

03_Correlacion.R

Usuario

2023-09-25

```
# Correlacion
# 25/09/2023
# Leobardo Estrella

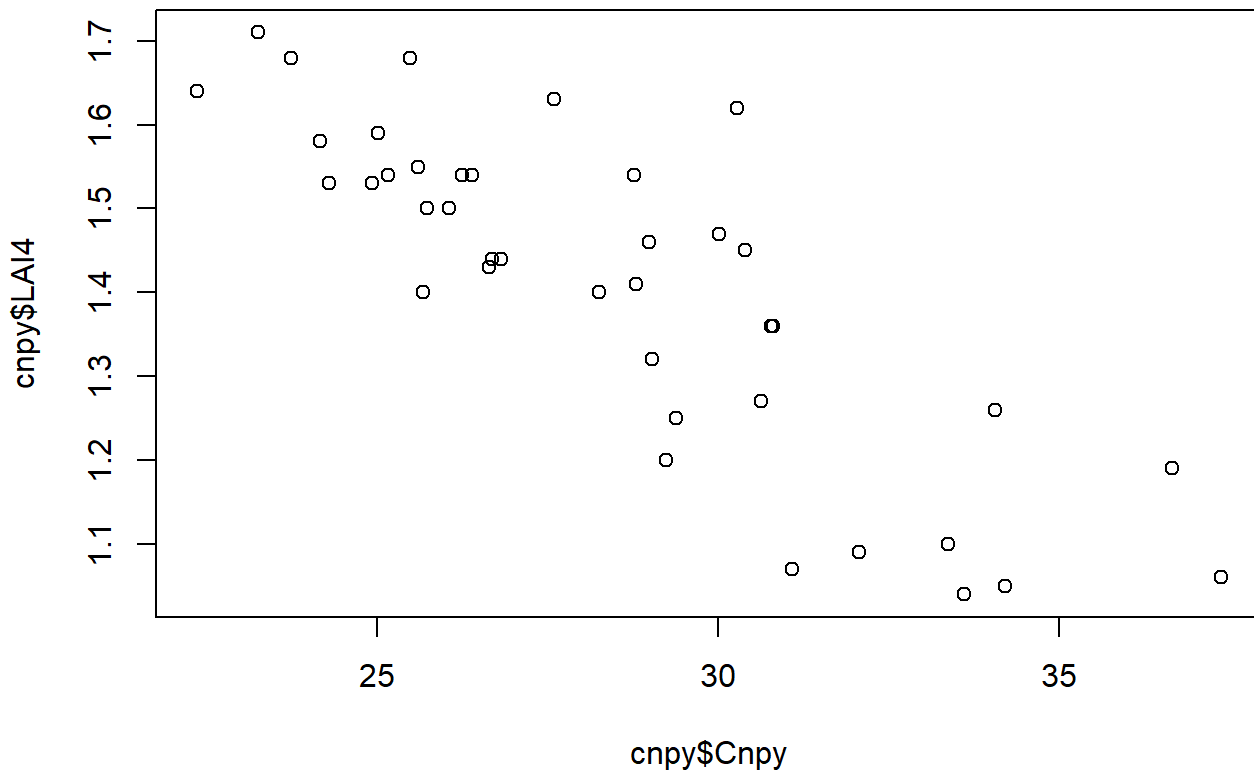
# Importar -----

setwd ( "C:/Repositorio_Git/Met_ES/Codigos")

cnpy <- read.csv ("canopy.csv", header = T)
cnpy$Forest <- as.factor(cnpy$Forest)

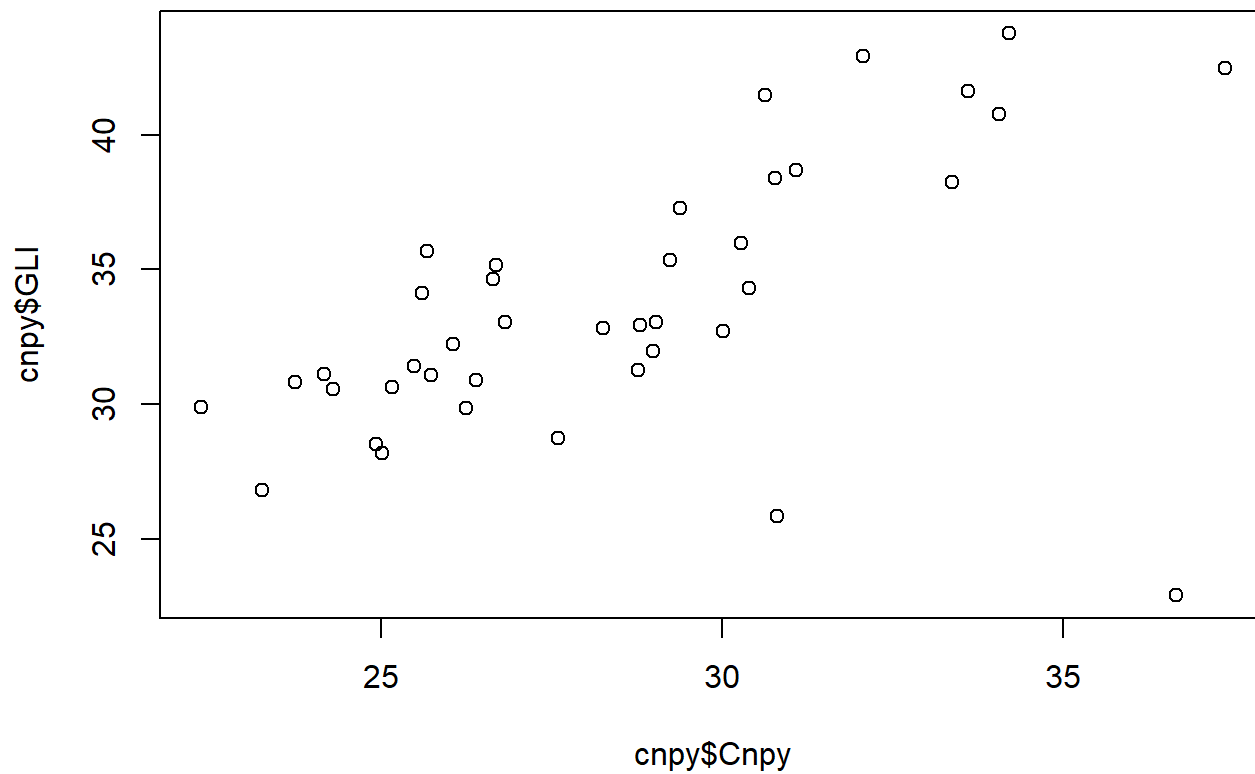
# Grafica -----

plot(cnpy$Cnpy, cnpy$LAI4)
```



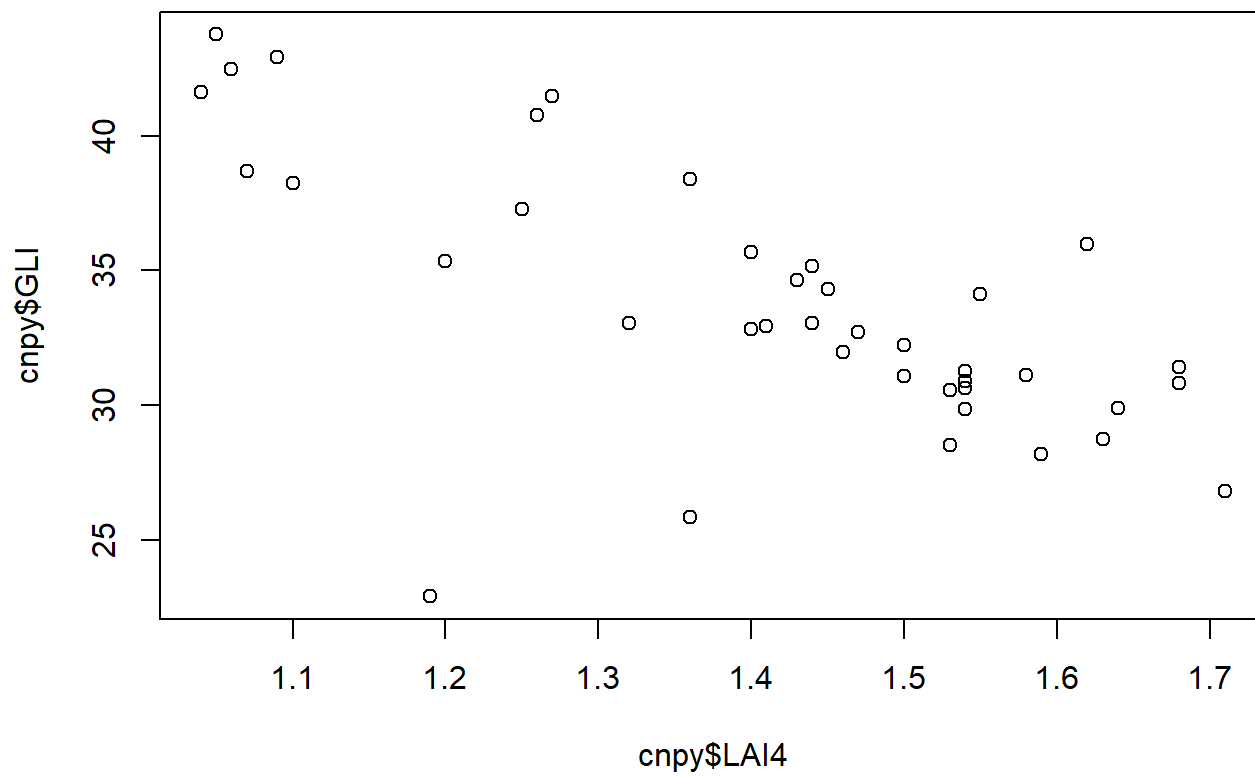
```
# Asociacion negativa entre Cnpy vs LAI4
```

```
plot(cnpy$Cnpy, cnpy$GLI)
```



```
# Asociacion positiva Cnpy vs GLI (lus que llega al suelo)
```

```
plot(cnpy$LAI4, cnpy$GLI)
```



```
# Asociacion negativa entre LAI4 vs GLI
```

```
# Personalizar grafica -----
```

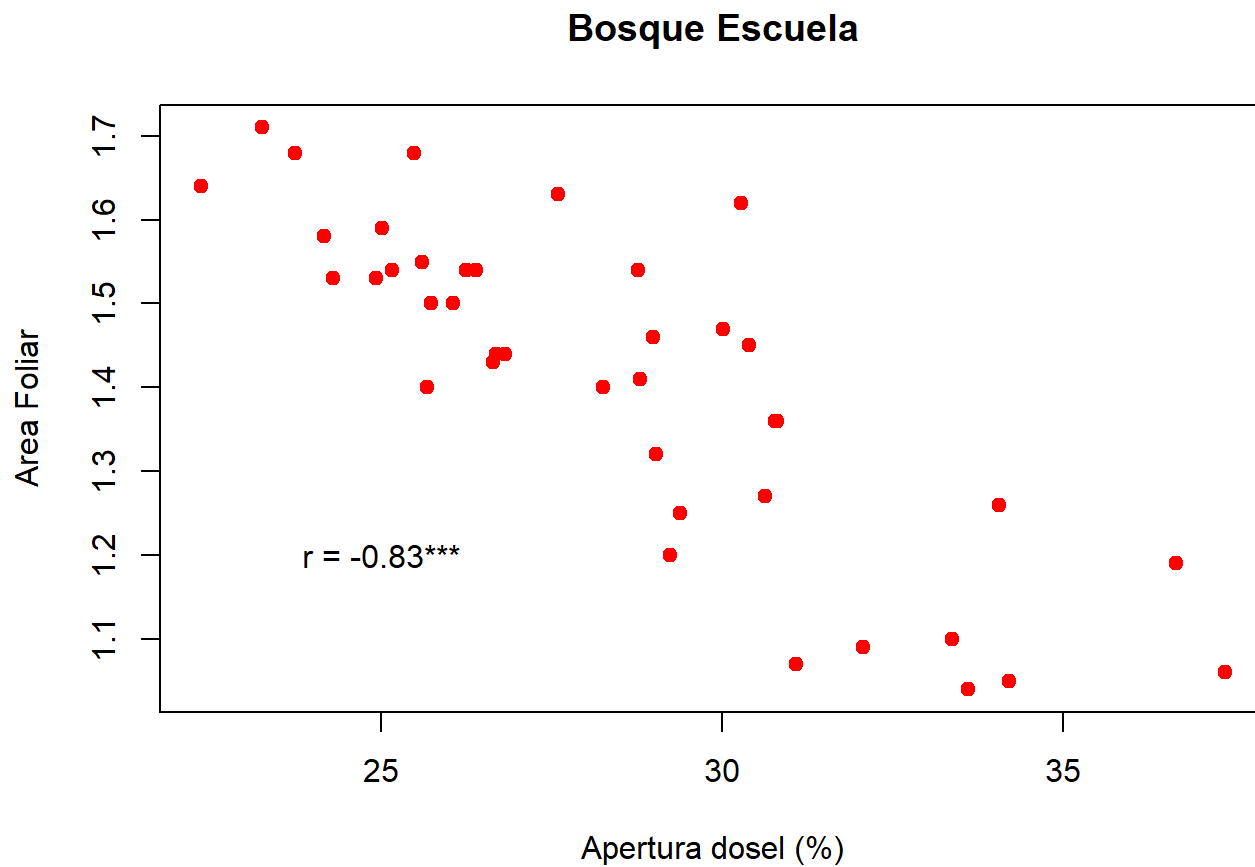
```
plot(cnp$cnp, cnp$LAI4,
      xlab = "Apertura dosel (%)",
      ylab = "Area Foliar",
      col = "red",
      pch = 19,
      main = "Bosque Escuela")
```

```
cor.test(cnp$cnp, cnp$LAI4)
```

```
##
## Pearson's product-moment correlation
##
## data:  cnpy$Cnpy and cnpy$LAI4
## t = -9.2962, df = 38, p-value = 2.493e-11
## alternative hypothesis: true correlation is not equal to 0
## 95 percent confidence interval:
##  -0.9089473 -0.7049143
## sample estimates:
##      cor
## -0.833416
```

```
# Anotar el r dentro de la grafica
```

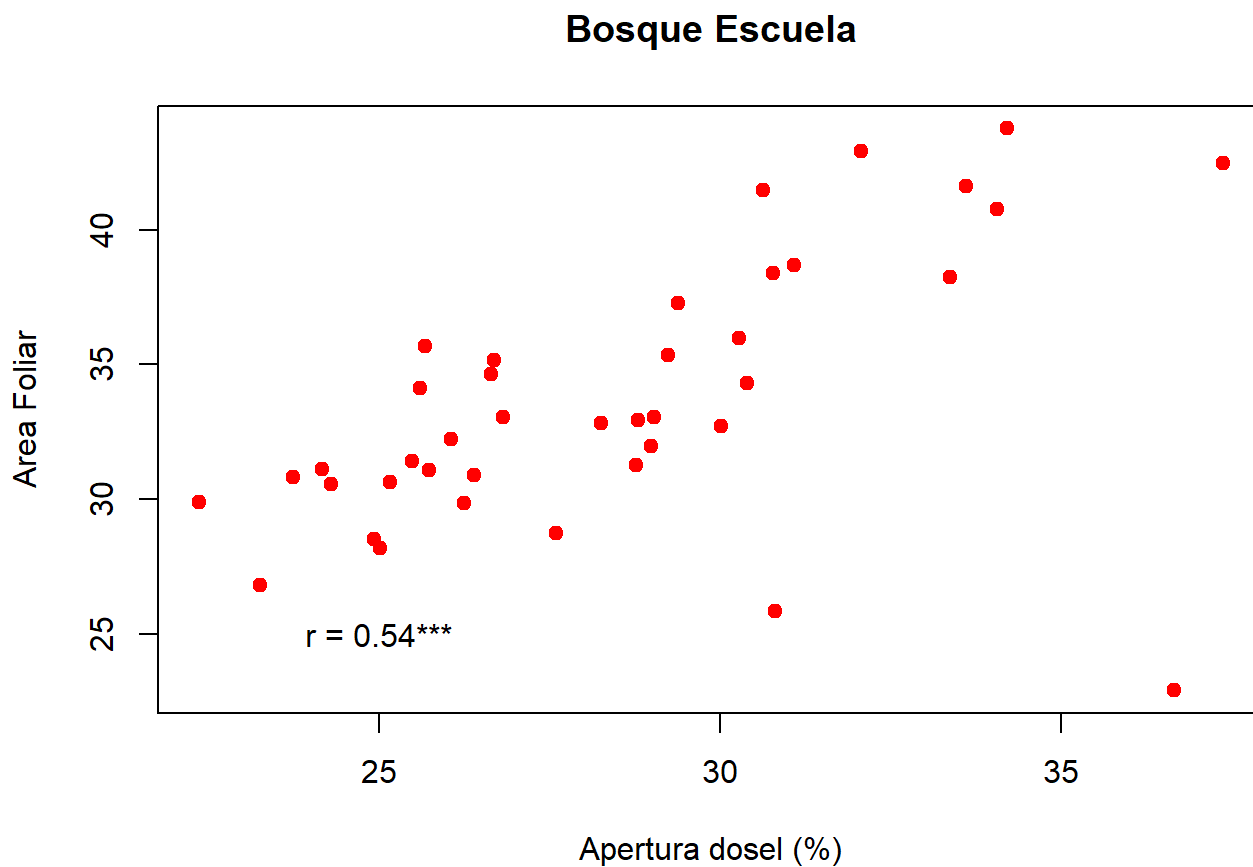
```
plot(cnpy$Cnpy, cnpy$LAI4,
     xlab = "Apertura dosel (%)",
     ylab = "Area Foliar",
     col = "red",
     pch = 19,
     main = "Bosque Escuela")
text(25,1.2, "r = -0.83***")
```



```
plot(cnp$Cnp, cnp$GLI,  
     xlab = "Apertura dosel (%)",  
     ylab = "Area Foliar",  
     col = "red",  
     pch = 19,  
     main = "Bosque Escuela")  
cor.test(cnp$Cnp, cnp$GLI)
```

```
##  
## Pearson's product-moment correlation  
##  
## data:  cnp$Cnp and cnp$GLI  
## t = 4.0149, df = 38, p-value = 0.0002702  
## alternative hypothesis: true correlation is not equal to 0  
## 95 percent confidence interval:  
##  0.2822213 0.7326972  
## sample estimates:  
##      cor  
## 0.5457512
```

```
text(25,25, "r = 0.54***")
```



```
plot(cnp$LA14, cnp$GLI,  
     xlab = "Apertura dosel (%)",  
     ylab = "Area Foliar",  
     col = "red",  
     pch = 19,  
     main = "Bosque Escuela")  
cor.test(cnp$LA14, cnp$GLI)
```

```
##  
## Pearson's product-moment correlation  
##  
## data:  cnp$LA14 and cnp$GLI  
## t = -5.8669, df = 38, p-value = 8.669e-07  
## alternative hypothesis: true correlation is not equal to 0  
## 95 percent confidence interval:  
## -0.8239664 -0.4812537  
## sample estimates:  
##          cor  
## -0.6894101
```

```
text(1.2,25, "r = -0.68***")
```

