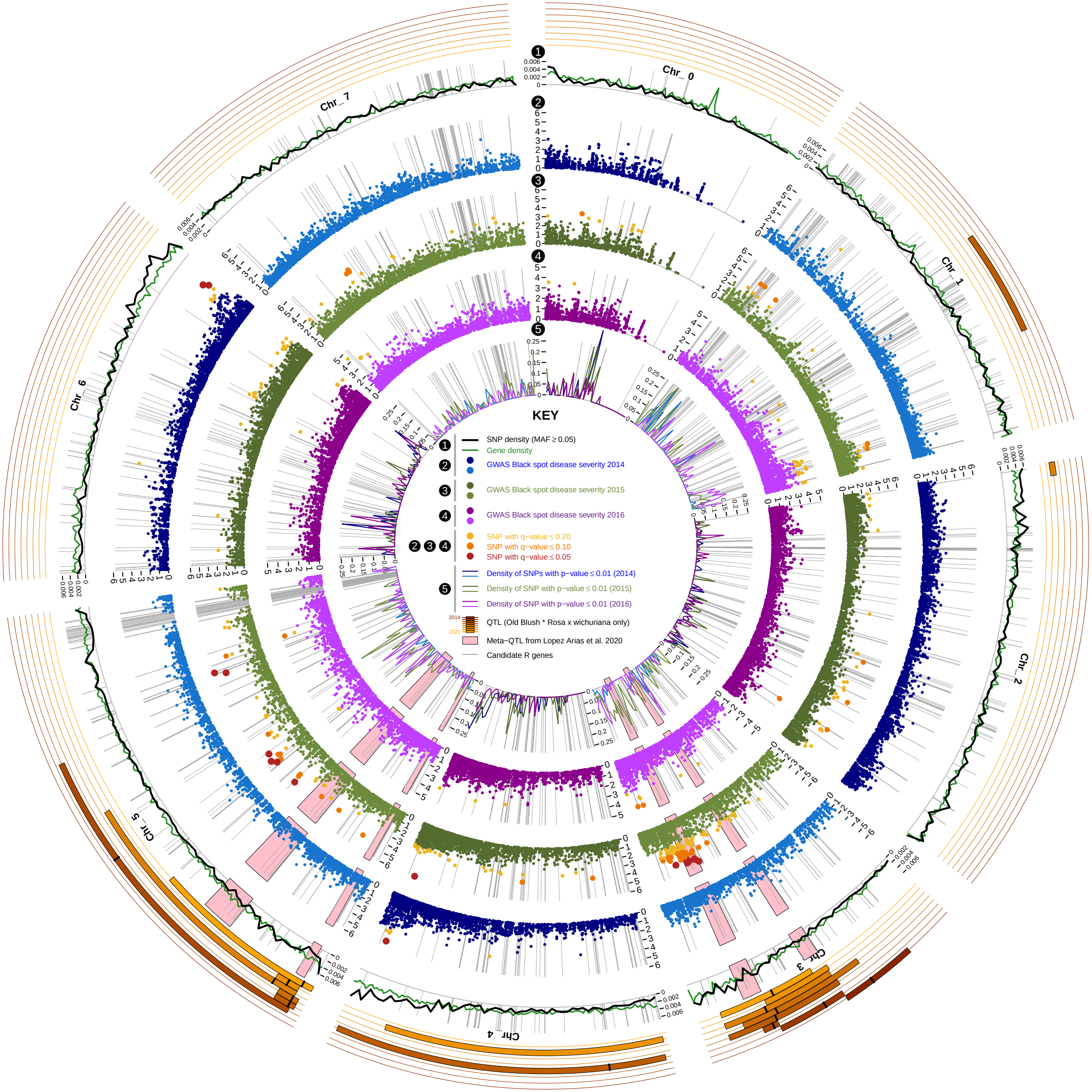
Chr_0
Chr_1
Chr_2
Chr_3
Chr_4
Chr_5
Chr_6
Chr_7
KEY
1 SNP density (MAF ≥ 0.05)
Gene density
2 GWAS Black spot disease severity 2014
3 GWAS Black spot disease severity 2015
4 GWAS Black spot disease severity 2016
2 3 4 SNP with q−value ≤ 0.20
SNP with q−value ≤ 0.10
SNP with q−value ≤ 0.05
5 Density of SNPs with p−value ≤ 0.01 (2014)
Density of SNP with p−value ≤ 0.01 (2015)
Density of SNP with p−value ≤ 0.01 (2016)
2014
2021
QTL (Old Blush * Rosa x wichuriana only)
Meta−QTL from Lopez Arias et al. 2020
Candidate R genes