cq value for the alternative allele results in the following SNP genotype for that specific sample and SNP marker: homozygous for the reference allele.

**Red:** Left lower corner, Low Cq value for the reference allele in combination with a low Cq value for the alternative allele results in the following SNP genotype for that specific sample and SNP marker: heterozygous.

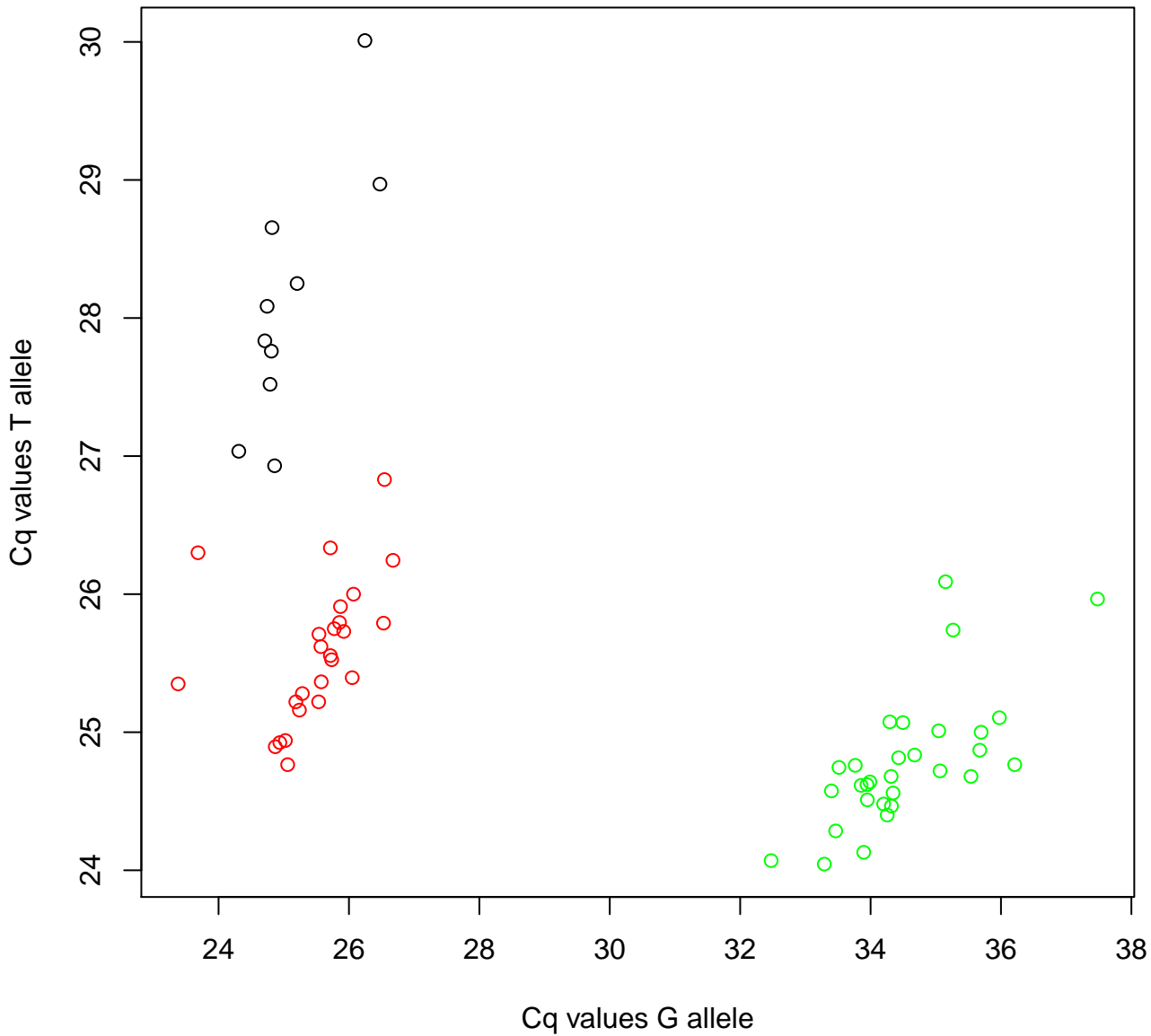
**Green:** Right lower corner, High Cq value for the reference allele in combination with a low Cq value for the alternative allele results in the following SNP genotype for that specific sample and SNP marker: homozygous for the alternative allele.

### Table of content

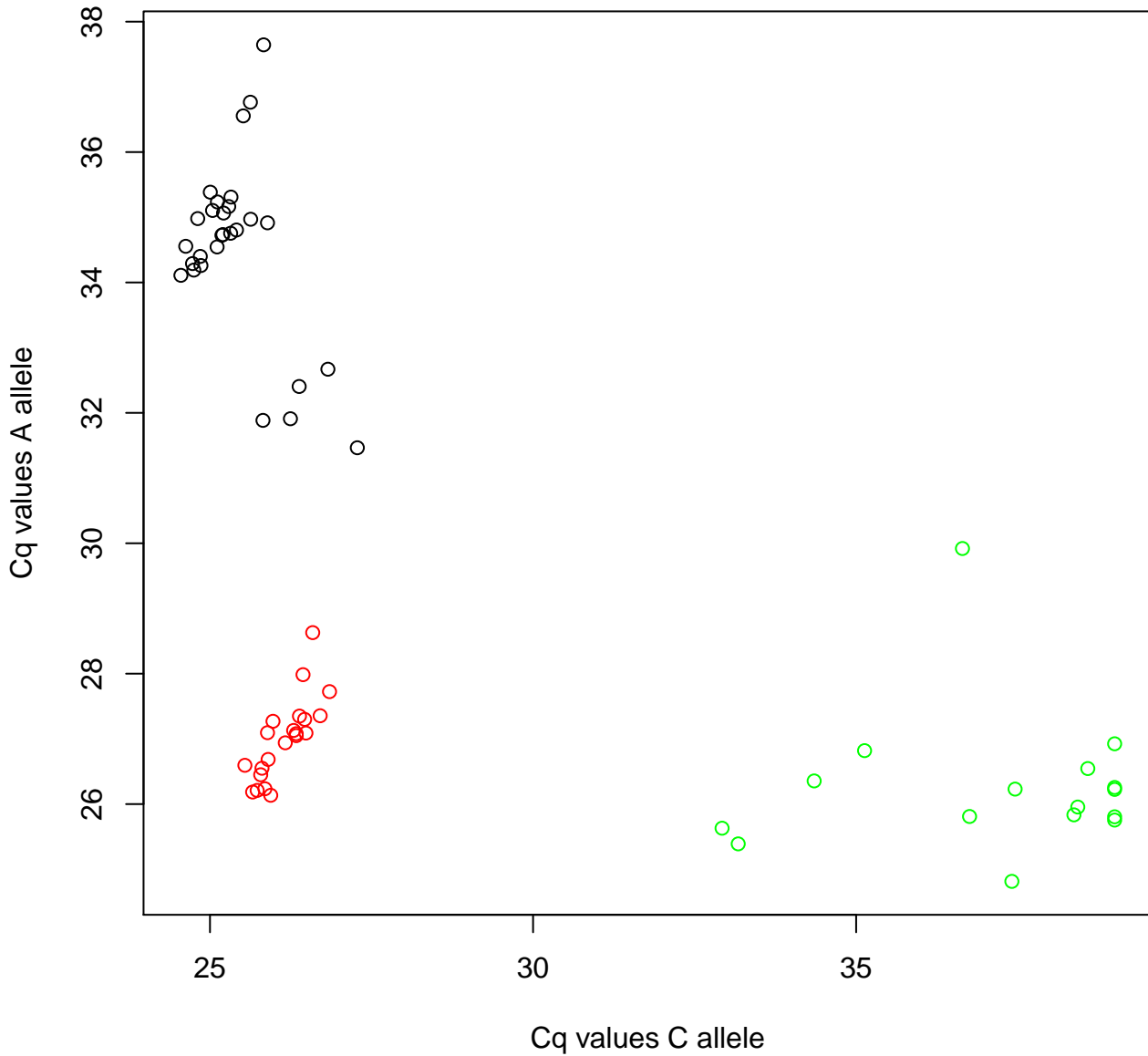
1. TcSNP139
2. TcSNP144
3. TcSNP151
4. TcSNP174
5. TcSNP193
6. TcSNP226
7. TcSNP230
8. TcSNP364
9. TcSNP372
10. TcSNP413
11. TcSNP448
12. TcSNP577
13. TcSNP591
14. TcSNP602
15. TcSNP606
16. TcSNP751
17. TcSNP786
18. TcSNP852

19. TcSNP860
20. TcSNP872
21. TcSNP878
22. TcSNP891
23. TcSNP994
24. TcSNP1041
25. TcSNP1060
26. TcSNP1111
27. TcSNP1126
28. TcSNP1280
29. TcSNP1331
30. TcSNP1439
31. TcSNP1458
32. Tcm002s00644224
33. Tcm002s29938429
34. Tcm002s34015437
35. Tcm003s05554949
36. Tcm003s12502217
37. Tcm003s20315420
38. Tcm003s27807955
39. Tcm006s26507164
40. Tcm008s17168944
41. Tcm009s28255143
42. Tcm009s41415628

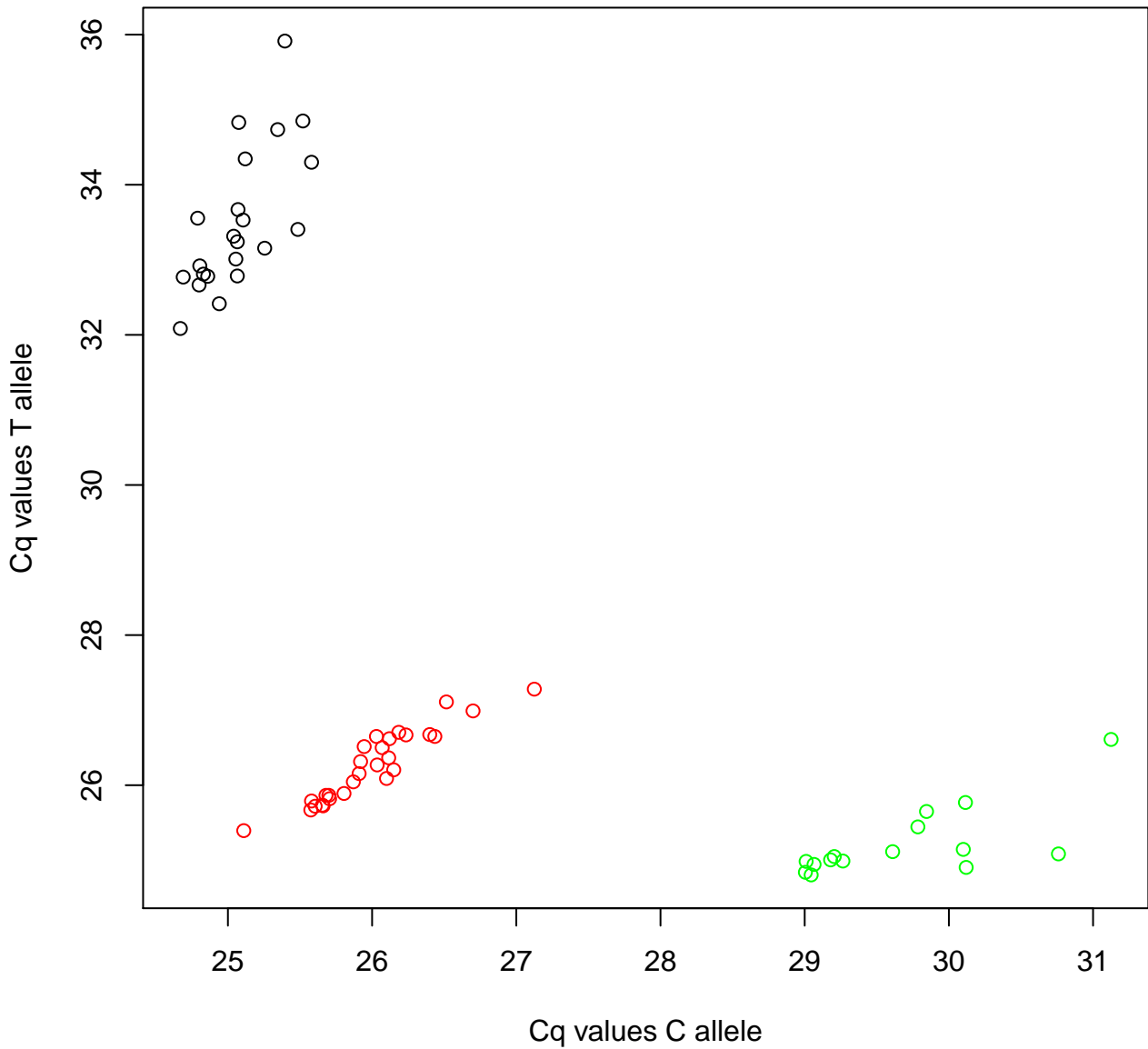
# TcSNP139



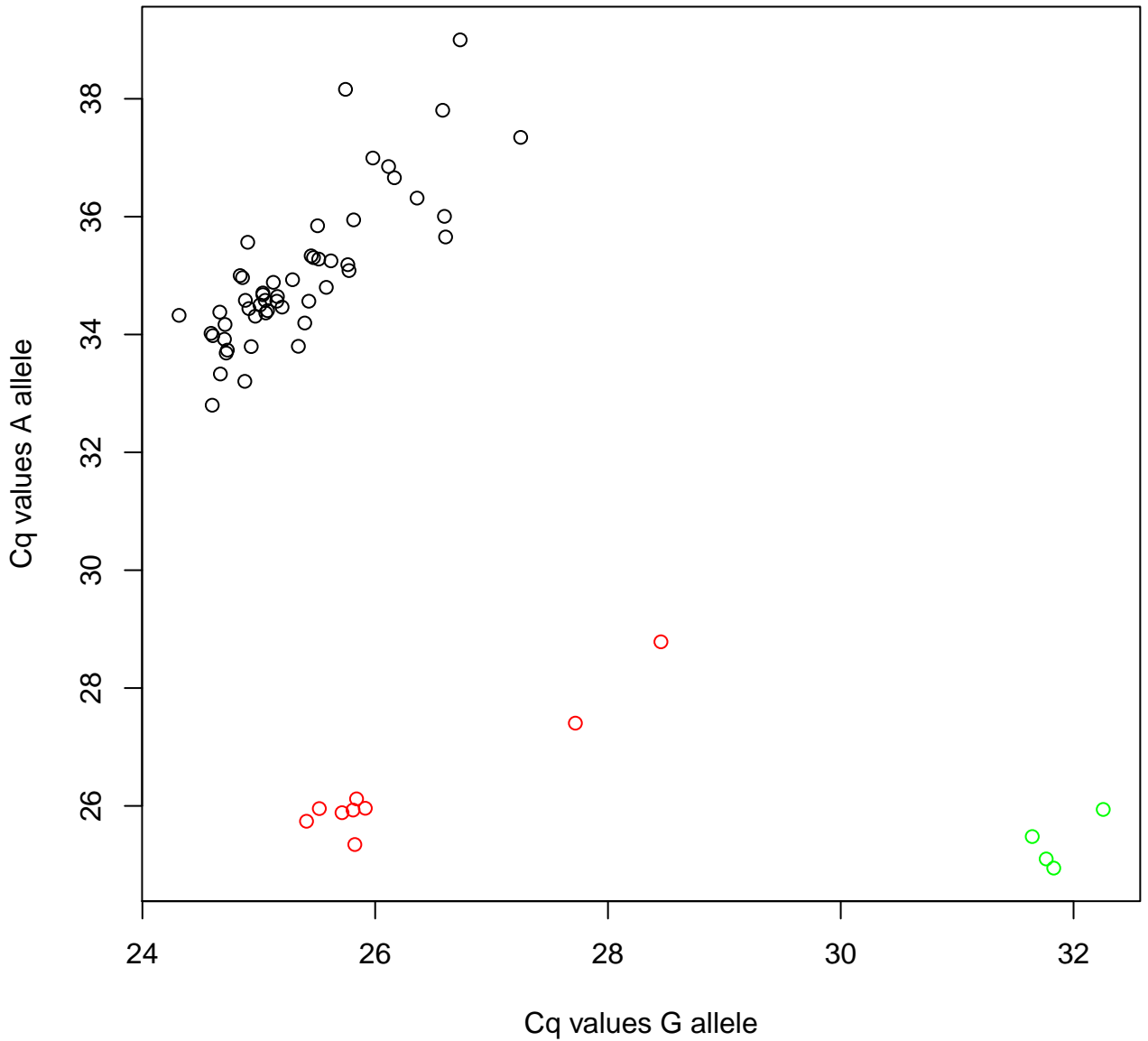
# TcSNP144



# TcSNP151

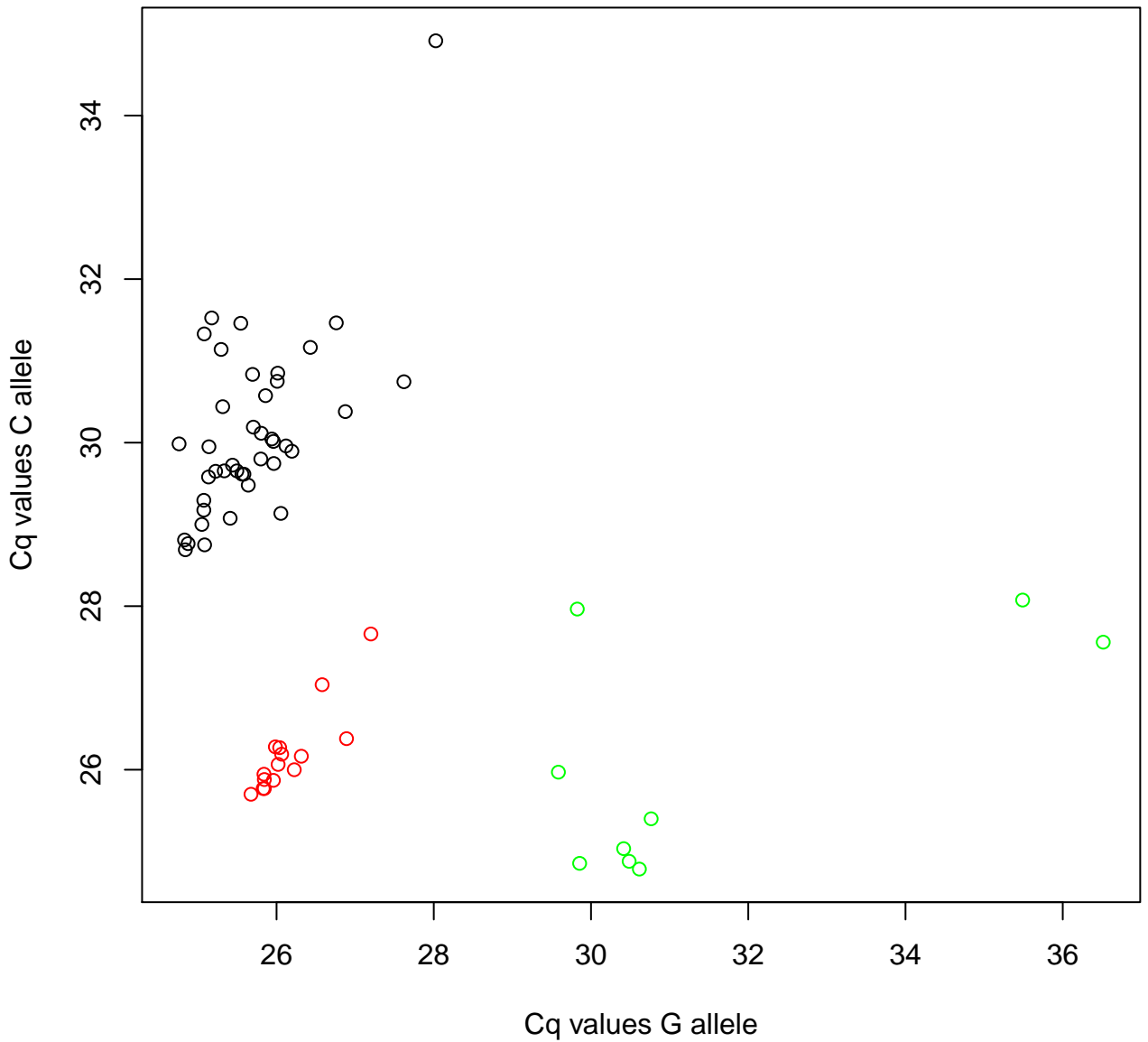


# TcSNP174



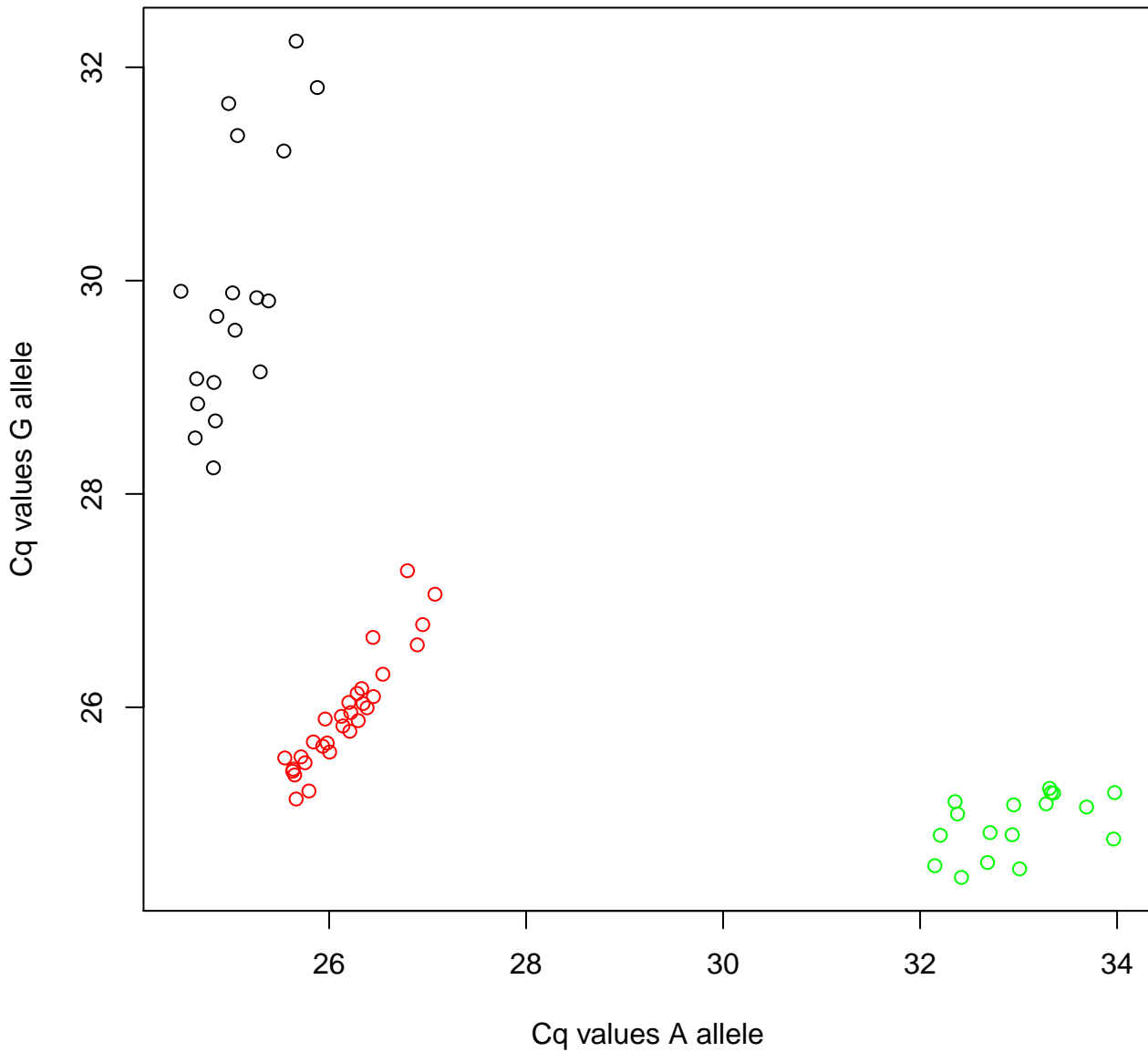


# TcSNP226

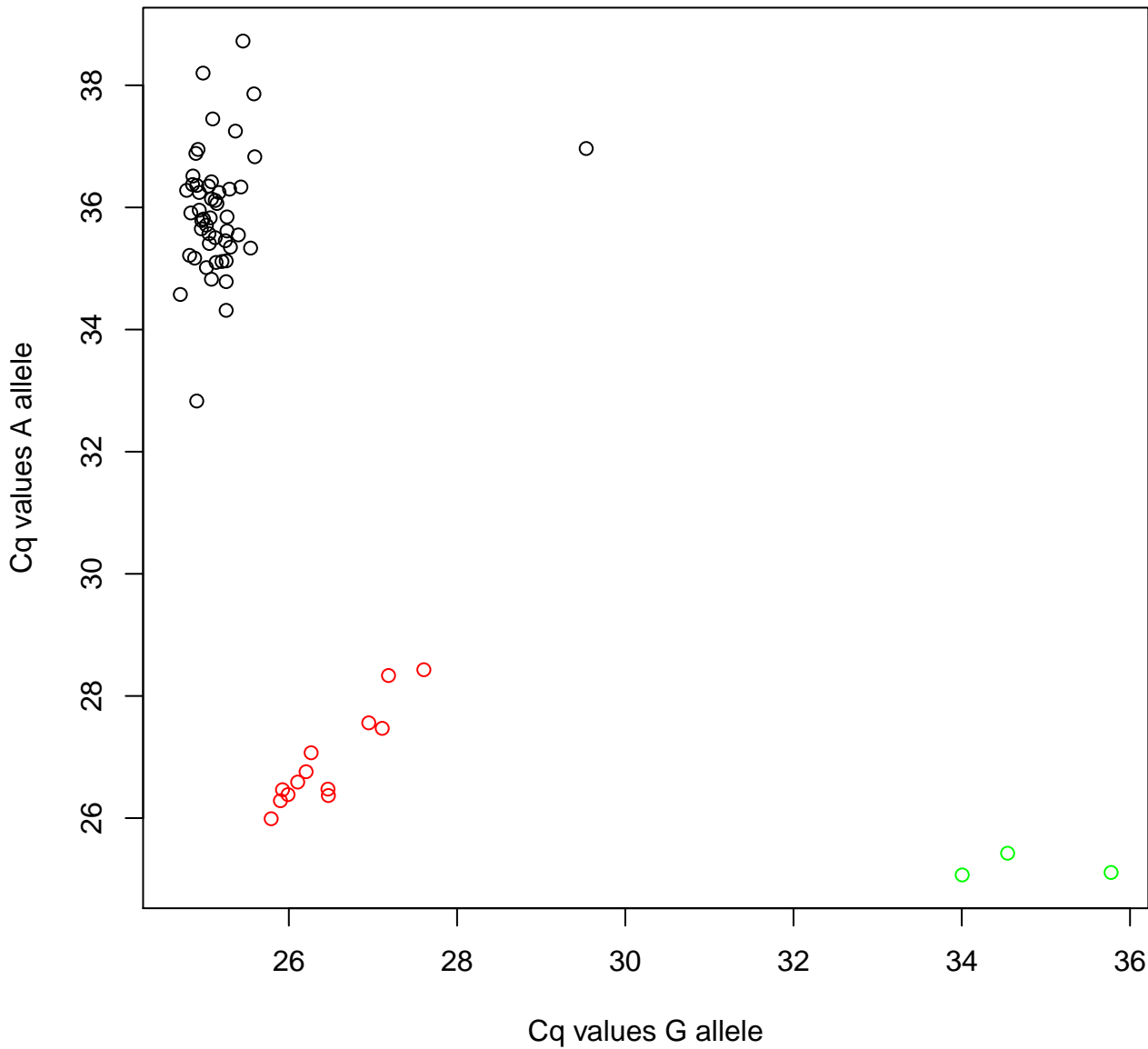




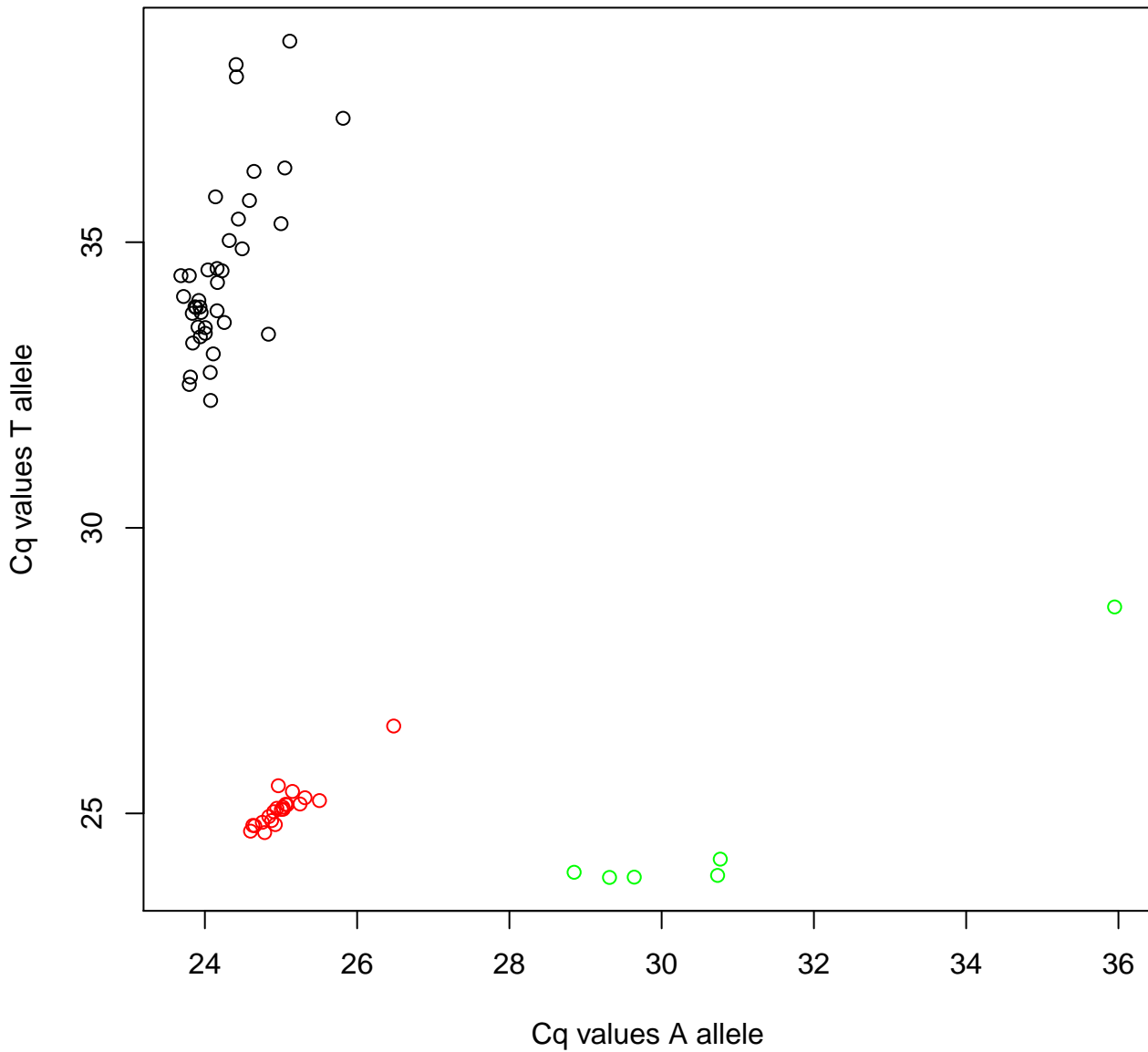
# TcSNP230



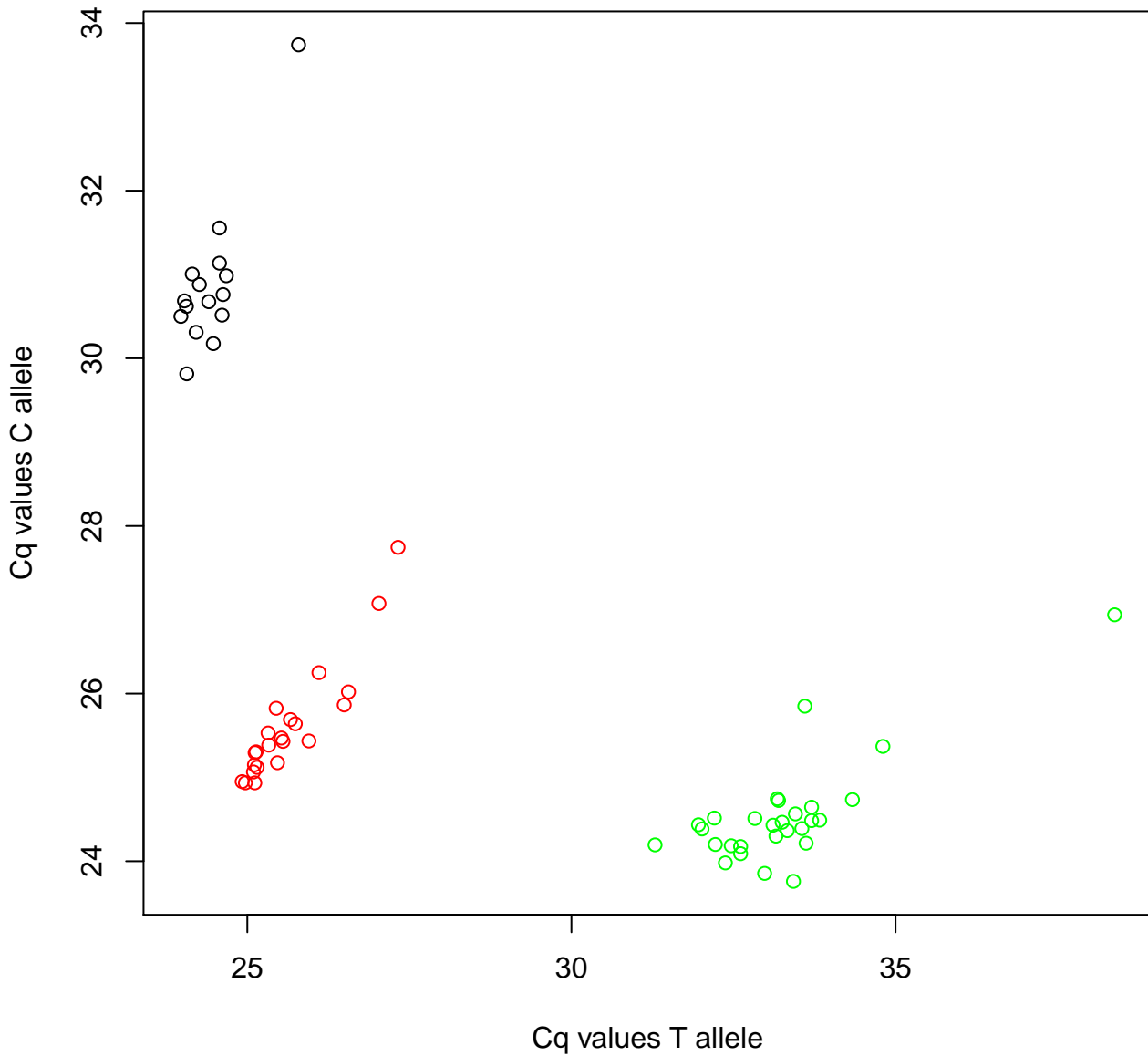
# TcSNP364



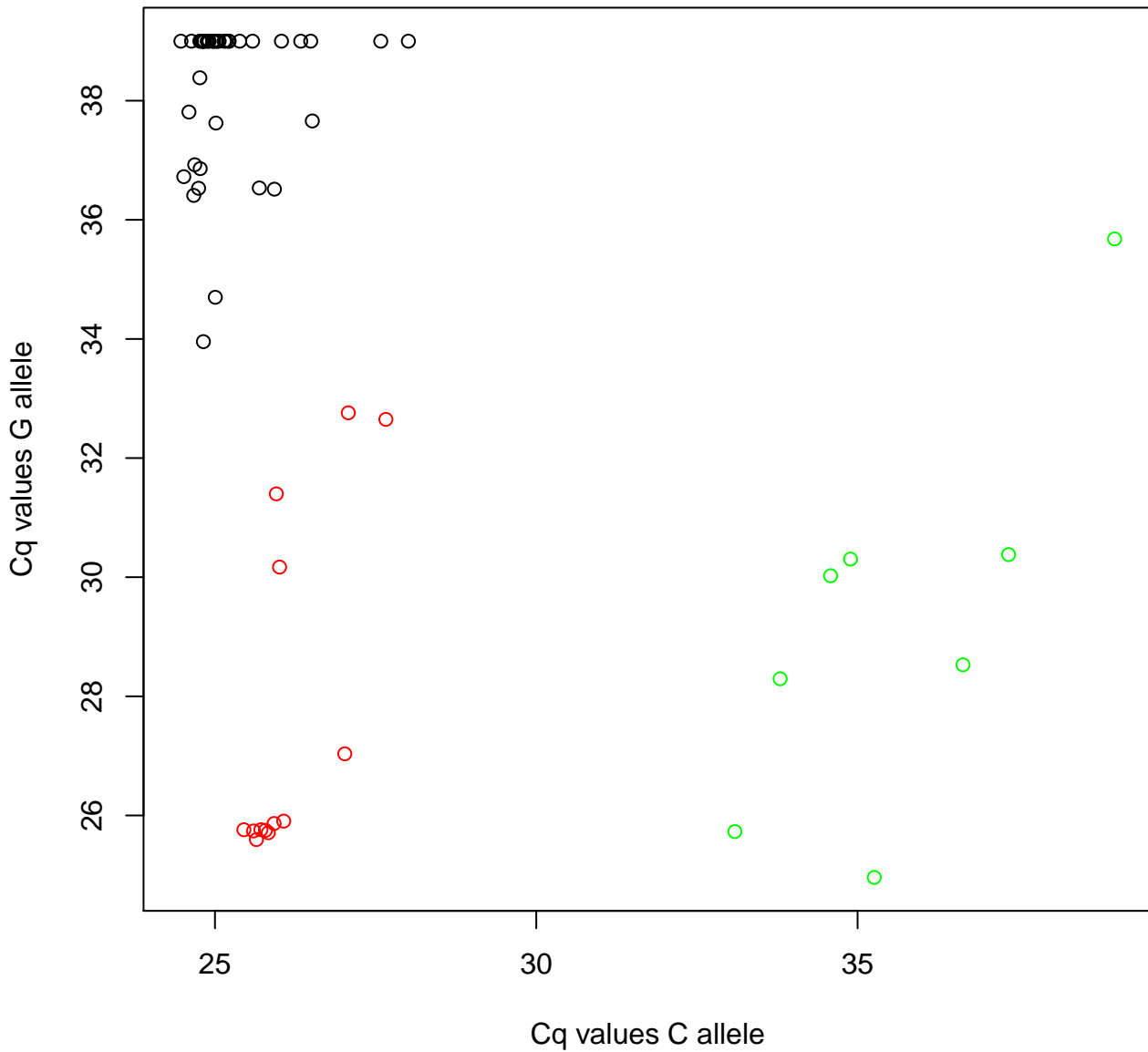
# TcSNP372



# TcSNP413

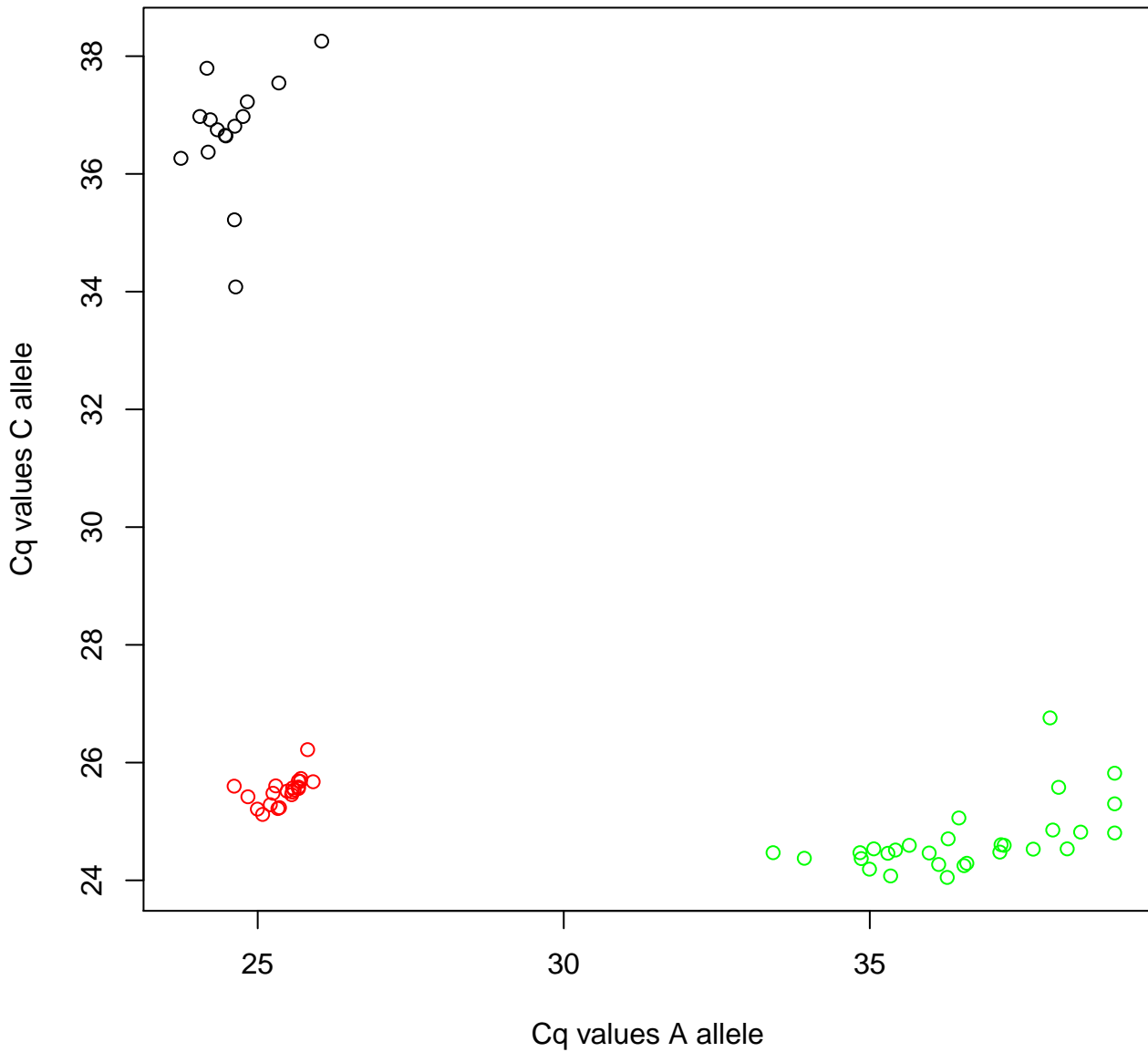


# TcSNP448

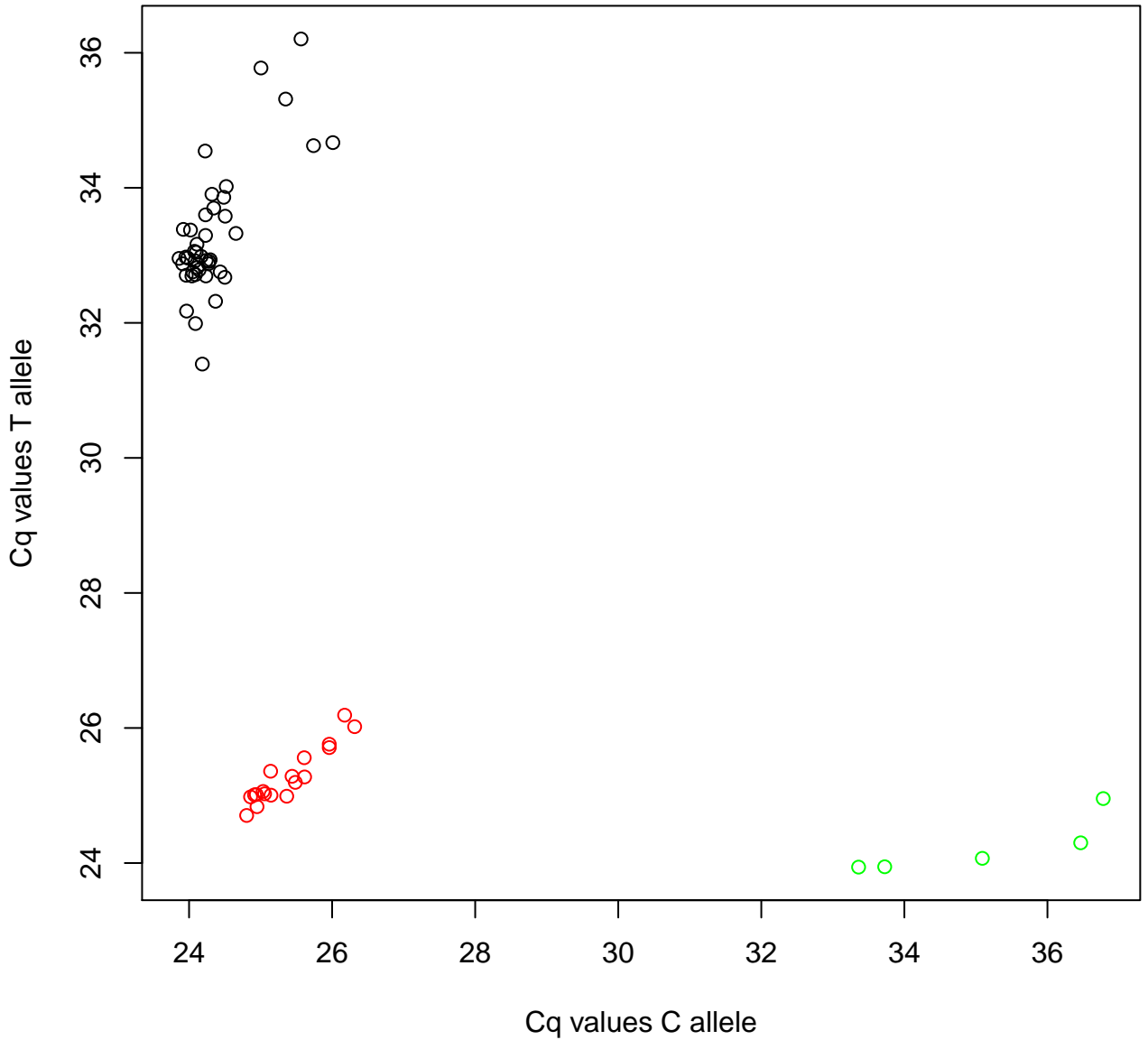




# TcSNP591

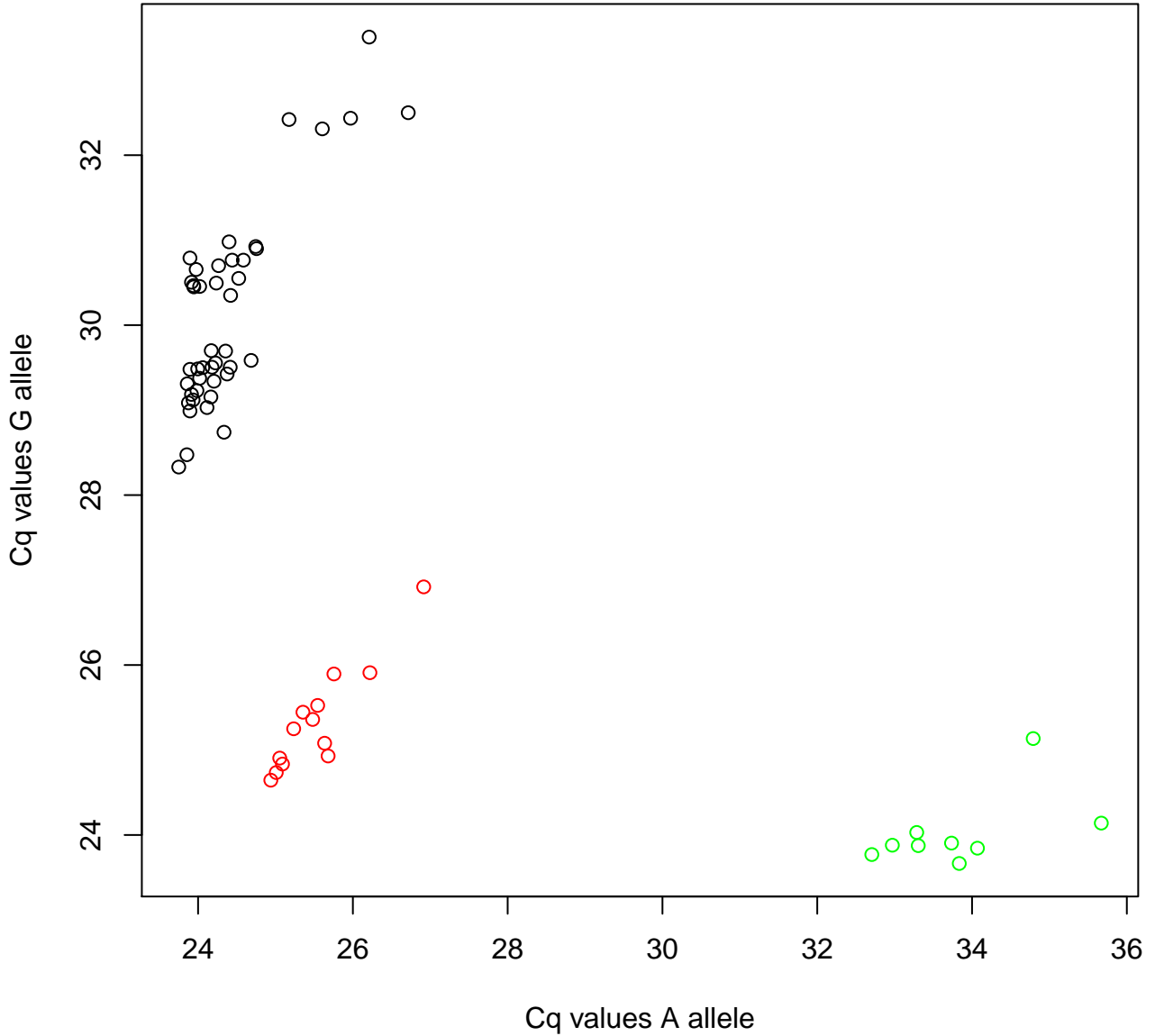


# TcSNP602

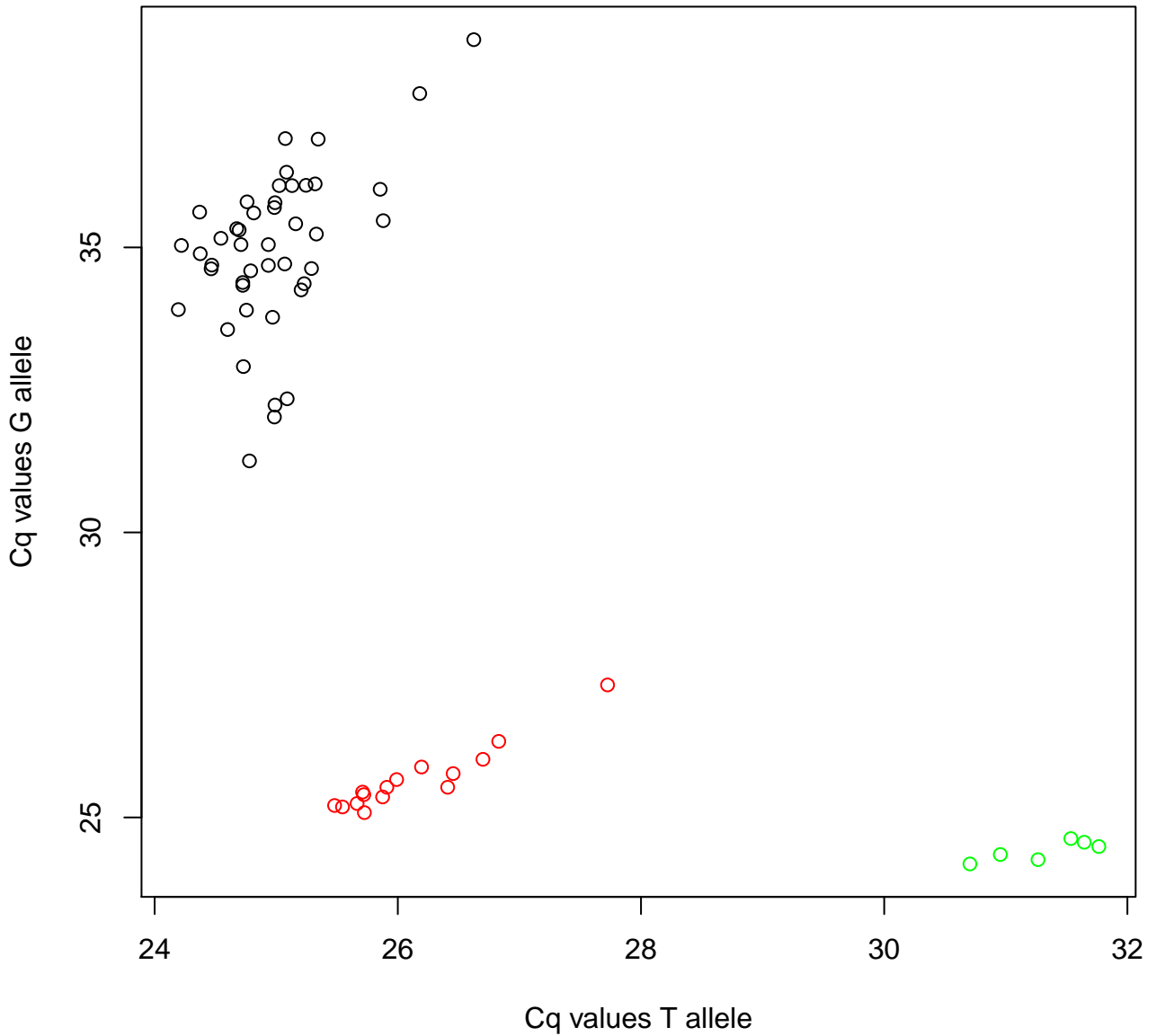




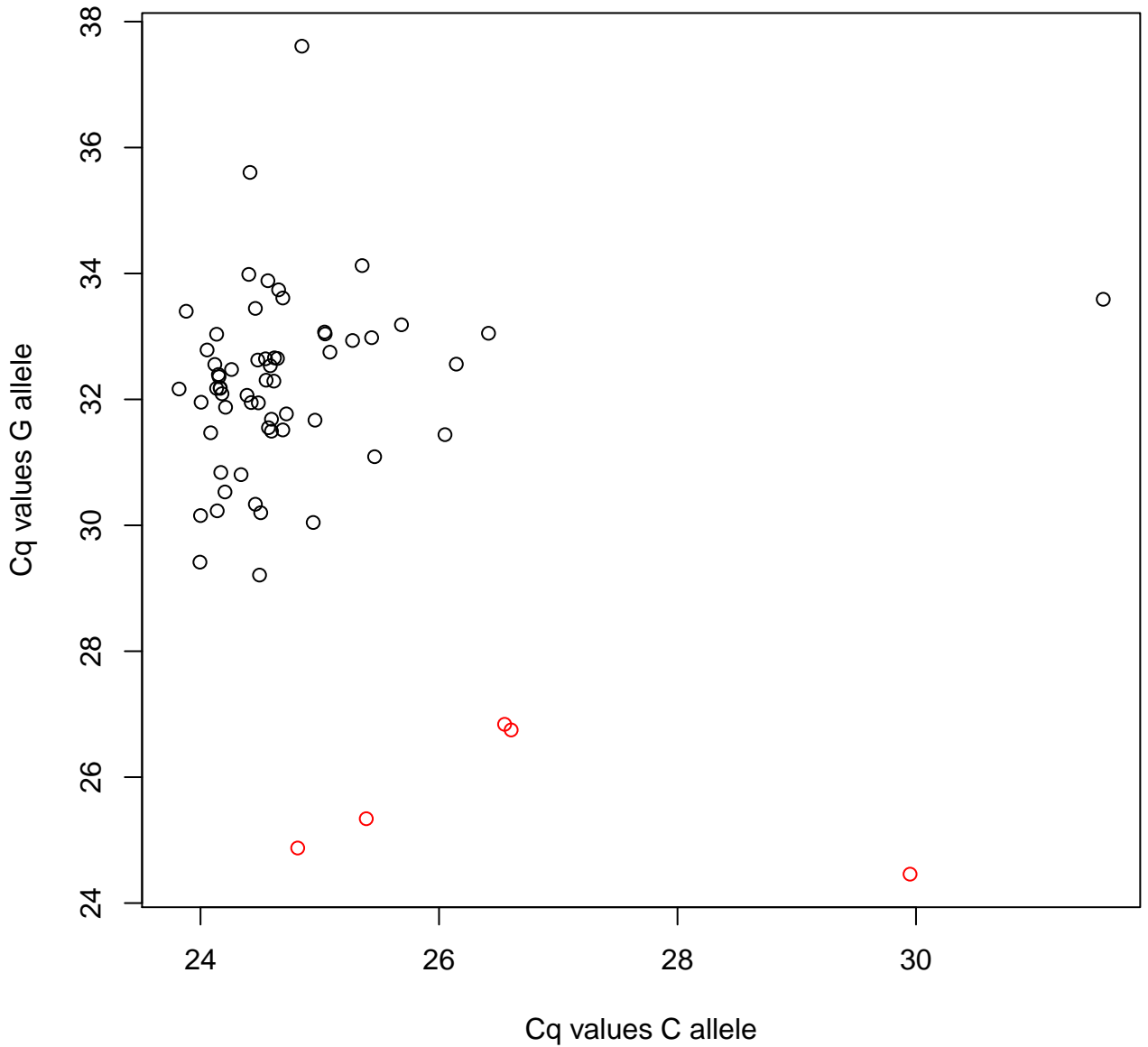
# TcSNP606



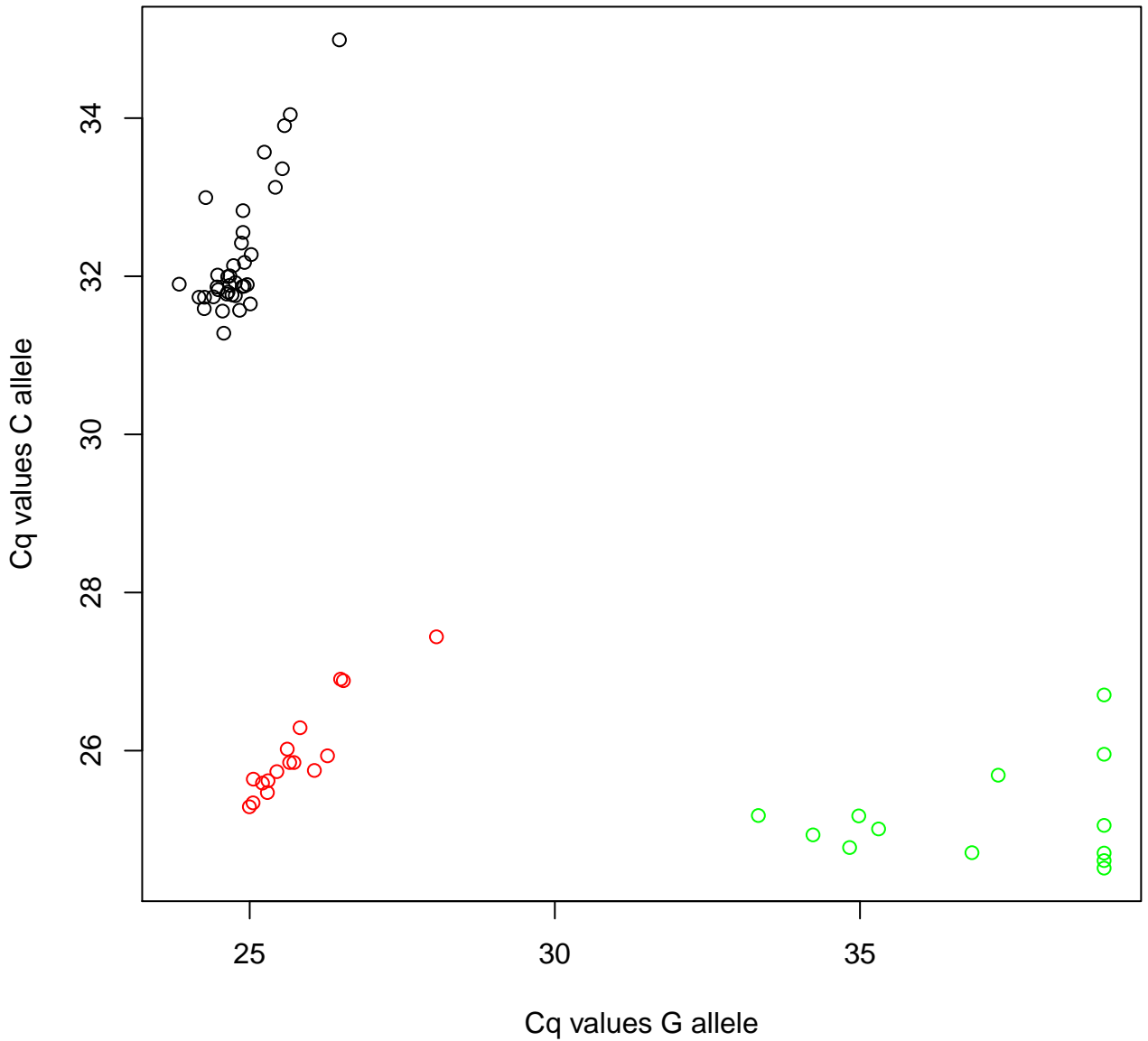
# TcSNP751



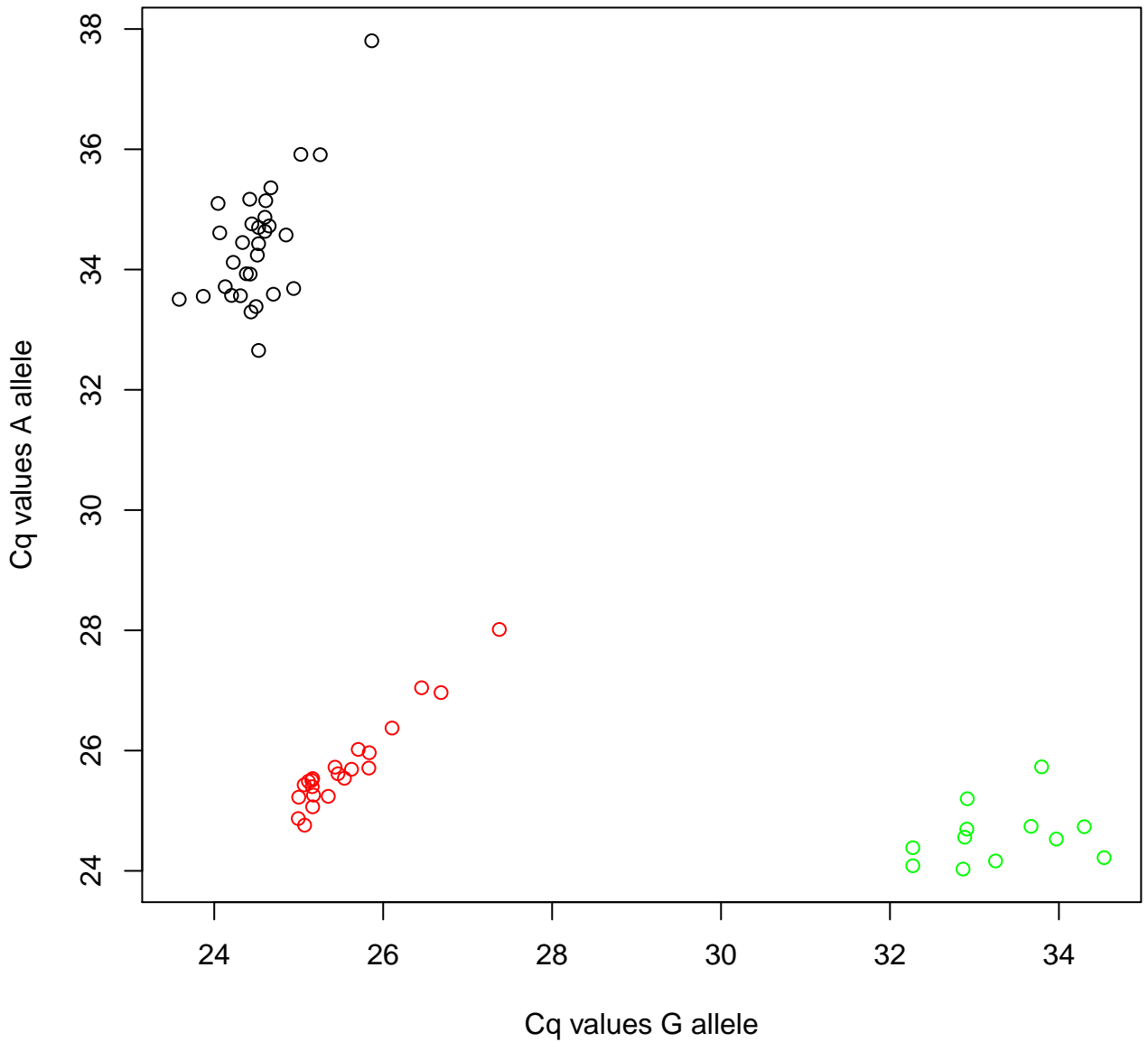
# TcSNP786



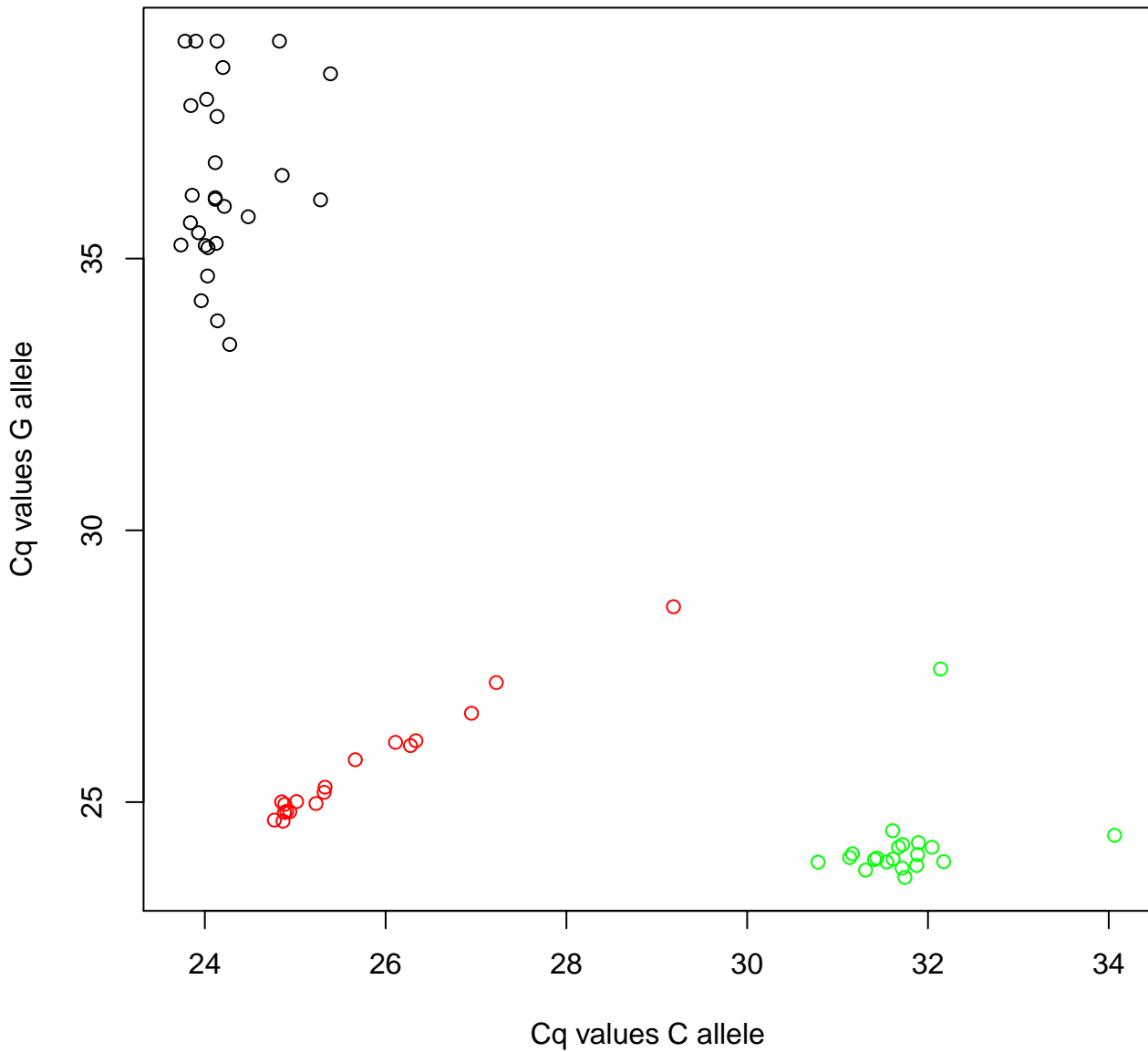
# TcSNP852



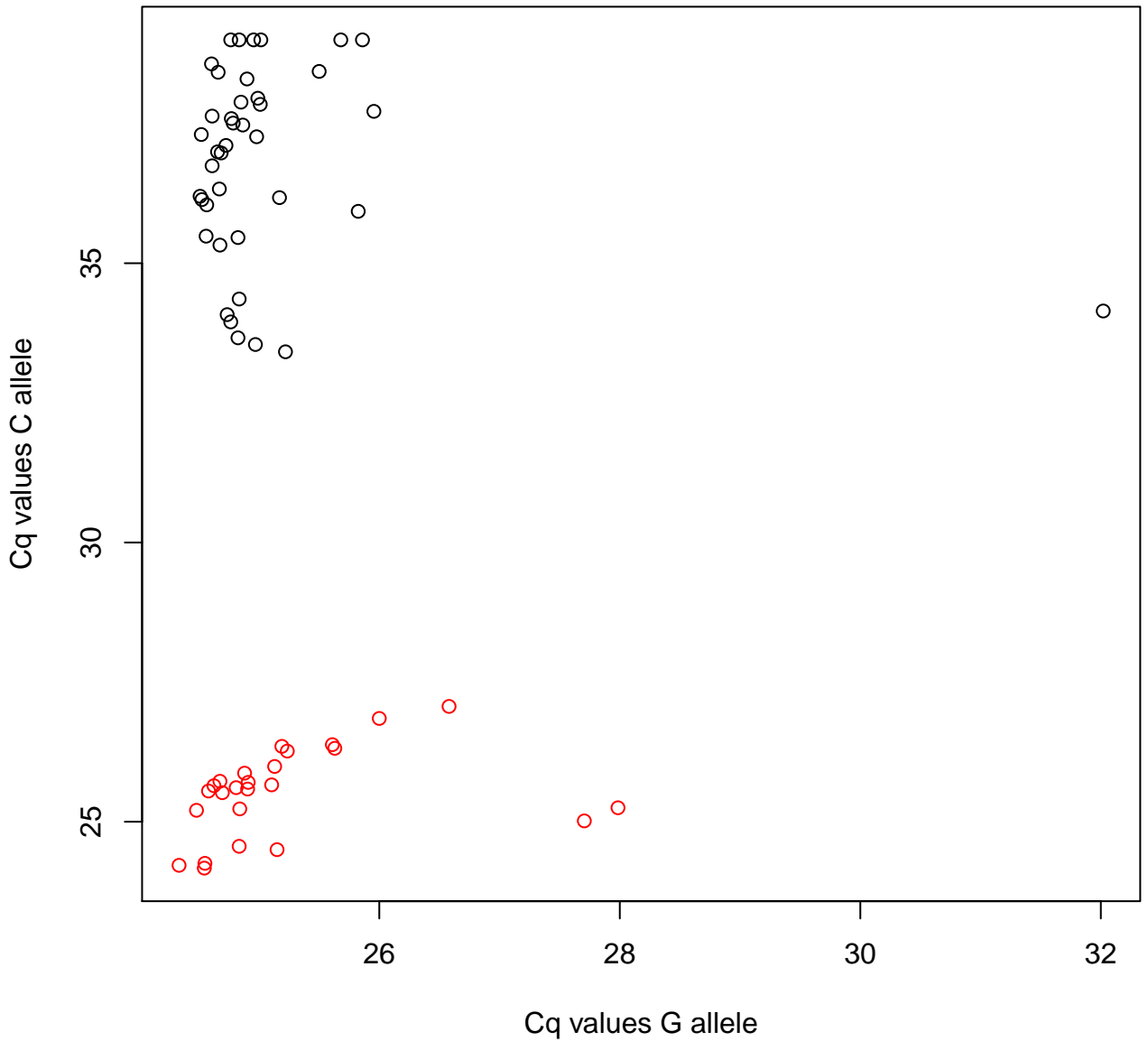
# TcSNP860



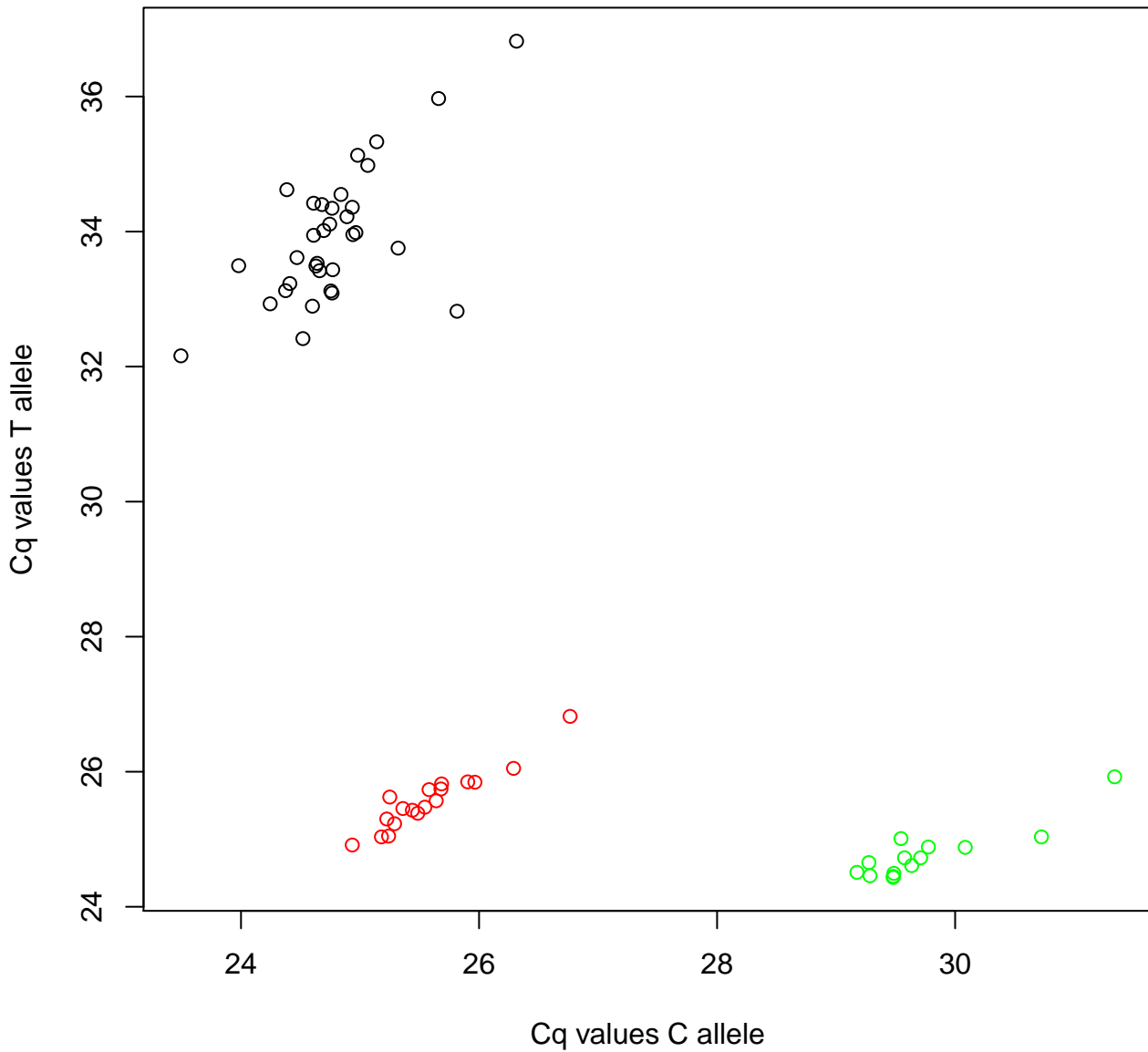
# TcSNP872



# TcSNP878

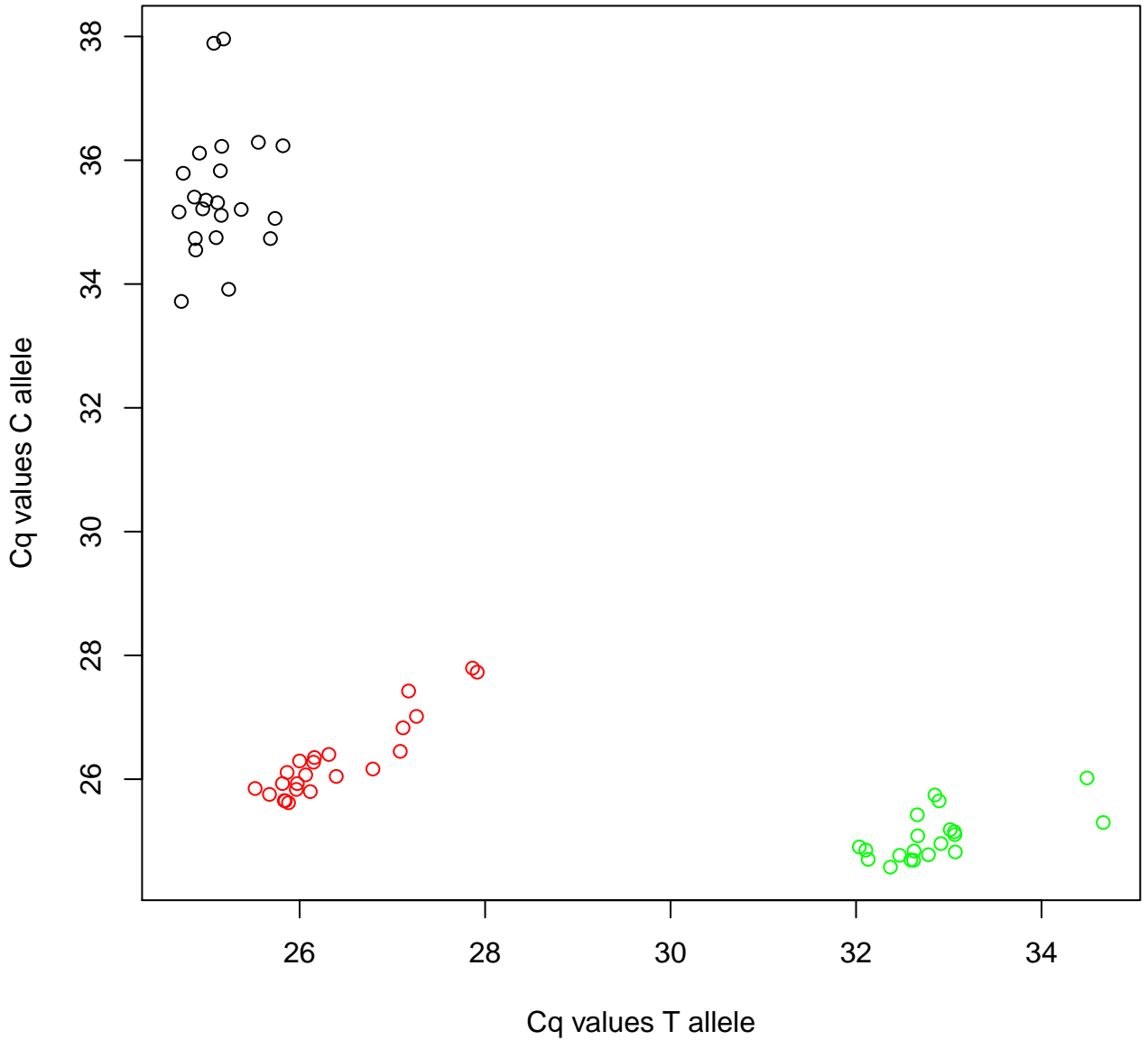


# TcSNP891

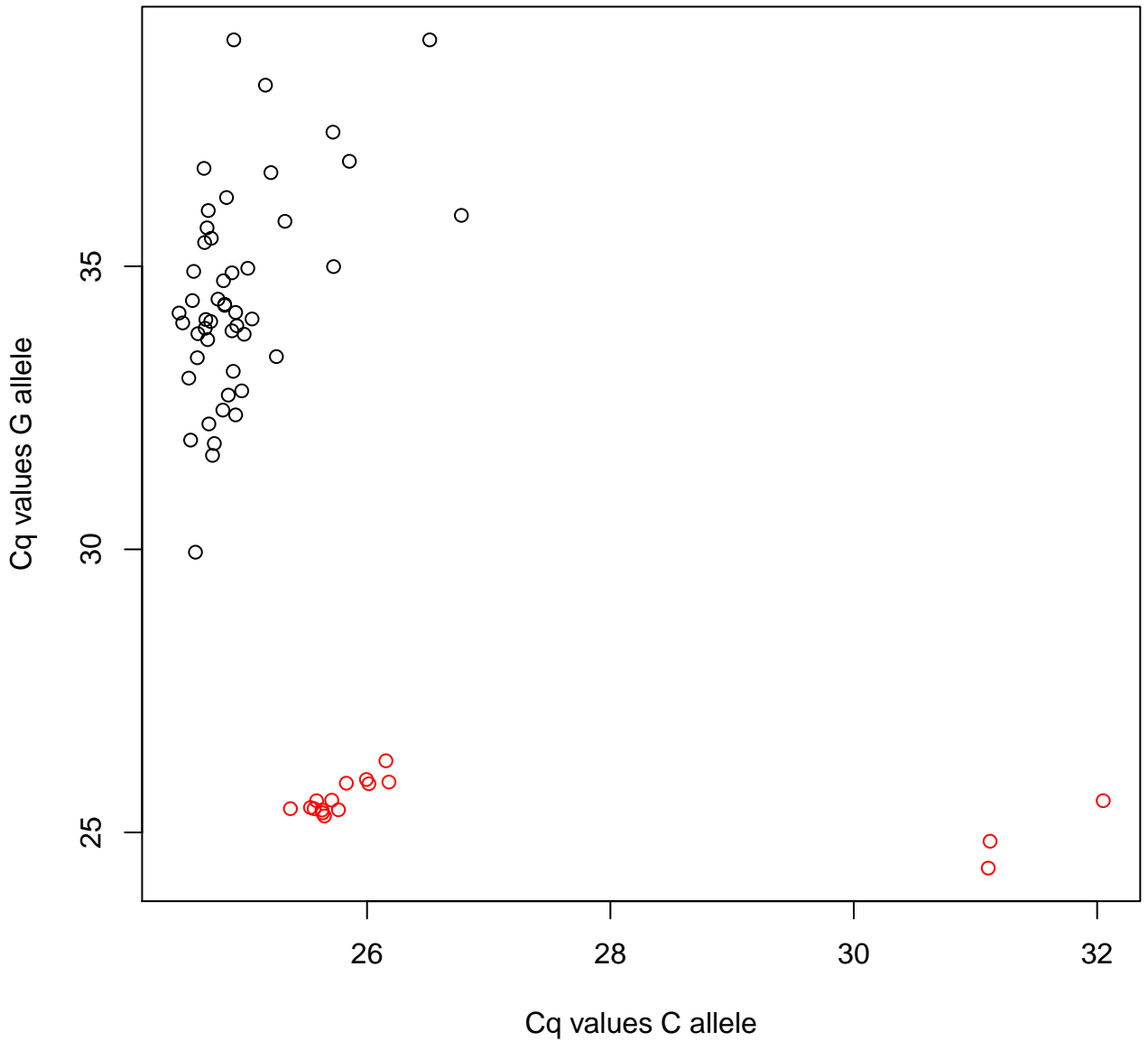




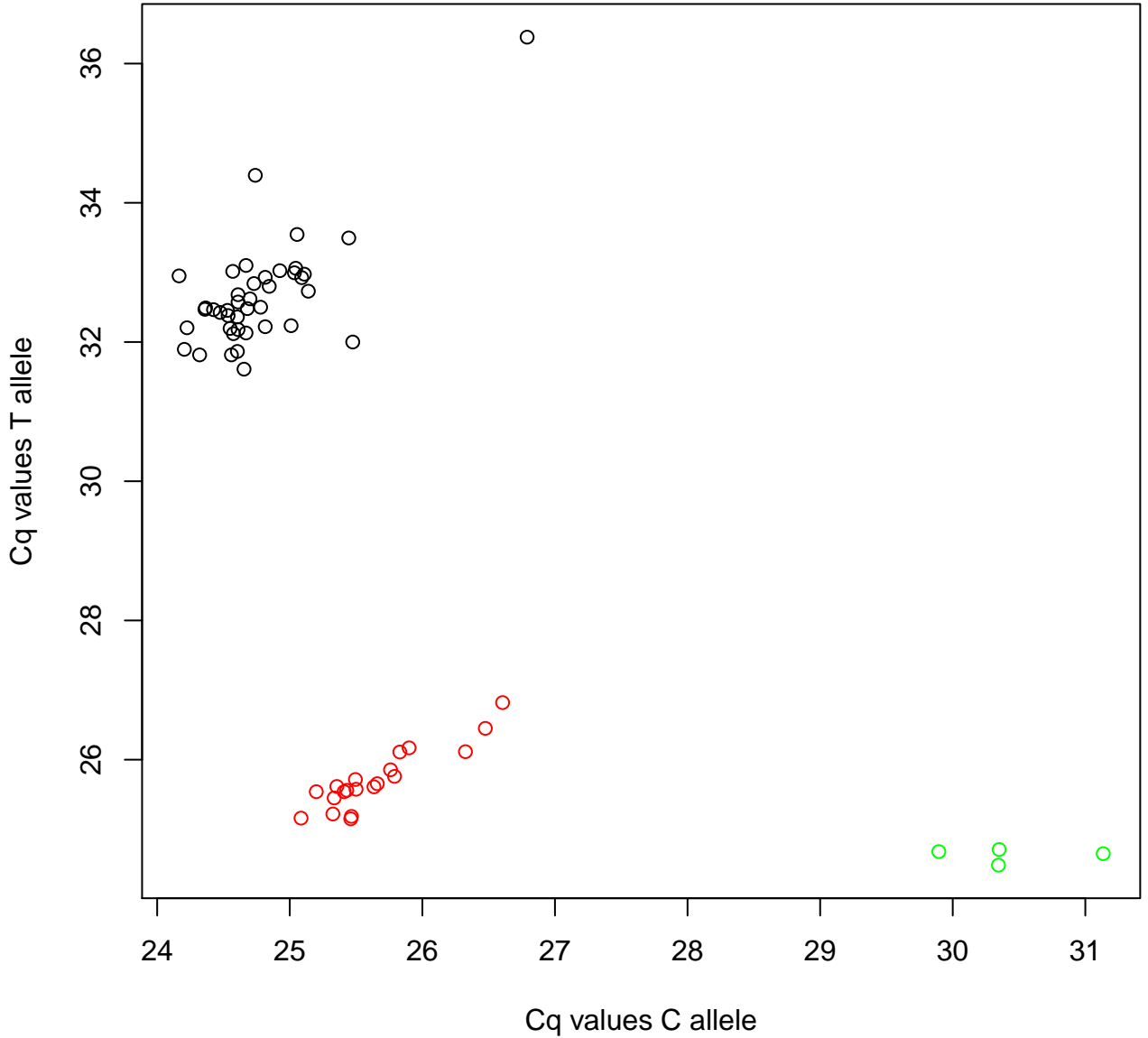
# TcSNP994



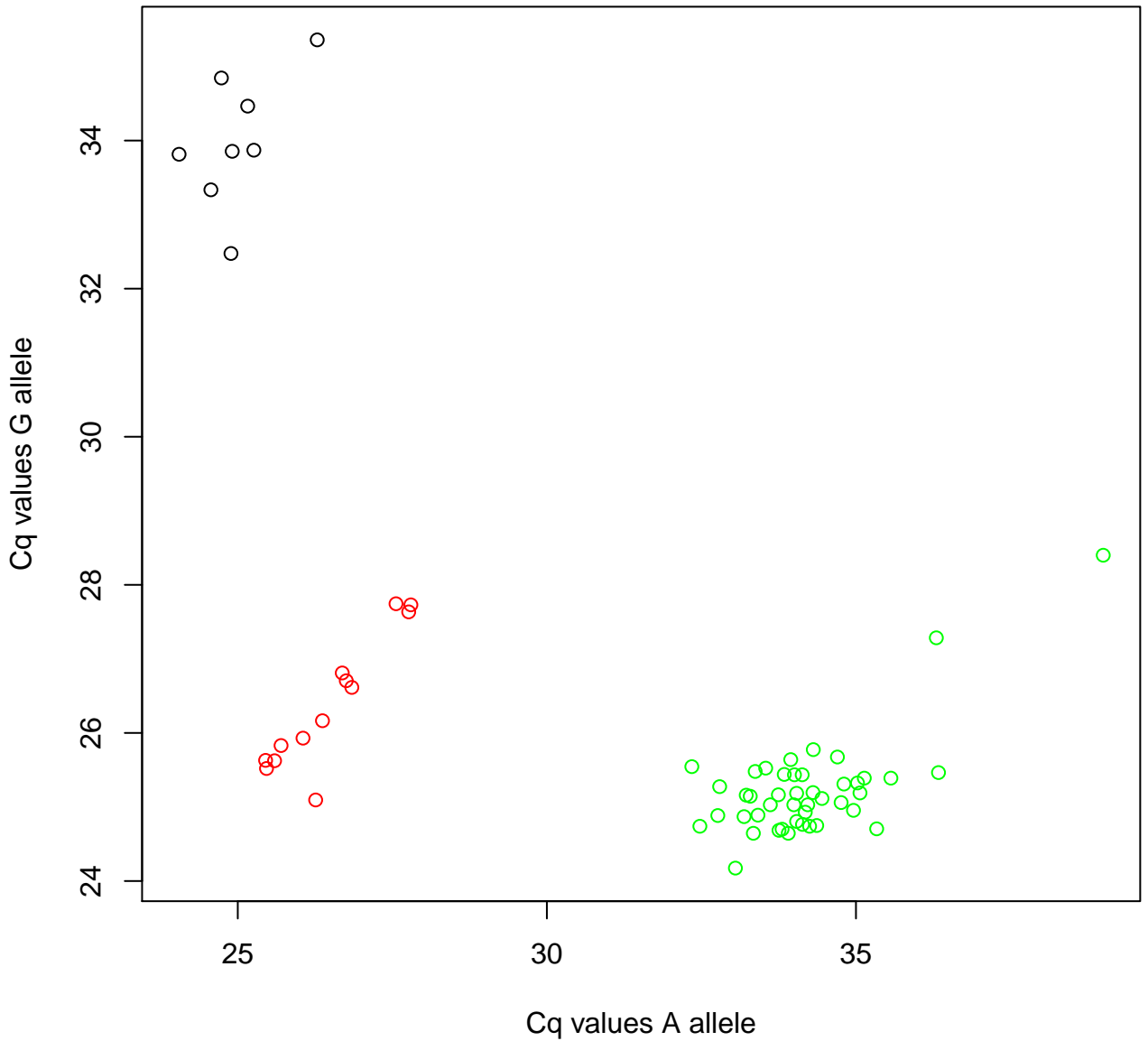
# TcSNP1041



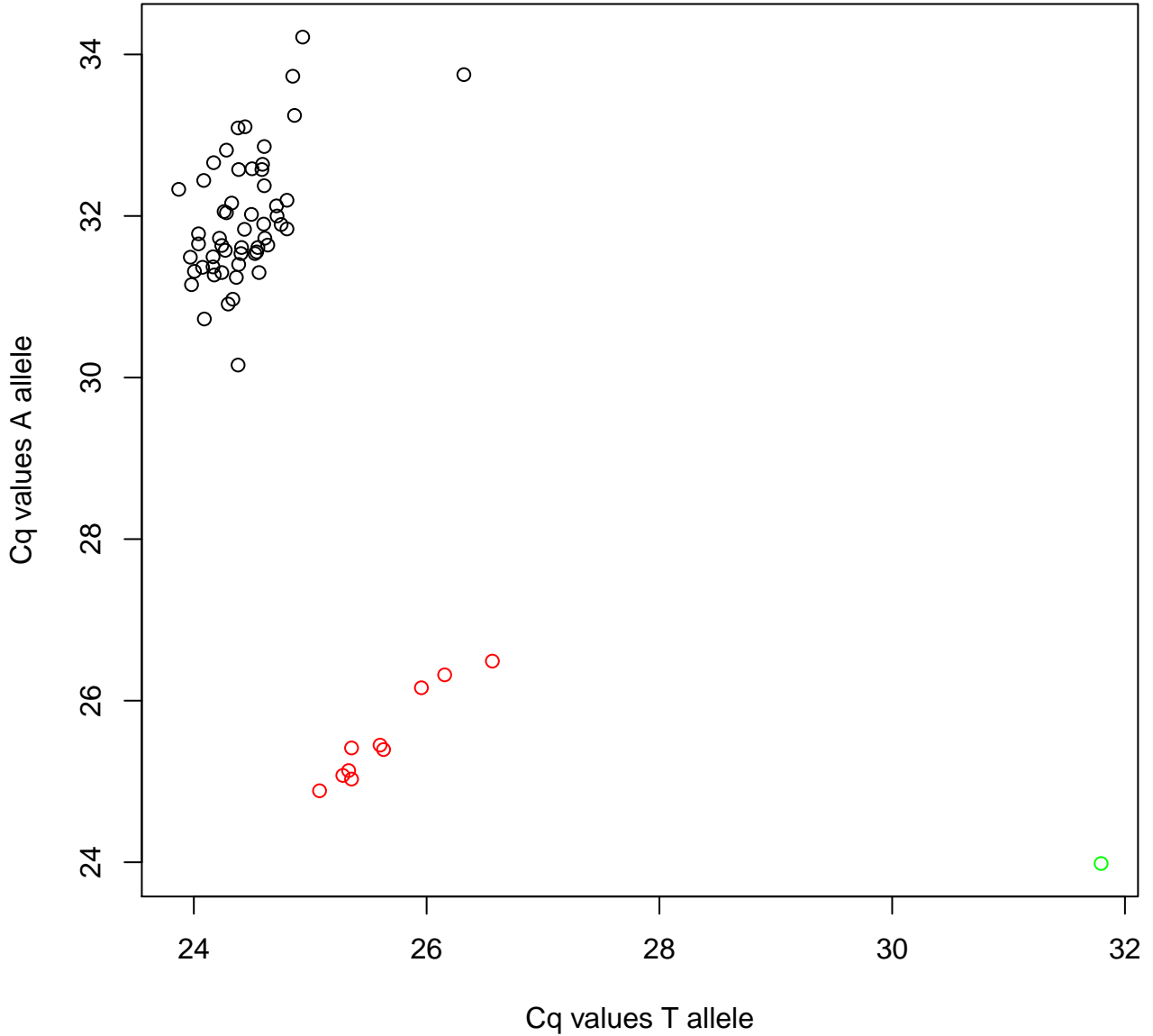
# TcSNP1060



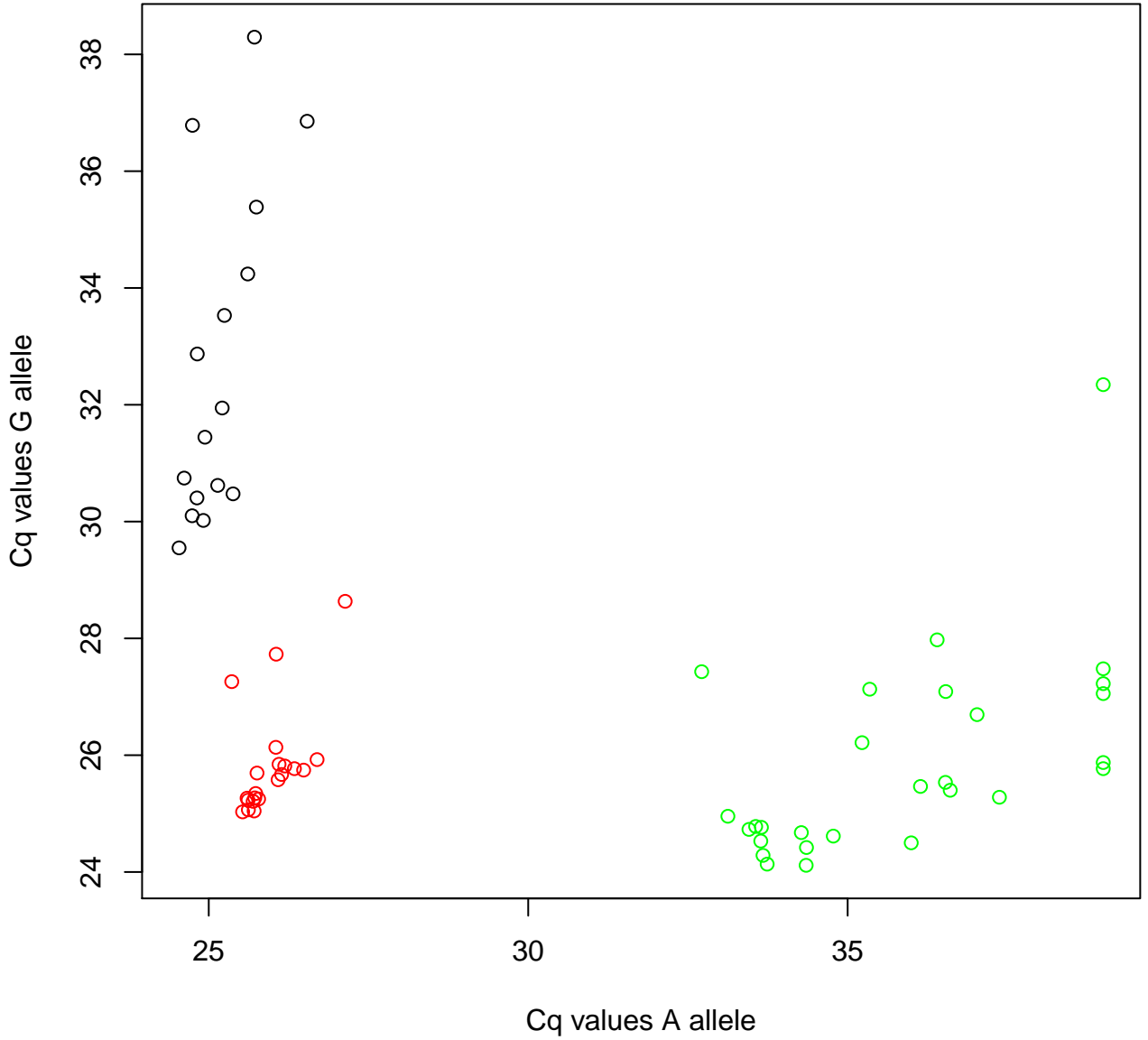
# TcSNP1111



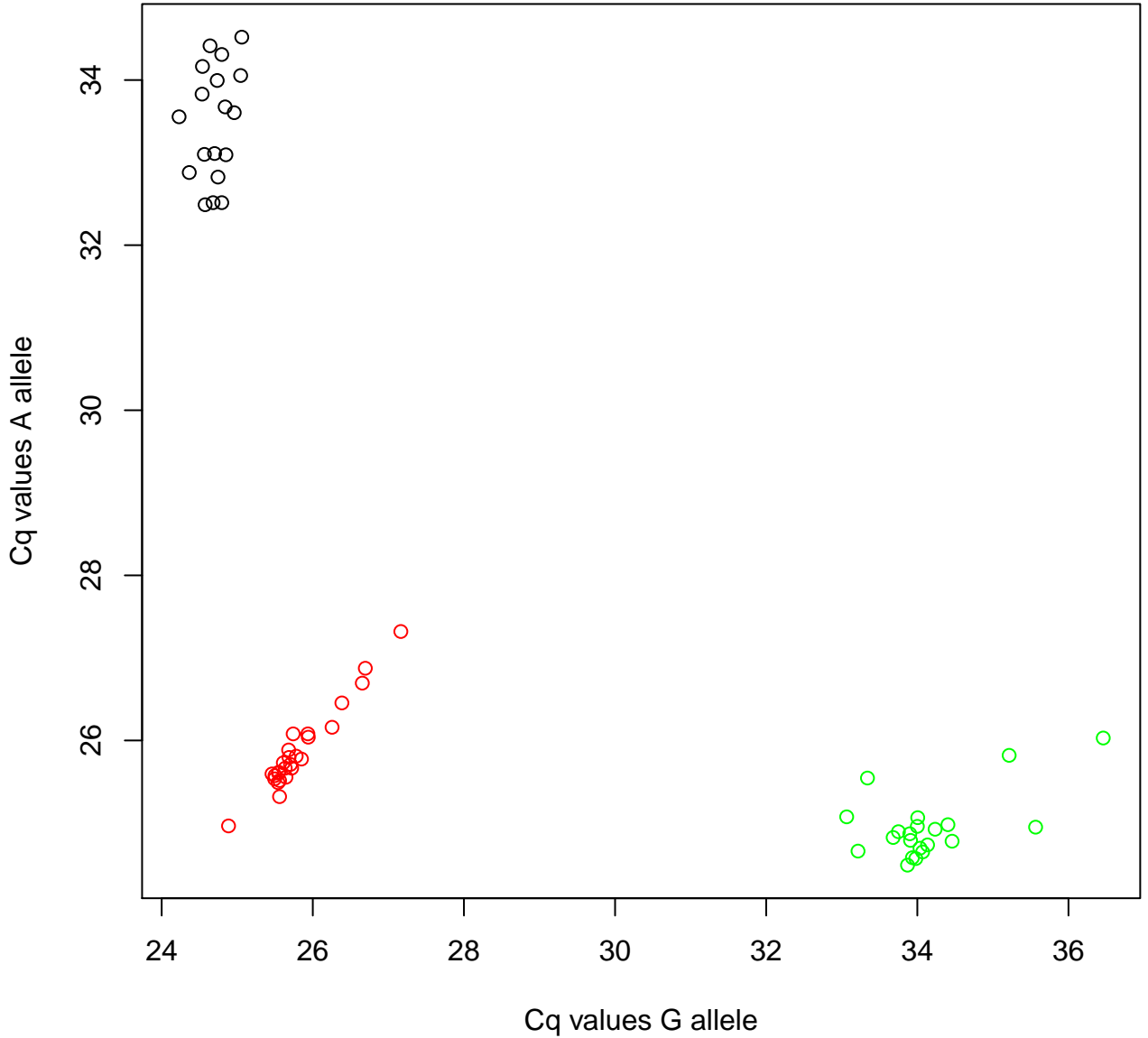
# TcSNP1126



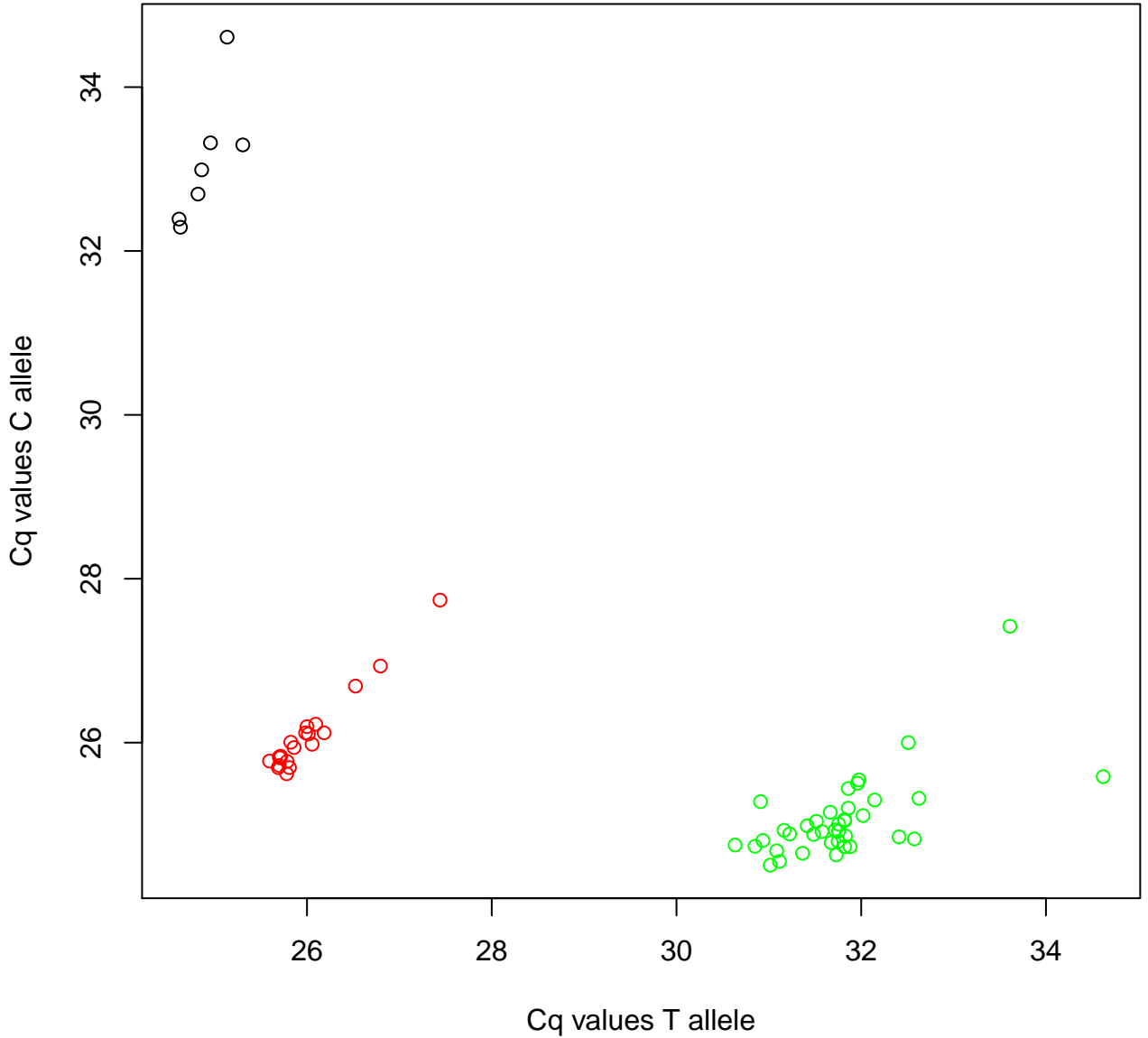
# TcSNP1280



# TcSNP1331

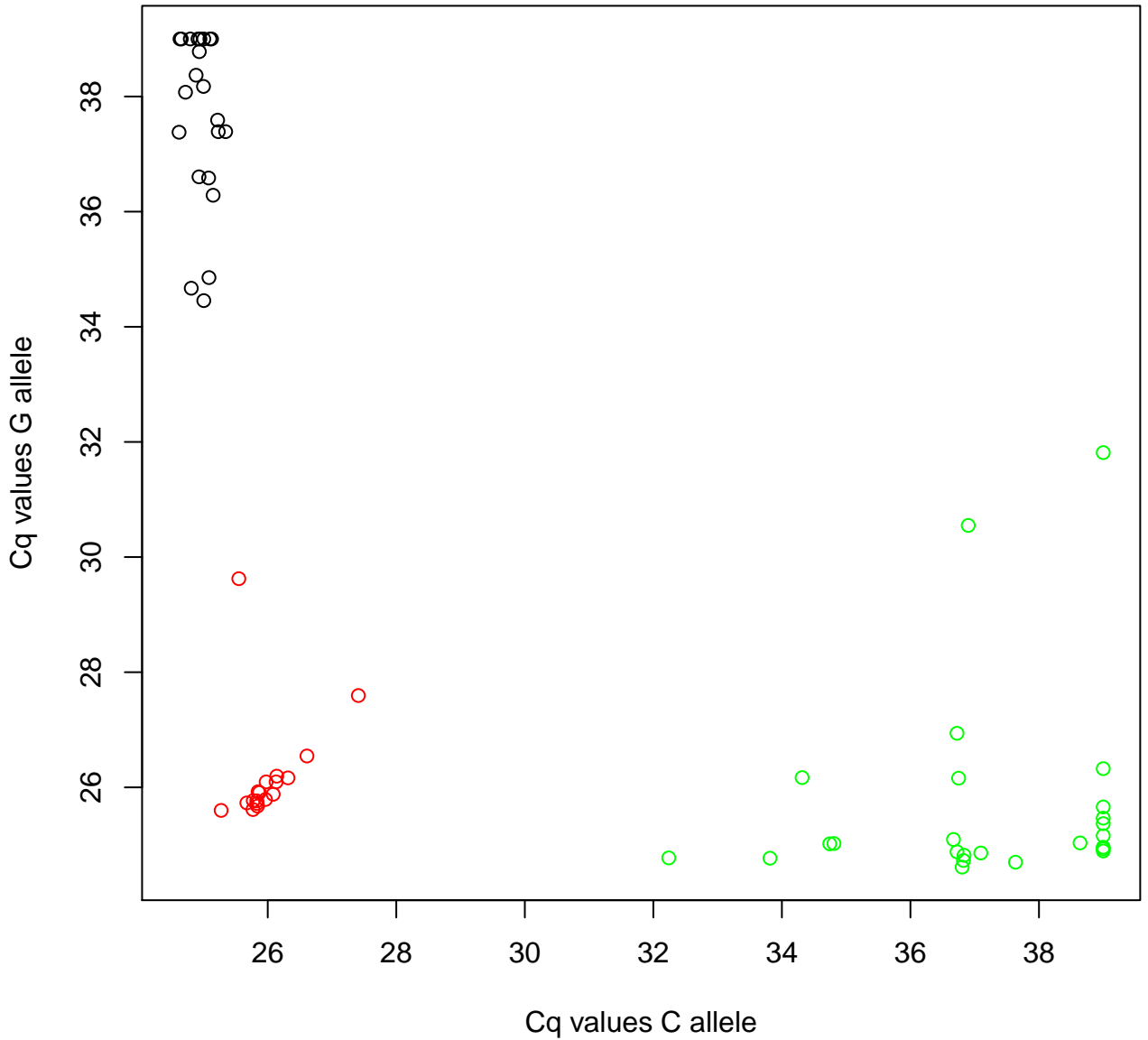


# TcSNP1439

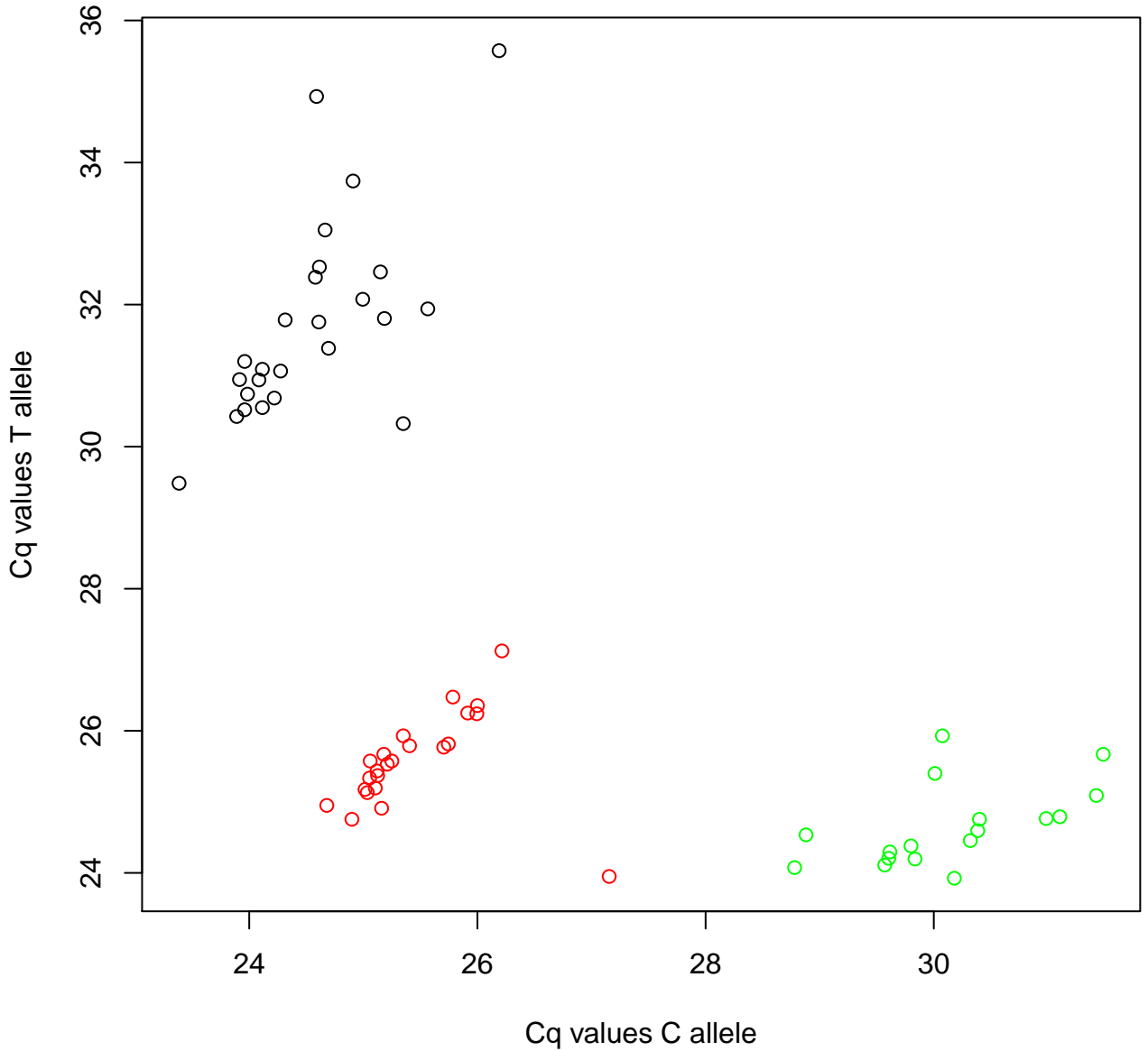




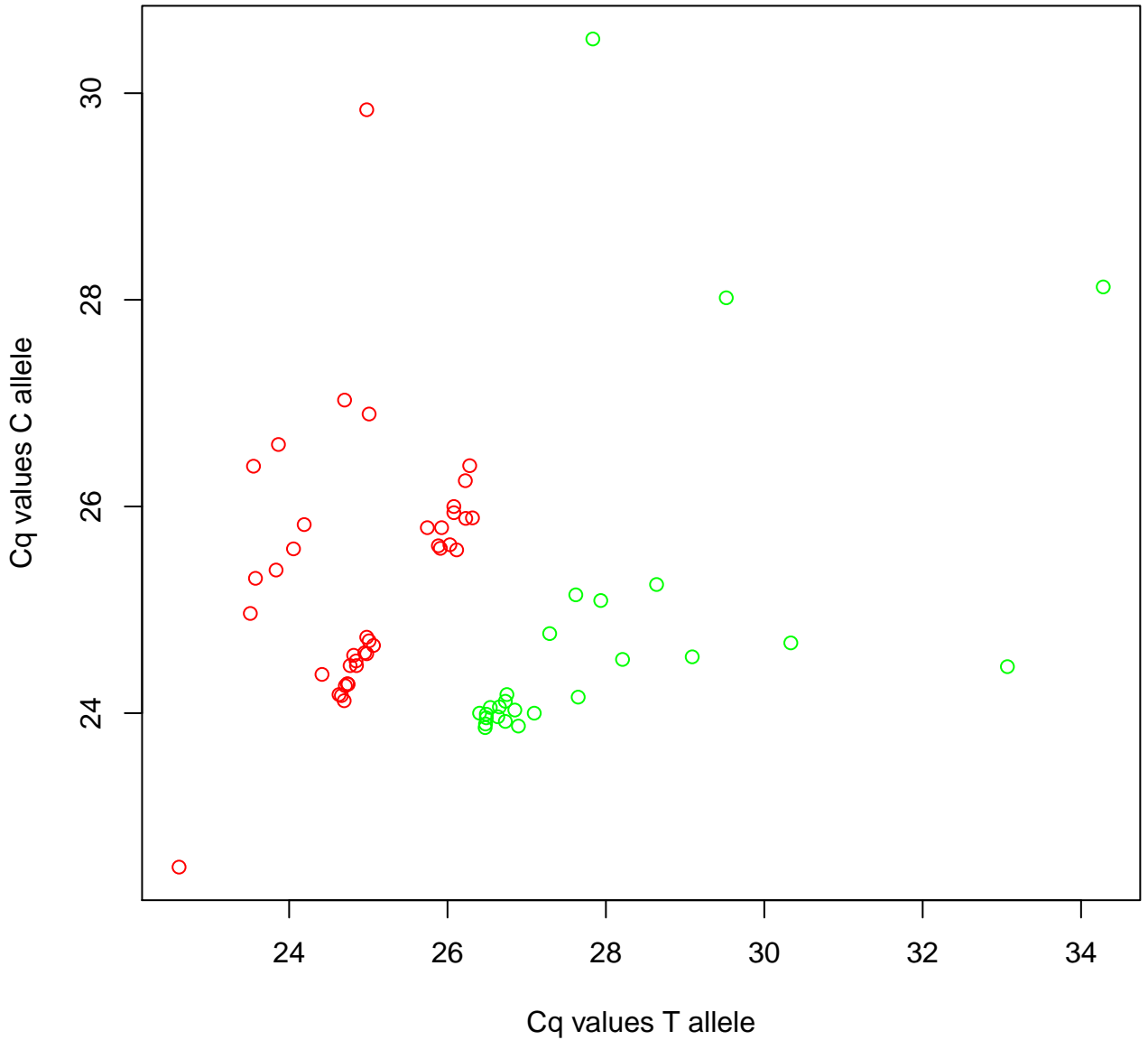
# TcSNP1458



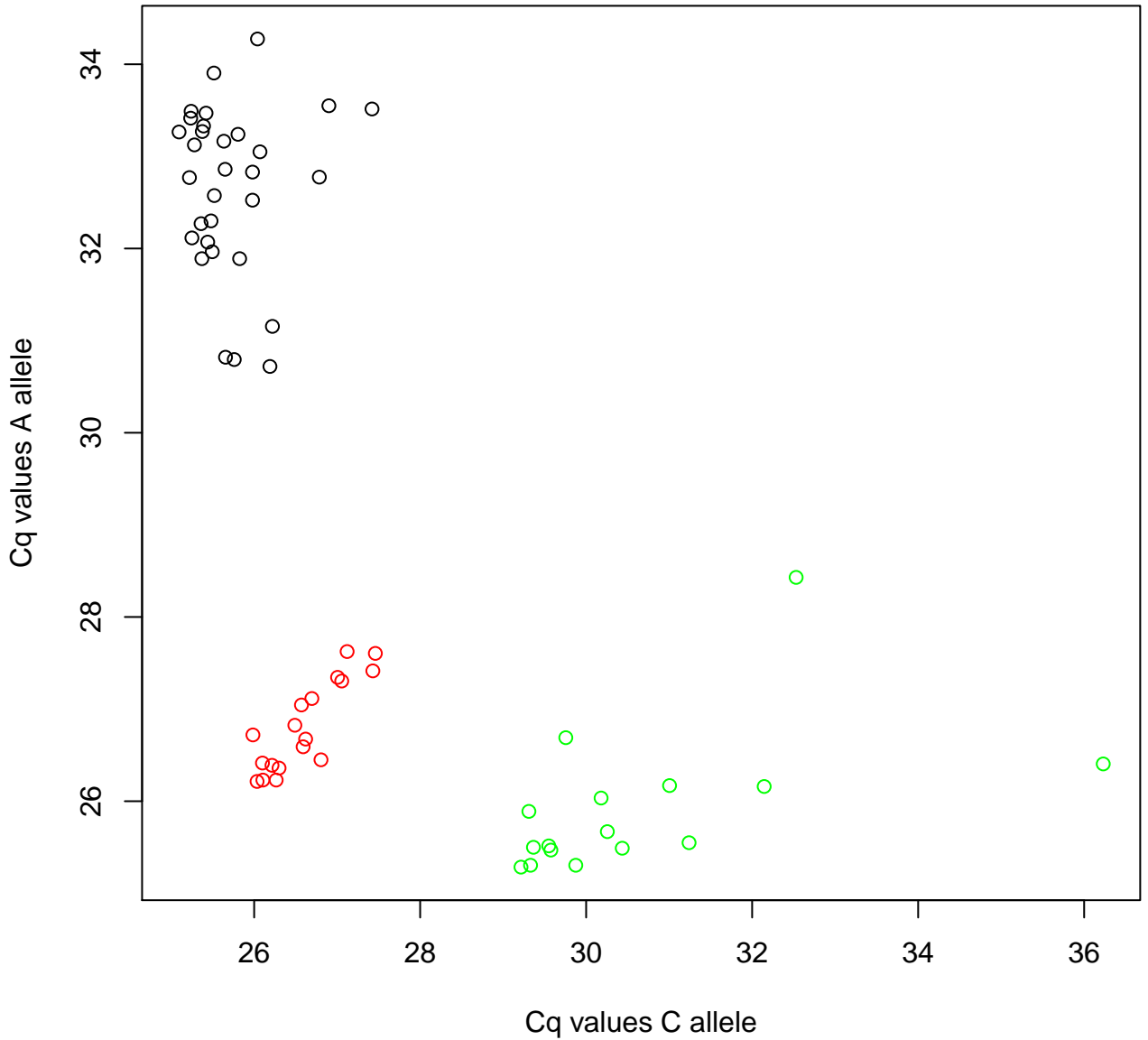
# Tcm002s00644224



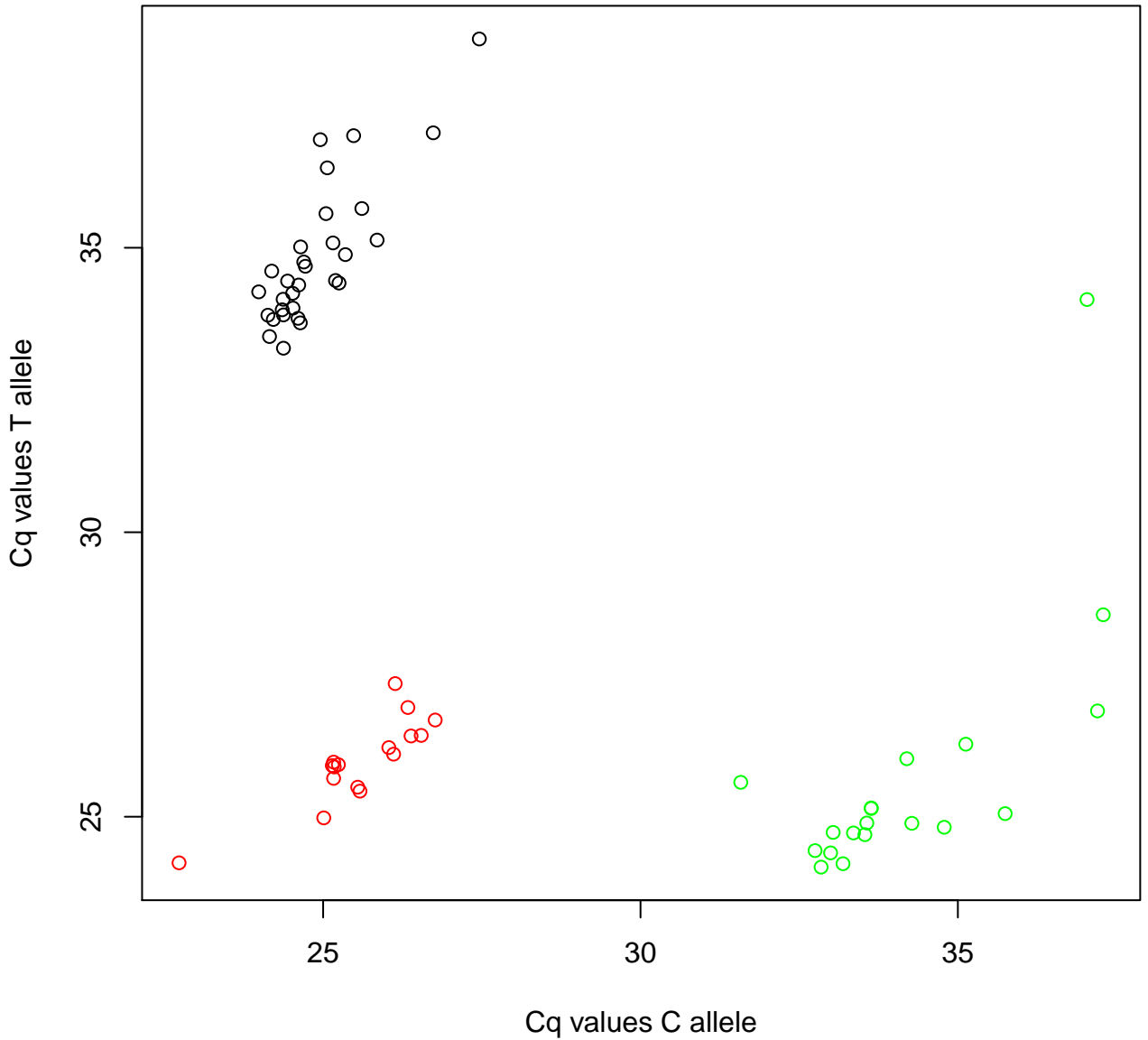
# Tcm002s29938429



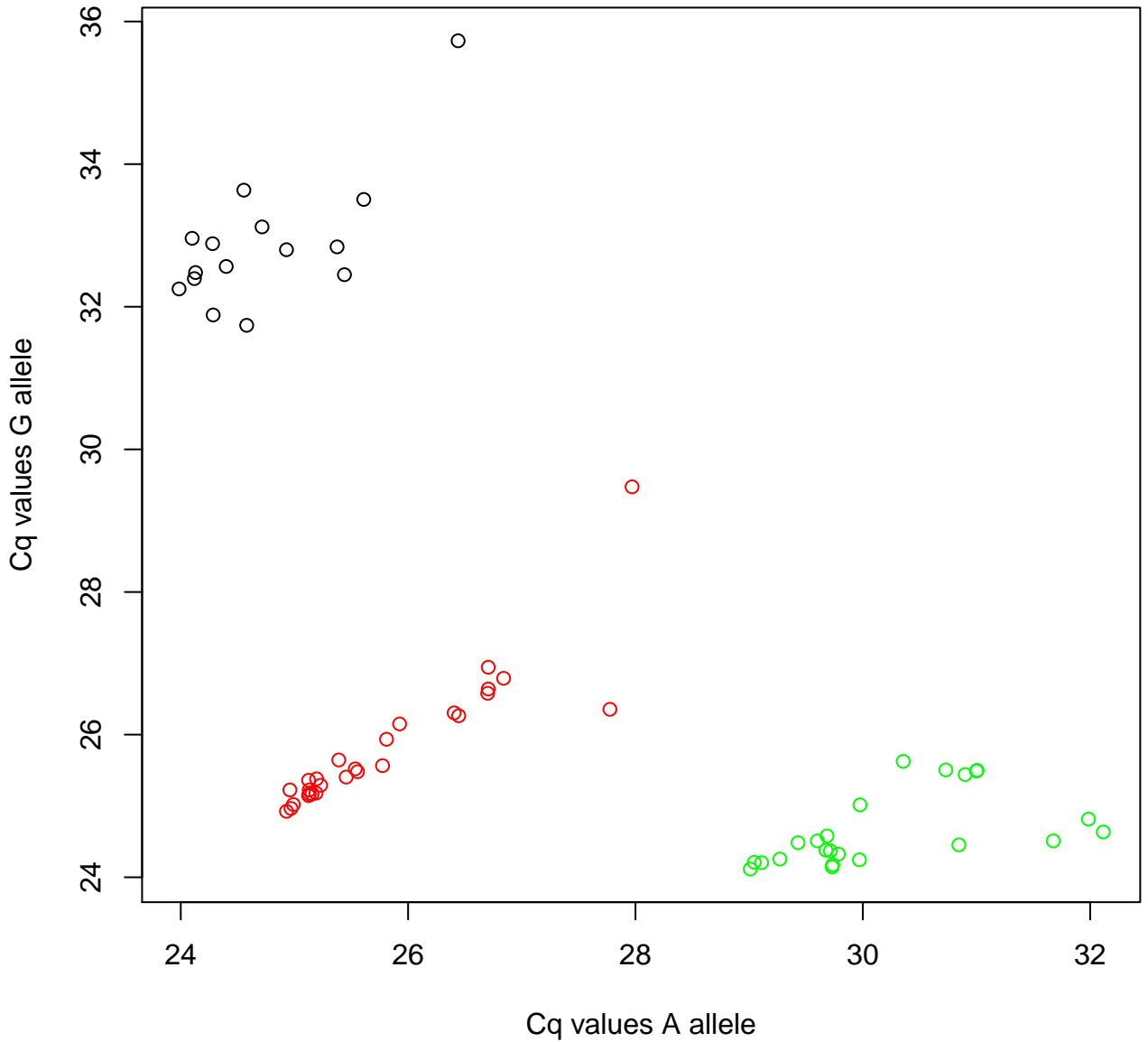
# Tcm002s34015437



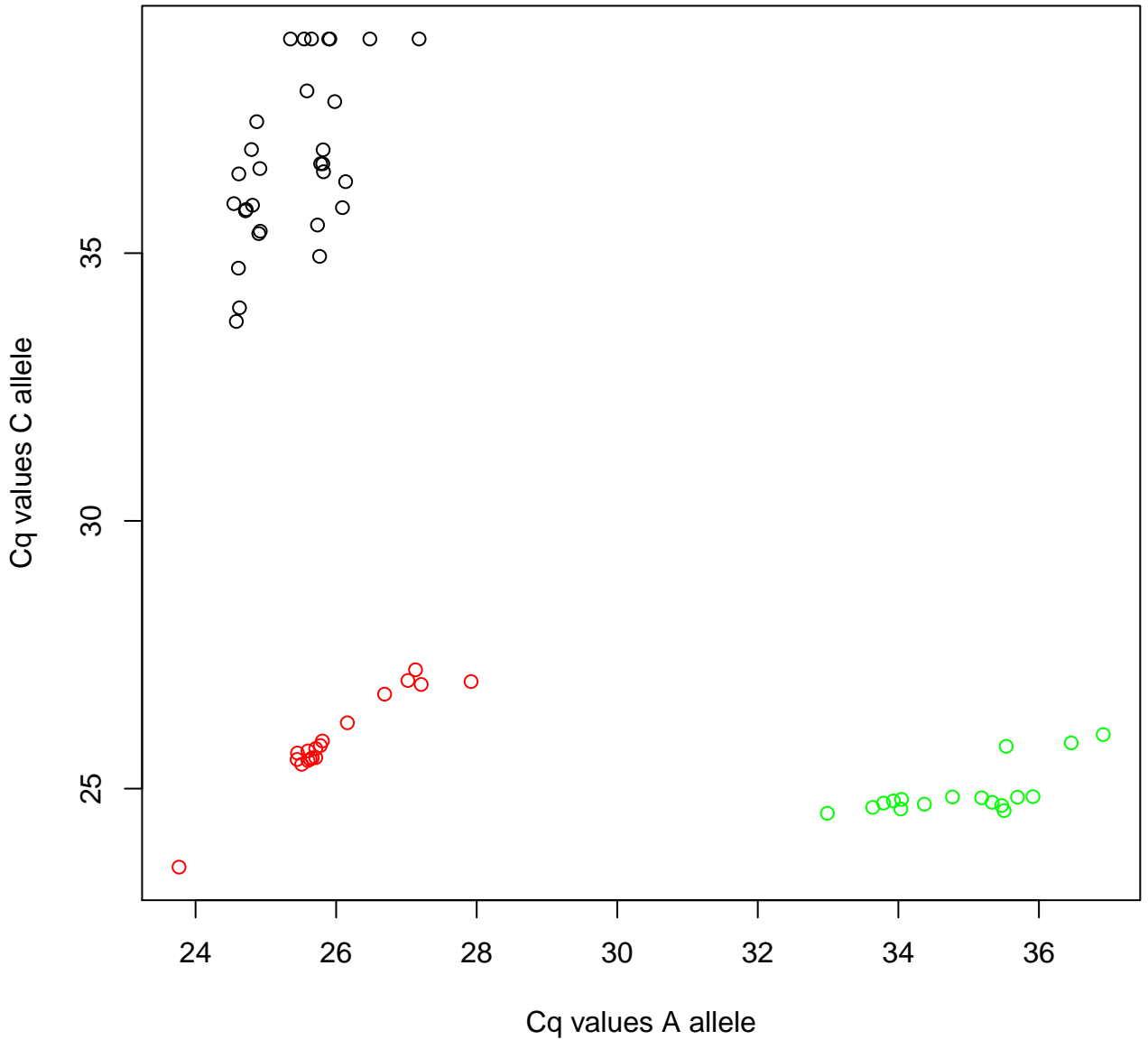
# Tcm003s05554949



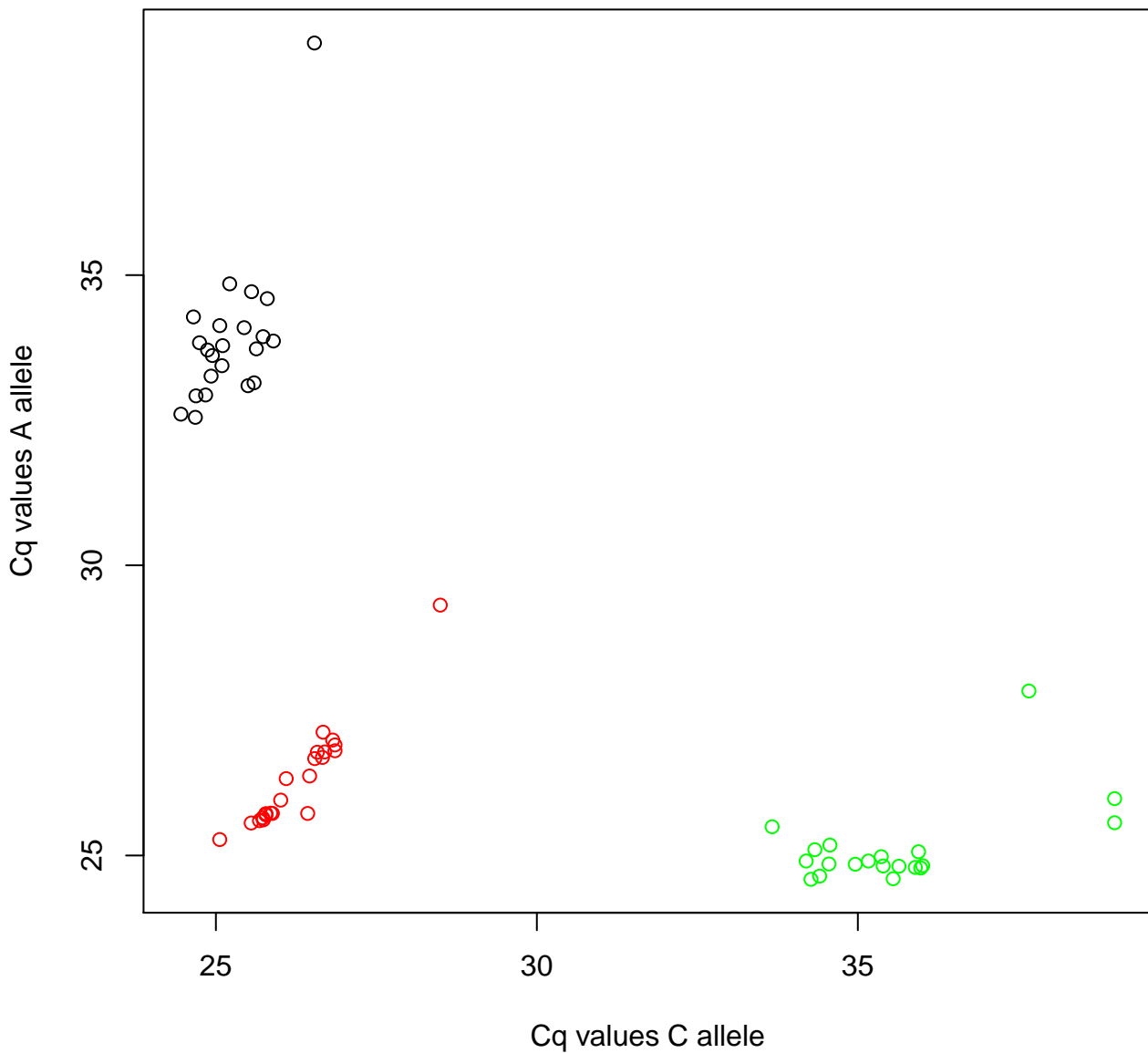
# Tcm003s12502217



# Tcm003s20315420

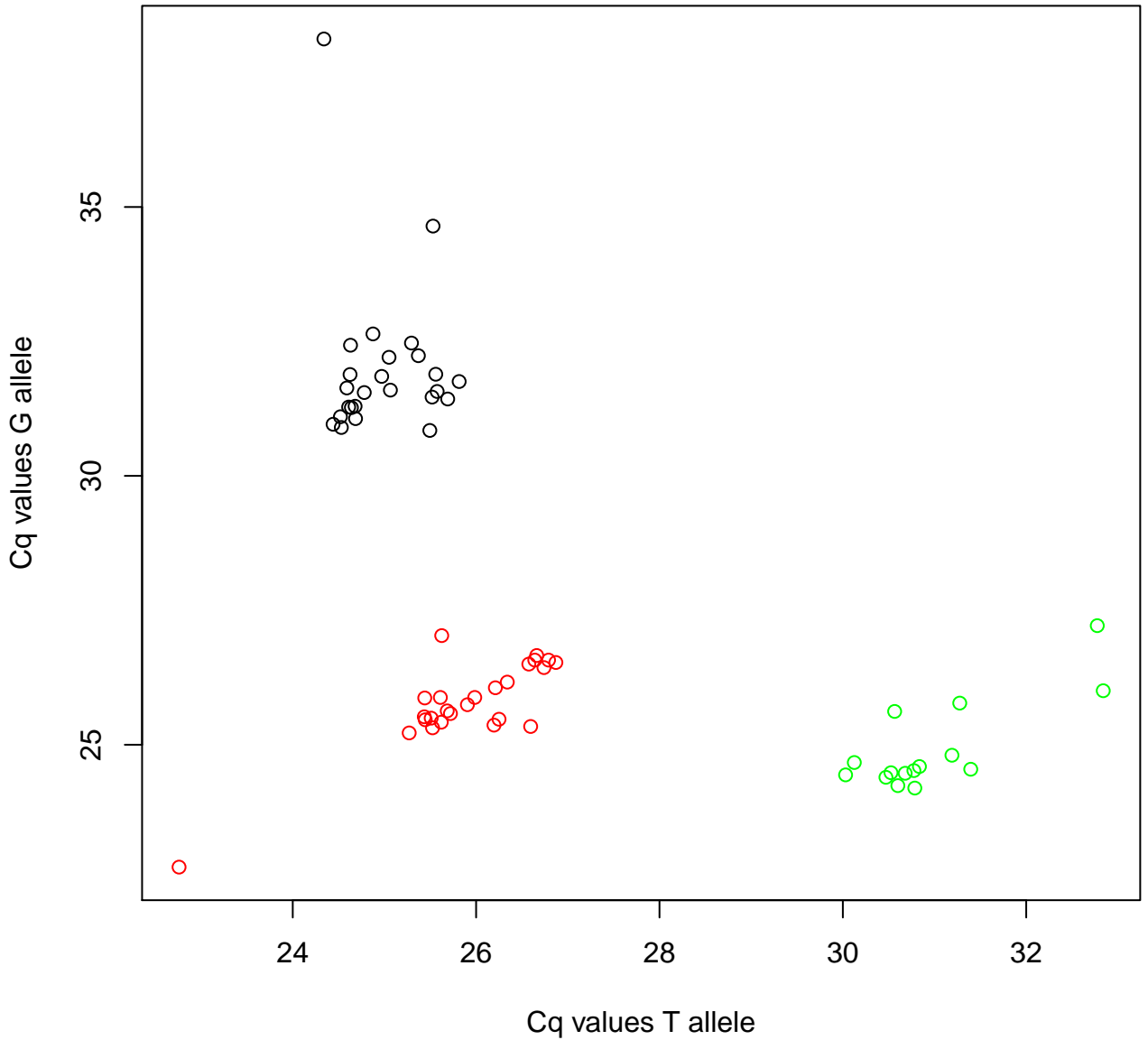


# Tcm003s27807955





# Tcm006s26507164



# Tcm008s17168944

