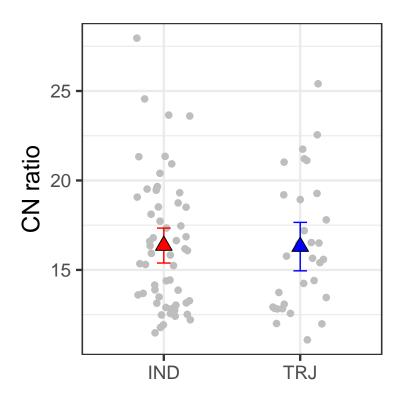
Use side-view HSI data to predict CN ratio from Tropical japonica data

```
##
## IND TRJ
## 57 31
```



```
## $plsralg
## [1] "oscorespls"

## [1] "902" "903" "909" "912" "914" "915" "917" "919" "920" "925" "927" "943"

## [13] "945" "946" "948" "950" "952" "954" "957" "960" "963" "967" "971" "973"

## [25] "974" "977" "978" "983" "985" "991" "993"

## [1] "904" "905" "906" "907" "908" "910" "911" "916" "918" "921" "922" "923"

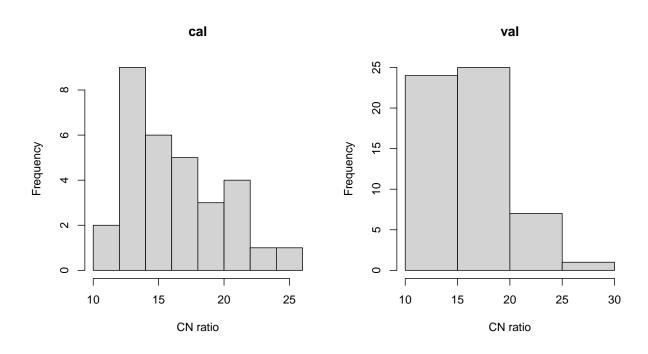
## [13] "924" "926" "928" "929" "930" "931" "932" "933" "934" "935" "936" "937"

## [25] "940" "941" "942" "944" "947" "951" "953" "955" "956" "958" "959" "962"

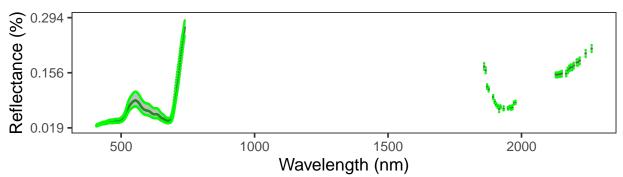
## [37] "965" "966" "968" "969" "970" "972" "975" "979" "980" "981" "982" "984"

## [49] "986" "987" "988" "989" "990" "992" "994" "995" "996"
```

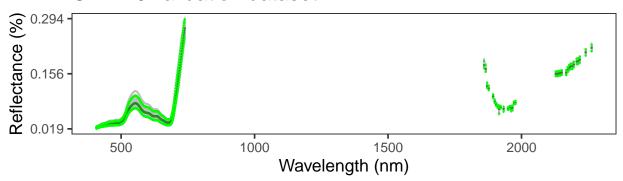
```
## 646 0.05043659 1949.55
## 685 0.04855972 2167.58
## 631 0.04763477 1865.64
## 682 0.04714212 2150.81
## 633 0.04689325 1876.83
## 698 0.04664752 2240.25
```

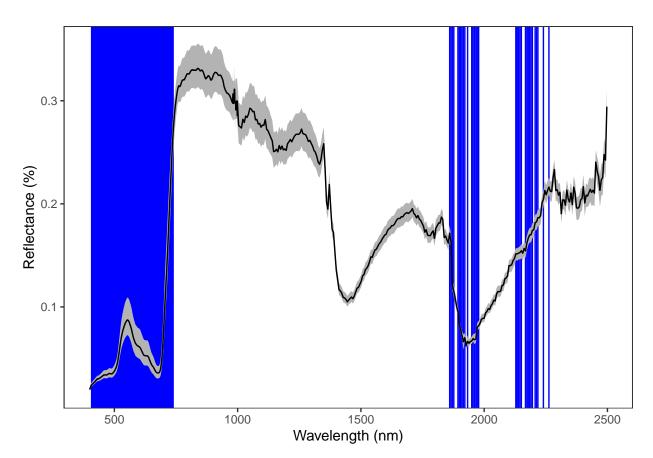


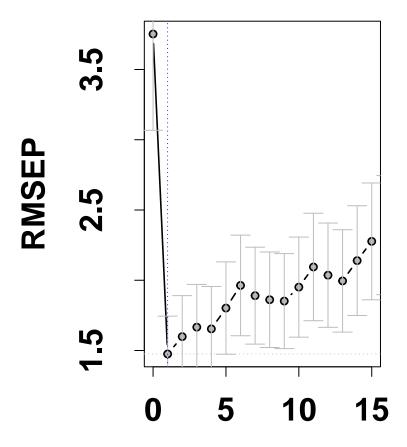
CN TRJ calibration dataset



CN TRJ validation dataset

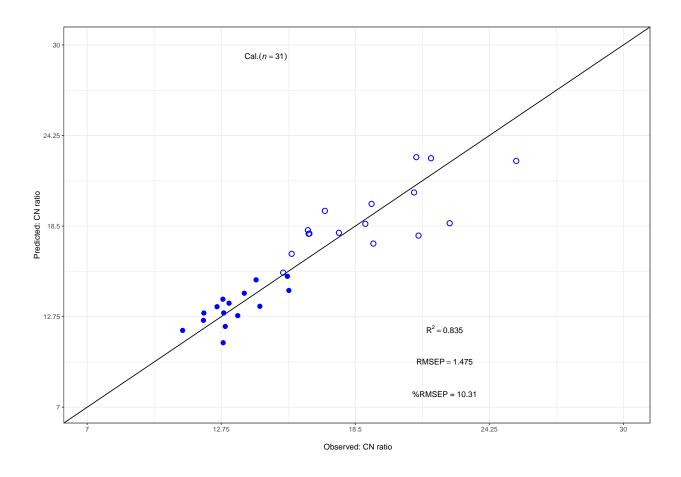


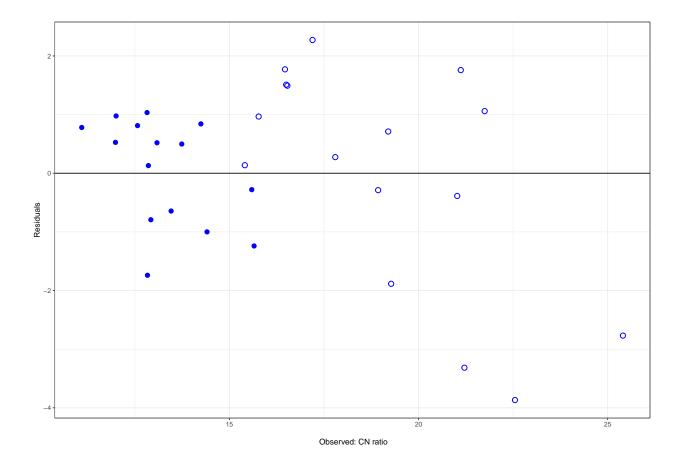


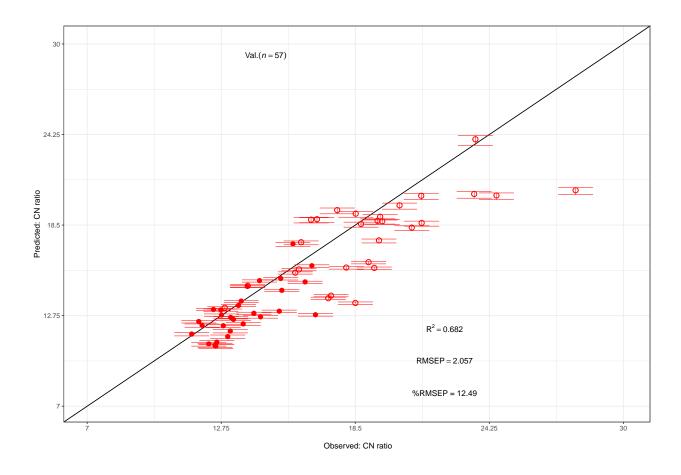


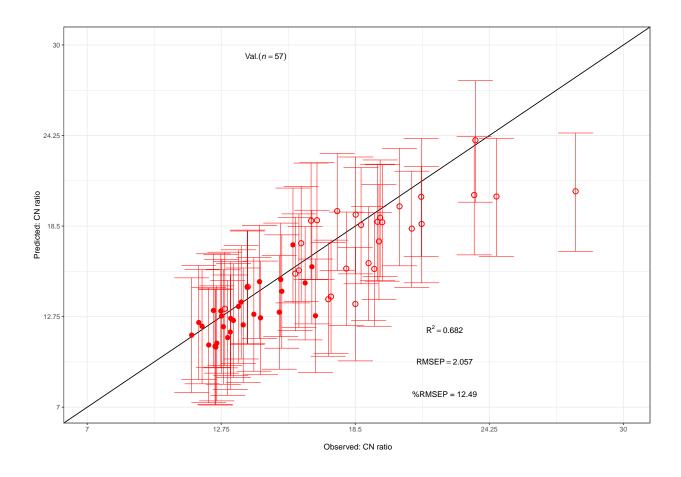
Number of compone

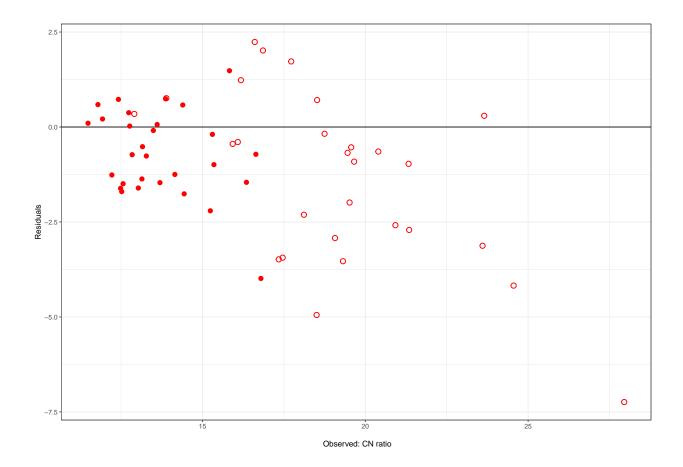
```
data_set
                 R2 RMSEP NRMSEP
## 1
          cal 0.835 1.475 10.309
## 2
          val 0.682 2.057 12.489
     Observed Predicted
                          Residuals Treatment Subpop
                                                                    lci
## 1 13.13801 11.77061 -1.36740057
                                           N1
                                                 IND 11.86256 11.65315 15.39561
## 2 16.79262
              12.80589 -3.98672582
                                           N1
                                                 IND 12.87593 12.71948 16.40833
## 3 12.51760
              10.81713 -1.70047118
                                           N1
                                                 IND 10.92710 10.67160 14.46091
## 4 12.41584
              13.14272 0.72687449
                                           N1
                                                 IND 13.20839 13.06261 16.74066
                                                 IND 11.67878 11.46279 15.21197
## 5 11.48295
              11.58230 0.09934689
                                           N1
## 6 11.78692
               12.37717 0.59024429
                                           N1
                                                 IND 12.45736 12.28529 15.98999
##
          lpi
## 1 8.120103
## 2 9.187076
## 3 7.137785
## 4 9.530345
## 5 7.929597
## 6 8.752661
```











```
Iteration Intercept X517.49509 X516.26319 X518.72726 X515.03152
## Seg 1
           1 -16.59539
                             1.297257
                                         1.229301
                                                    1.366277
                                                               1.166143
## Seg 2
                2 -16.24219
                              1.272135
                                         1.203861
                                                   1.341438
                                                               1.140553
## Seg 3
                3 -16.38347
                                         1.200831
                                                    1.339062
                                                               1.137166
                              1.269388
## Seg 4
                4 -16.48503
                              1.275286
                                         1.206927
                                                    1.344724
                                                               1.143449
## Seg 5
                5 -16.62236
                              1.278465
                                         1.209872
                                                    1.348187
                                                               1.146114
## Seg 6
                6 -17.18156
                              1.317953
                                         1.248216
                                                   1.388643
                                                               1.183455
```

coefs ## 517.49509 1.273888 ## 516.26319 1.205818 ## 518.72726 1.343074 ## 515.03152 1.142592 ## 519.95968 1.411430 ## 513.80012 1.079847