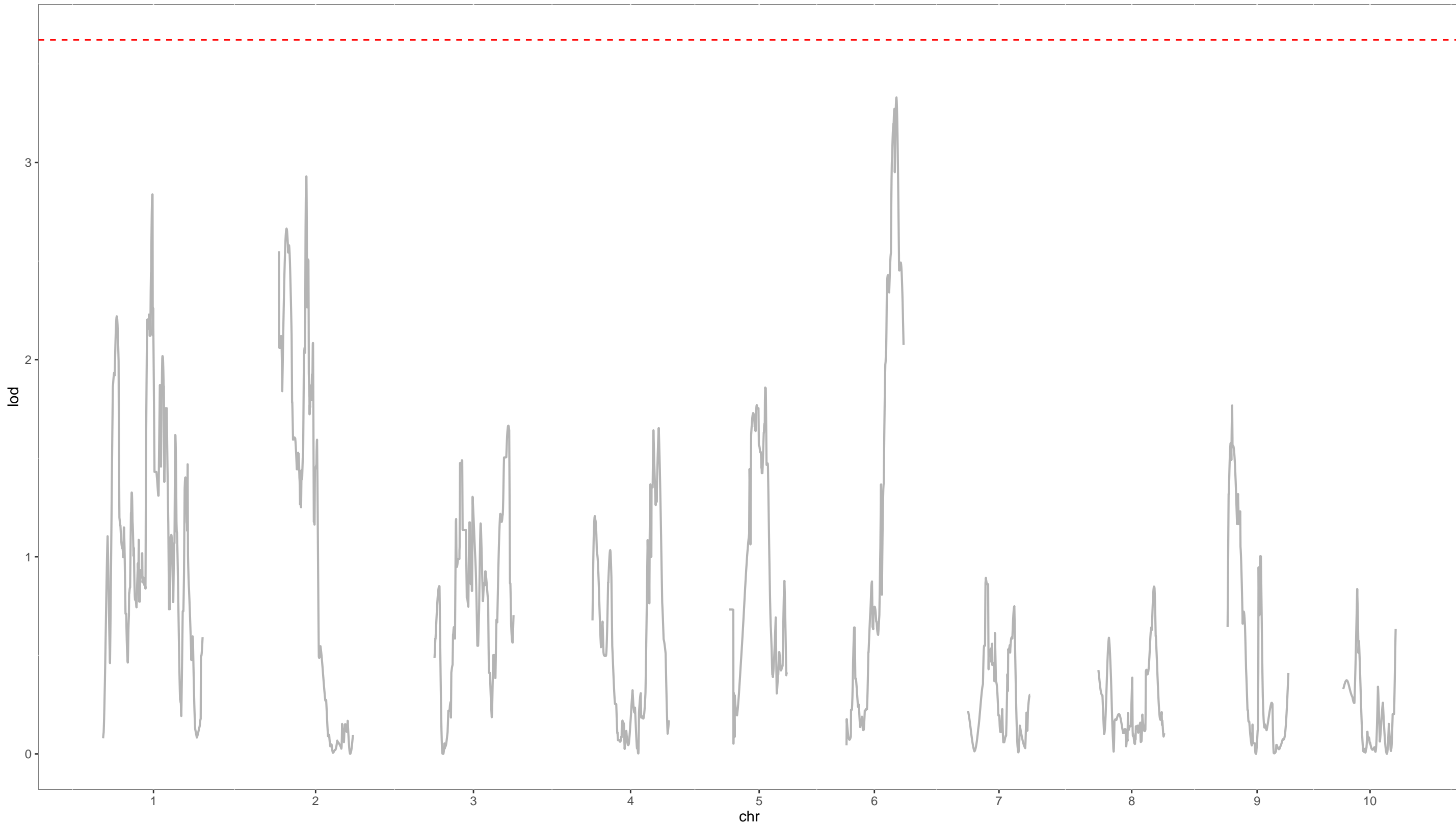
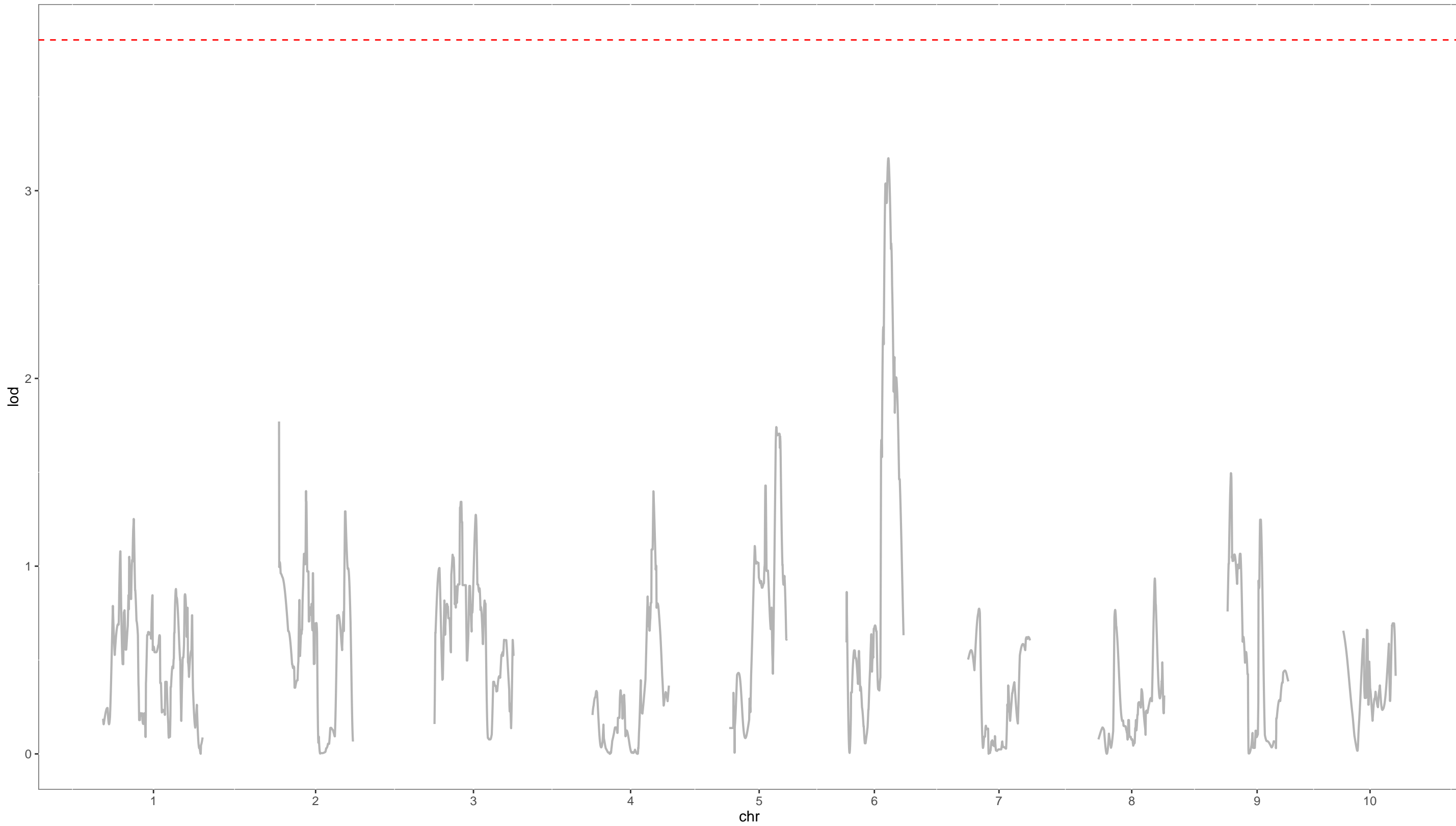


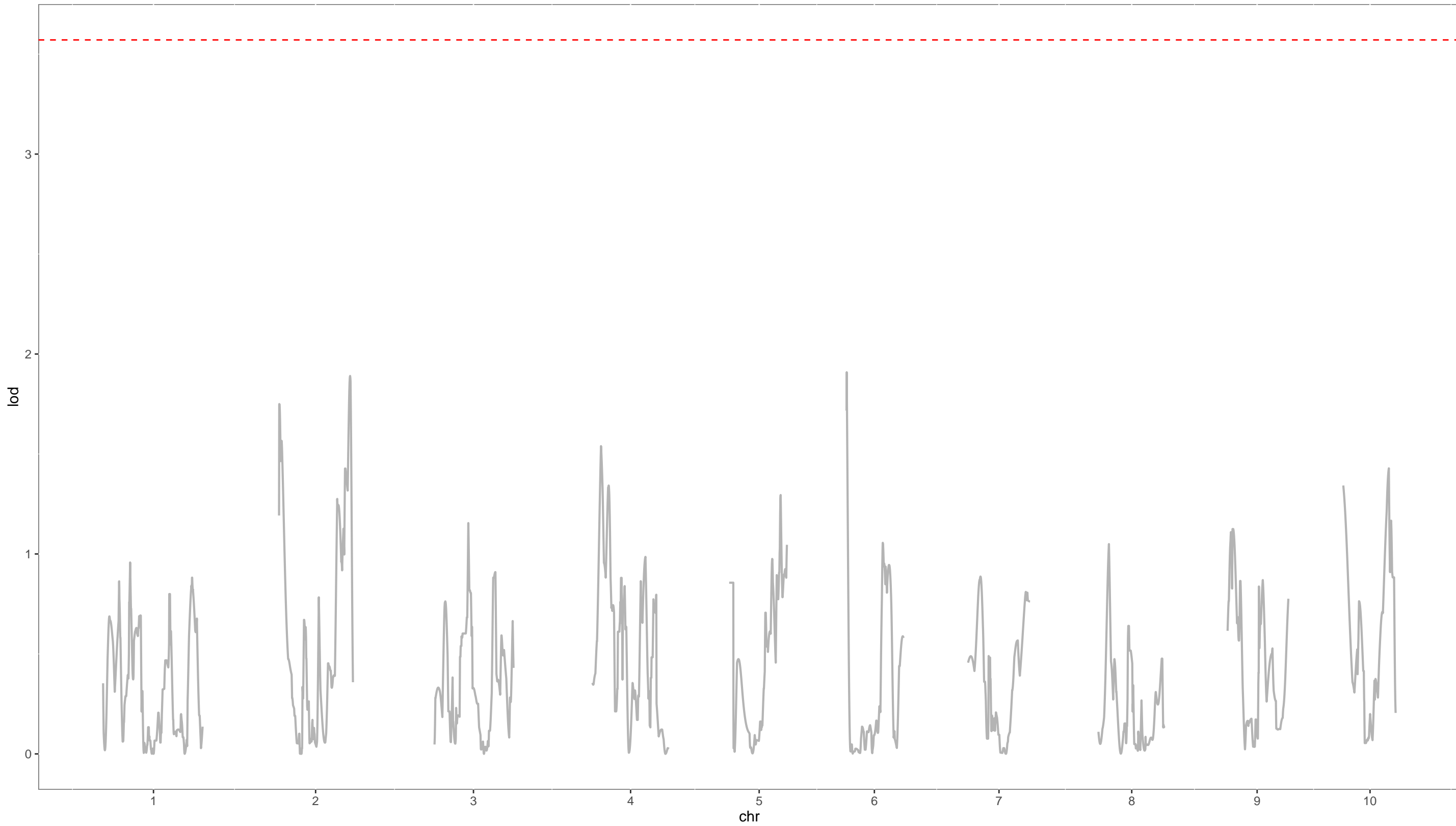
QTL analysis for int\_additive covariate for AI\_leaf



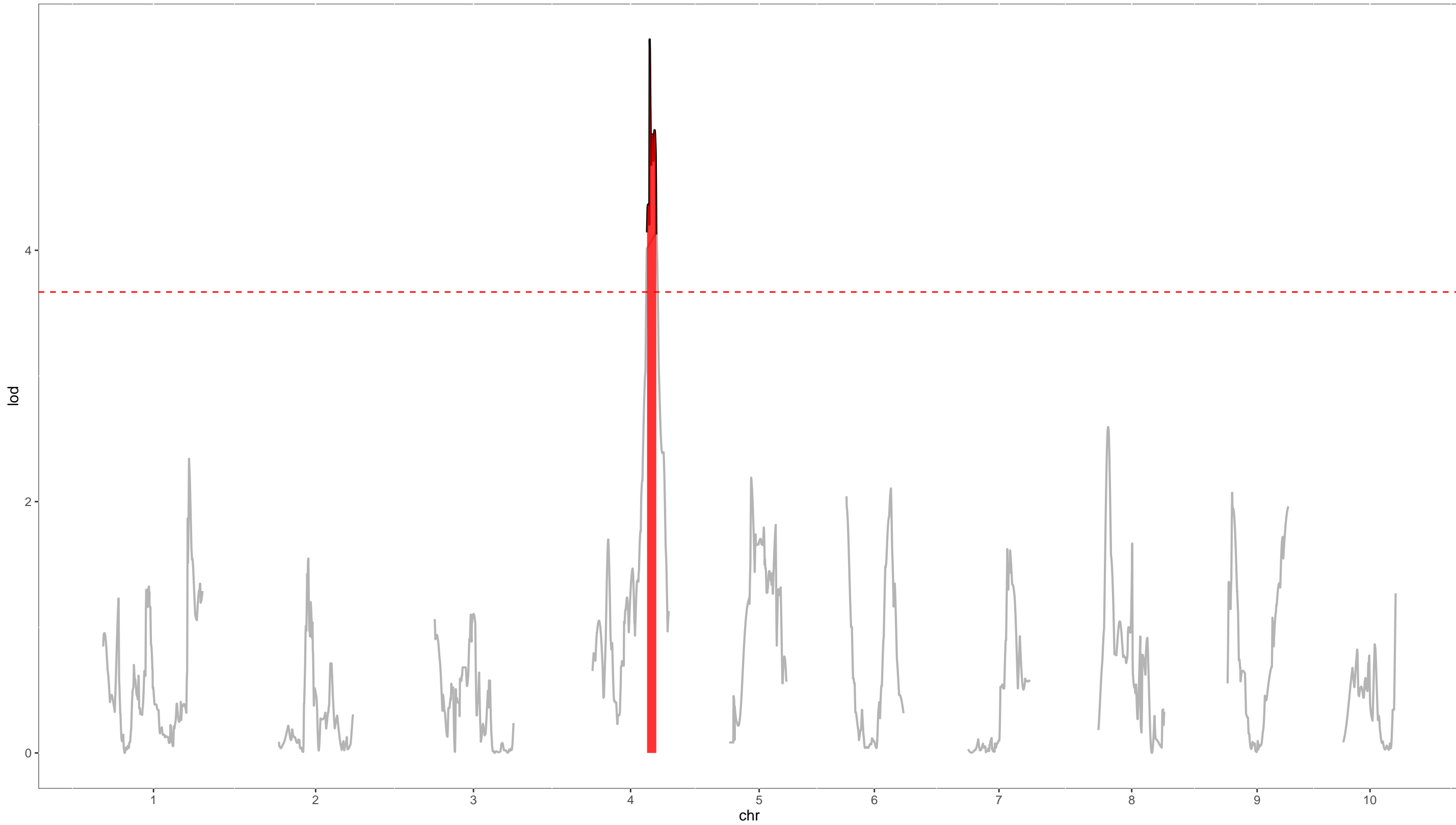
## QTL analysis for int\_additive covariate for AI\_ratio



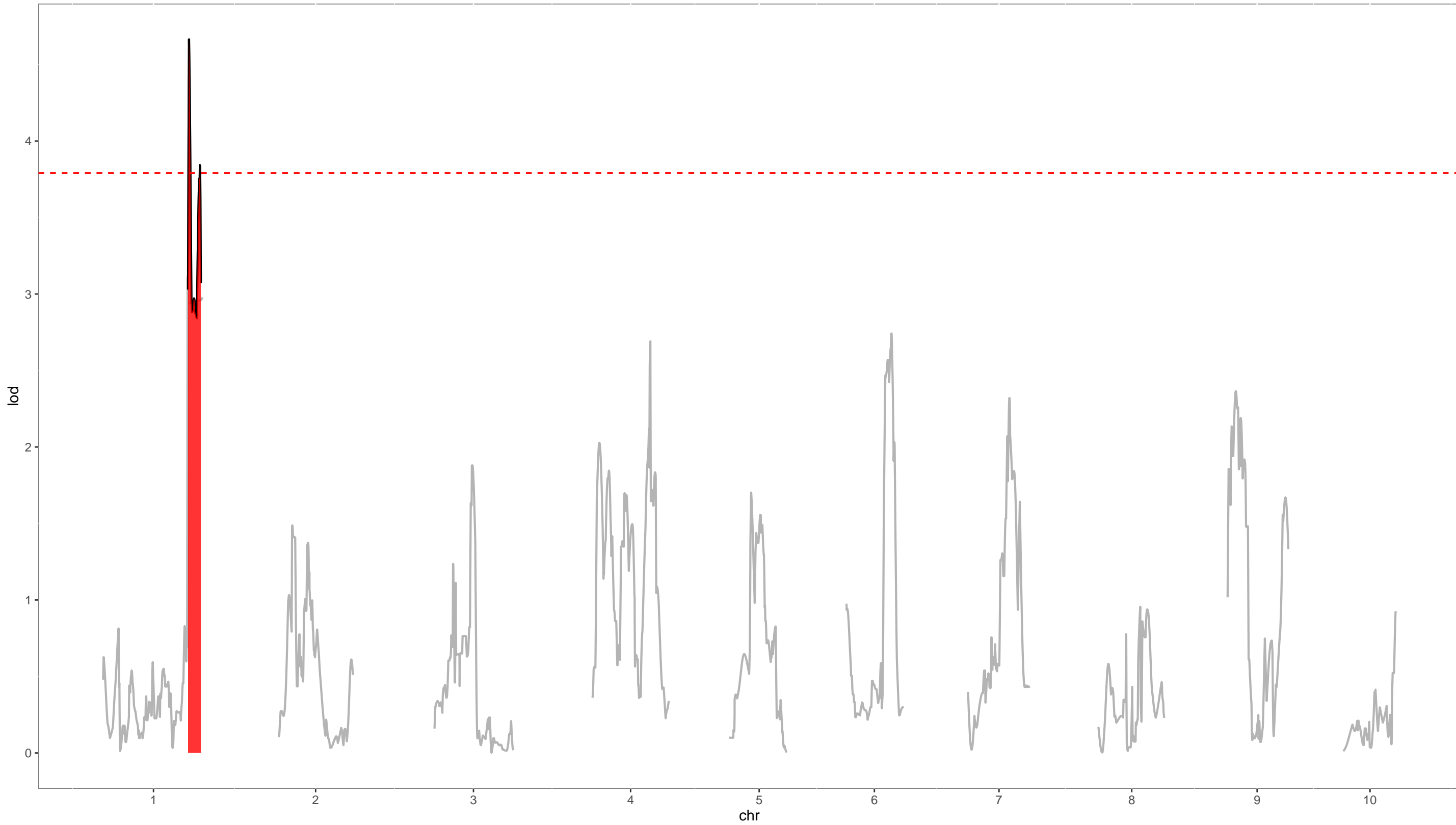
QTL analysis for int\_additive covariate for AI\_seed



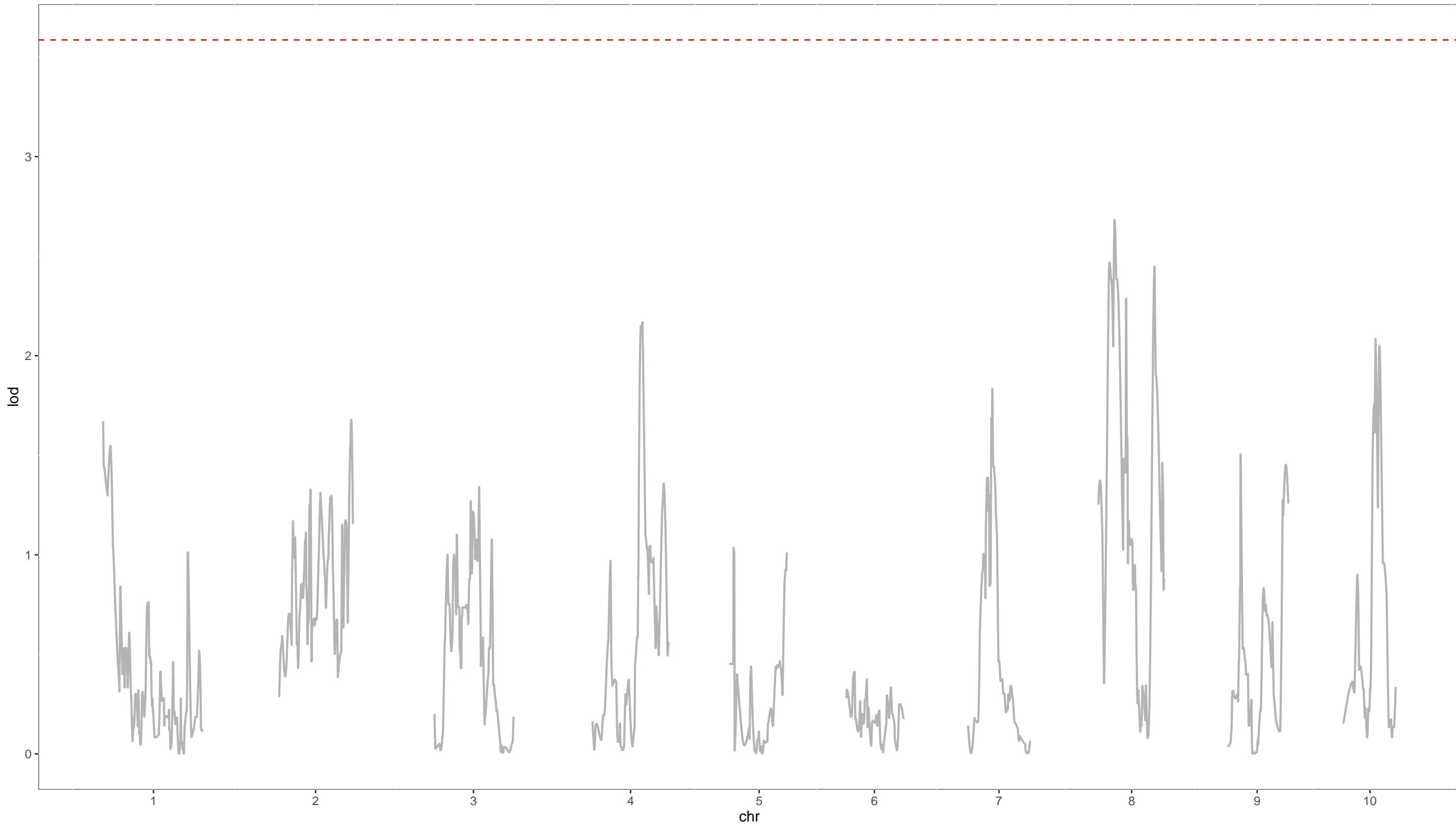
QTL analysis for int\_additive covariate for As\_leaf



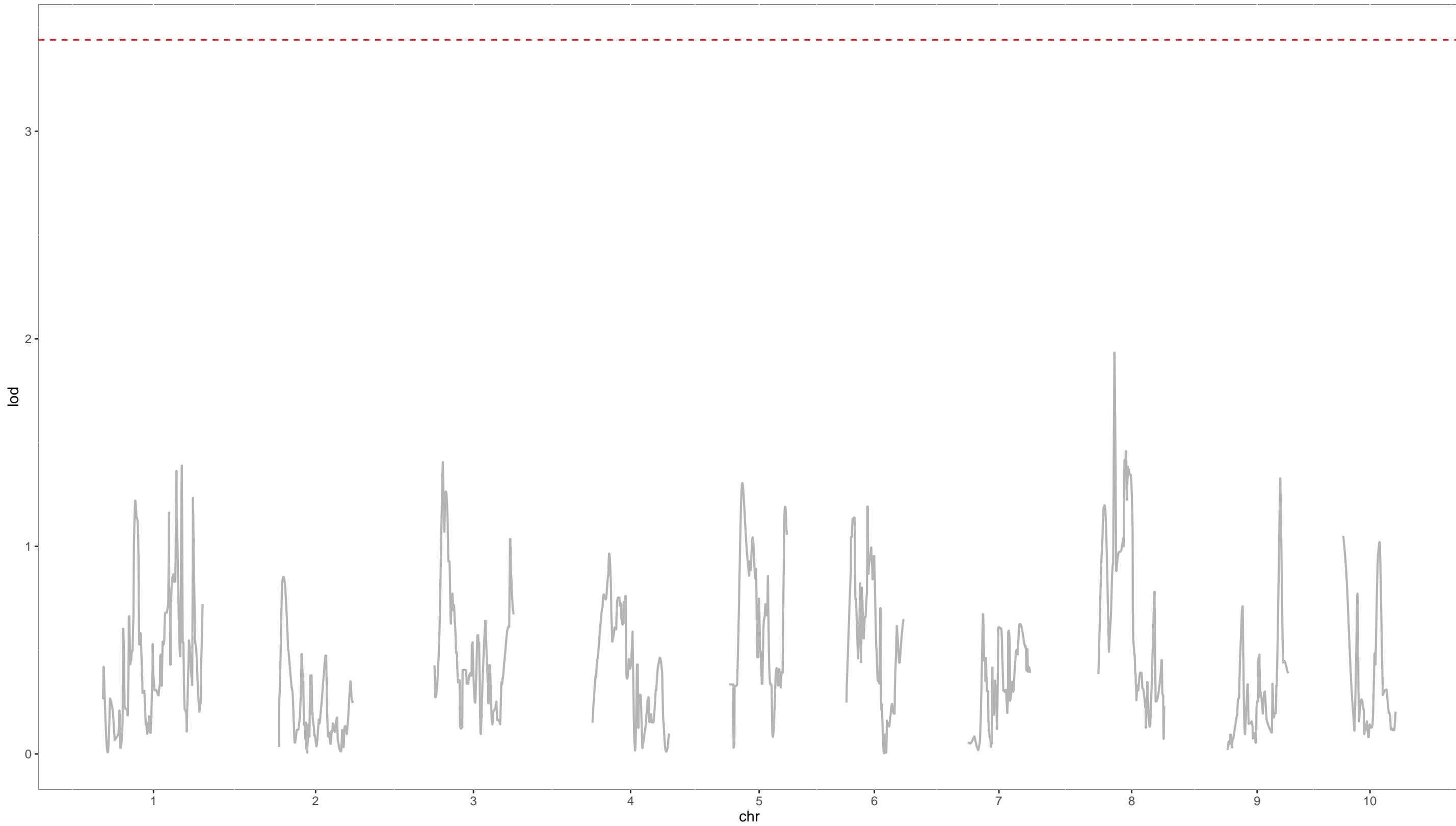
## QTL analysis for int\_additive covariate for As\_ratio



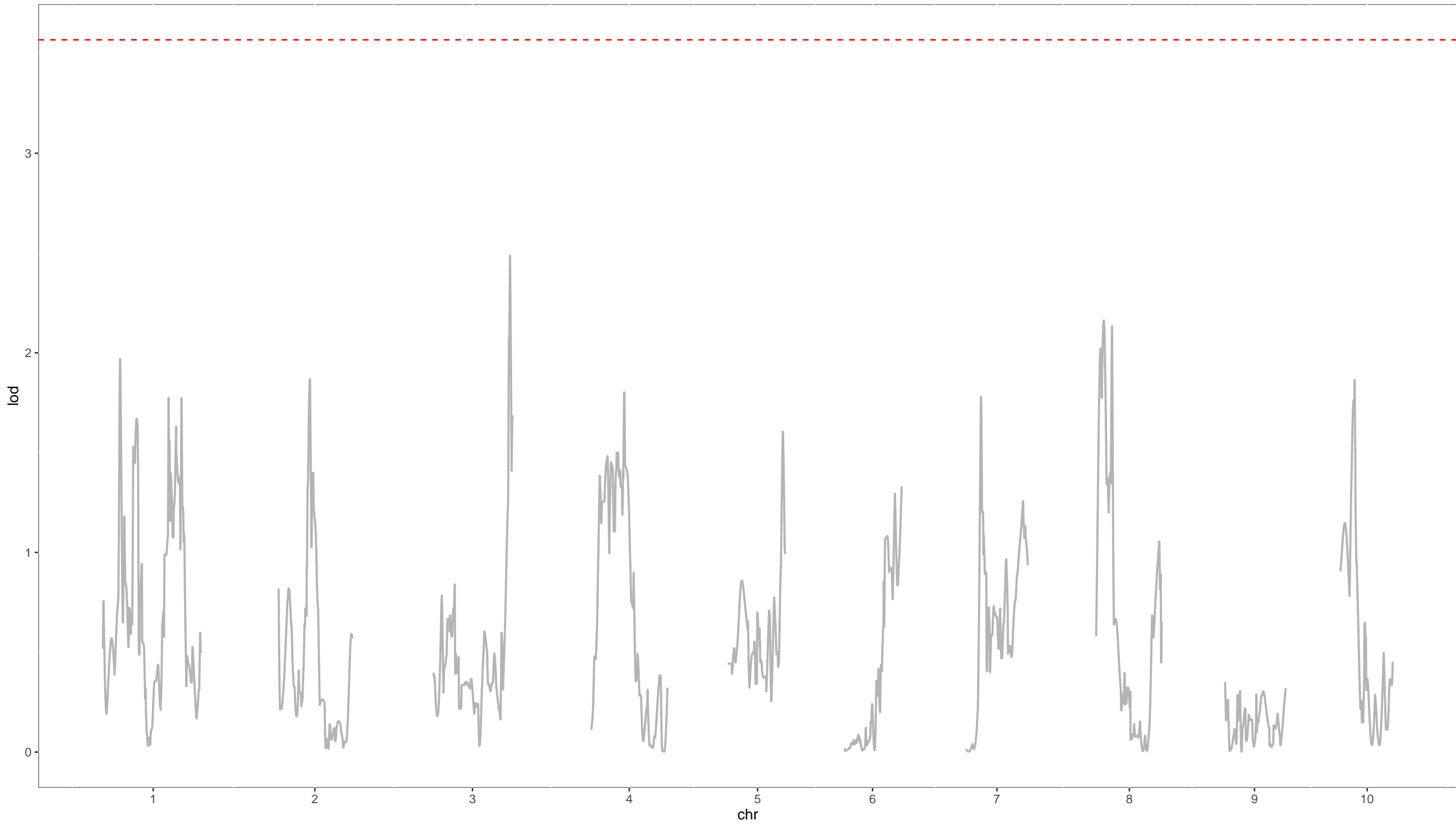
## QTL analysis for int\_additive covariate for As\_seed



## QTL analysis for int\_additive covariate for B\_leaf

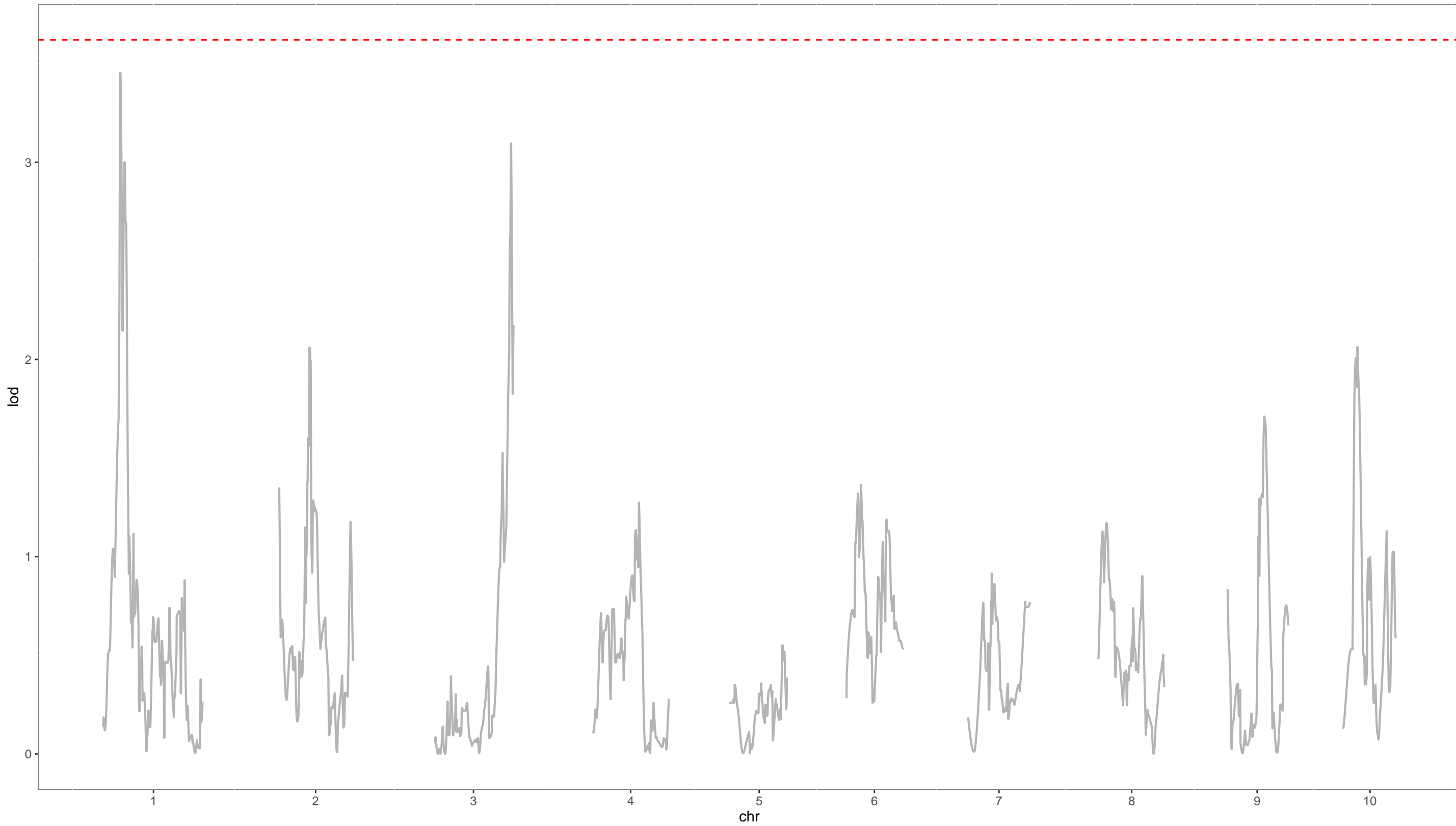


## QTL analysis for int\_additive covariate for B\_ratio

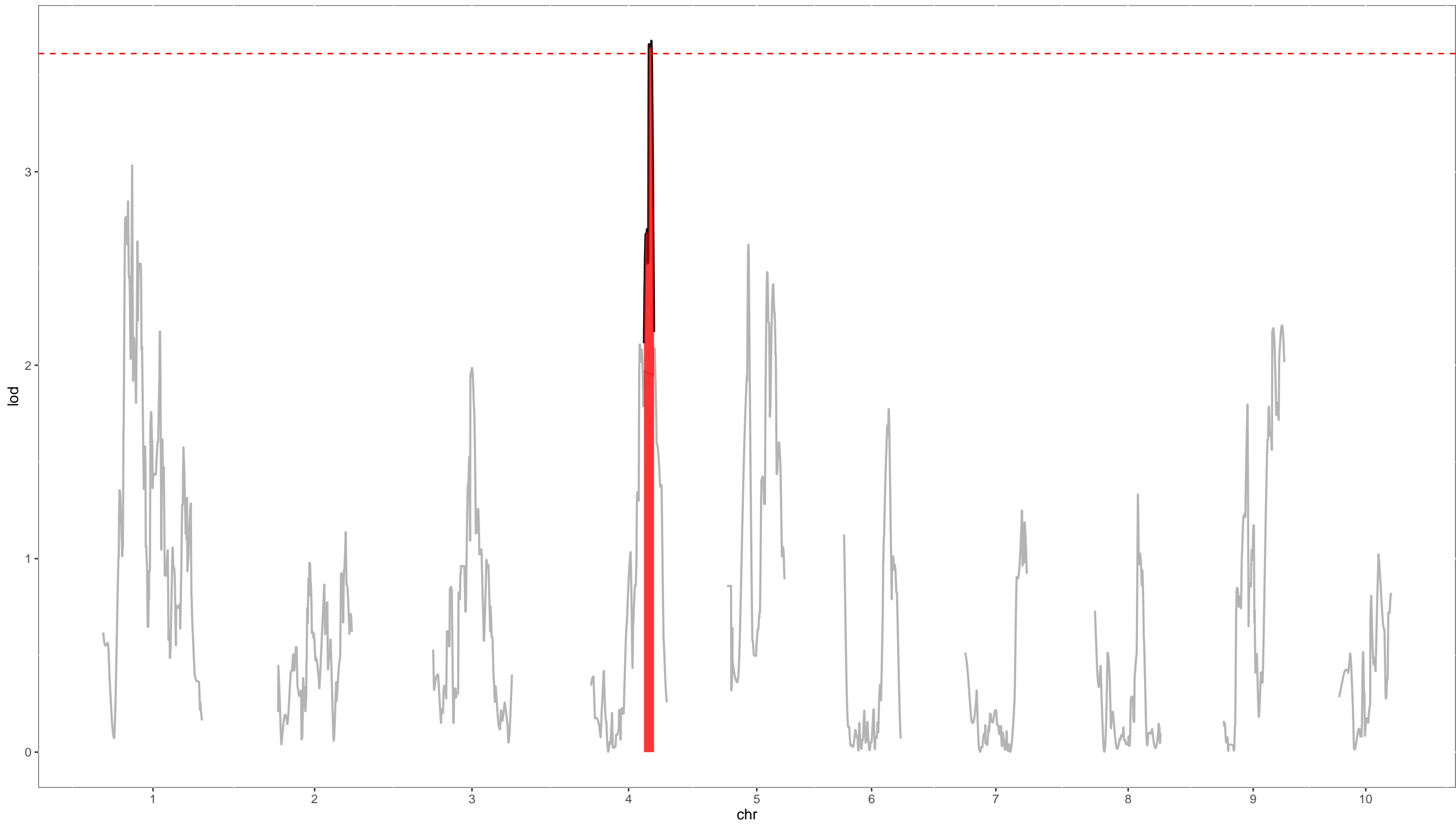




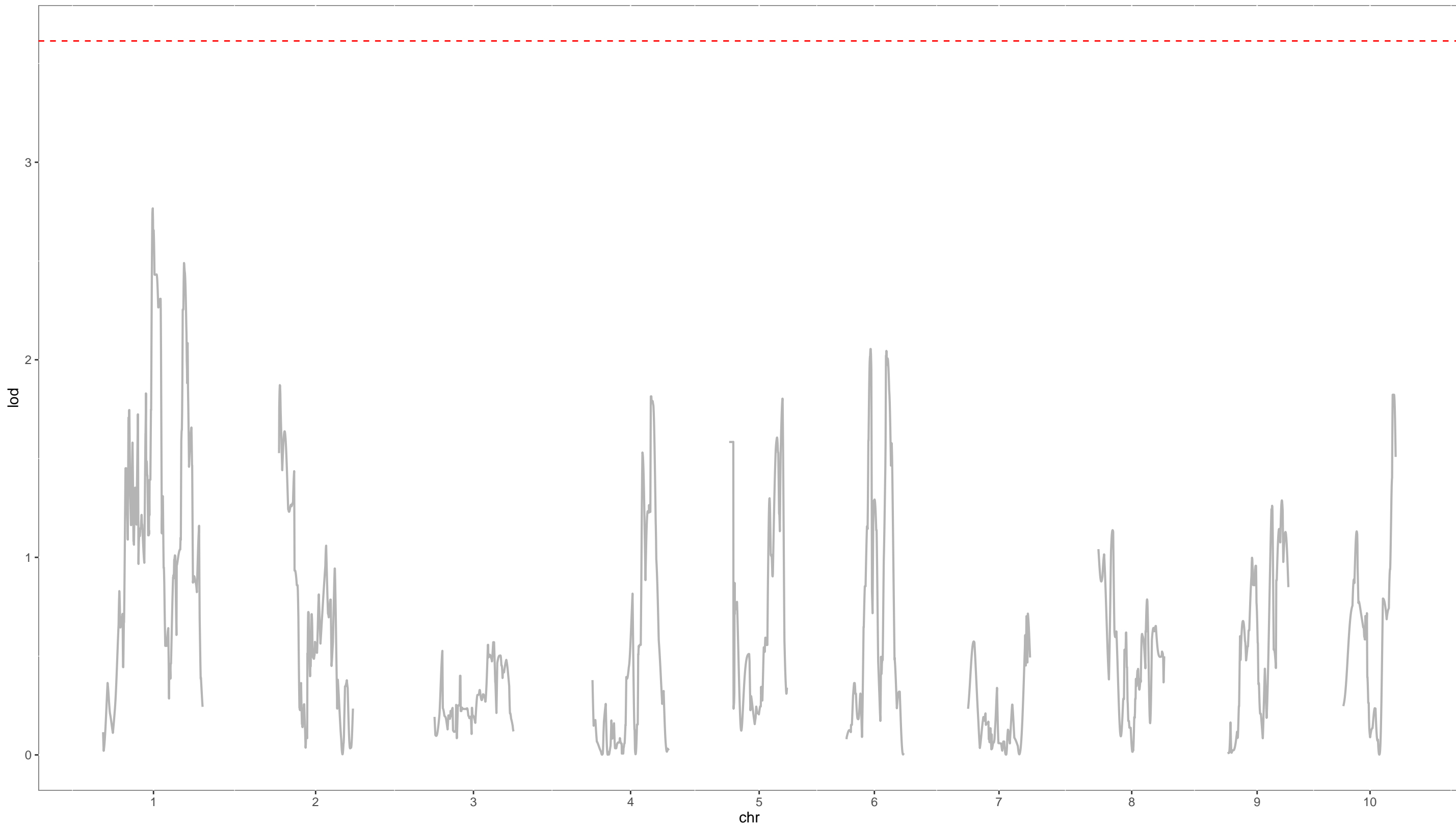
QTL analysis for int\_additive covariate for B\_seed



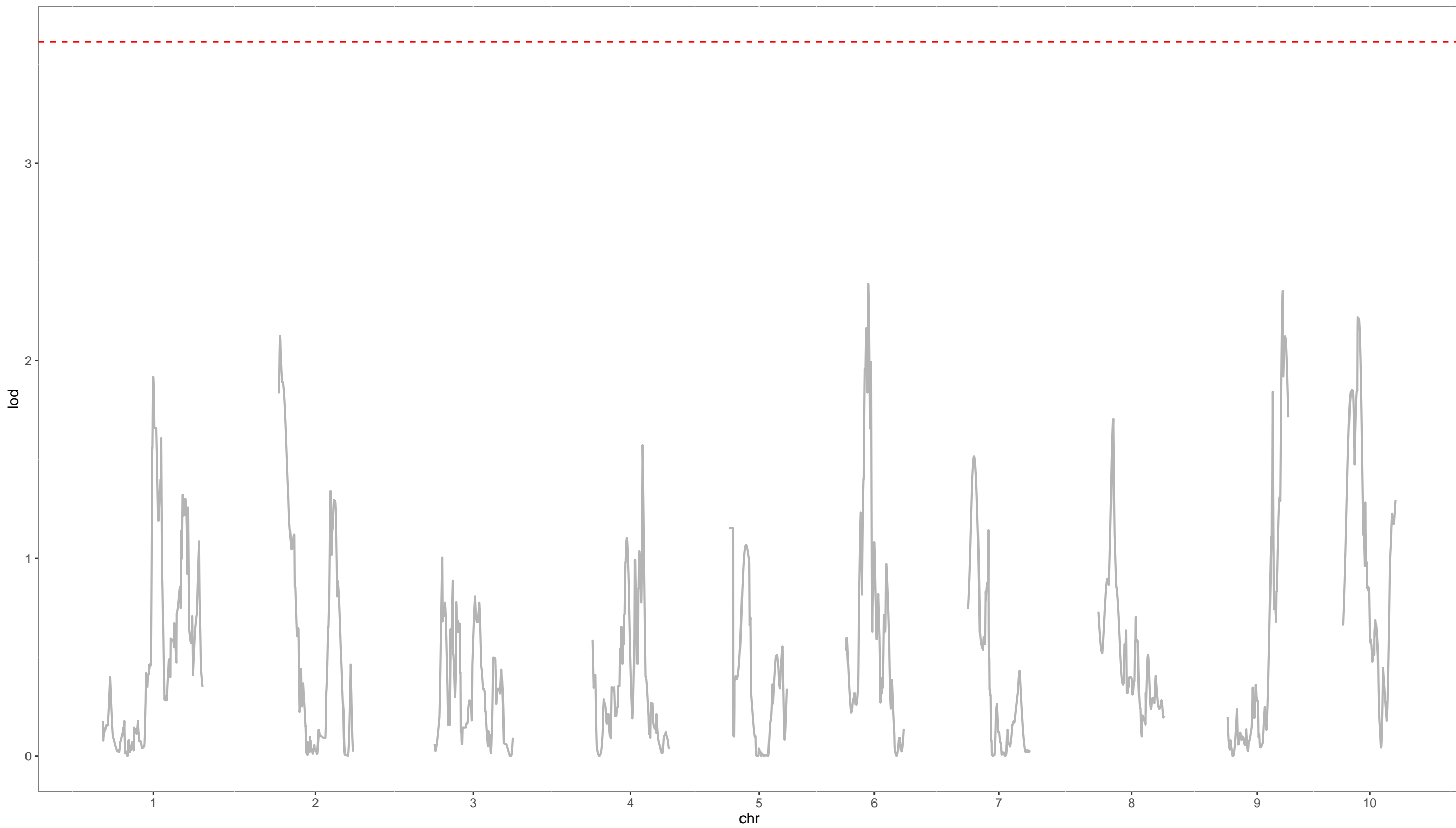
QTL analysis for int\_additive covariate for Ca\_leaf



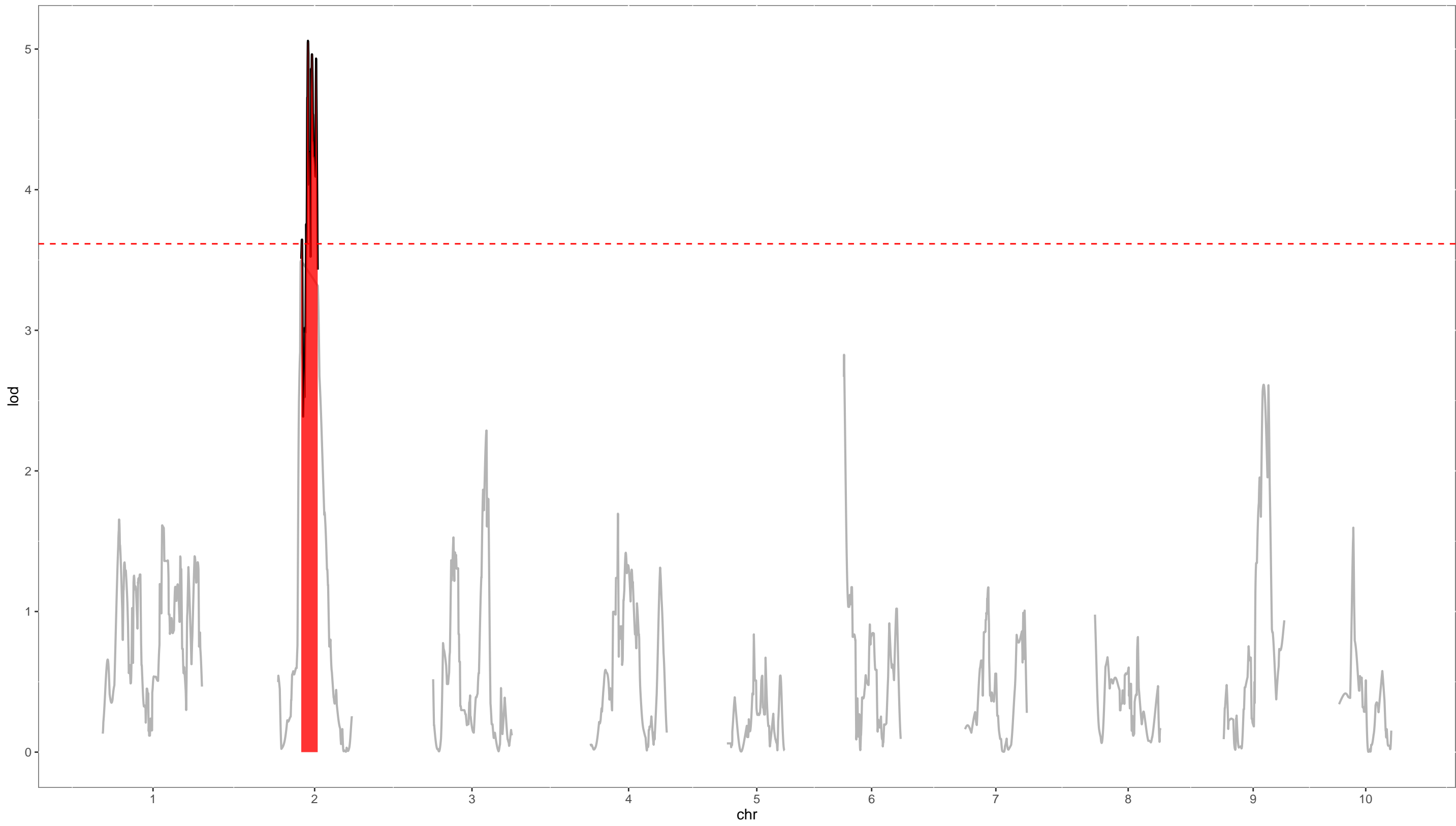
QTL analysis for int\_additive covariate for Ca\_ratio



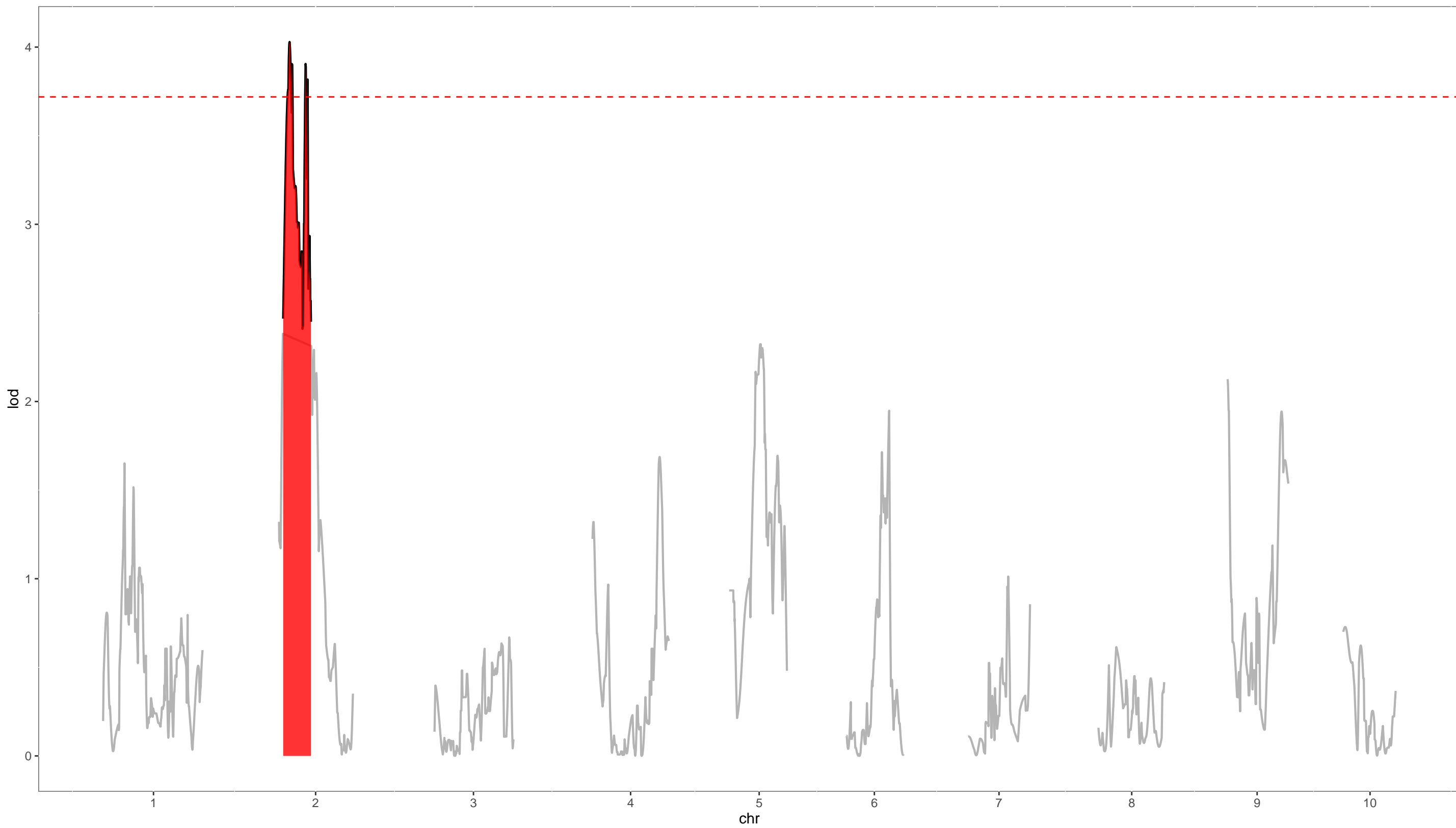
## QTL analysis for int\_additive covariate for Ca\_seed



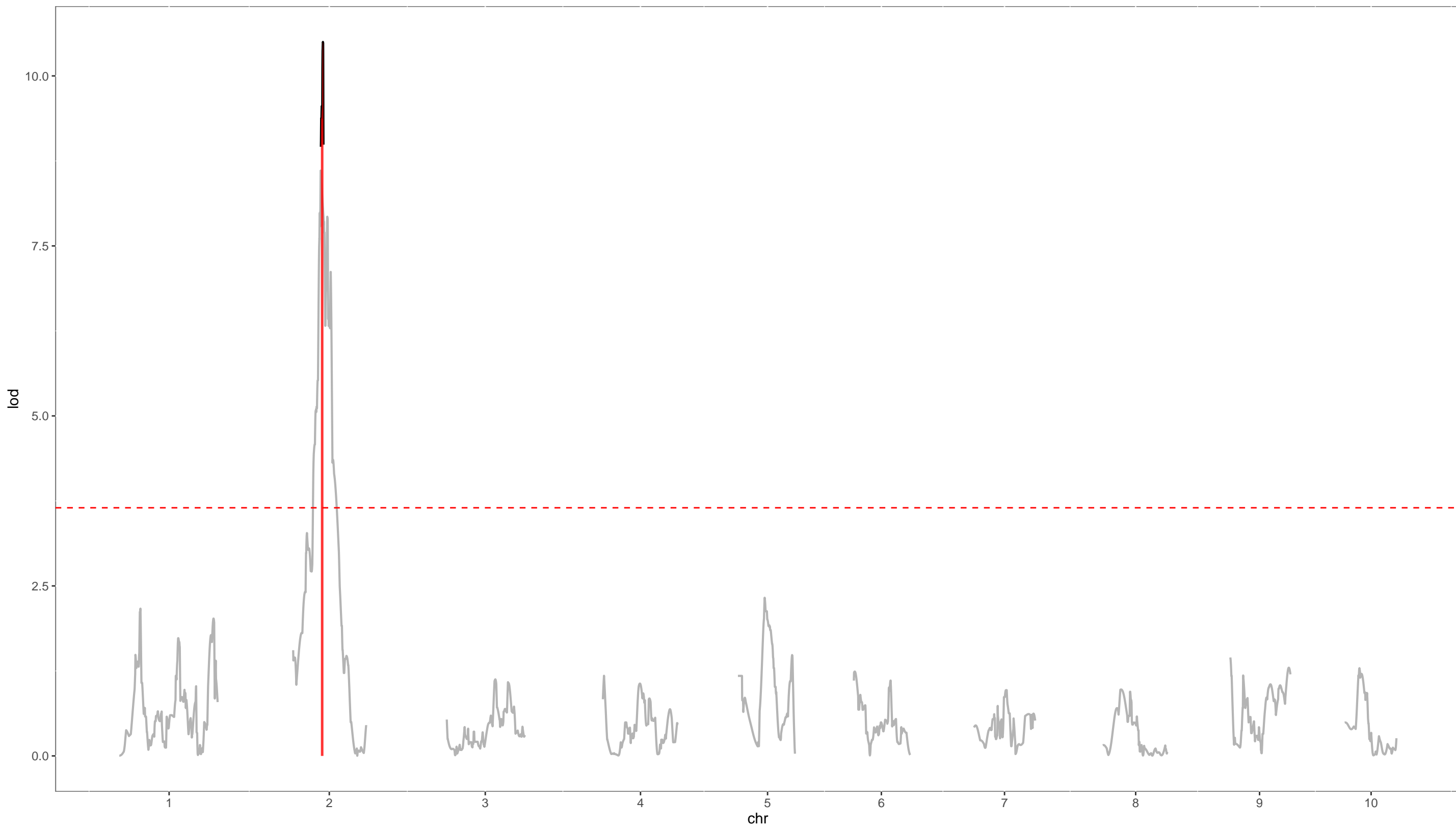
QTL analysis for int\_additive covariate for Cd\_leaf



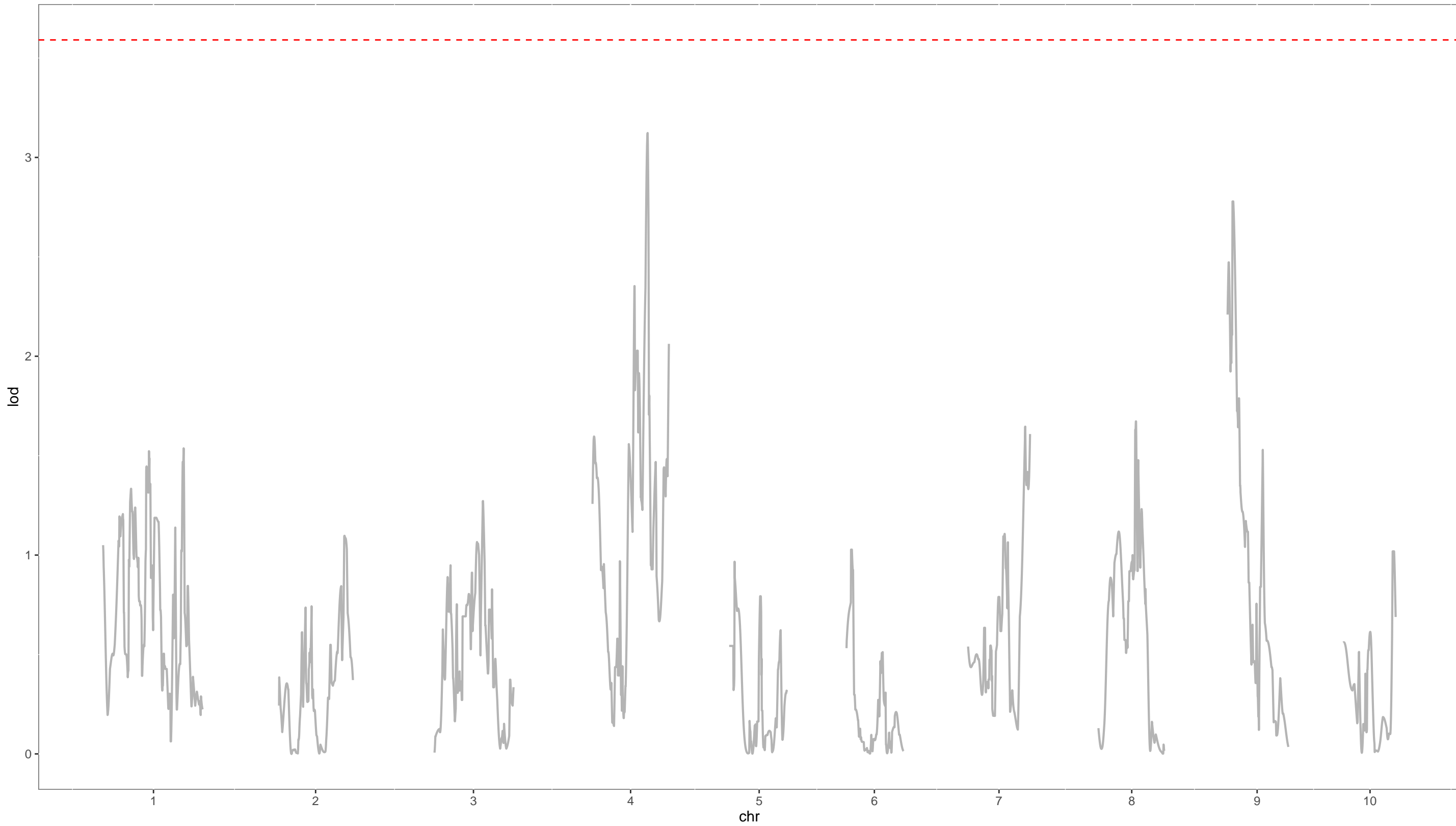
QTL analysis for int\_additive covariate for Cd\_ratio



## QTL analysis for int\_additive covariate for Cd\_seed

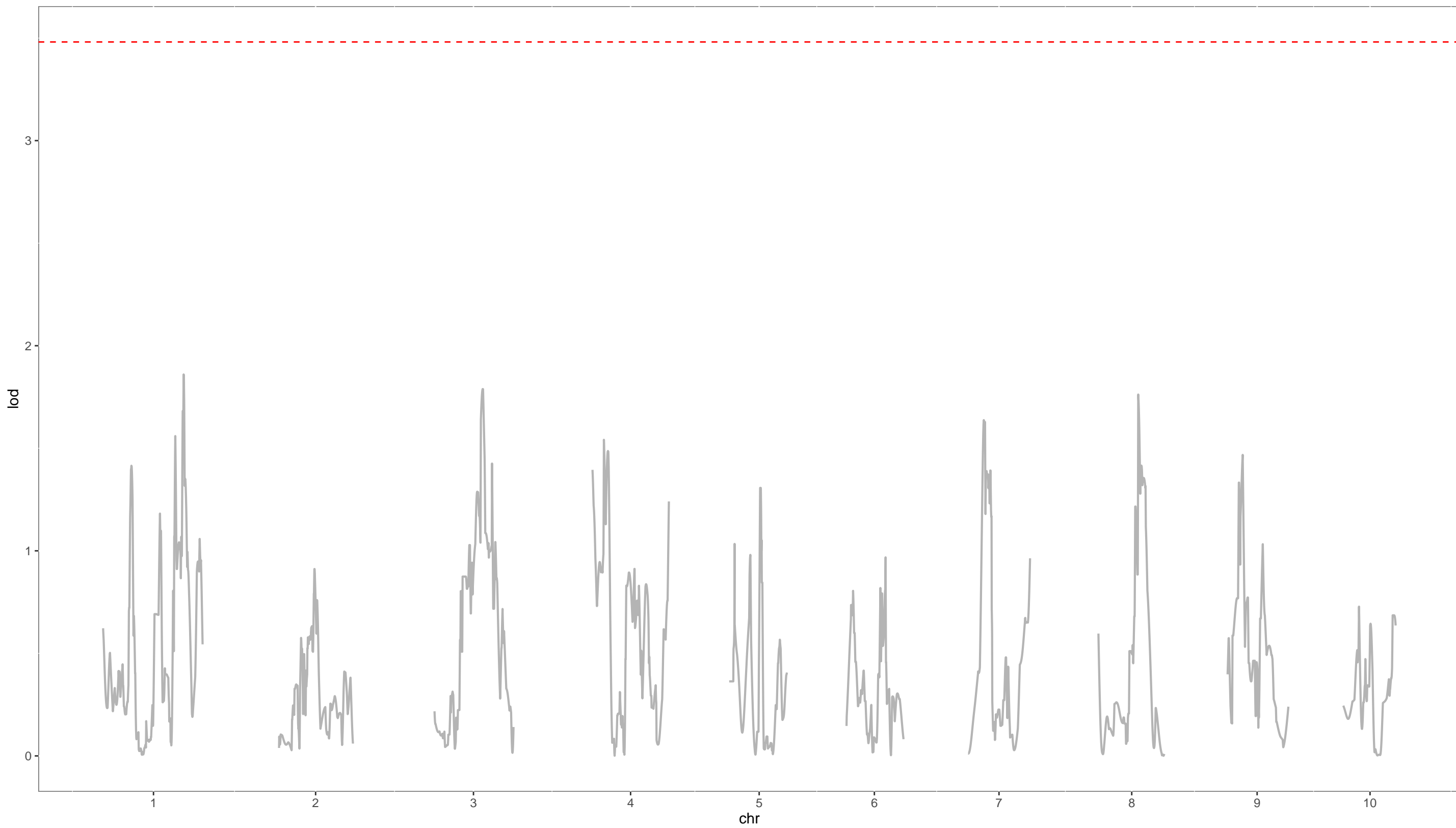


QTL analysis for int\_additive covariate for Co\_leaf

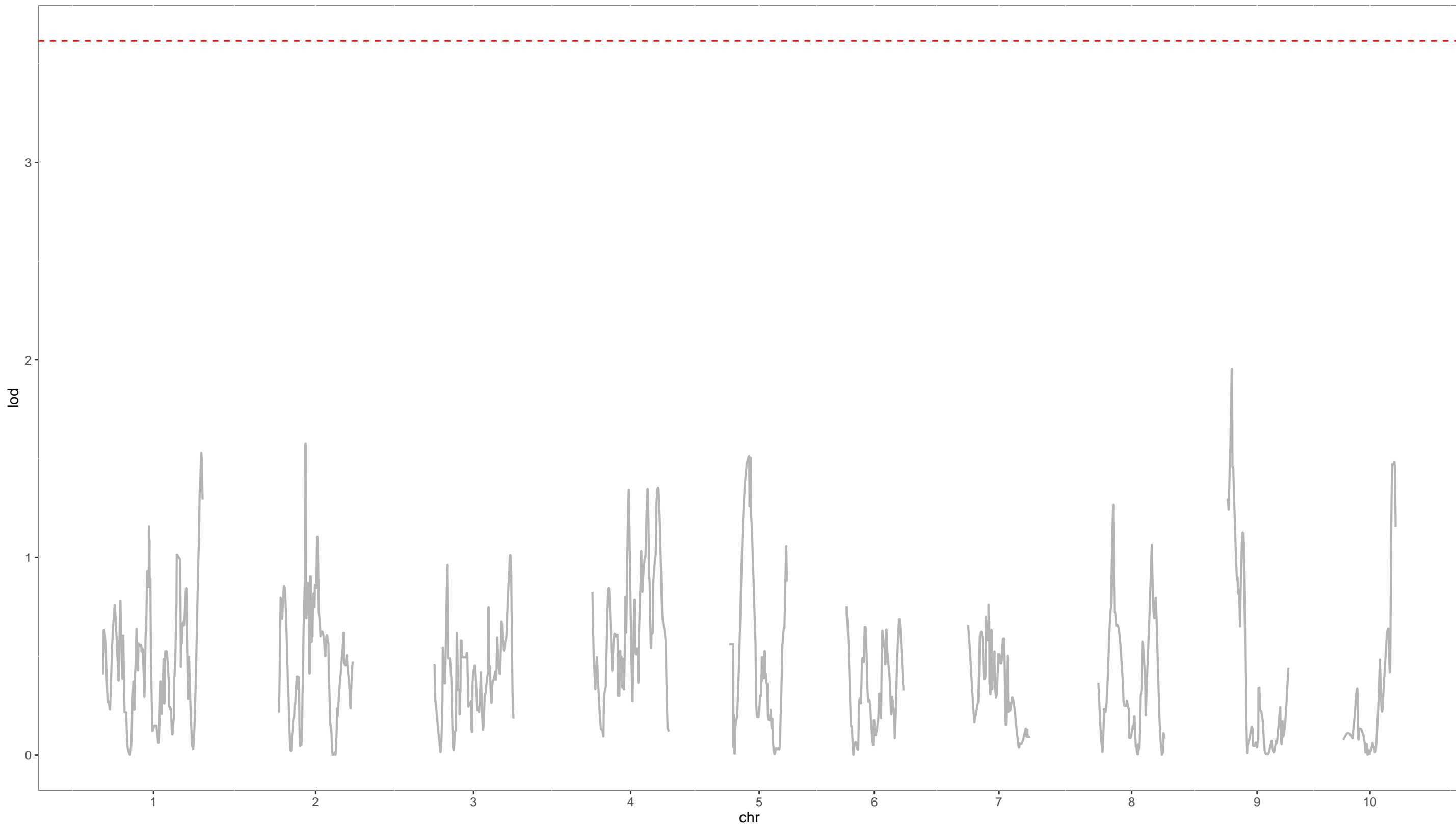




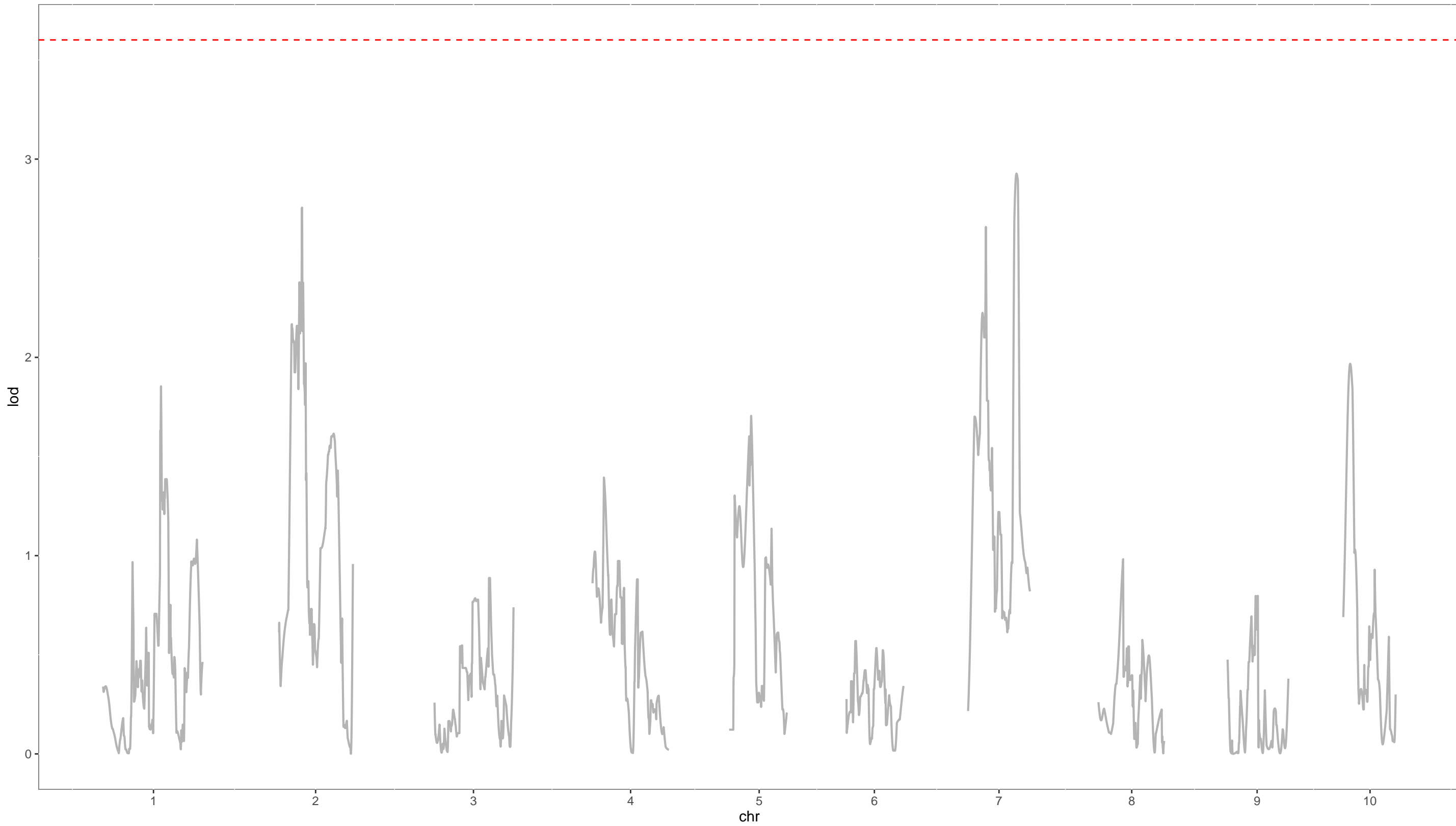
## QTL analysis for int\_additive covariate for Co\_ratio



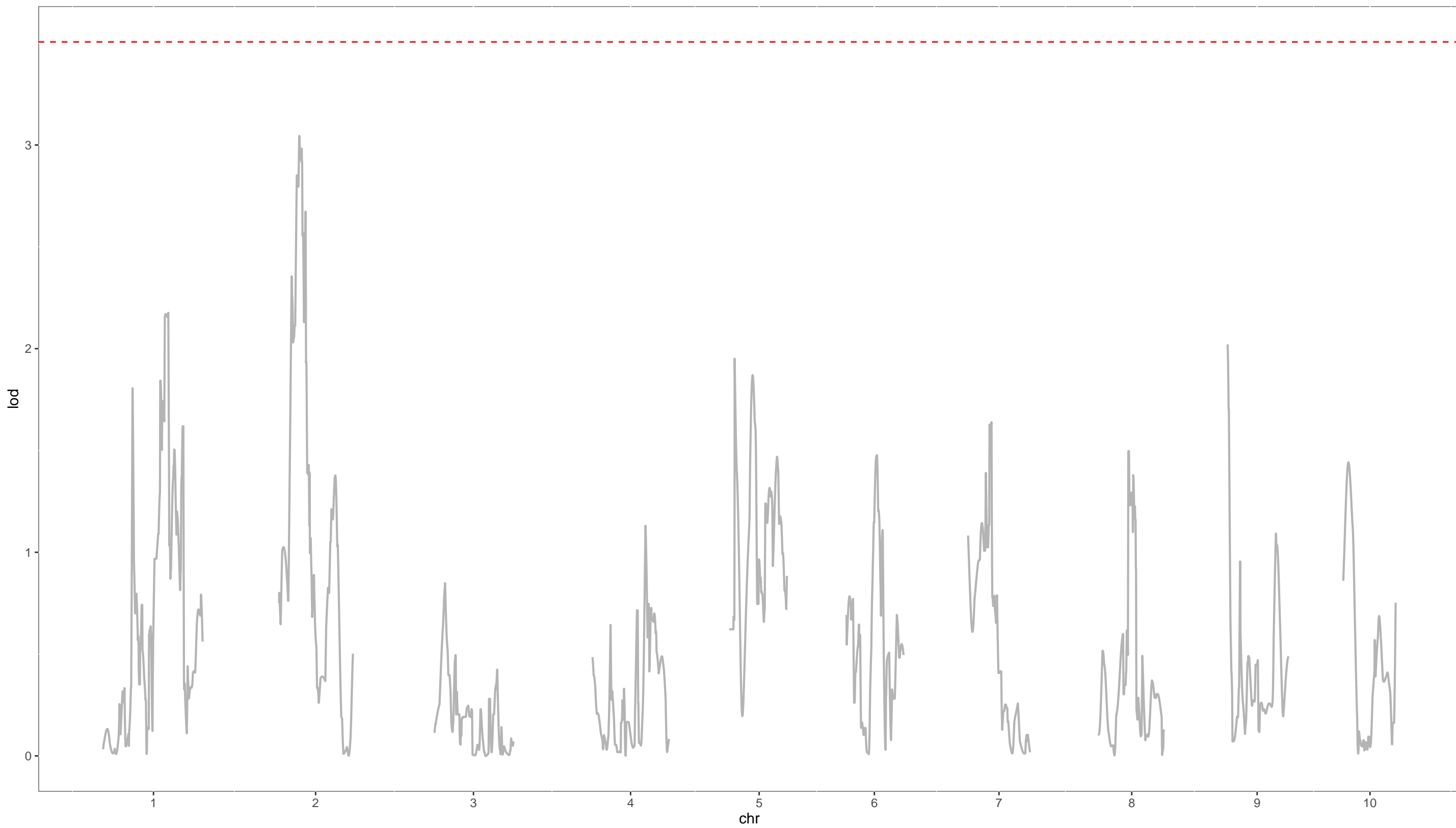
QTL analysis for int\_additive covariate for Co\_seed



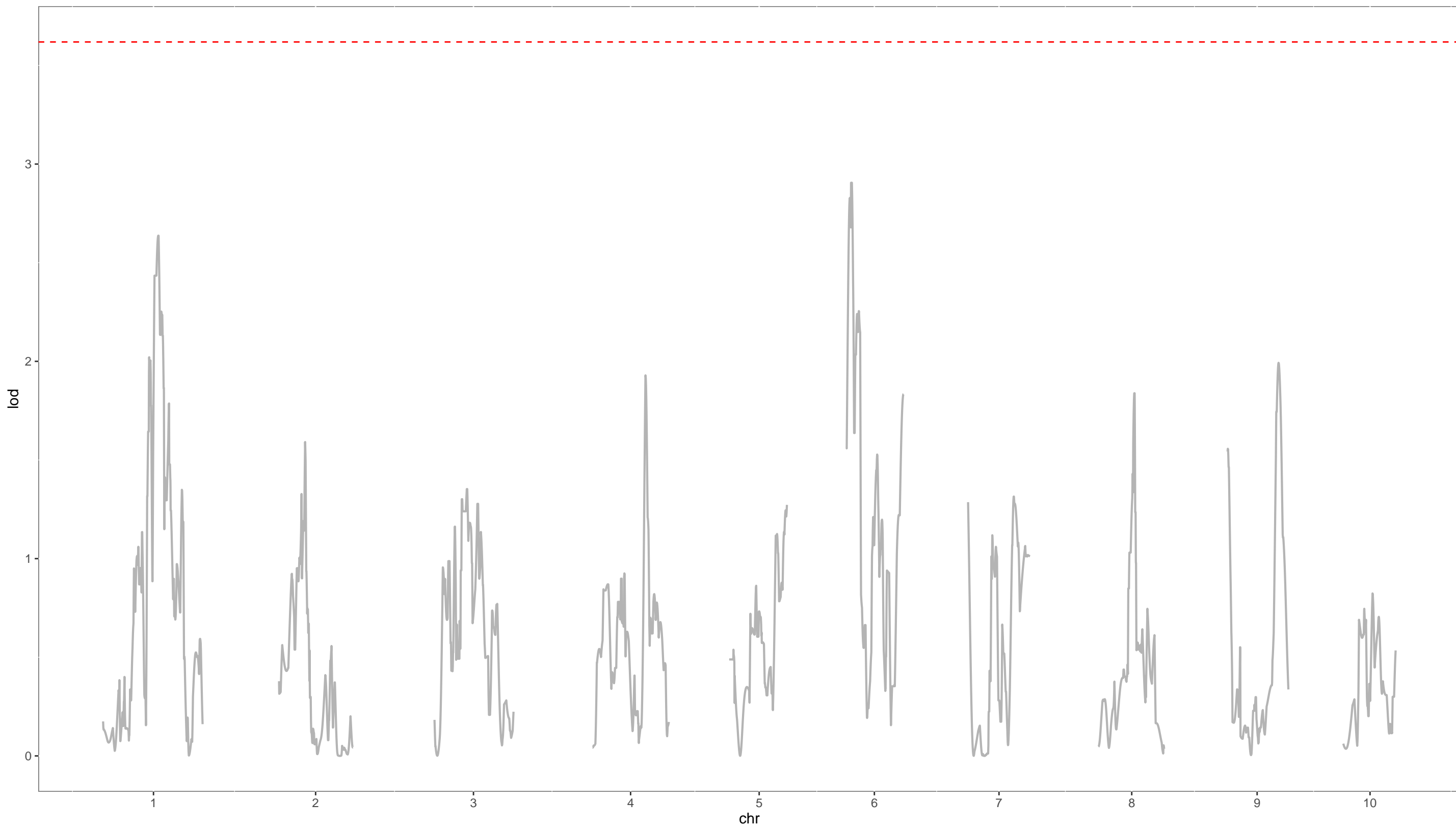
QTL analysis for int\_additive covariate for Cu\_leaf



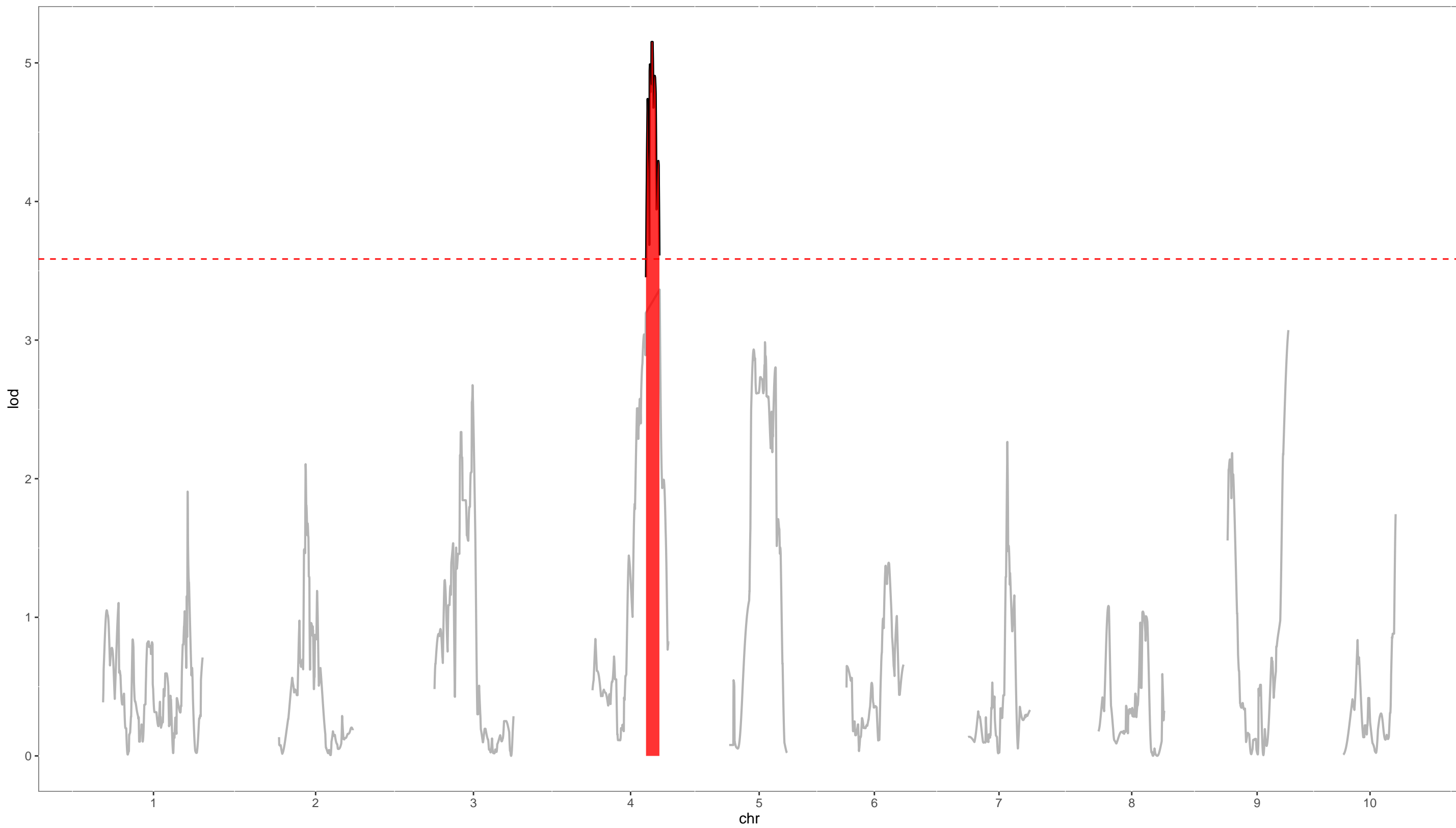
## QTL analysis for int\_additive covariate for Cu\_ratio



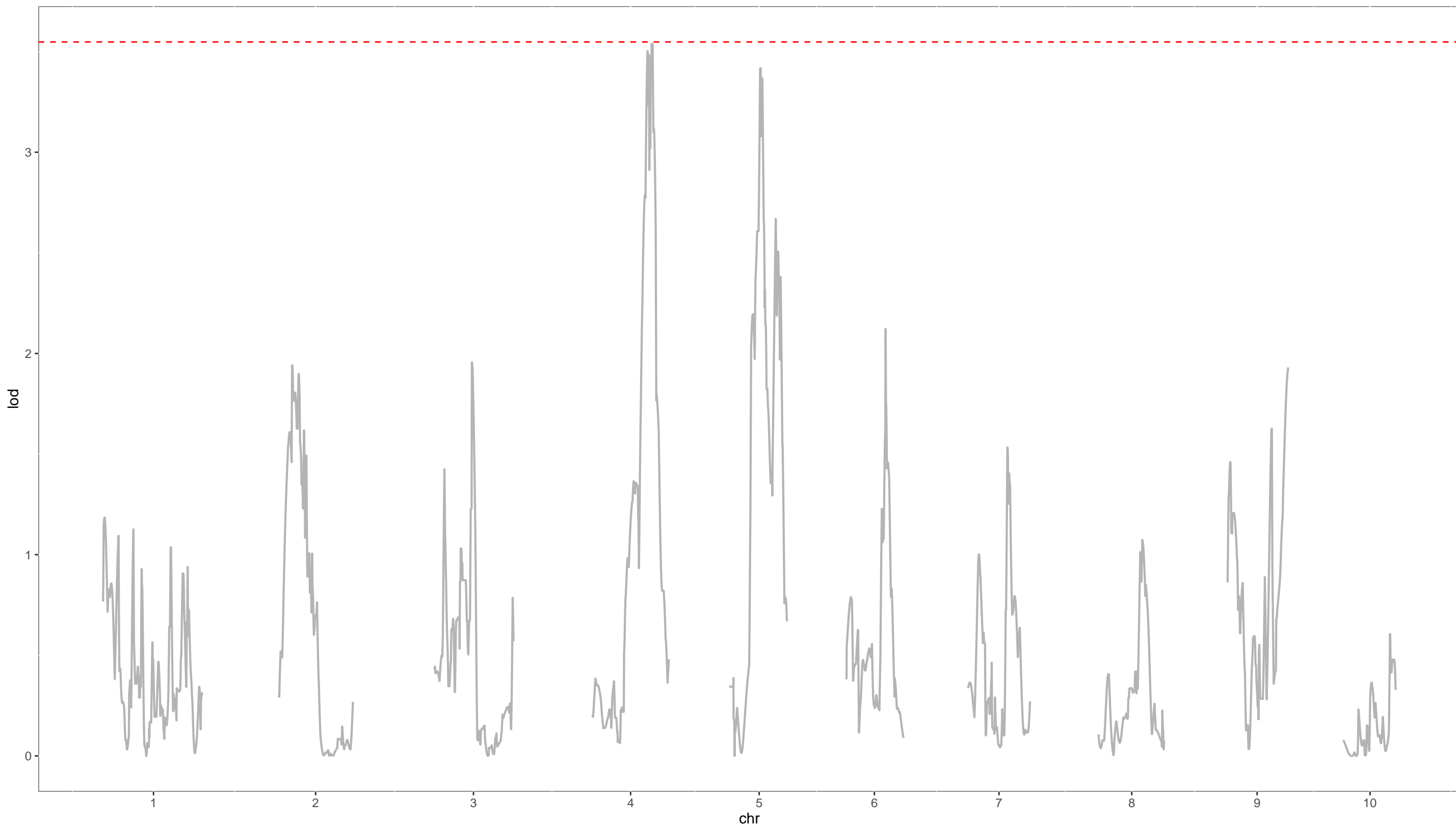
## QTL analysis for int\_additive covariate for Cu\_seed



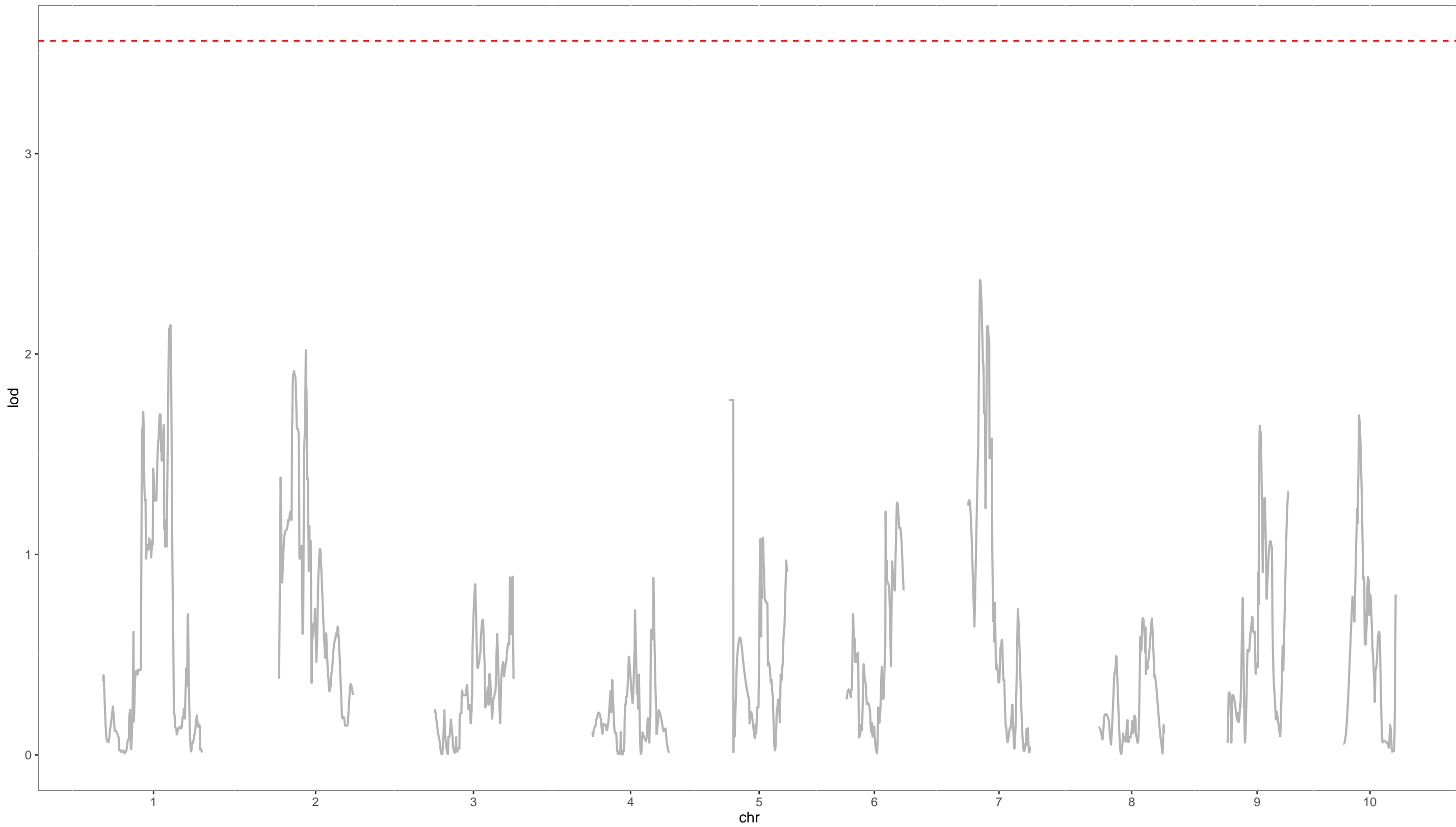
## QTL analysis for int\_additive covariate for Fe\_leaf



## QTL analysis for int\_additive covariate for Fe\_ratio

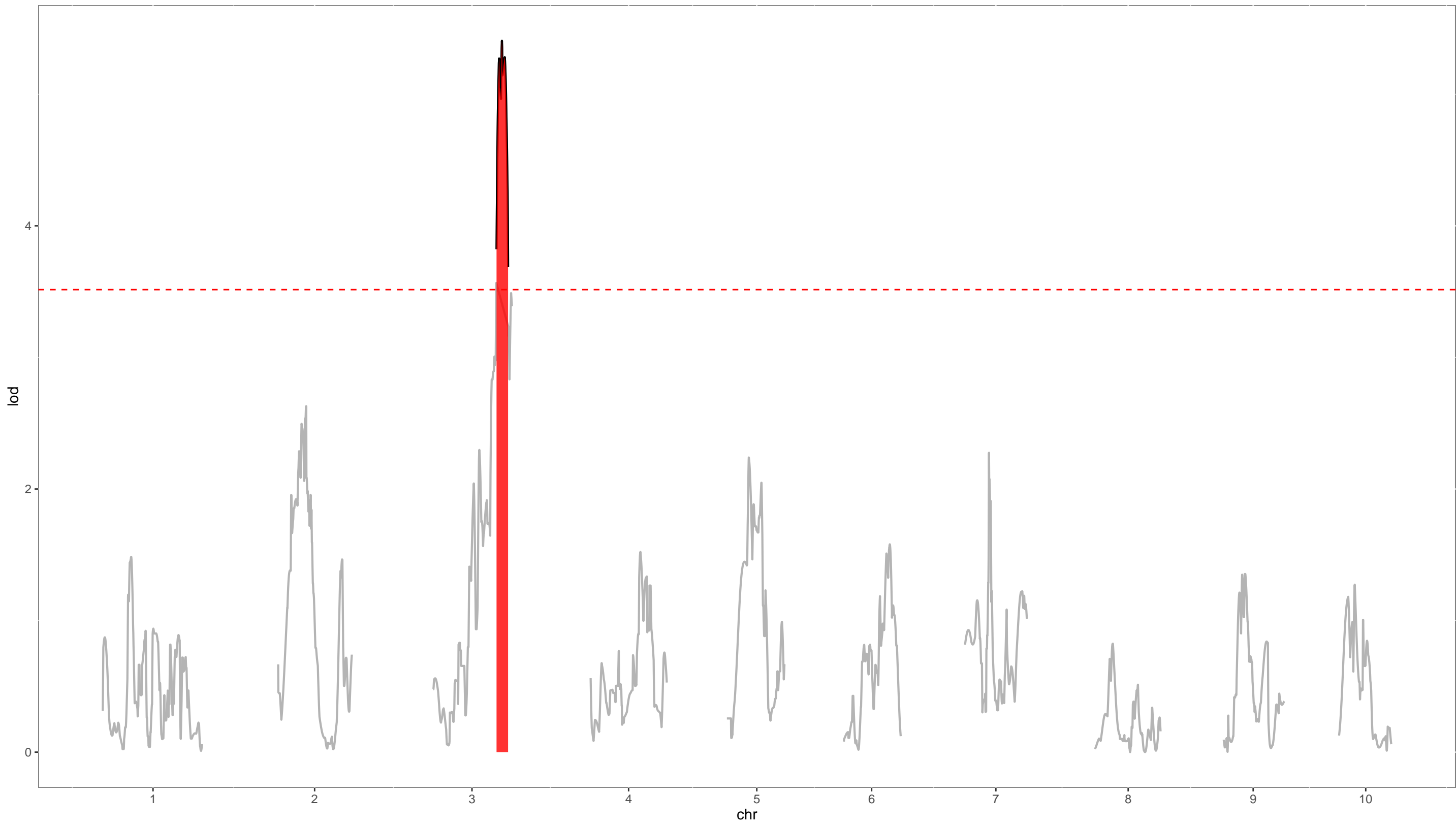


## QTL analysis for int\_additive covariate for Fe\_seed

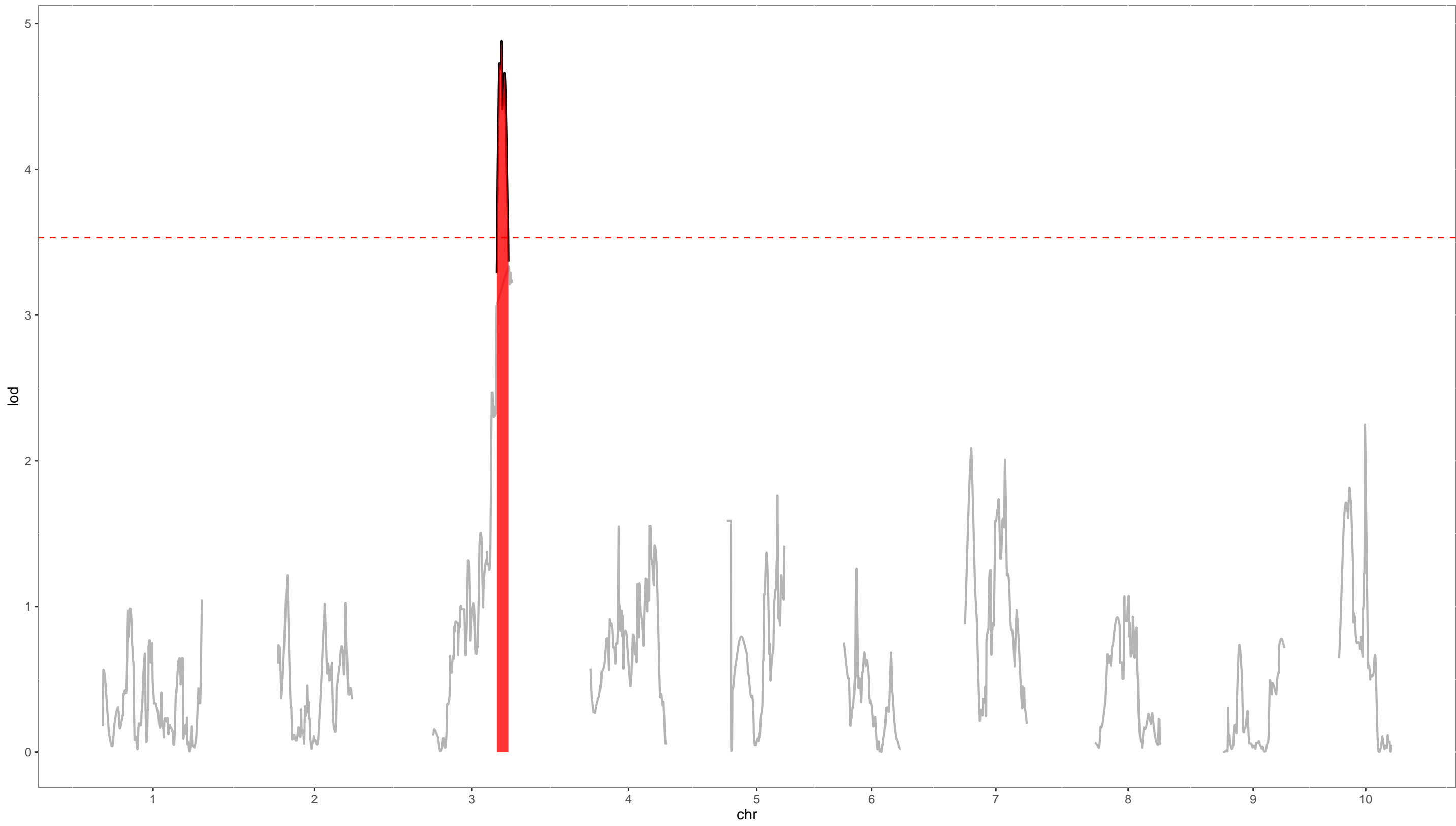




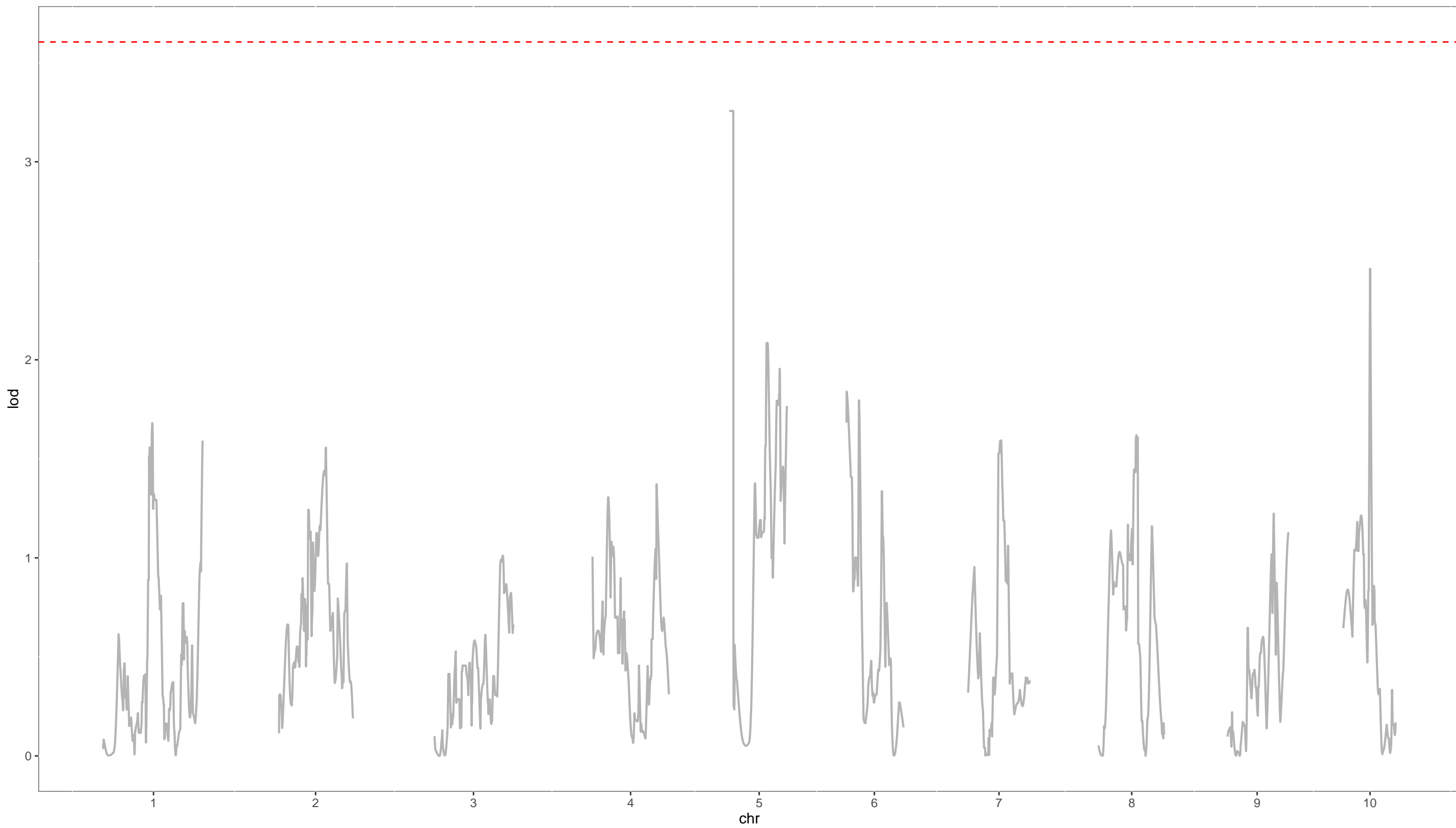
QTL analysis for int\_additive covariate for K\_leaf



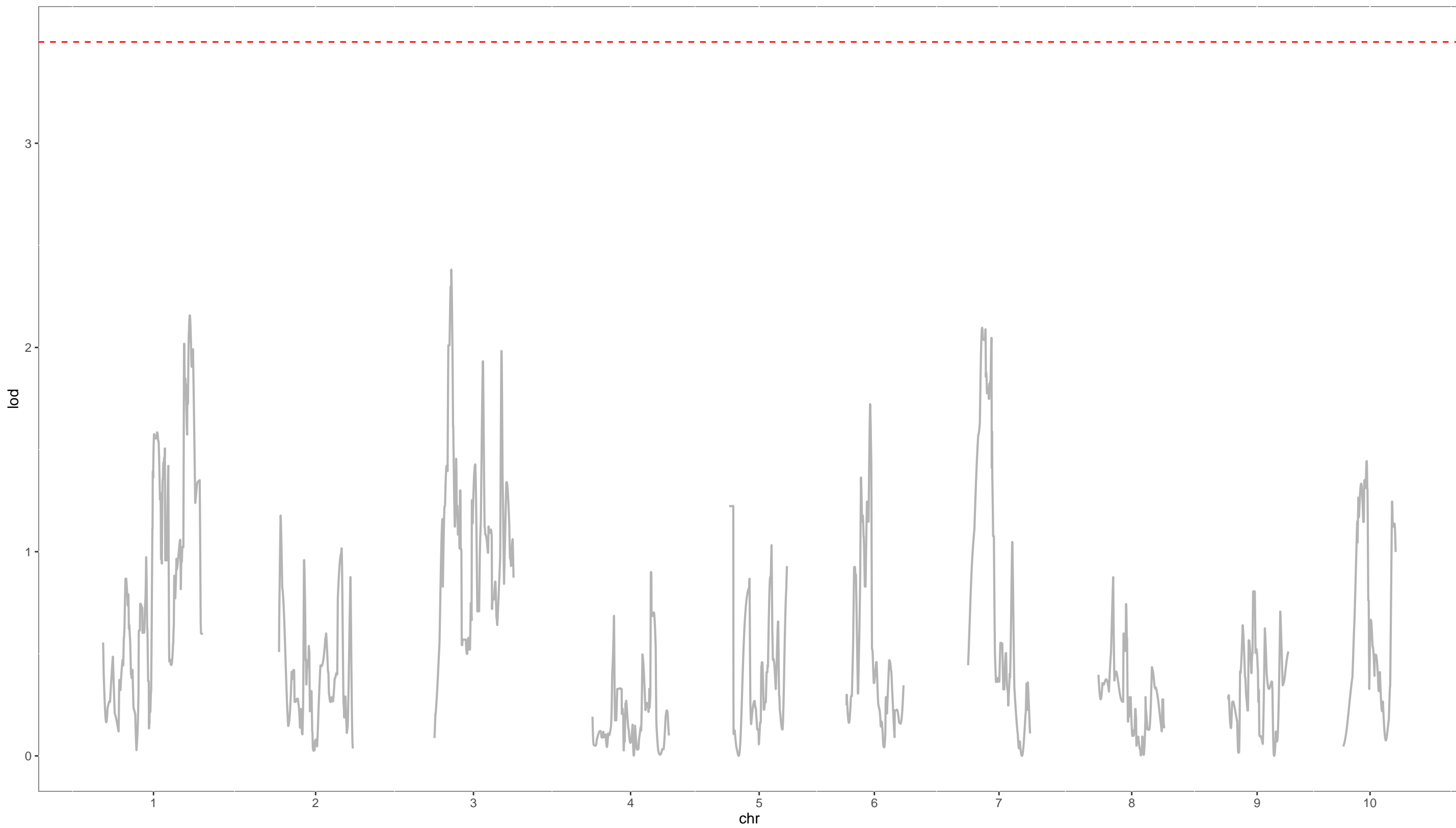
QTL analysis for int\_additive covariate for K\_ratio



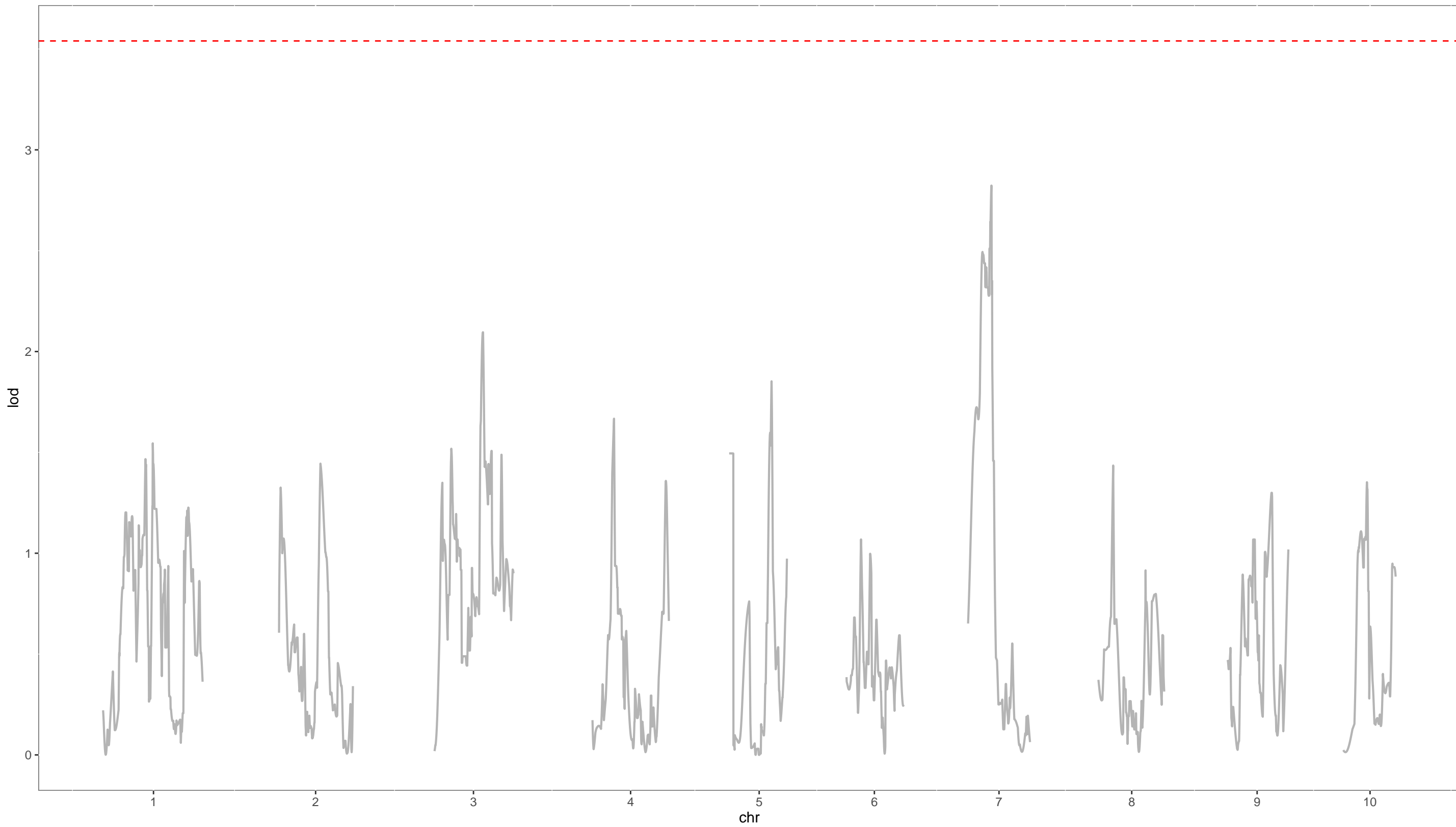
QTL analysis for int\_additive covariate for K\_seed



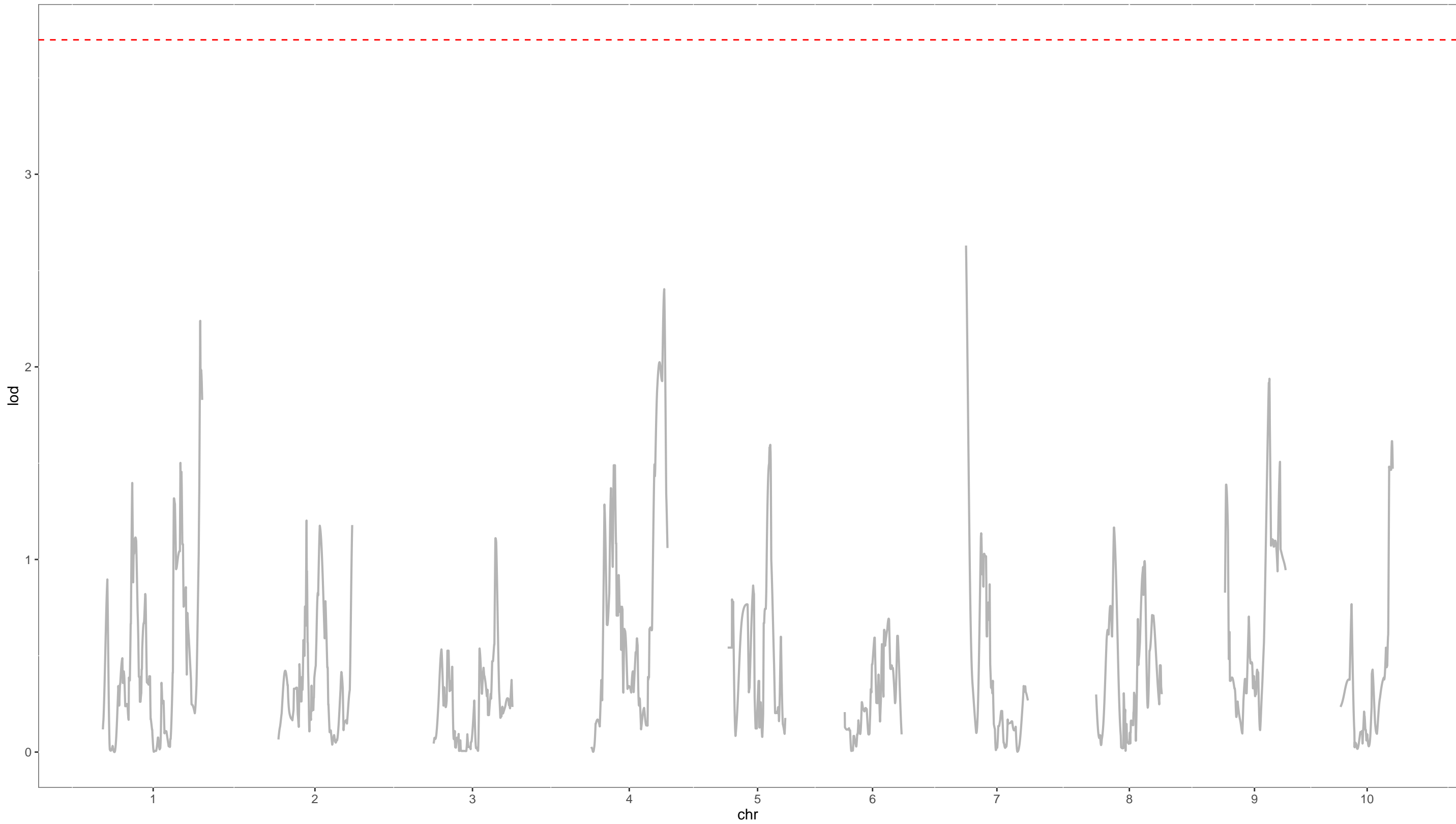
QTL analysis for int\_additive covariate for Mg\_leaf



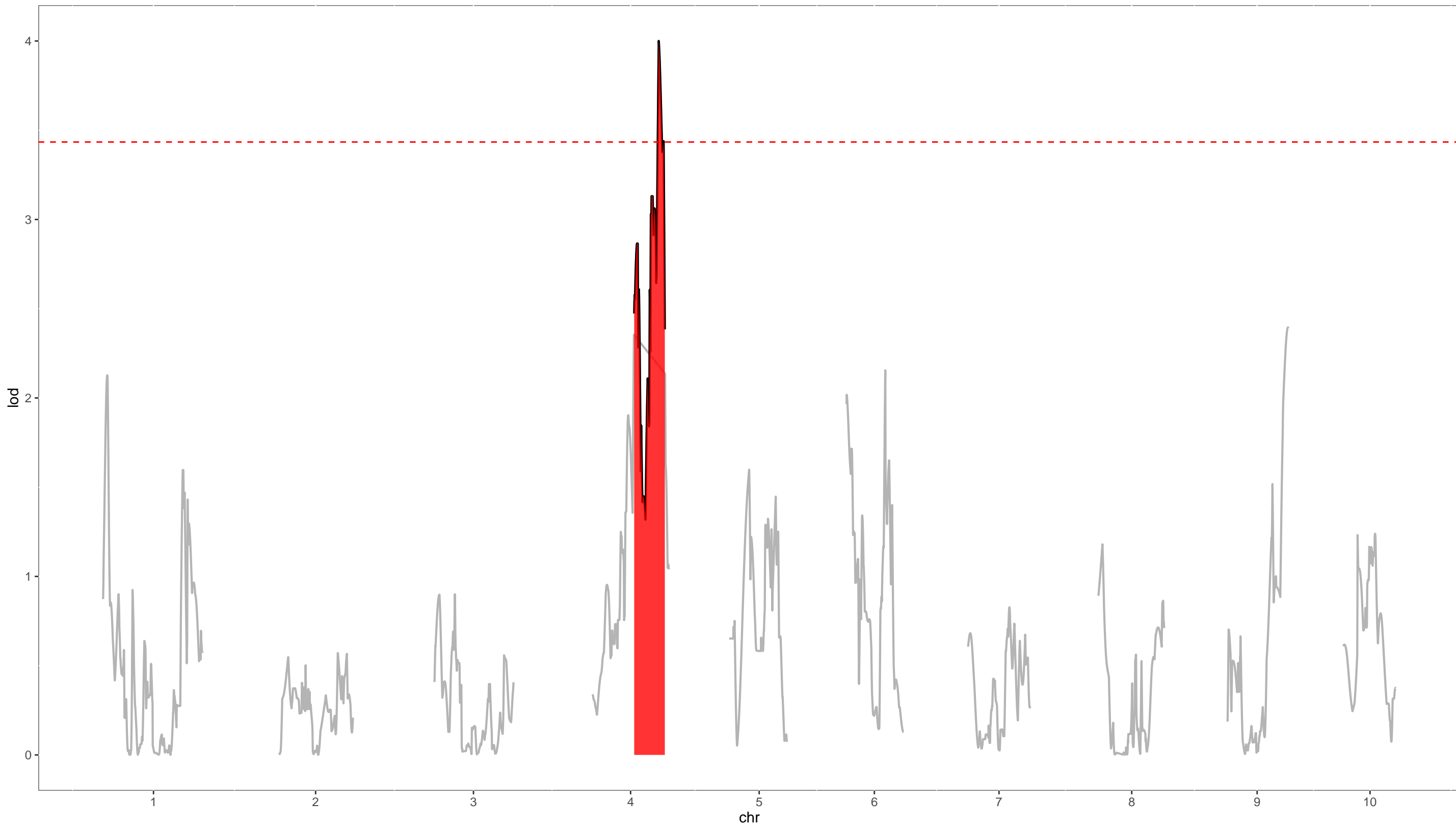
QTL analysis for int\_additive covariate for Mg\_ratio



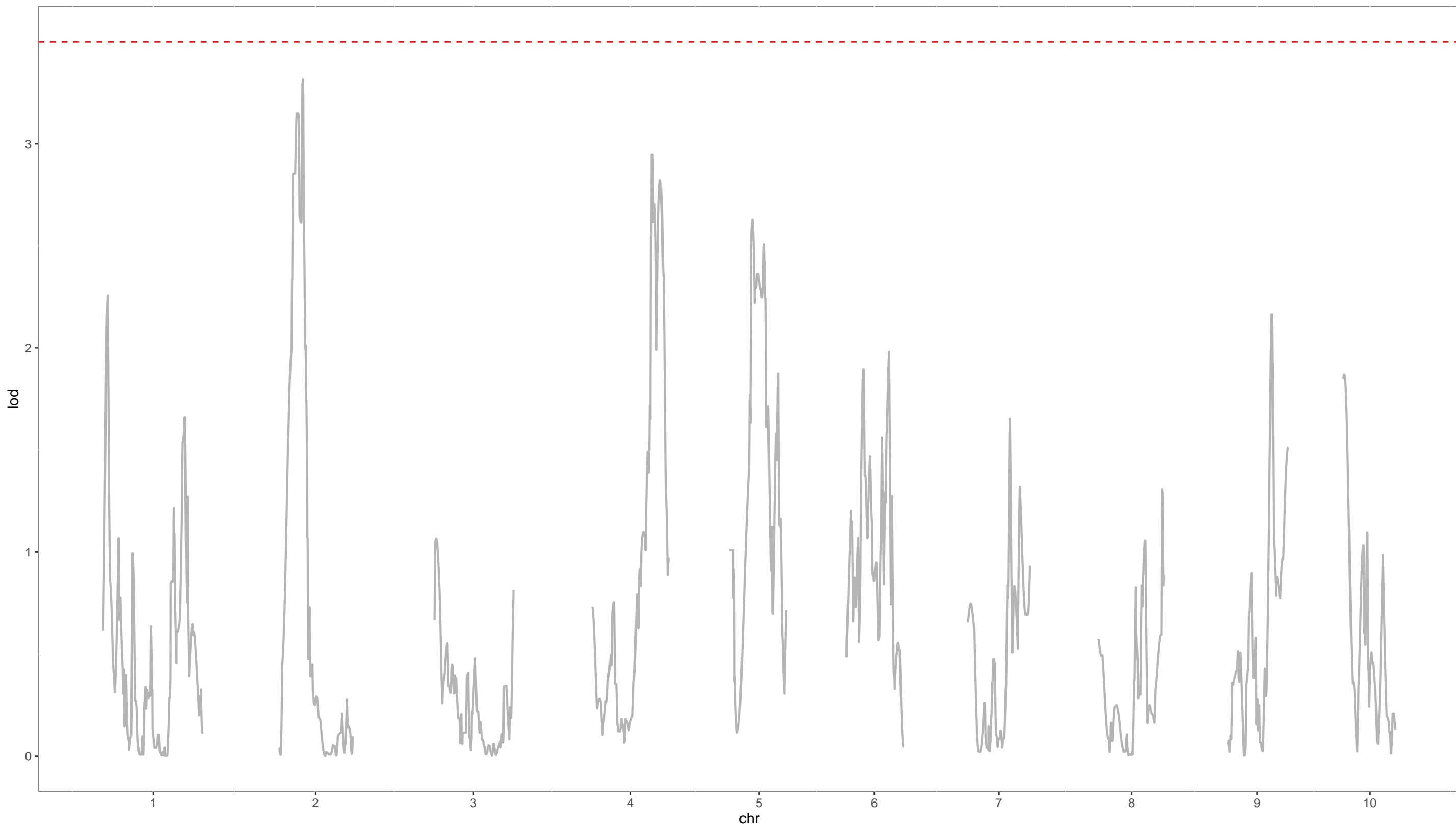
QTL analysis for int\_additive covariate for Mg\_seed



QTL analysis for int\_additive covariate for Mn\_leaf

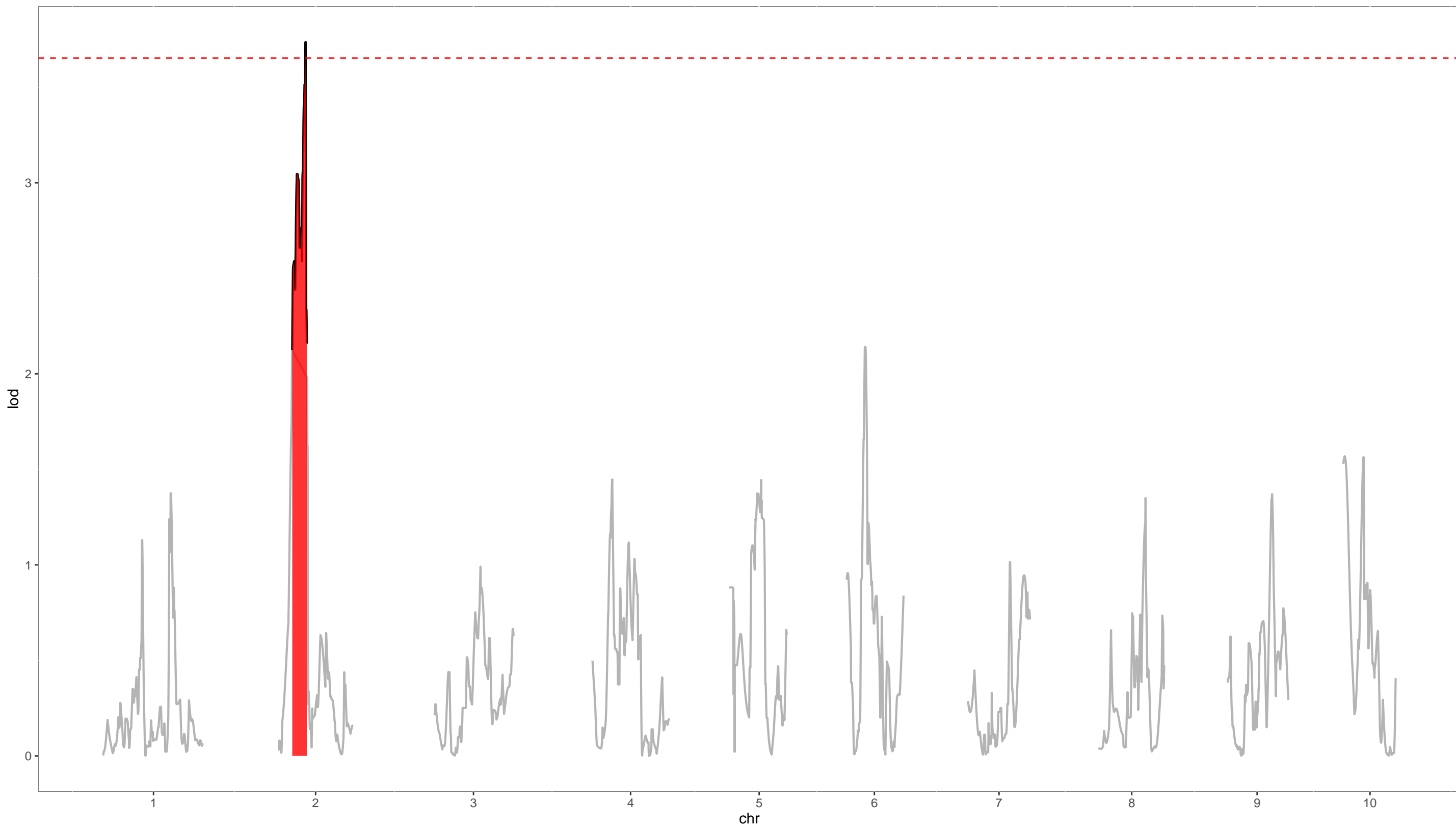


## QTL analysis for int\_additive covariate for Mn\_ratio

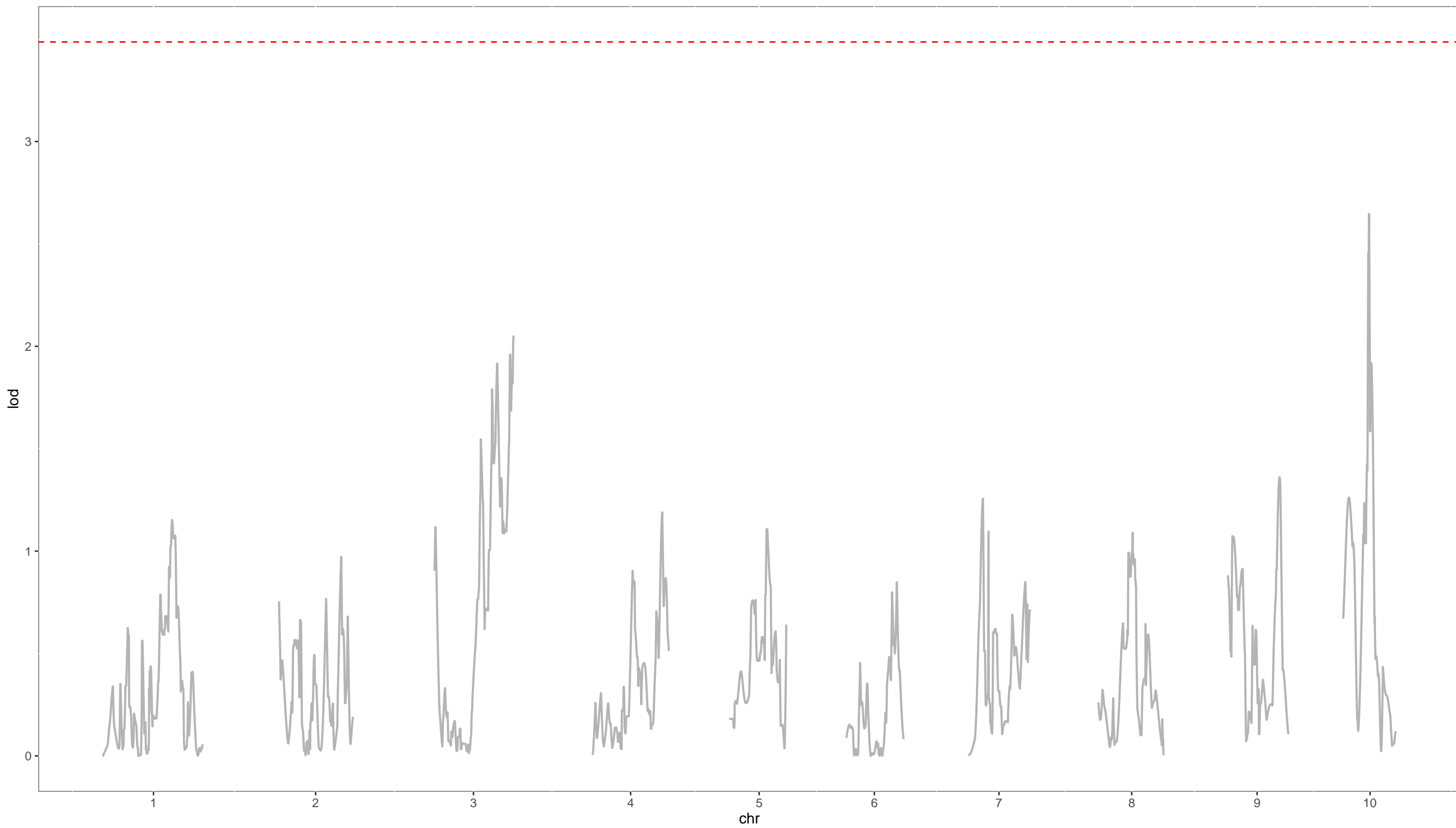




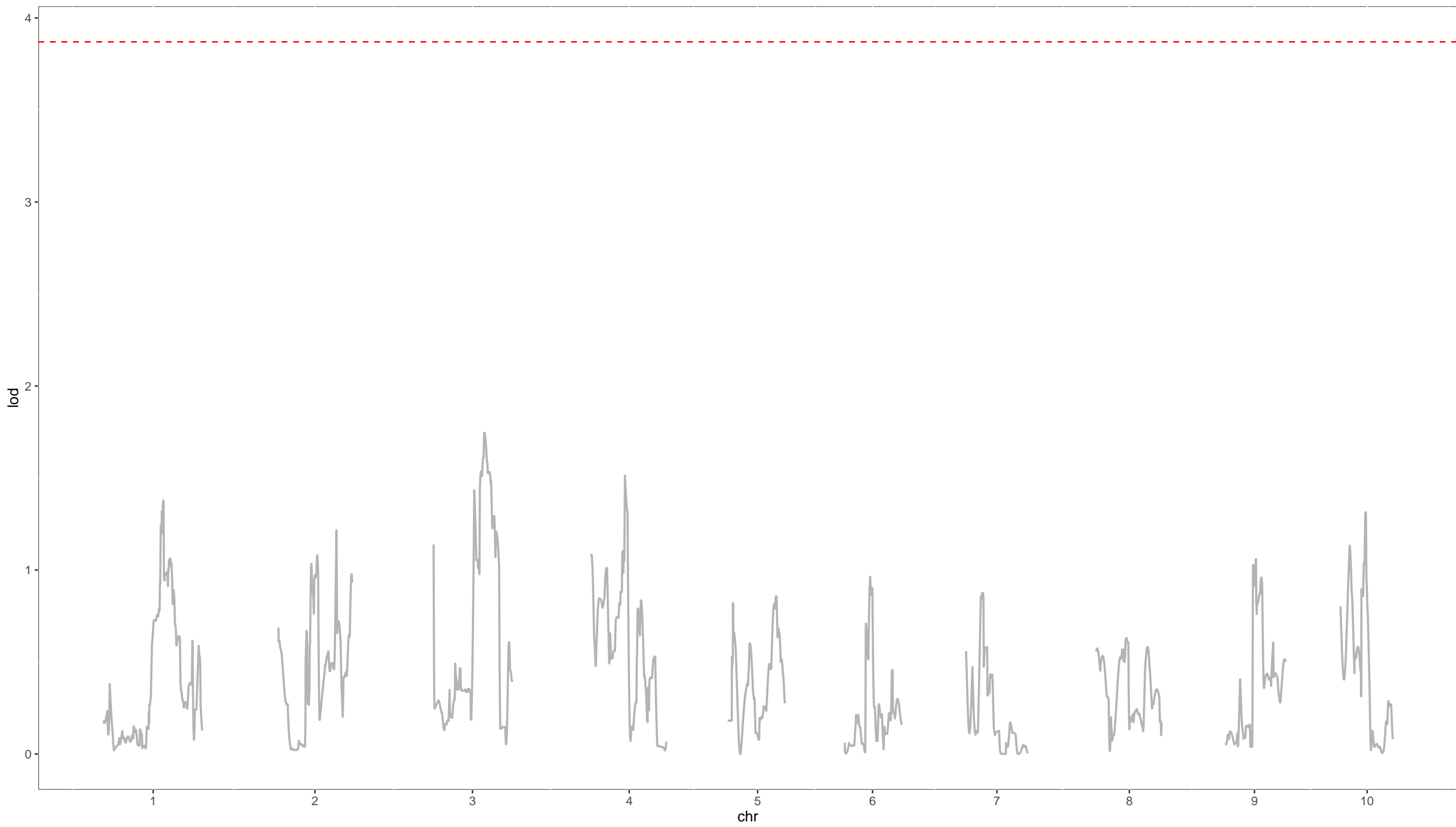
QTL analysis for int\_additive covariate for Mn\_seed



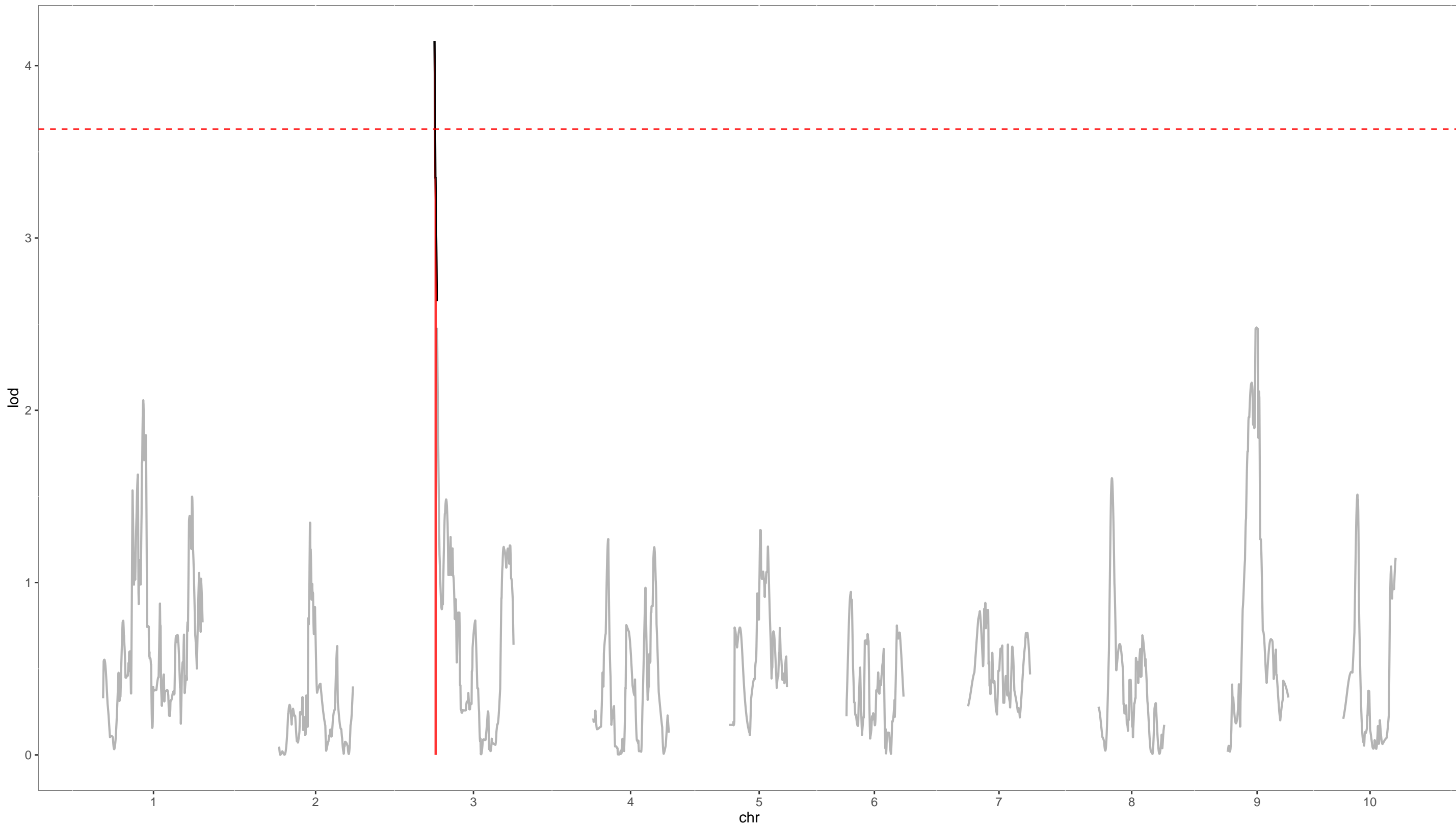
QTL analysis for int\_additive covariate for Mo\_leaf



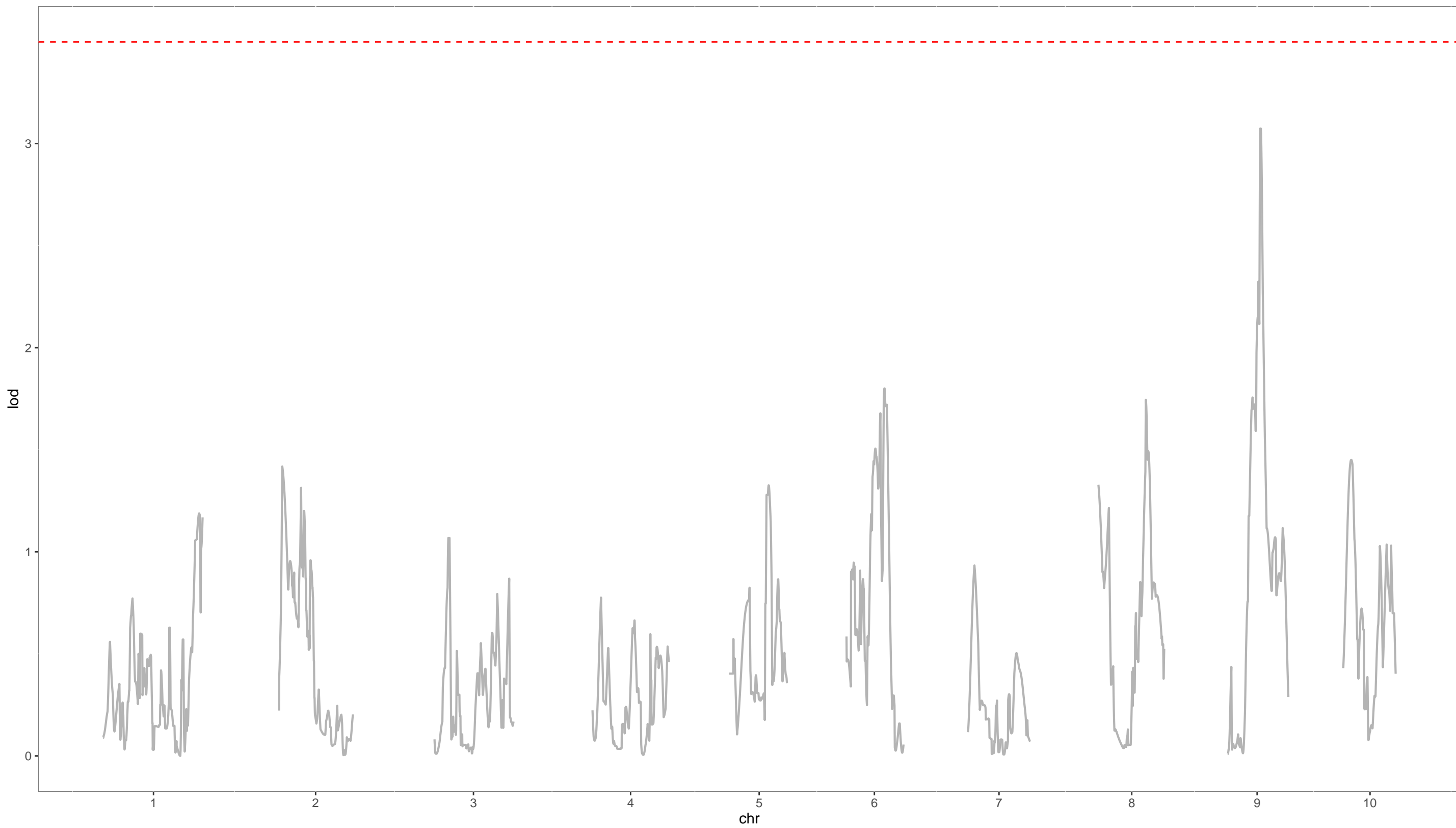
## QTL analysis for int\_additive covariate for Mo\_ratio



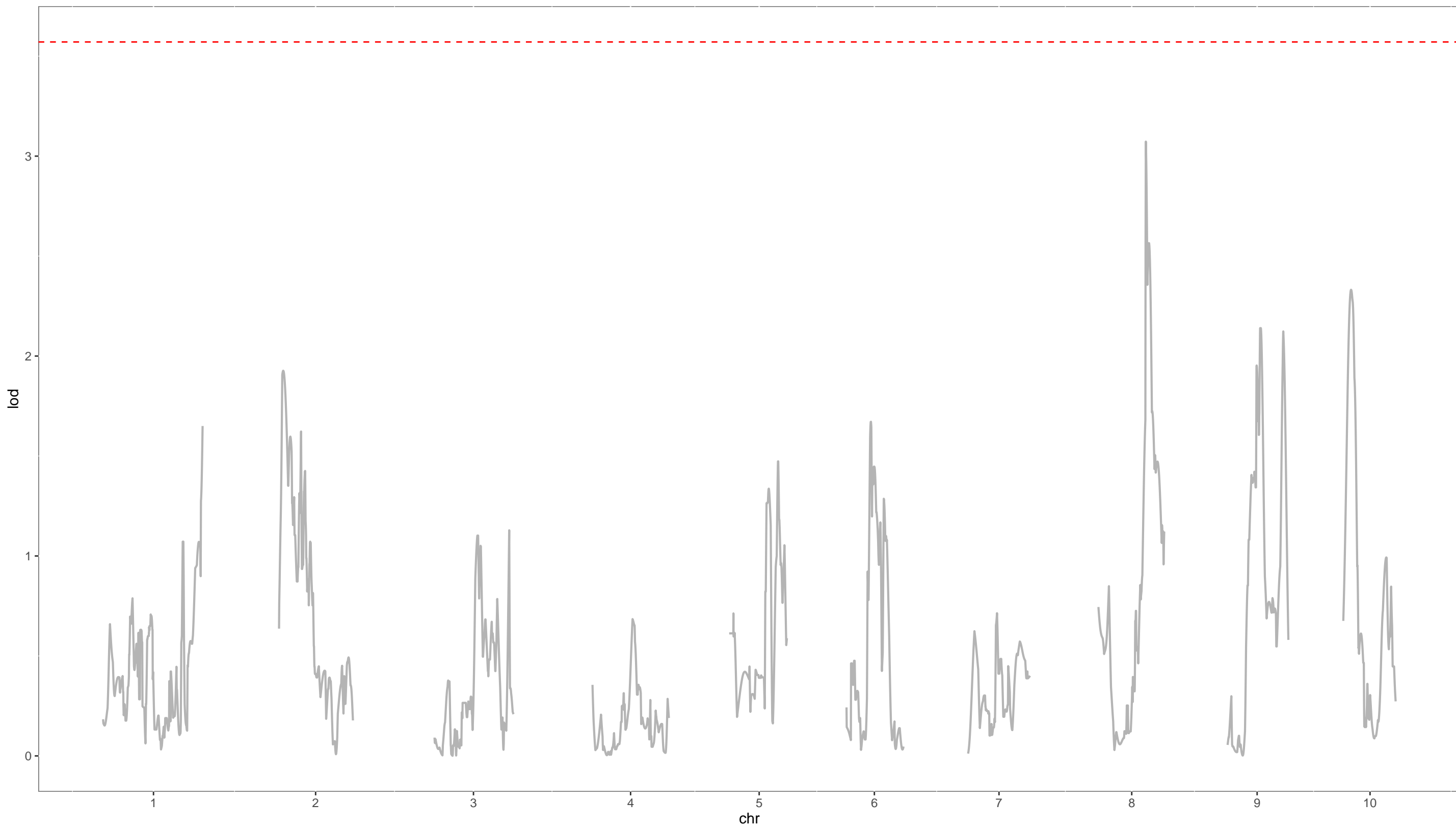
## QTL analysis for int\_additive covariate for Mo\_seed



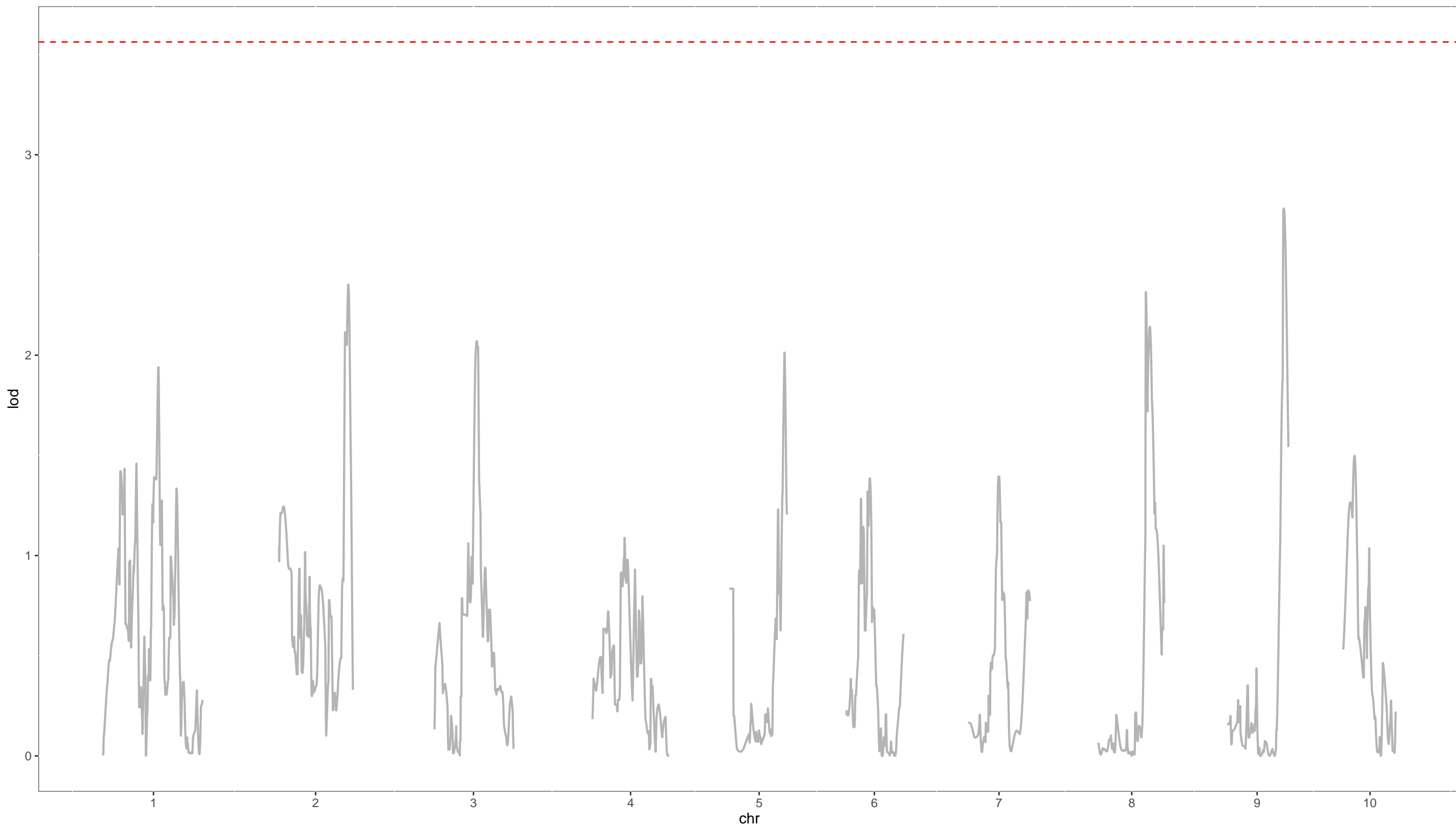
QTL analysis for int\_additive covariate for Na\_leaf



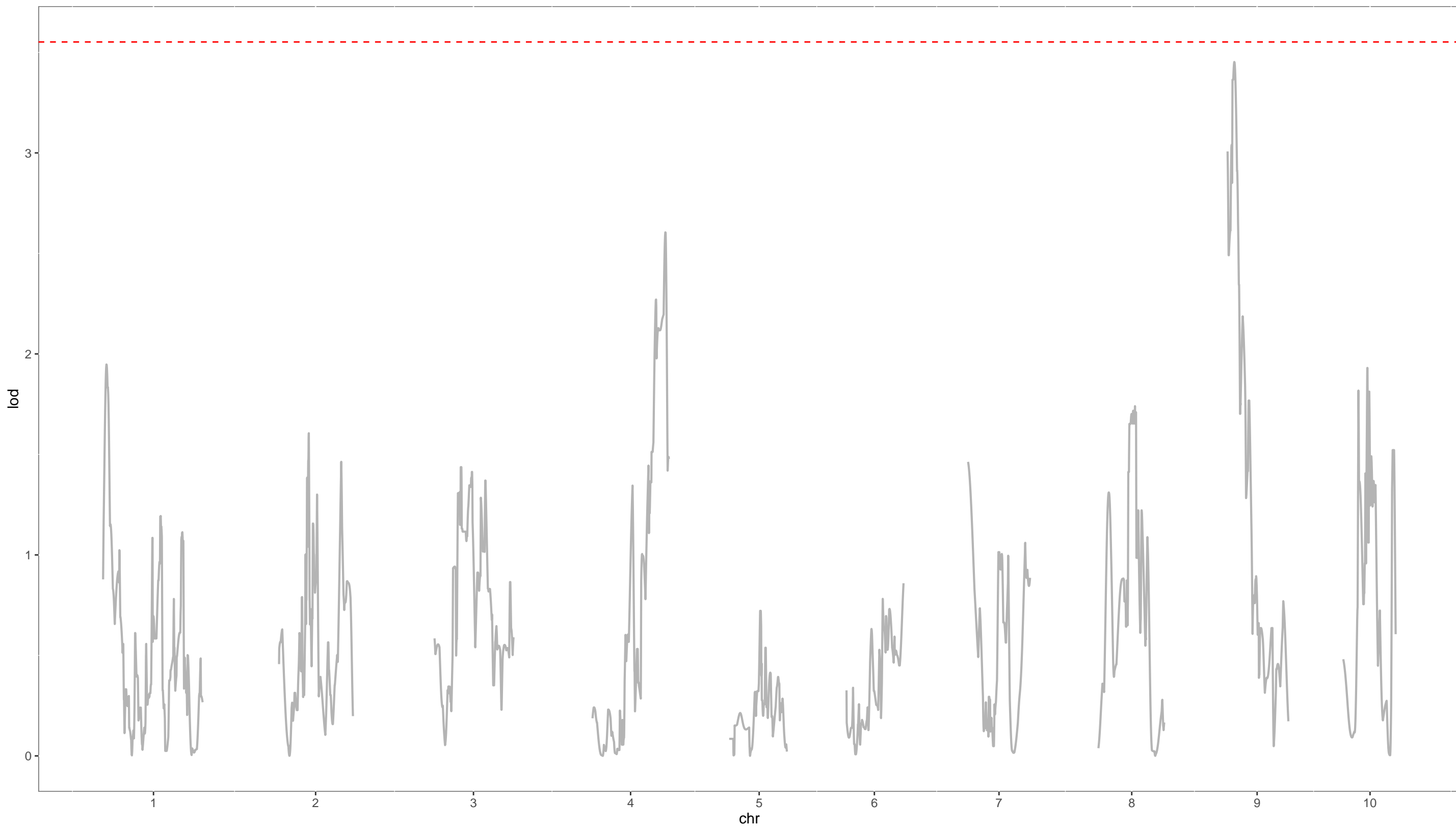
QTL analysis for int\_additive covariate for Na\_ratio



## QTL analysis for int\_additive covariate for Na\_seed

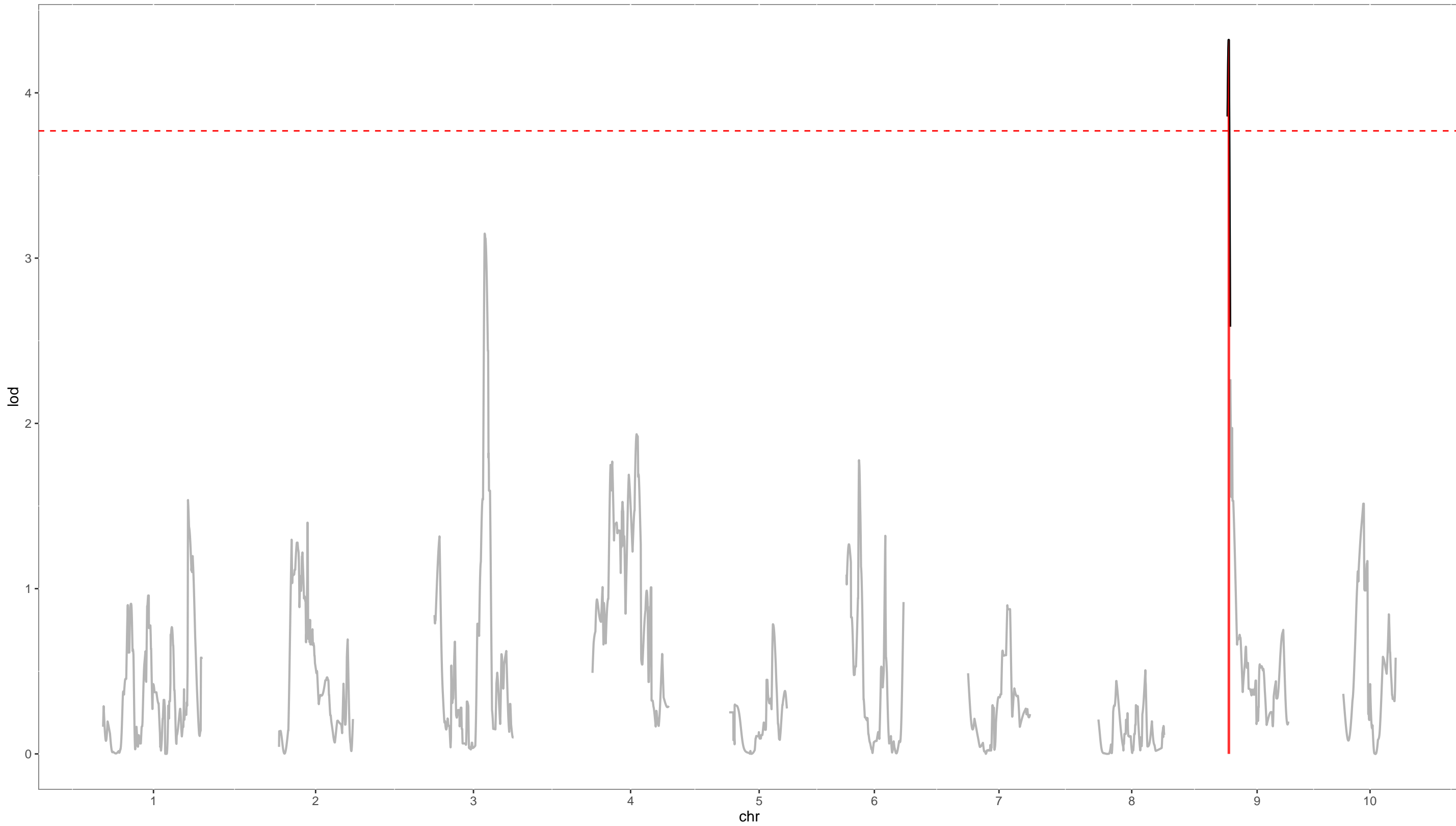


QTL analysis for int\_additive covariate for Ni\_leaf

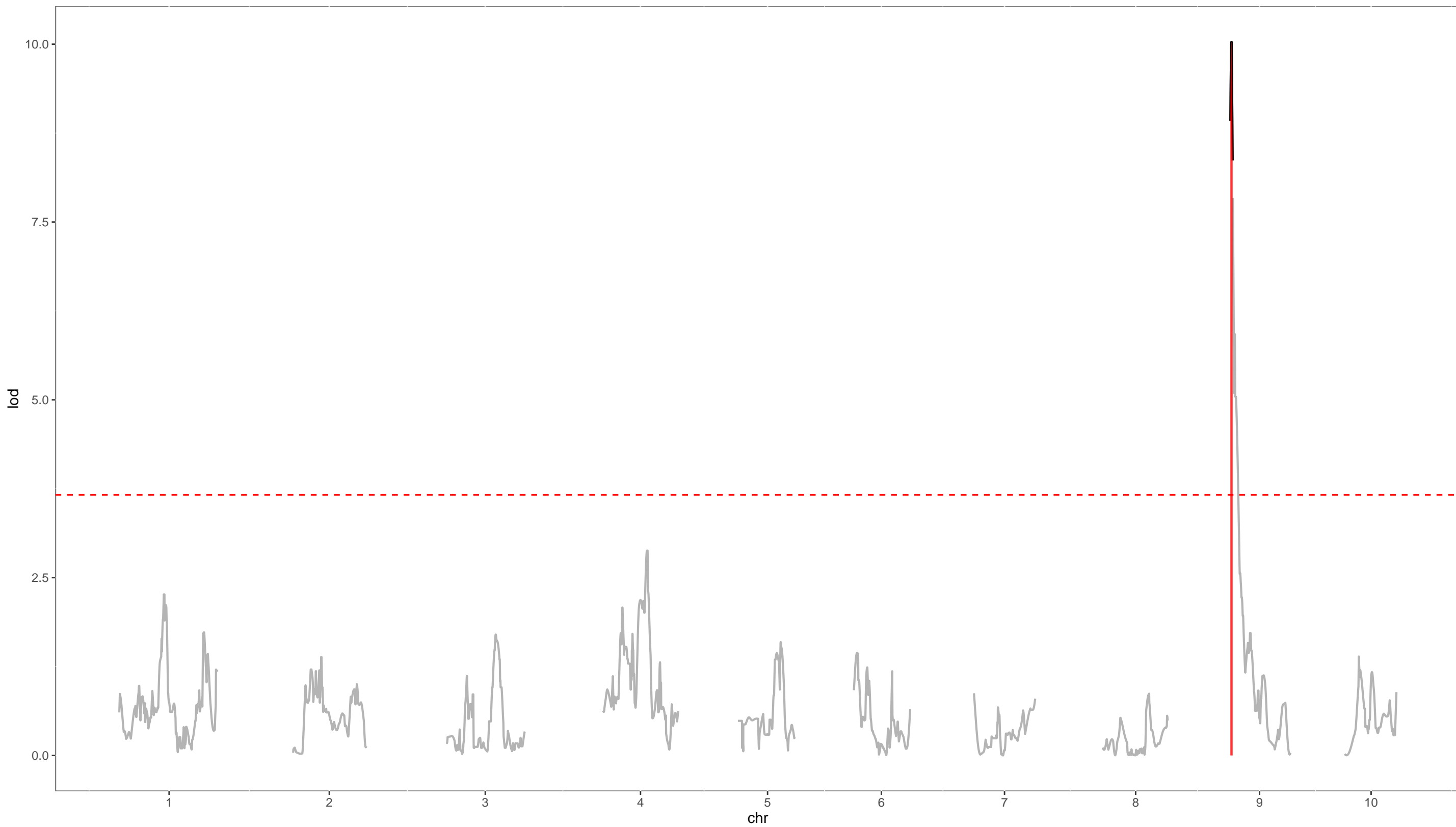




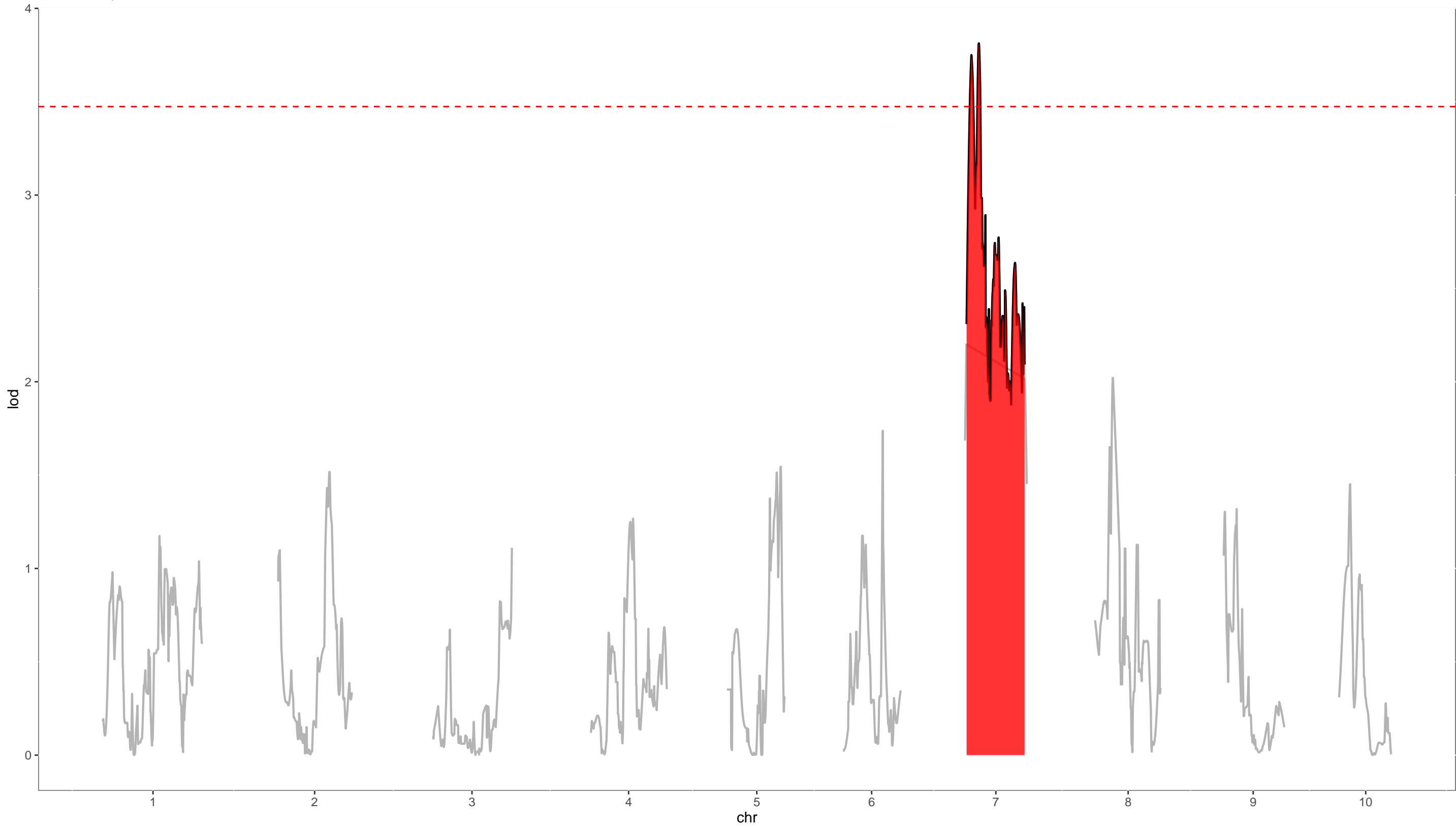
QTL analysis for int\_additive covariate for Ni\_ratio



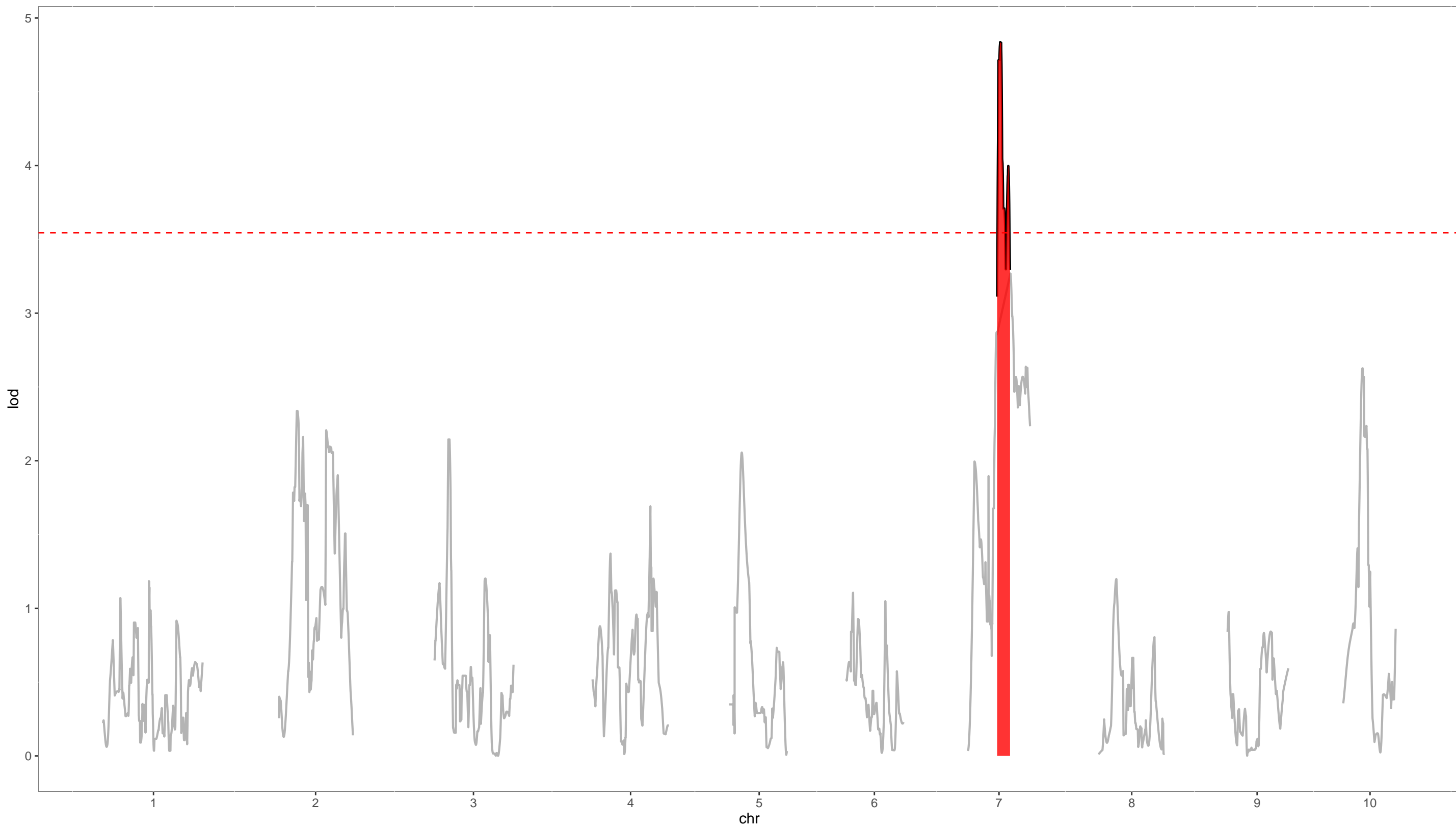
QTL analysis for int\_additive covariate for Ni\_seed



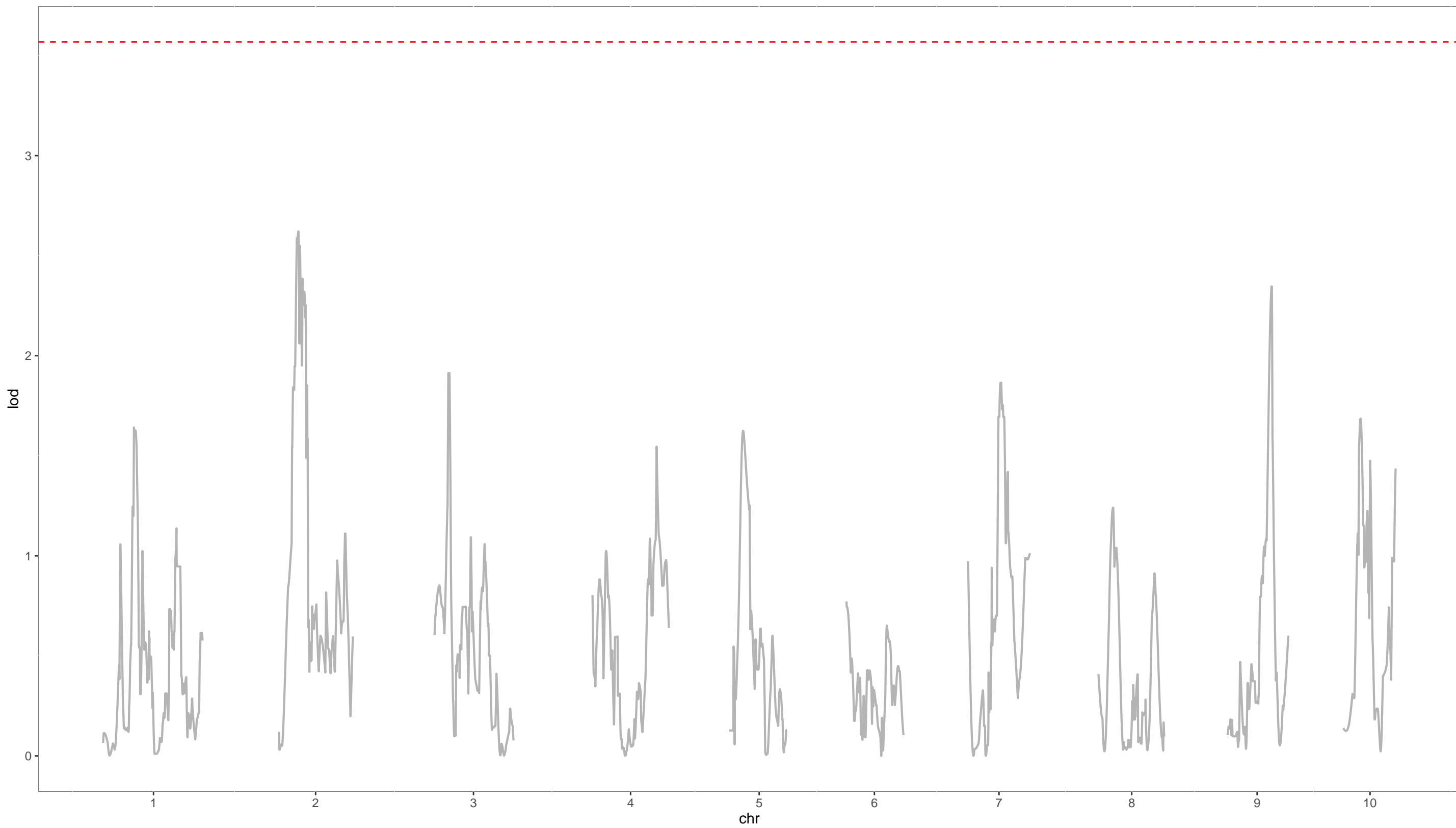
QTL analysis for int\_additive covariate for P\_leaf



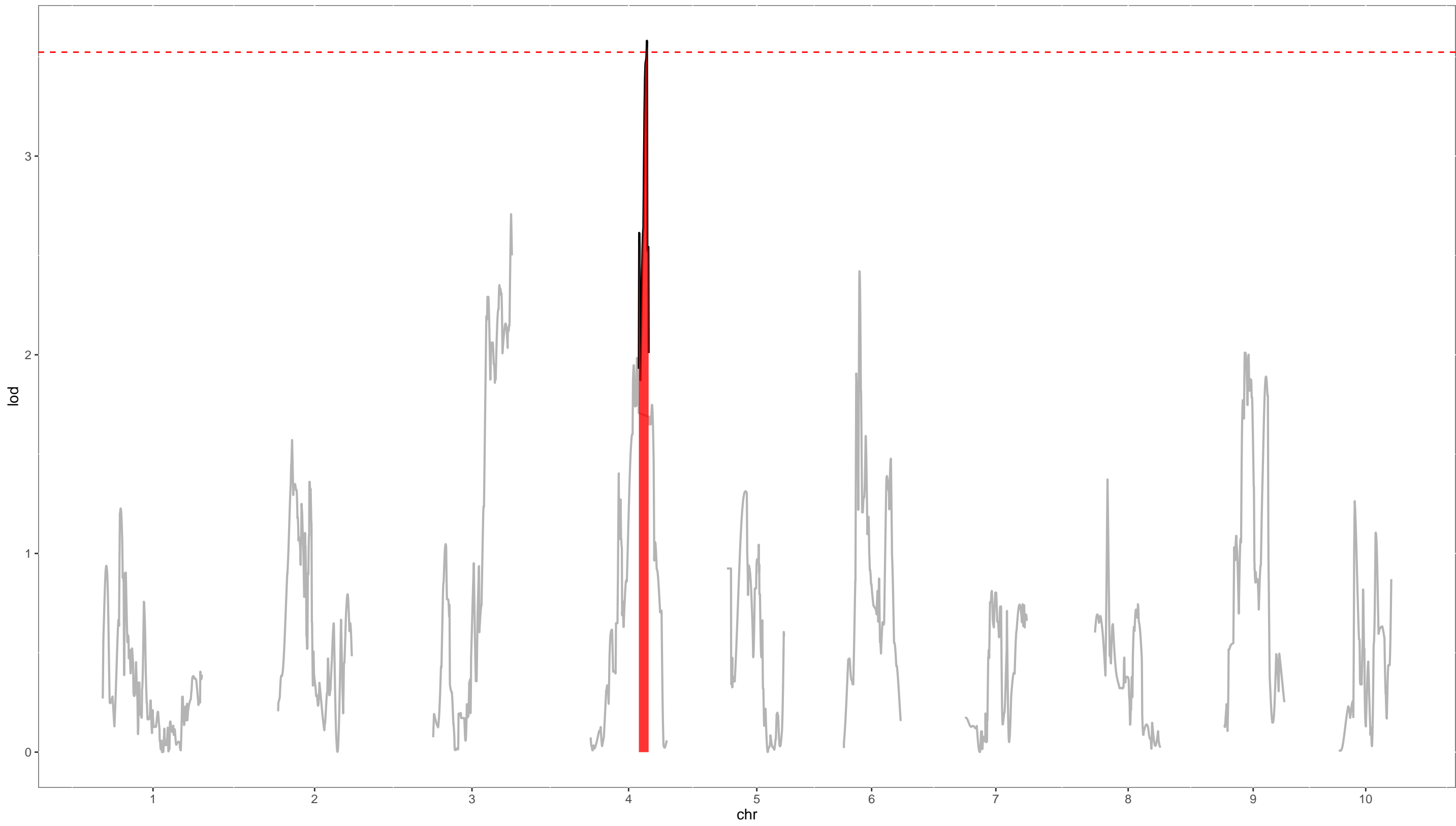
## QTL analysis for int\_additive covariate for P\_ratio



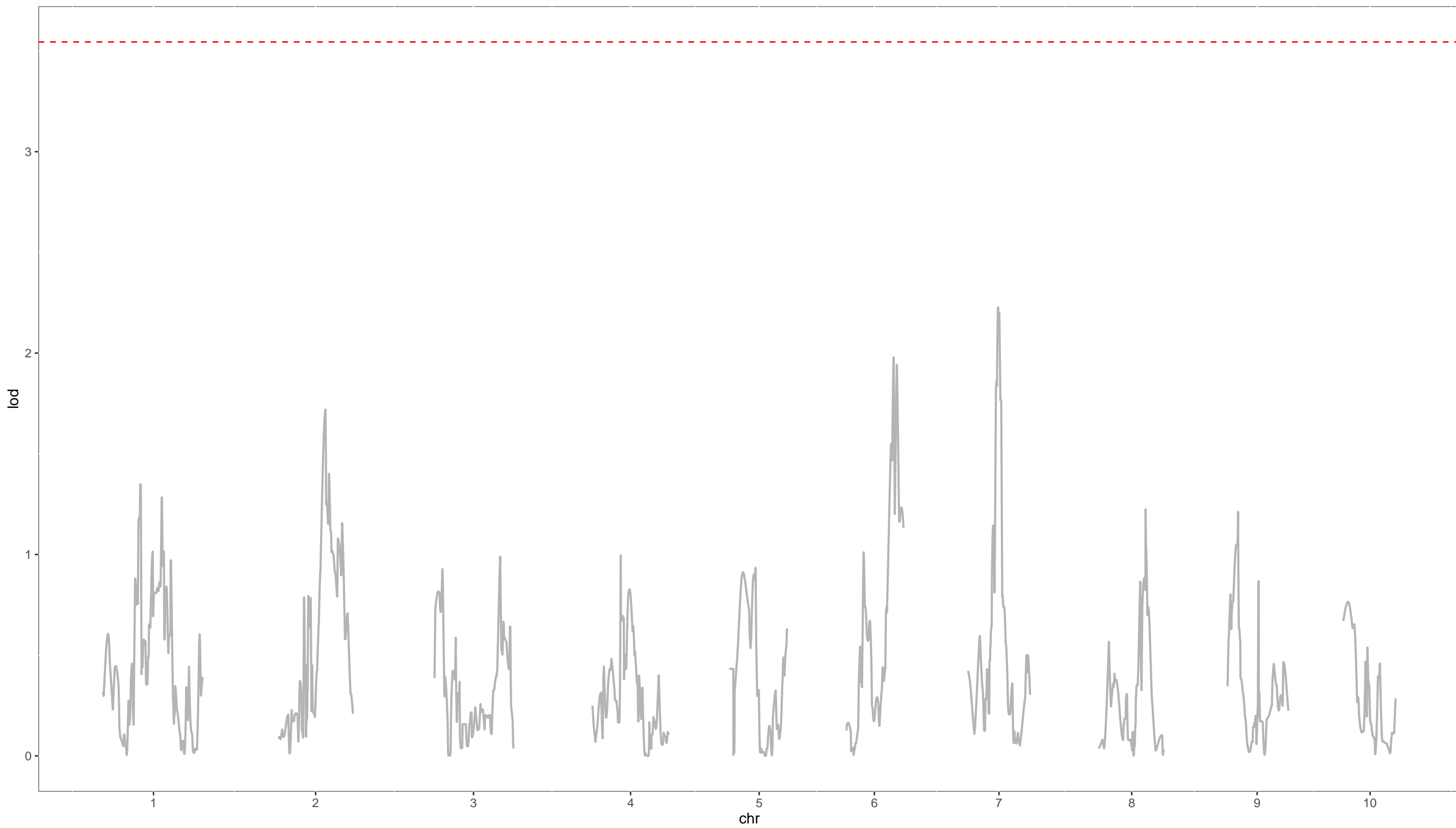
QTL analysis for int\_additive covariate for P\_seed



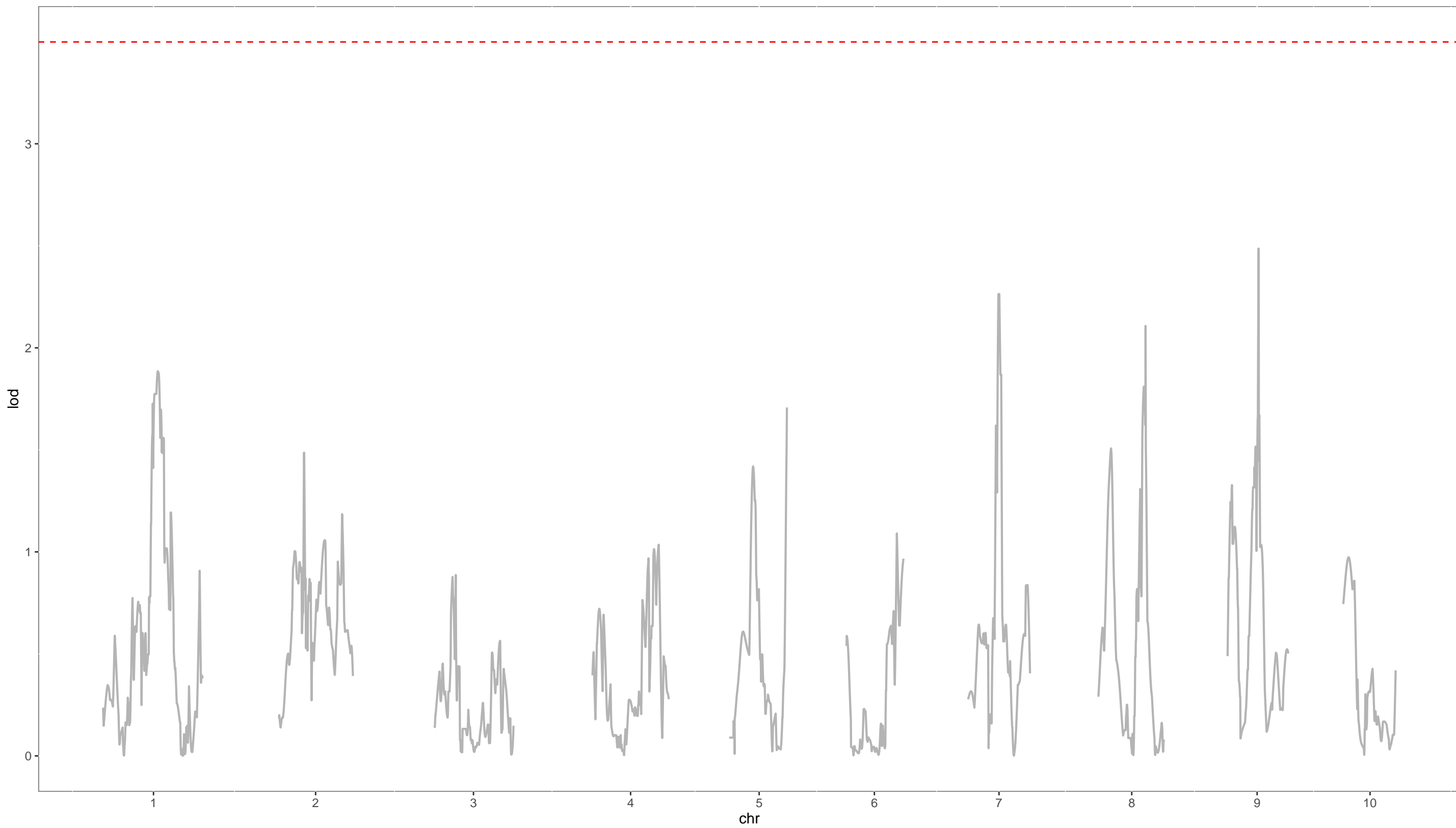
QTL analysis for int\_additive covariate for Rb\_leaf



QTL analysis for int\_additive covariate for Rb\_ratio

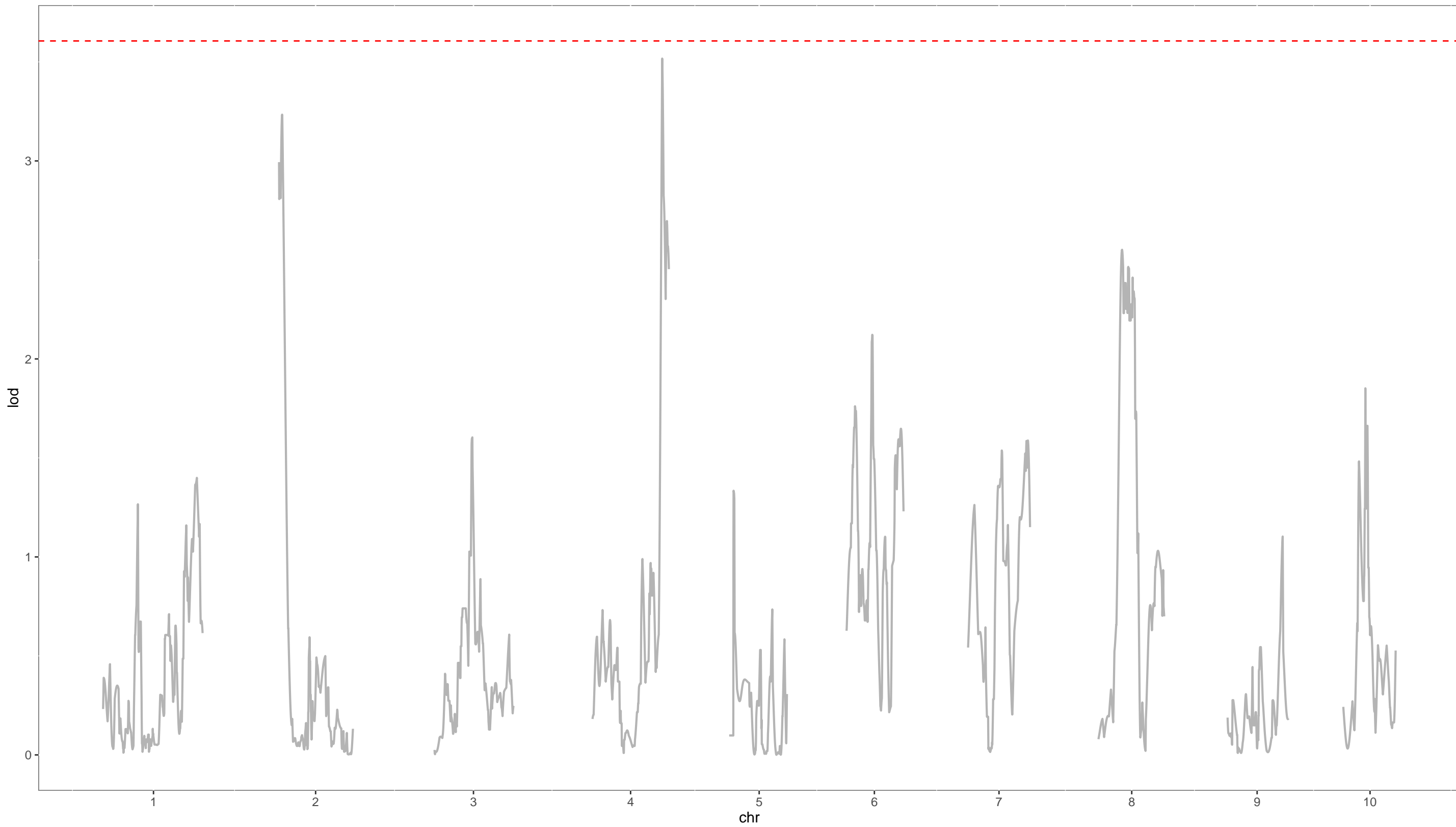


## QTL analysis for int\_additive covariate for Rb\_seed

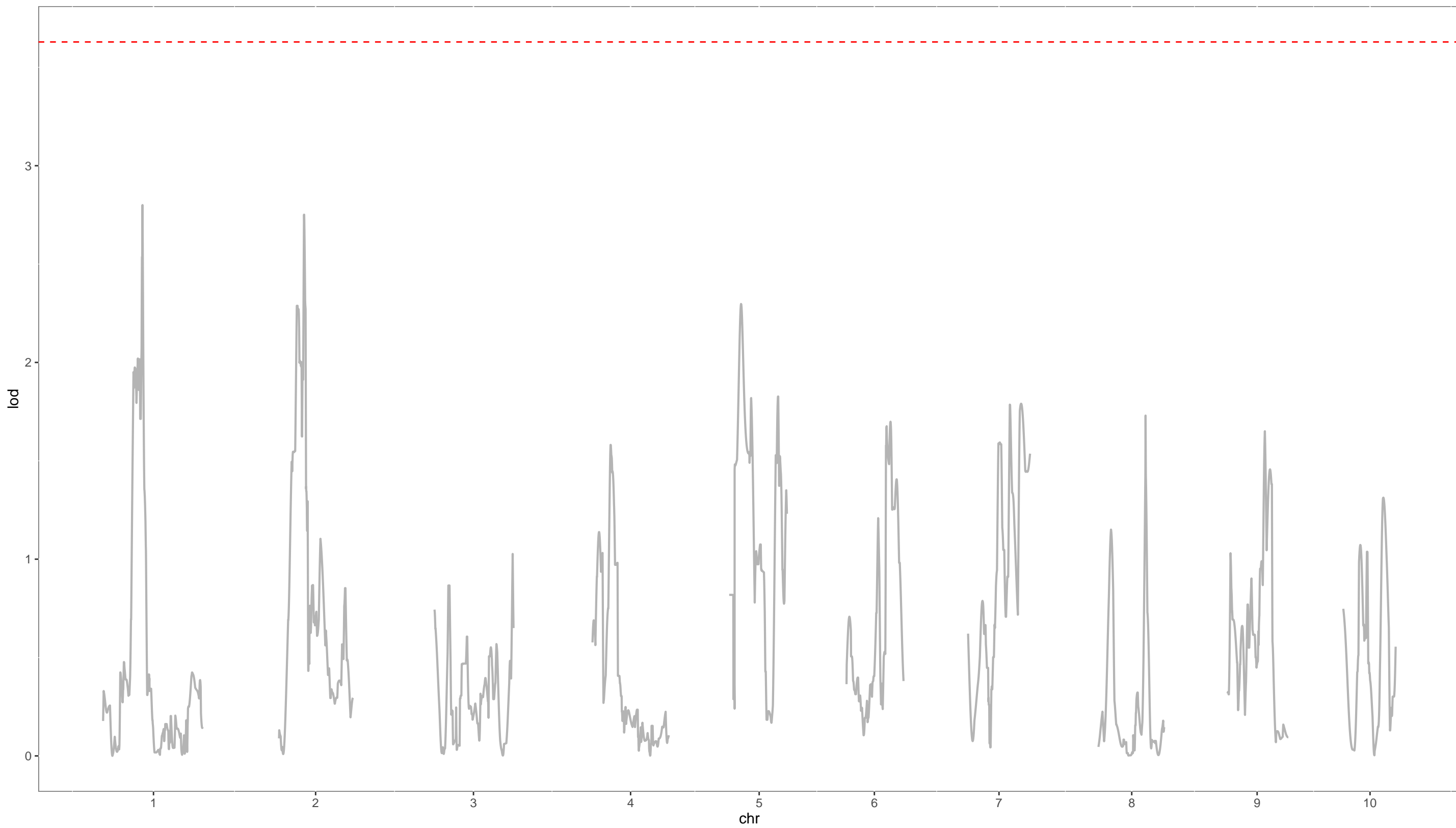




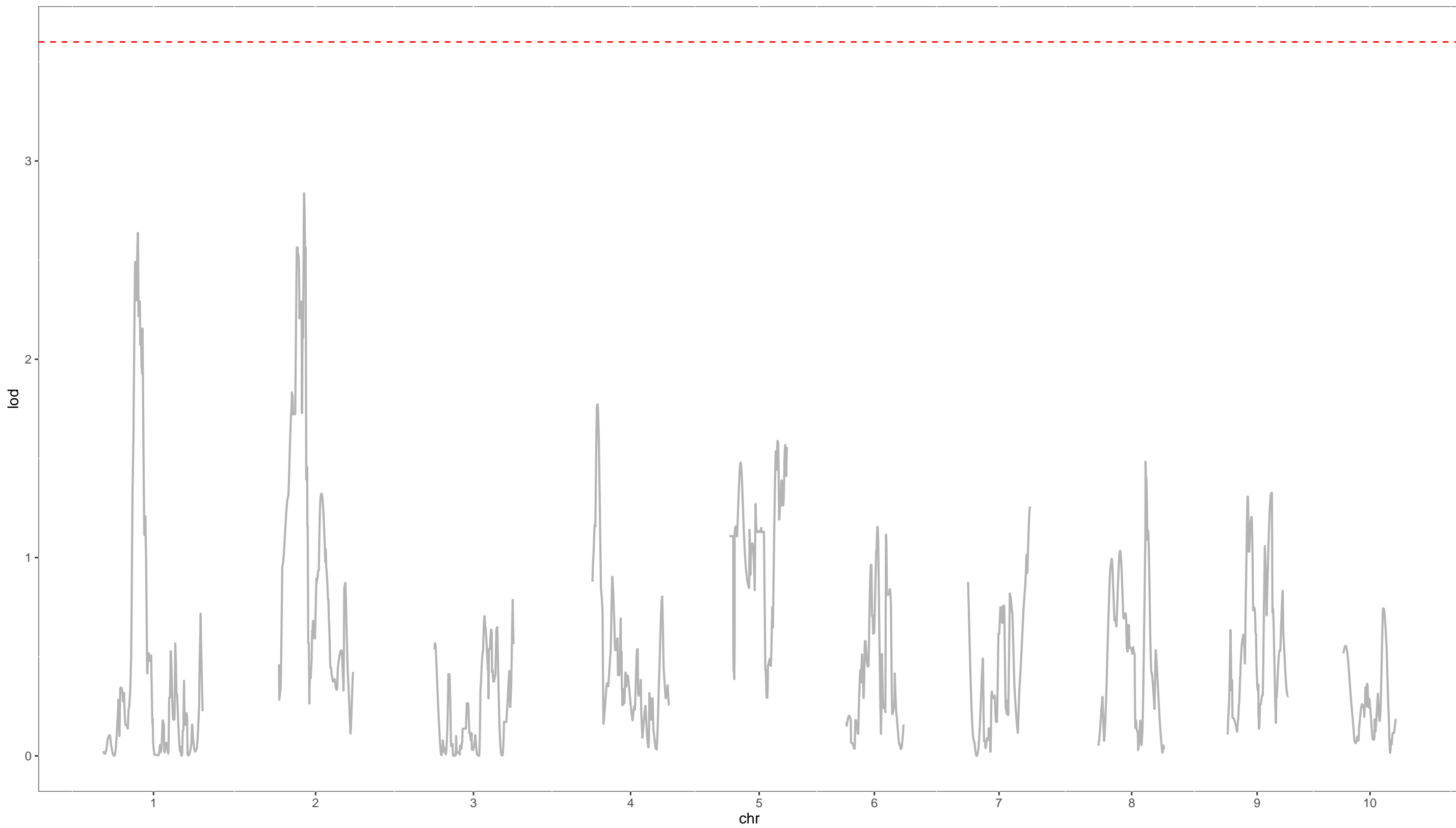
## QTL analysis for int\_additive covariate for S\_leaf



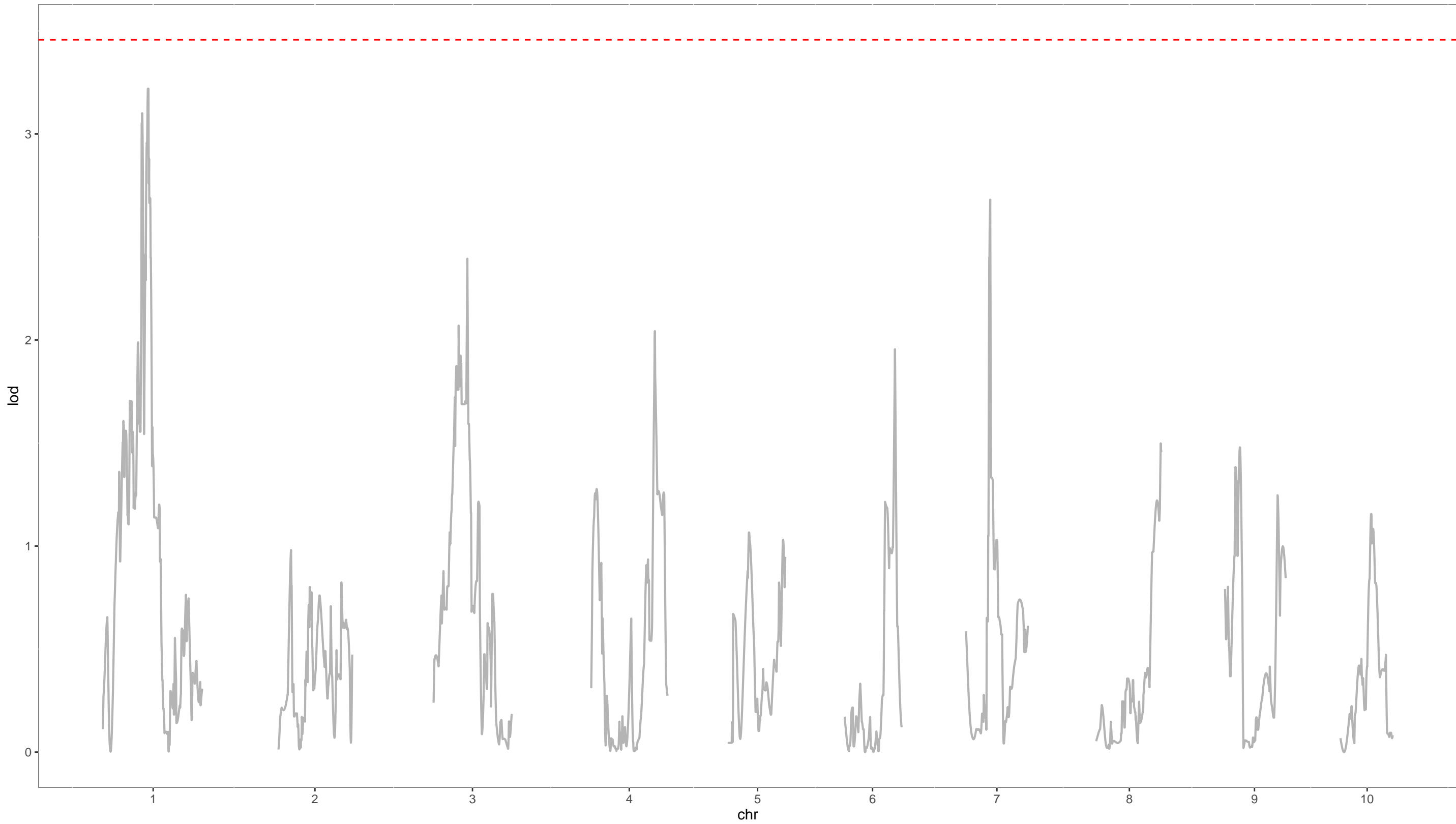
QTL analysis for int\_additive covariate for S\_ratio



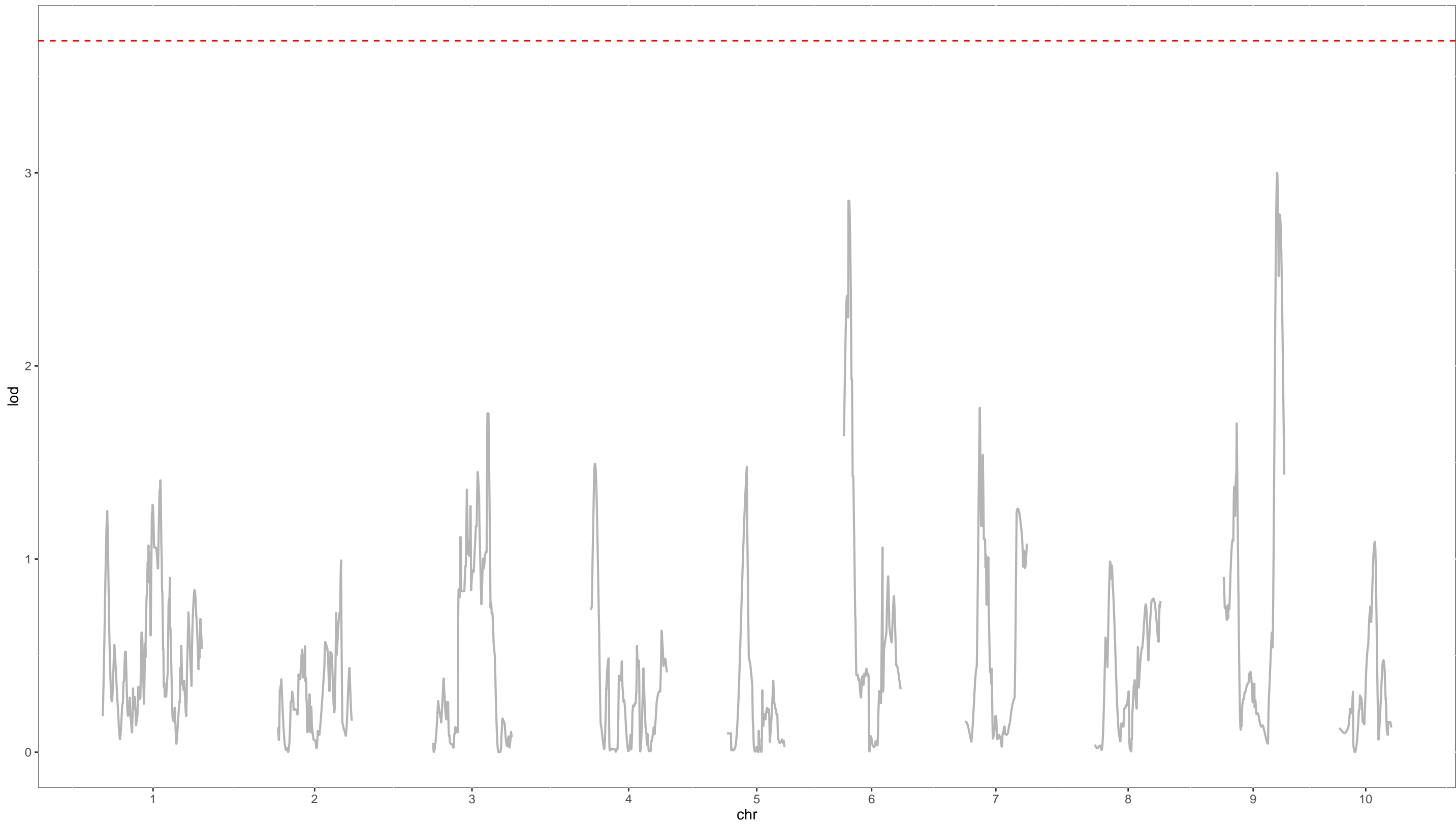
## QTL analysis for int\_additive covariate for S\_seed



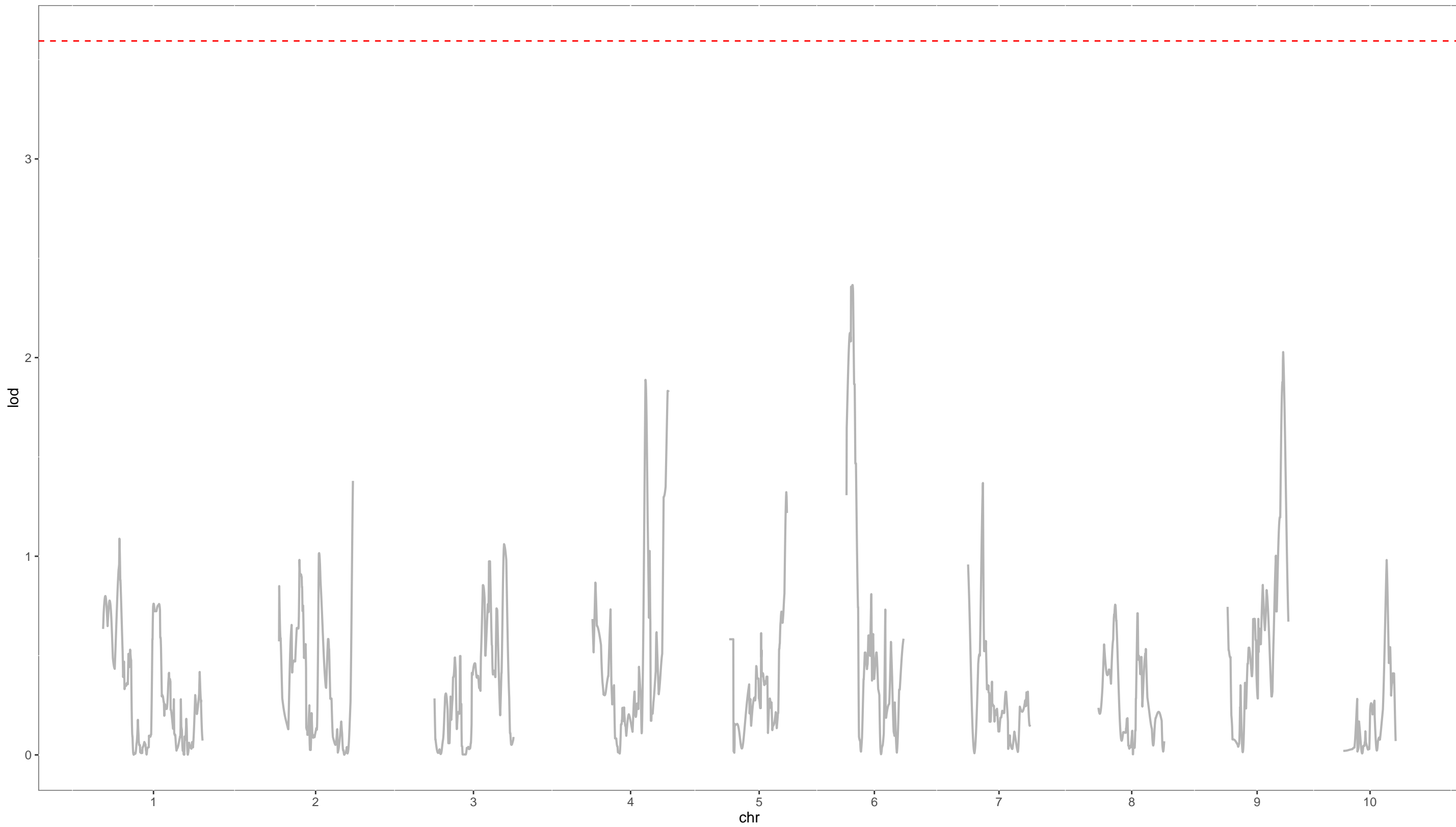
## QTL analysis for int\_additive covariate for Se\_leaf



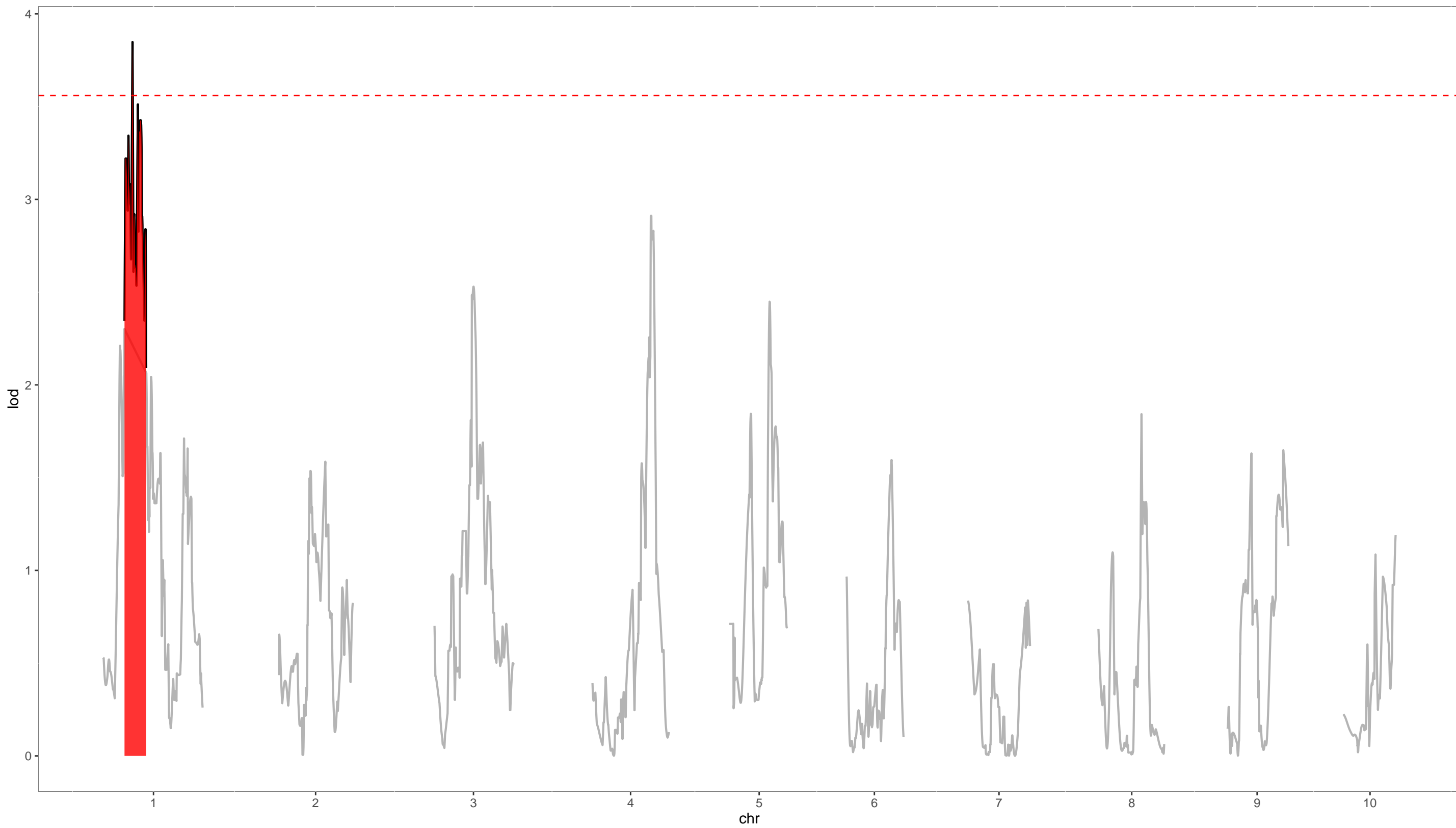
## QTL analysis for int\_additive covariate for Se\_ratio



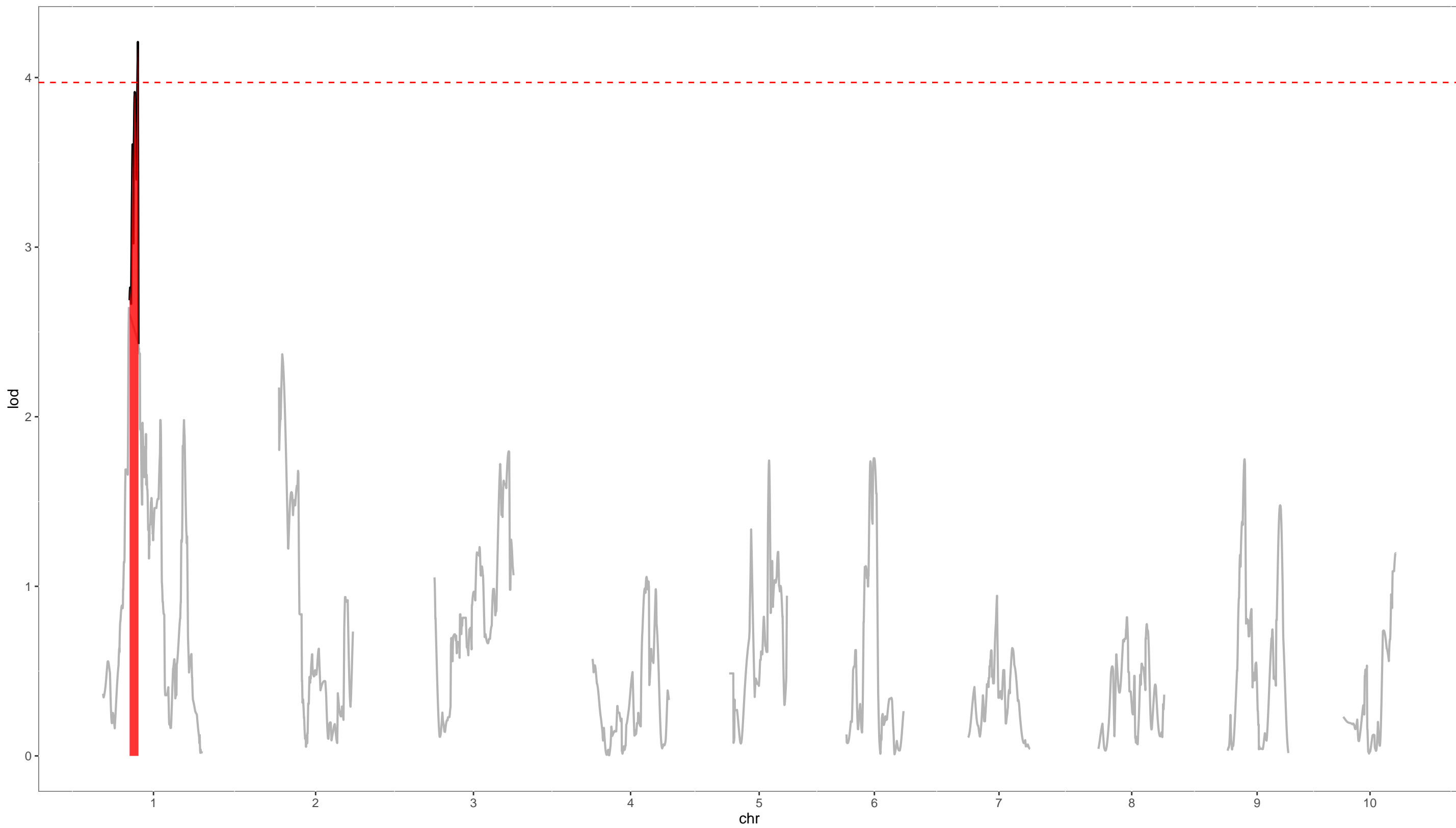
## QTL analysis for int\_additive covariate for Se\_seed



## QTL analysis for int\_additive covariate for Sr\_leaf

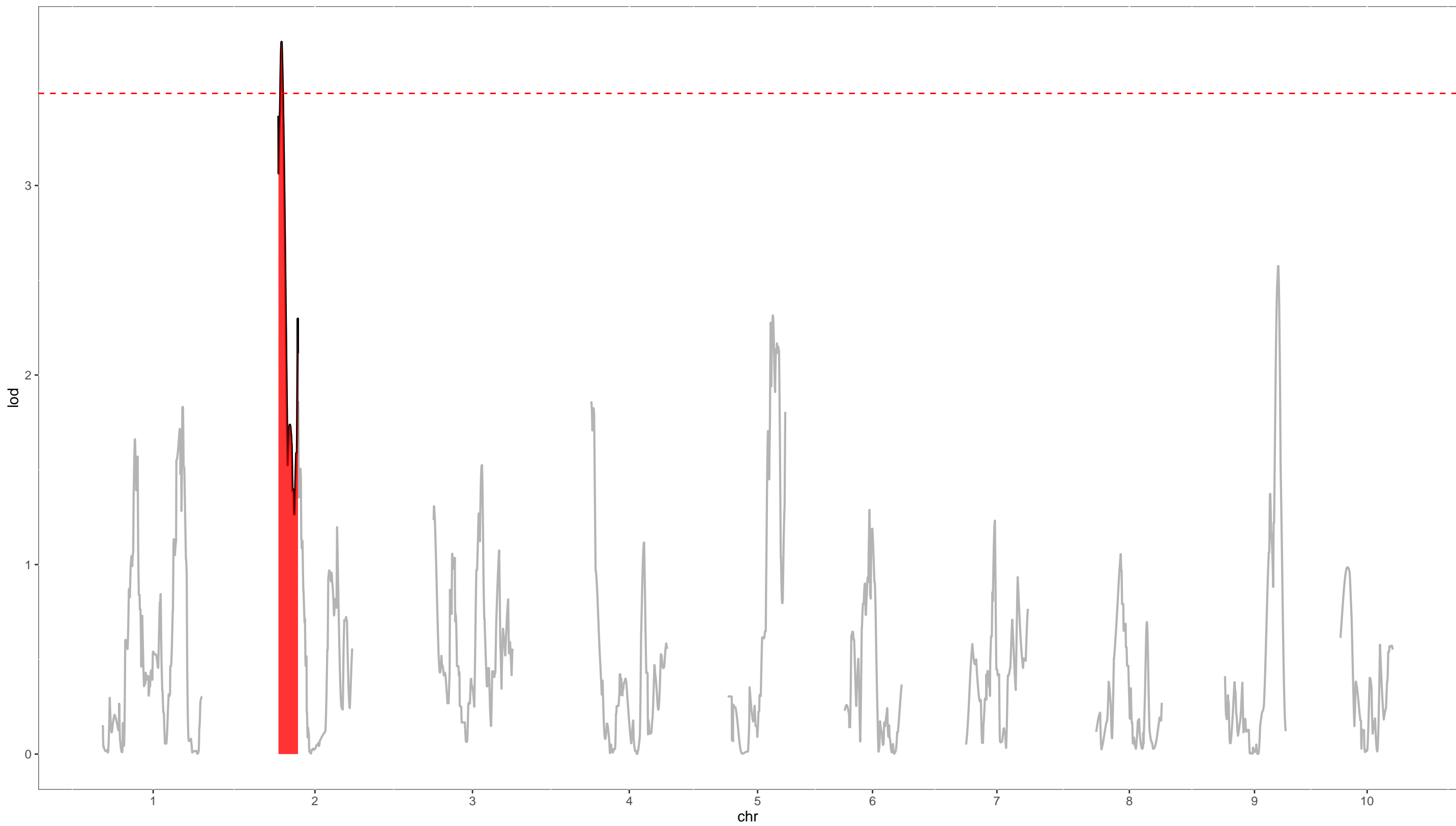


## QTL analysis for int\_additive covariate for Sr\_ratio

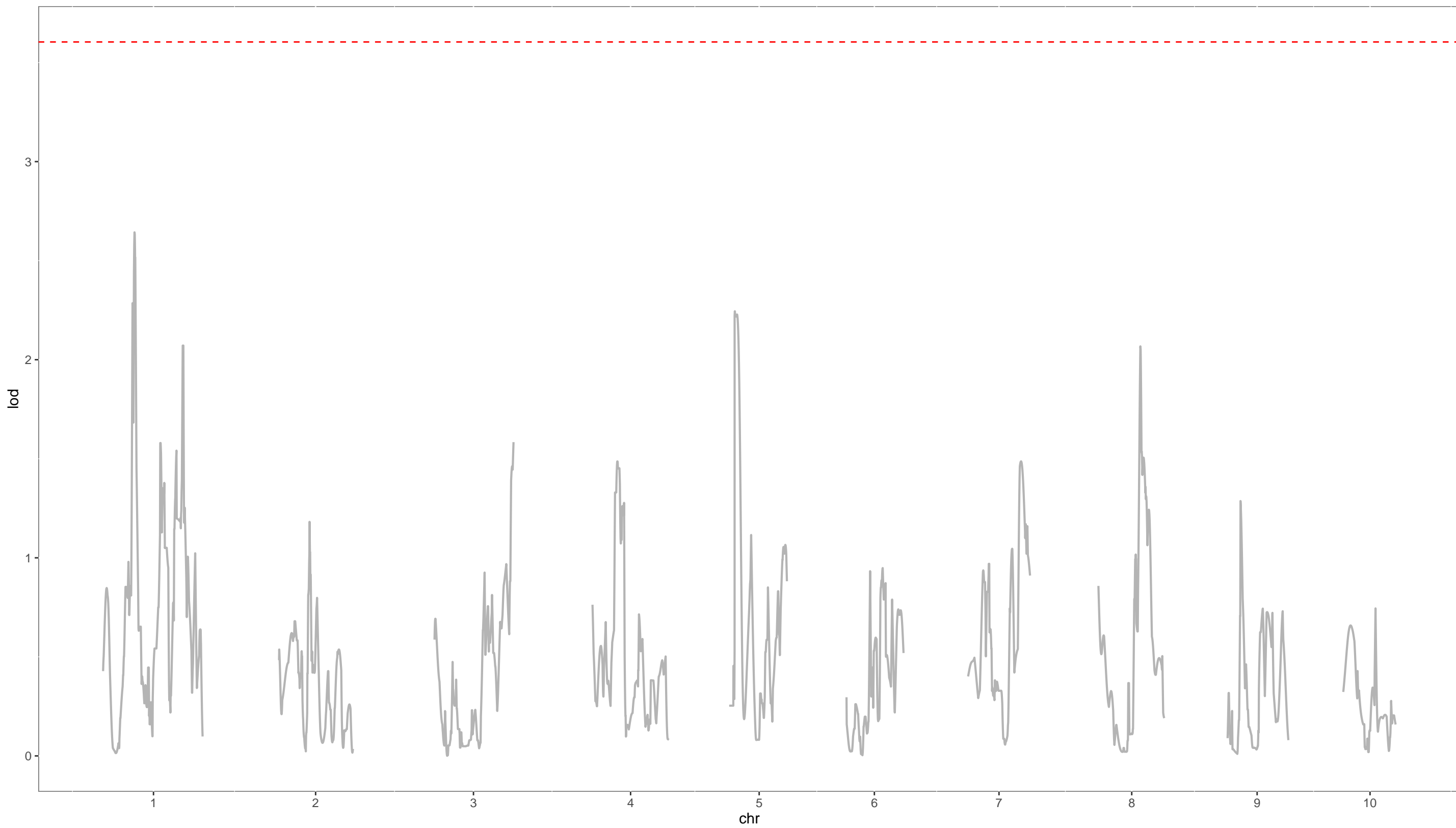




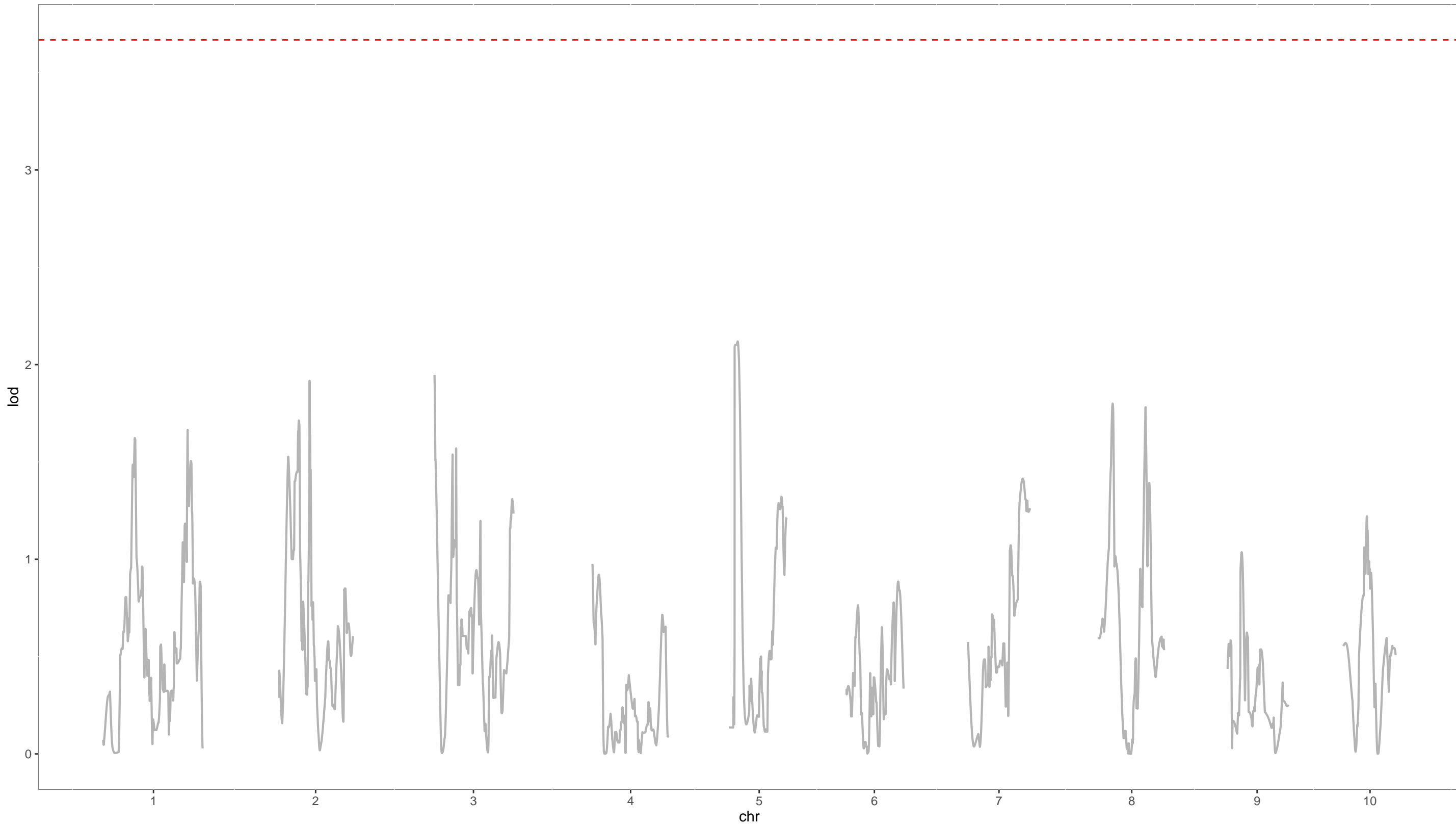
## QTL analysis for int\_additive covariate for Sr\_seed



## QTL analysis for int\_additive covariate for Zn\_leaf



## QTL analysis for int\_additive covariate for Zn\_ratio



## QTL analysis for int\_additive covariate for Zn\_seed

