

Supplementary Figures (S1-S10) and their titles are presented below.

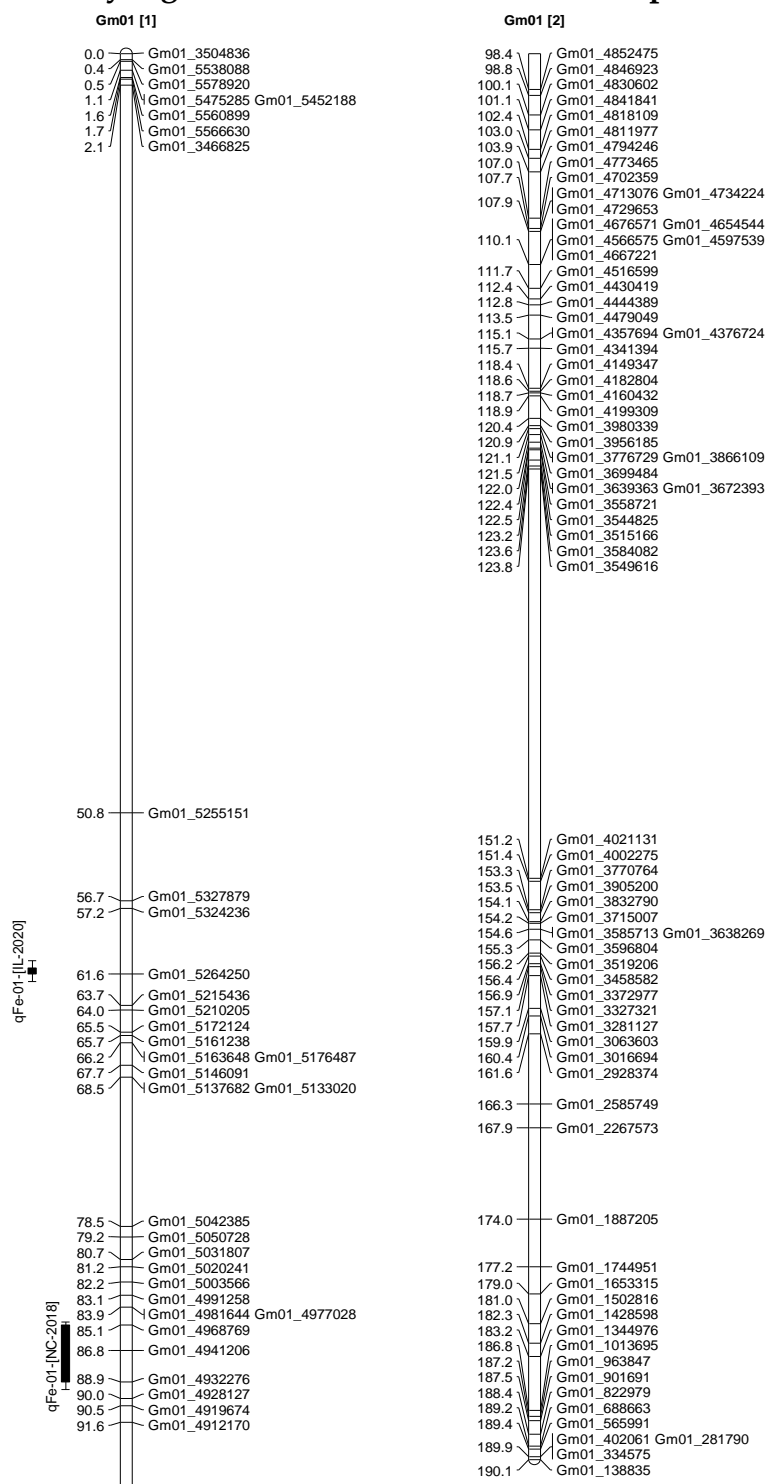


Figure S1. Chromosome 1 and parameters associated with the quantitative trait loci (QTL) for seed Fe and seed Zn in 'Forrest' by 'Williams 82' recombinant inbred soybean lines (RILs) population. A total of 5405 single nucleotides polymorphism (SNP) markers using Infinium NP6K BeadChips. A total 2075 polymorphic SNPs were mapped on the 20 soybean chromosomes.

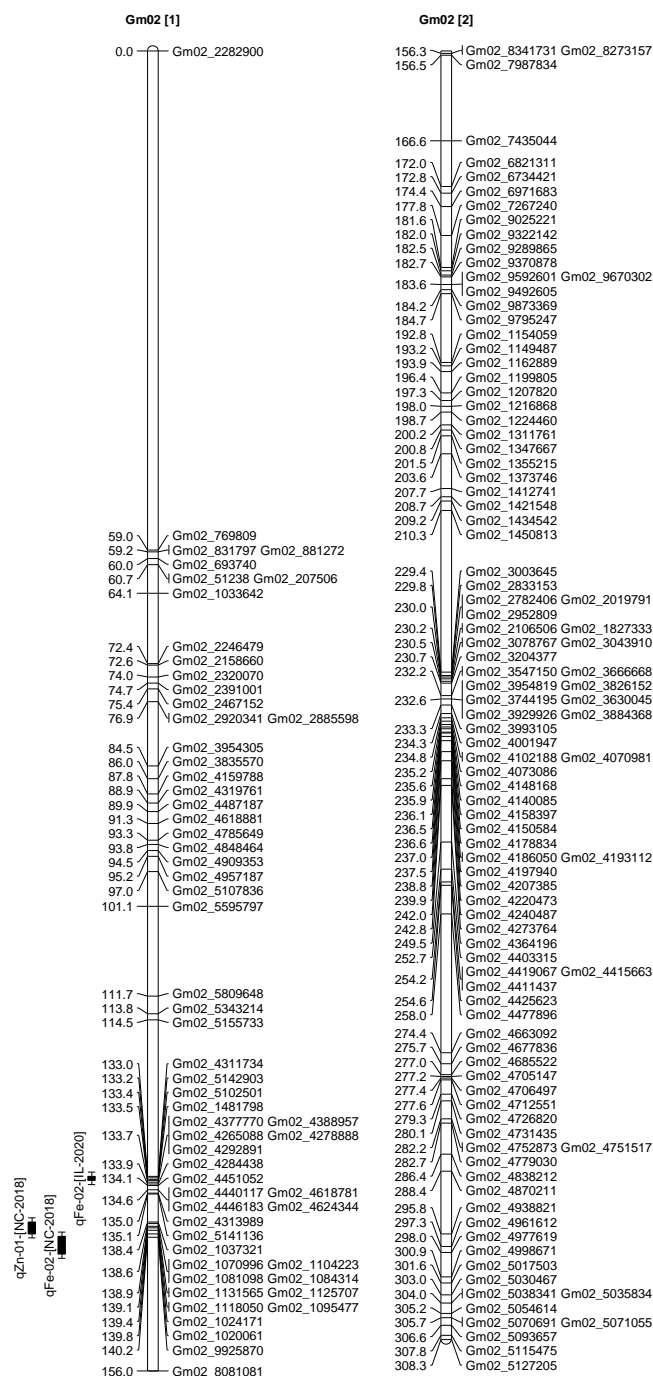


Figure S2. Chromosome 2 and parameters associated with the quantitative trait loci (QTL) for seed Fe and seed Zn in 'Forrest' by 'Williams 82' recombinant inbred soybean lines (RILs) population. A total of 5405 single nucleotides polymorphism (SNP) markers using Infinium SNP6K BeadChips. A total 2075 polymorphic SNPs were mapped on the 20 soybean chromosomes.

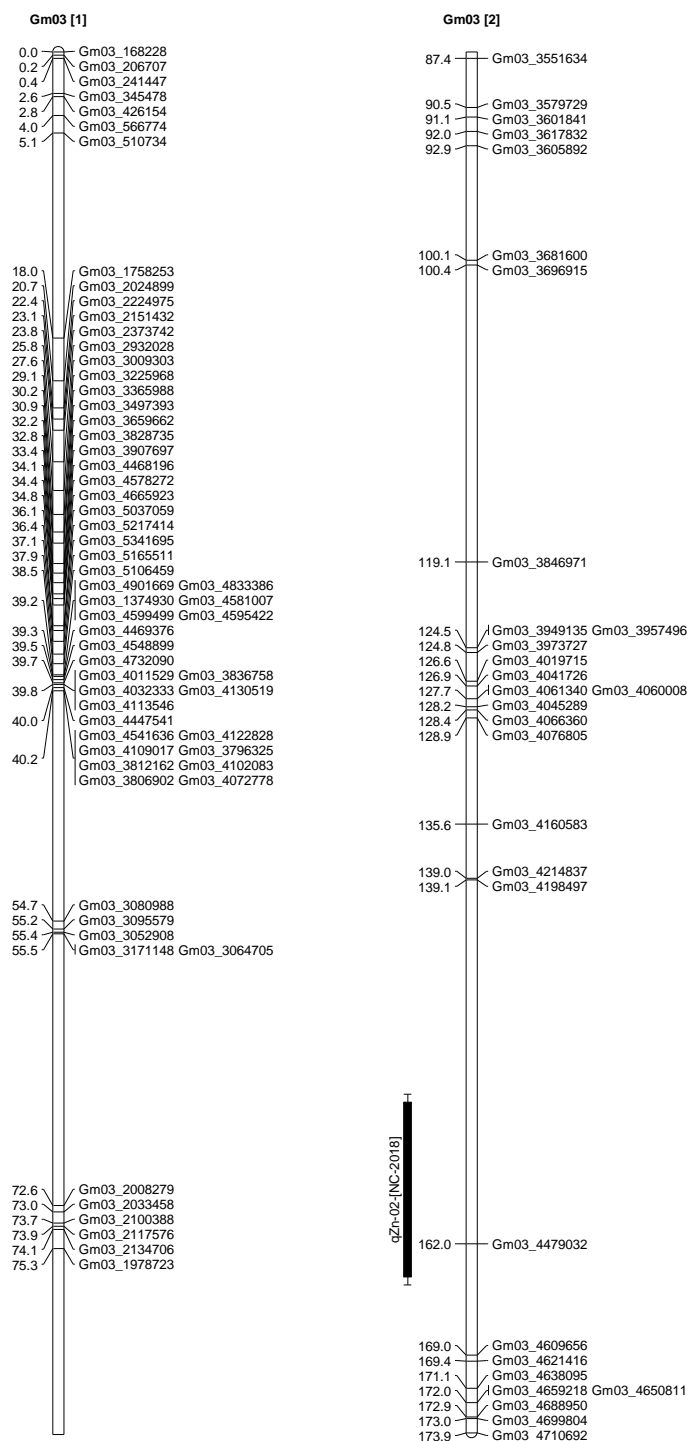
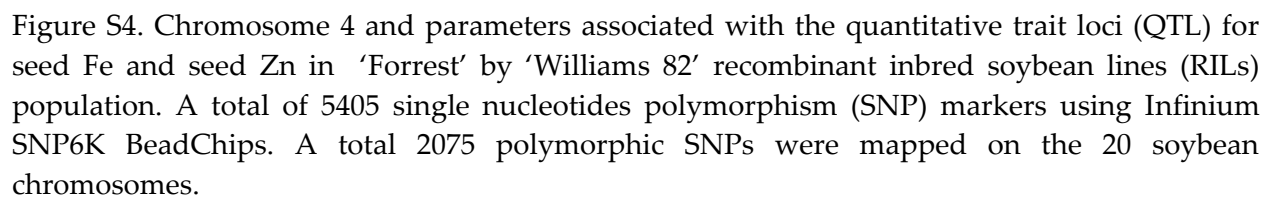


Figure S3. Chromosome 3 and parameters associated with the quantitative trait loci (QTL) for seed Fe and seed Zn in 'Forrest' by 'Williams 82' recombinant inbred soybean lines (RILs) population. A total of 5405 single nucleotides polymorphism (SNP) markers using Infinium SNP6K BeadChips. A total 2075 polymorphic SNPs were mapped on the 20 soybean chromosomes.



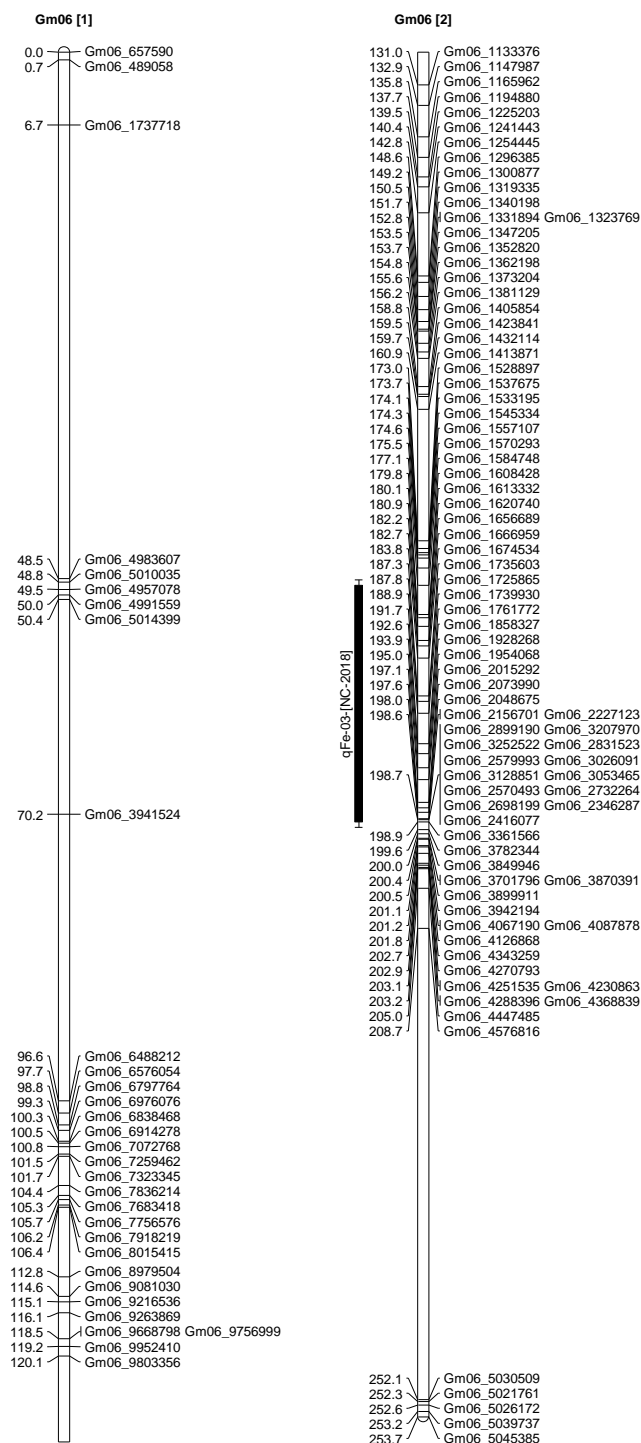


Figure S5. Chromosome 6 and parameters associated with the quantitative trait loci (QTL) for seed Fe and seed Zn in 'Forrest' by 'Williams 82' recombinant inbred soybean lines (RILs) population. A total of 5405 single nucleotides polymorphism (SNP) markers using Infinium SNP6K BeadChips. A total 2075 polymorphic SNPs were mapped on the 20 soybean chromosomes.

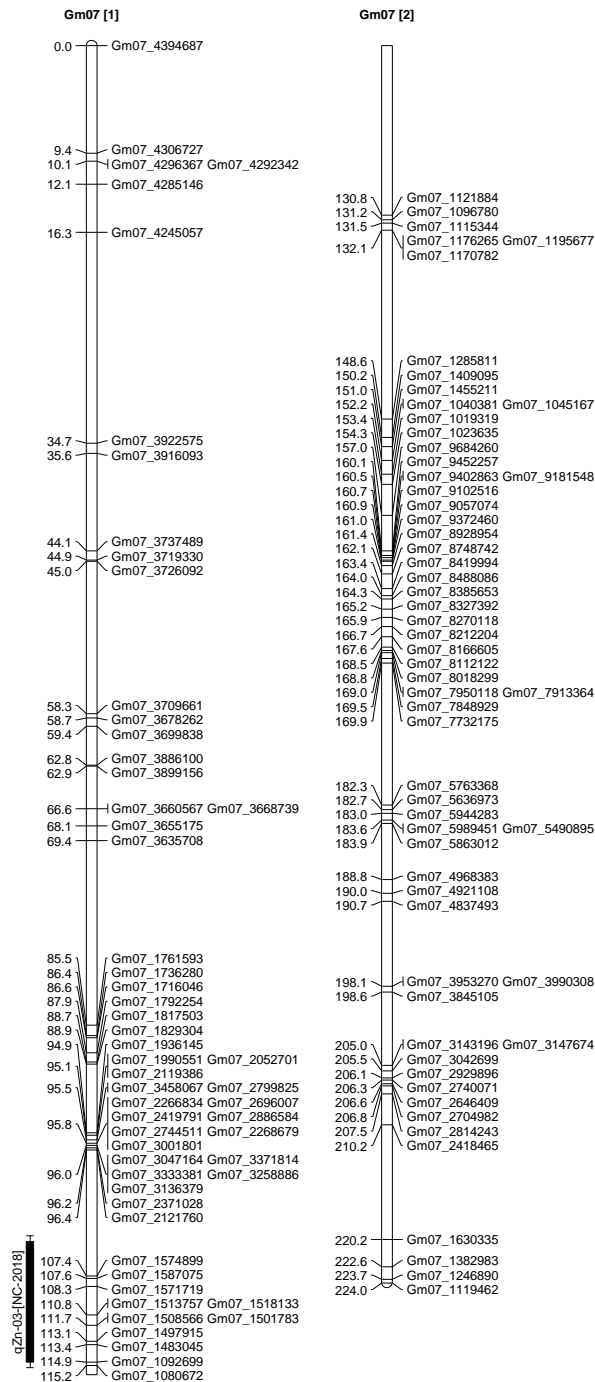


Figure S6. Chromosome 7 and parameters associated with the quantitative trait loci (QTL) for seed Fe and seed Zn in 'Forrest' by 'Williams 82' recombinant inbred soybean lines (RILs) population. A total of 5405 single nucleotides polymorphism (SNP) markers using Infinium SNP6K BeadChips. A total 2075 polymorphic SNPs were mapped on the 20 soybean chromosomes.

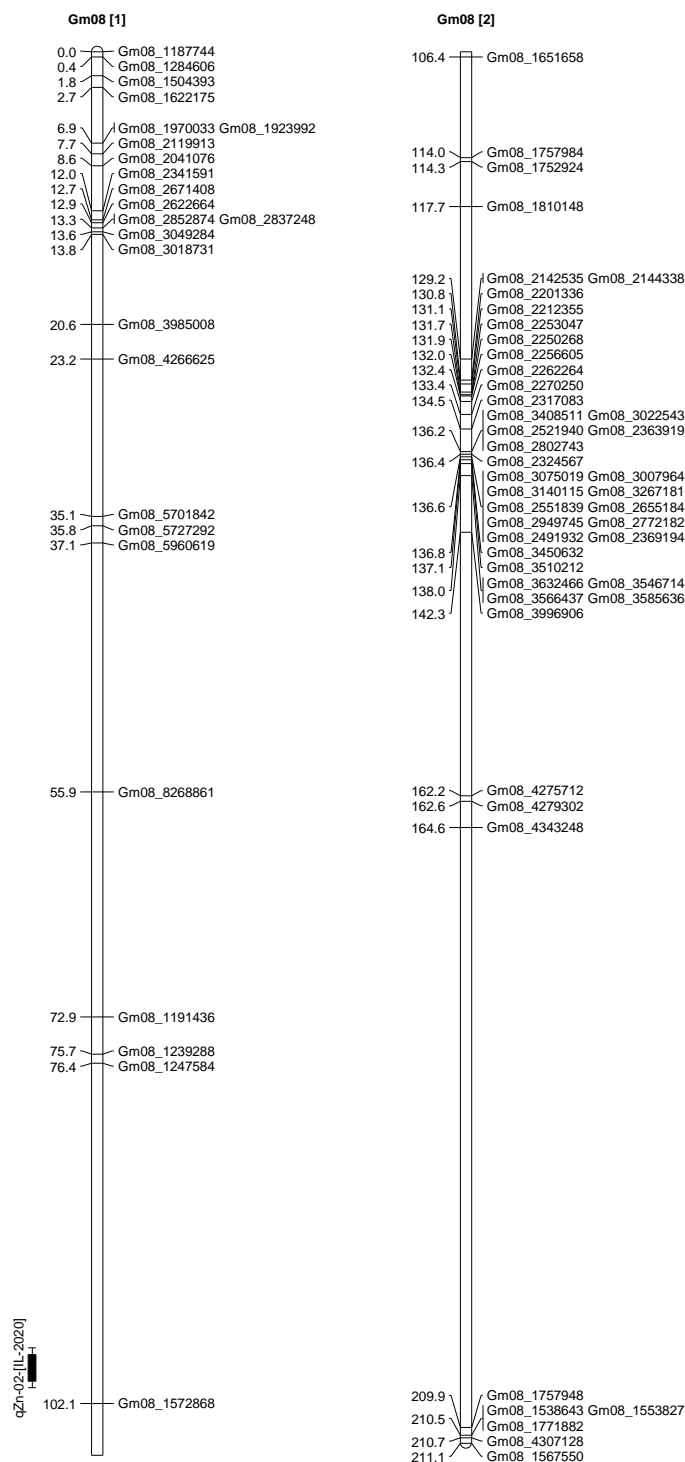


Figure S7. Chromosome 8 and parameters associated with the quantitative trait loci (QTL) for seed Fe and seed Zn in 'Forrest' by 'Williams 82' recombinant inbred soybean lines (RILs) population. A total of 5405 single nucleotides polymorphism (SNP) markers using Infinium SNP6K BeadChips. A total 2075 polymorphic SNPs were mapped on the 20 soybean chromosomes.

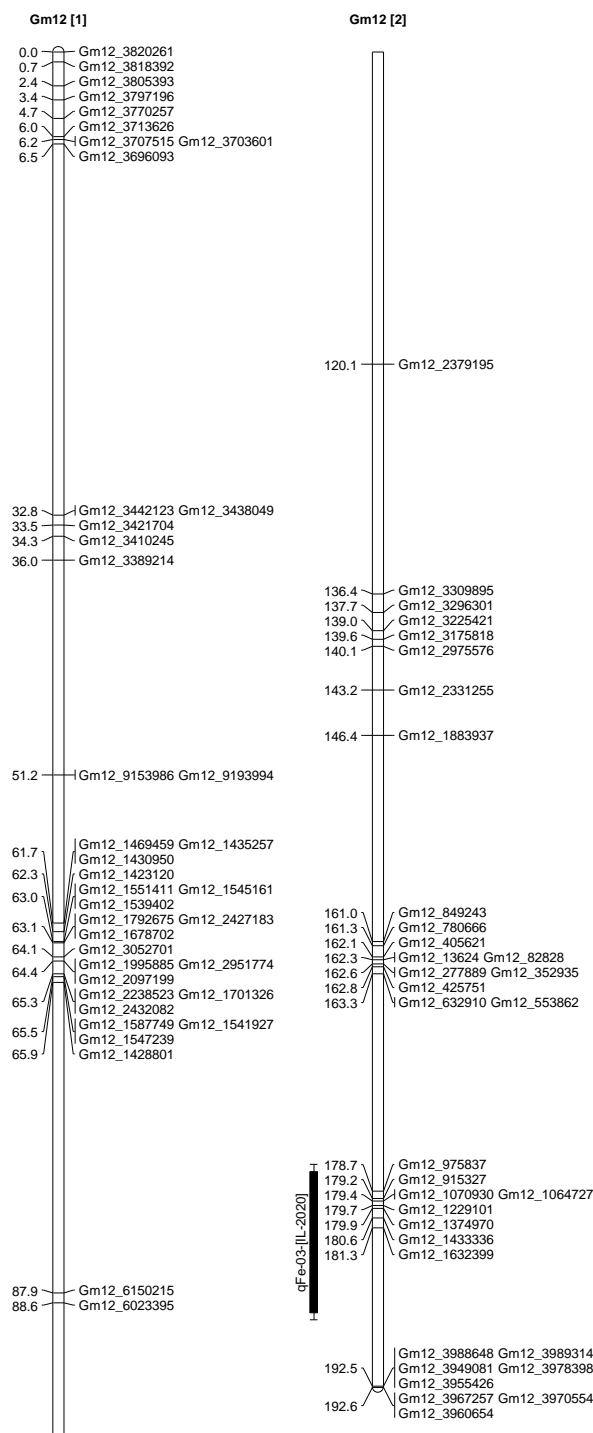


Figure S8. Chromosome 12 and parameters associated with the quantitative trait loci (QTL) for seed Fe and seed Zn in 'Forrest' by 'Williams 82' recombinant inbred soybean lines (RILs) population. A total of 5405 single nucleotides polymorphism (SNP) markers using Infinium SNP6K BeadChips. A total 2075 polymorphic SNPs were mapped on the 20 soybean chromosomes.



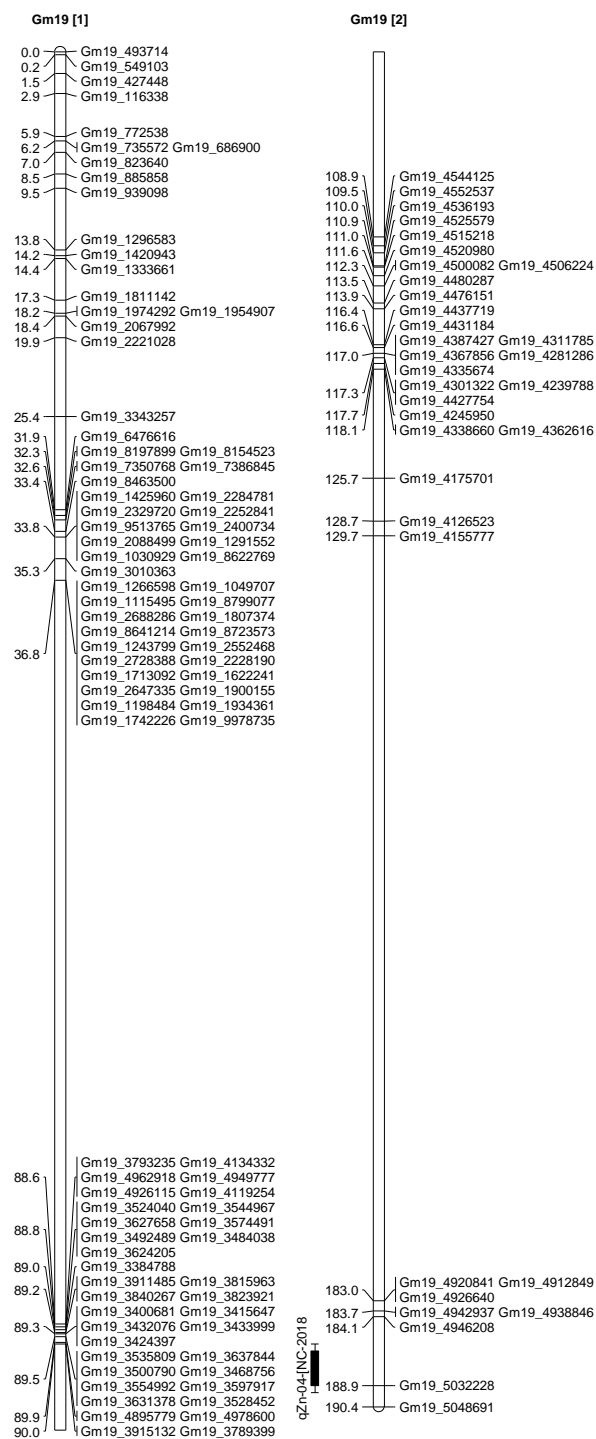


Figure S9. Chromosome 19 and parameters associated with the quantitative trait loci (QTL) for seed Fe and seed Zn in 'Forrest' by 'Williams 82' recombinant inbred soybean lines (RILs) population. A total of 5405 single nucleotides polymorphism (SNP) markers using Infinium SNP6K BeadChips. A total 2075 polymorphic SNPs were mapped on the 20 soybean chromosomes.

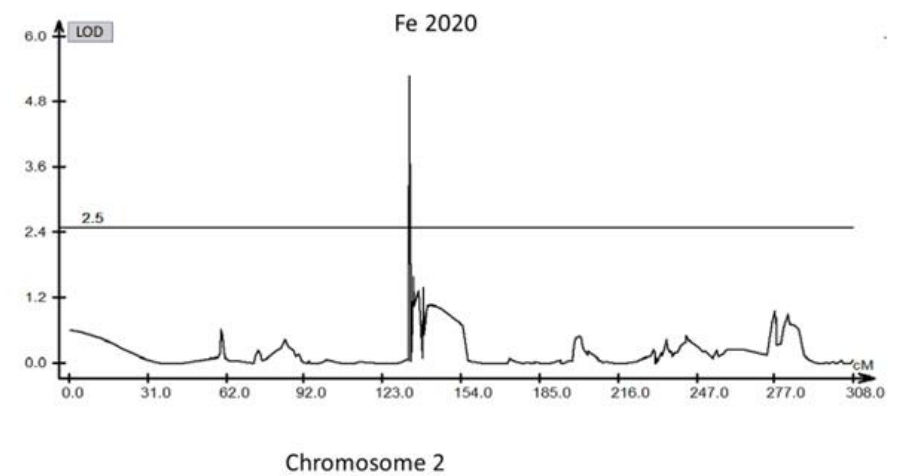
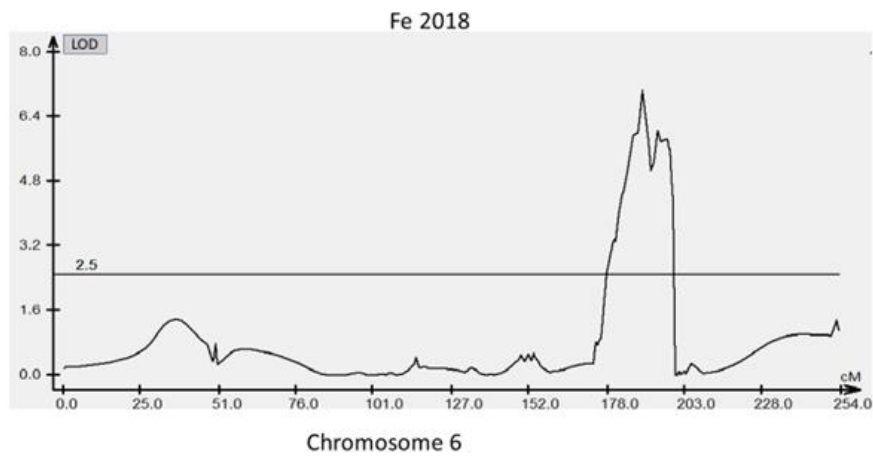
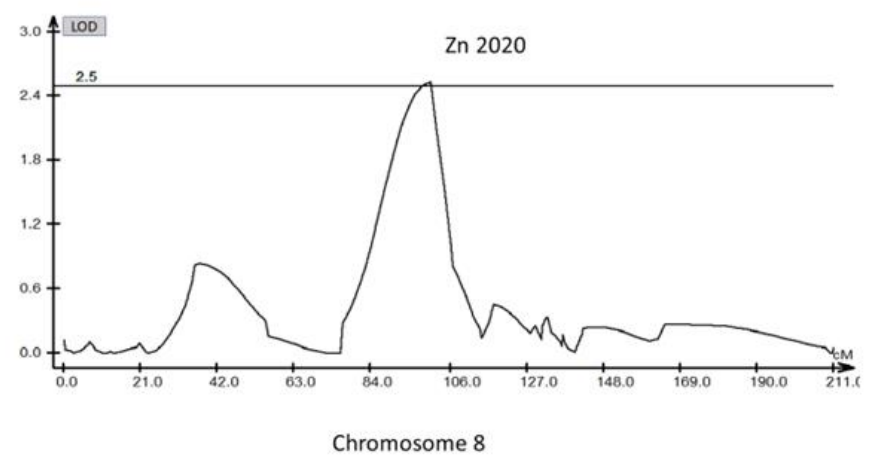
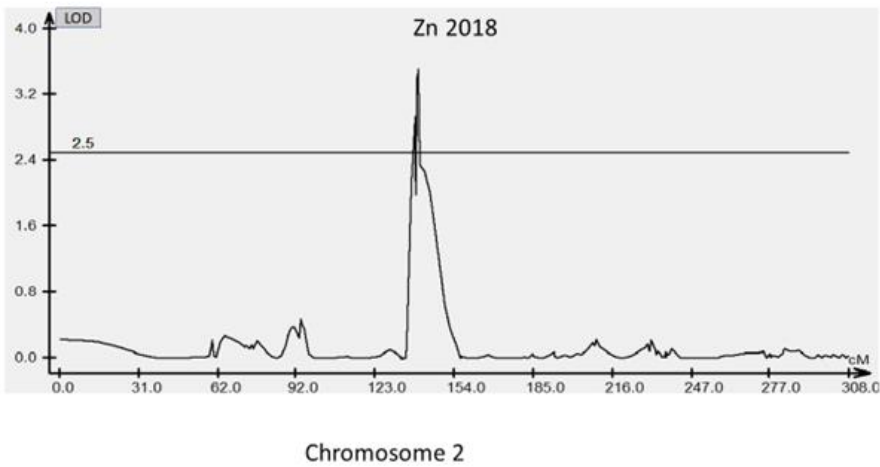


Figure S10. Example of some significant QTL as indicated by their logarithms of odds (LOD) for Zn (top) and Fe (bottom).