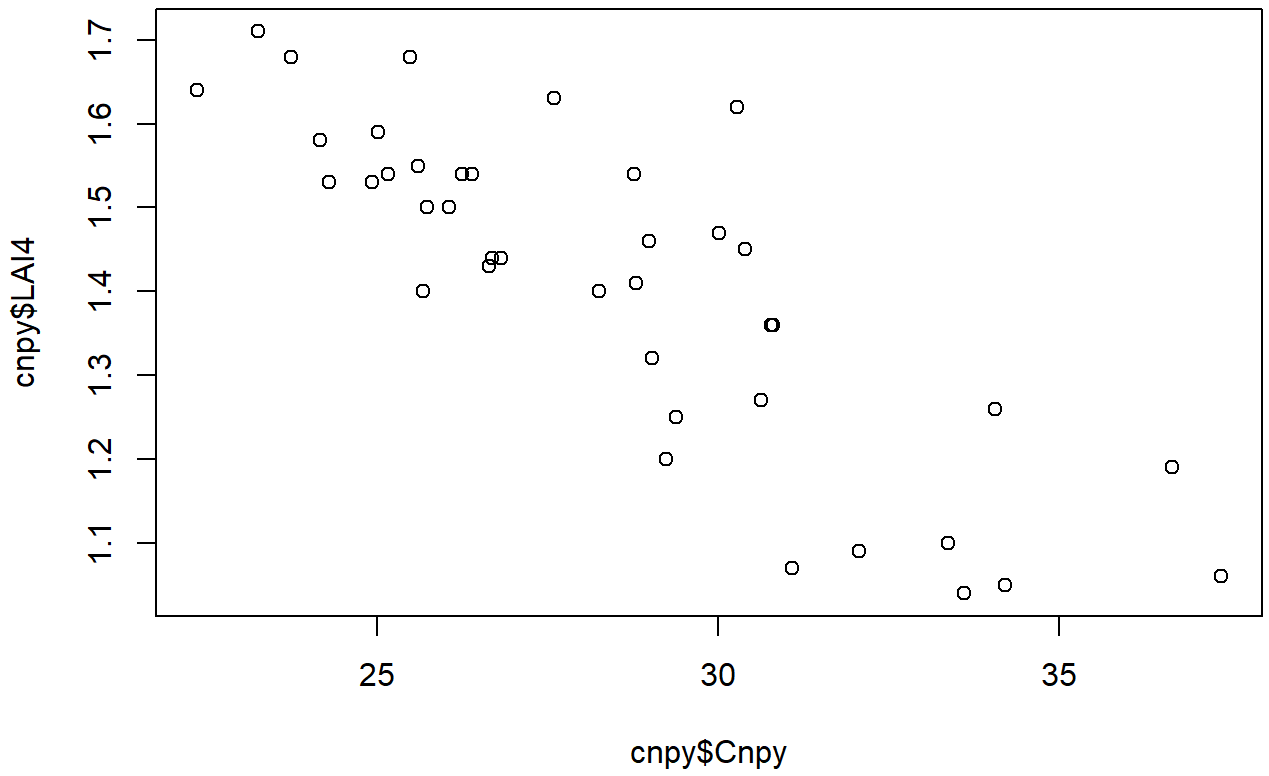
correlacion.R

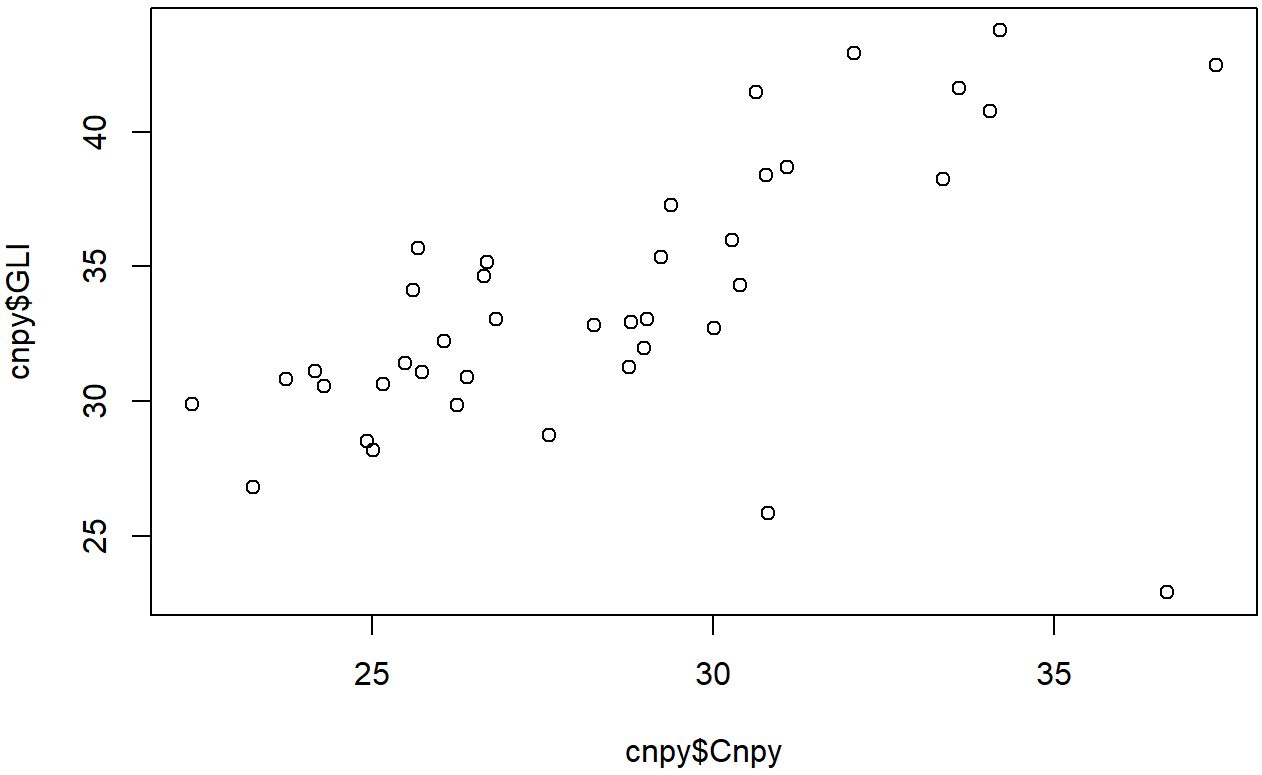
Usuario

2023-09-25

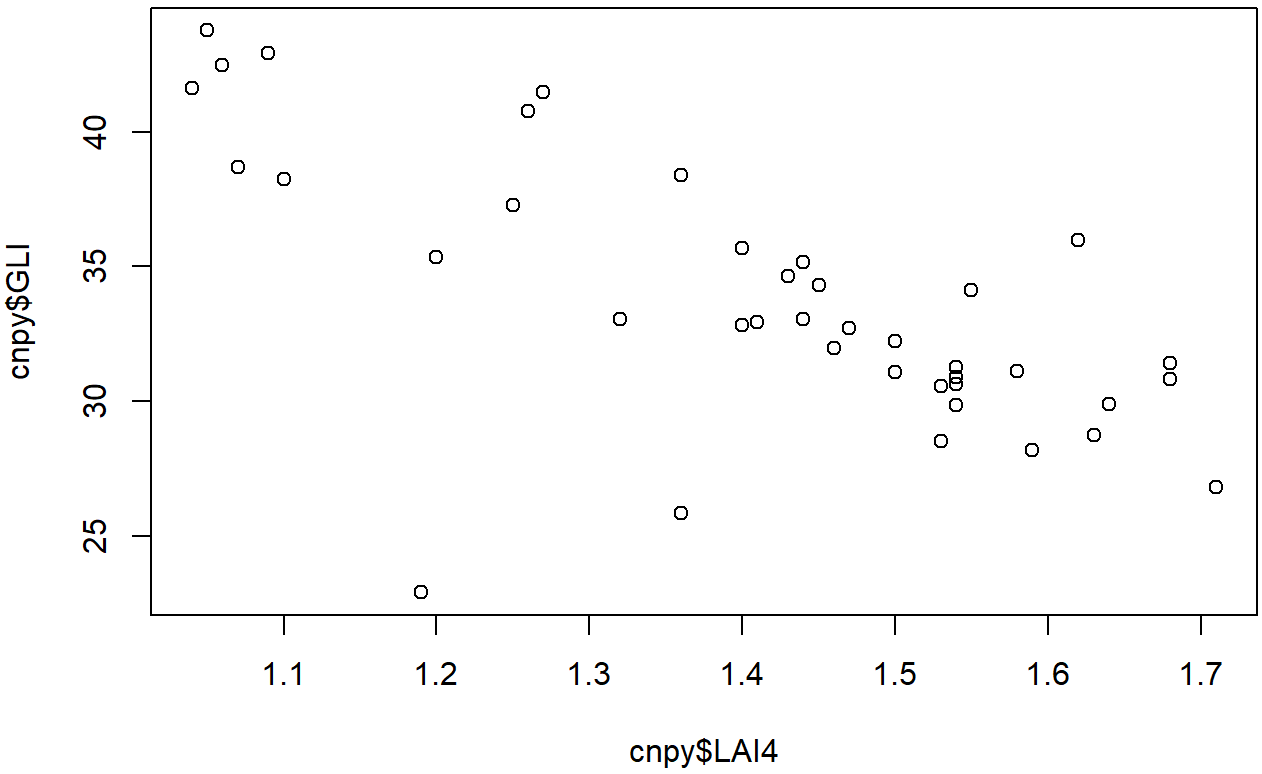
```
#correlacion
#25/09/23

#JGC


# IMPORTAR ------------------------------------------------------------------

setwd ("C:/REPOSITORIO/Met_ES/Scripts")

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)
```



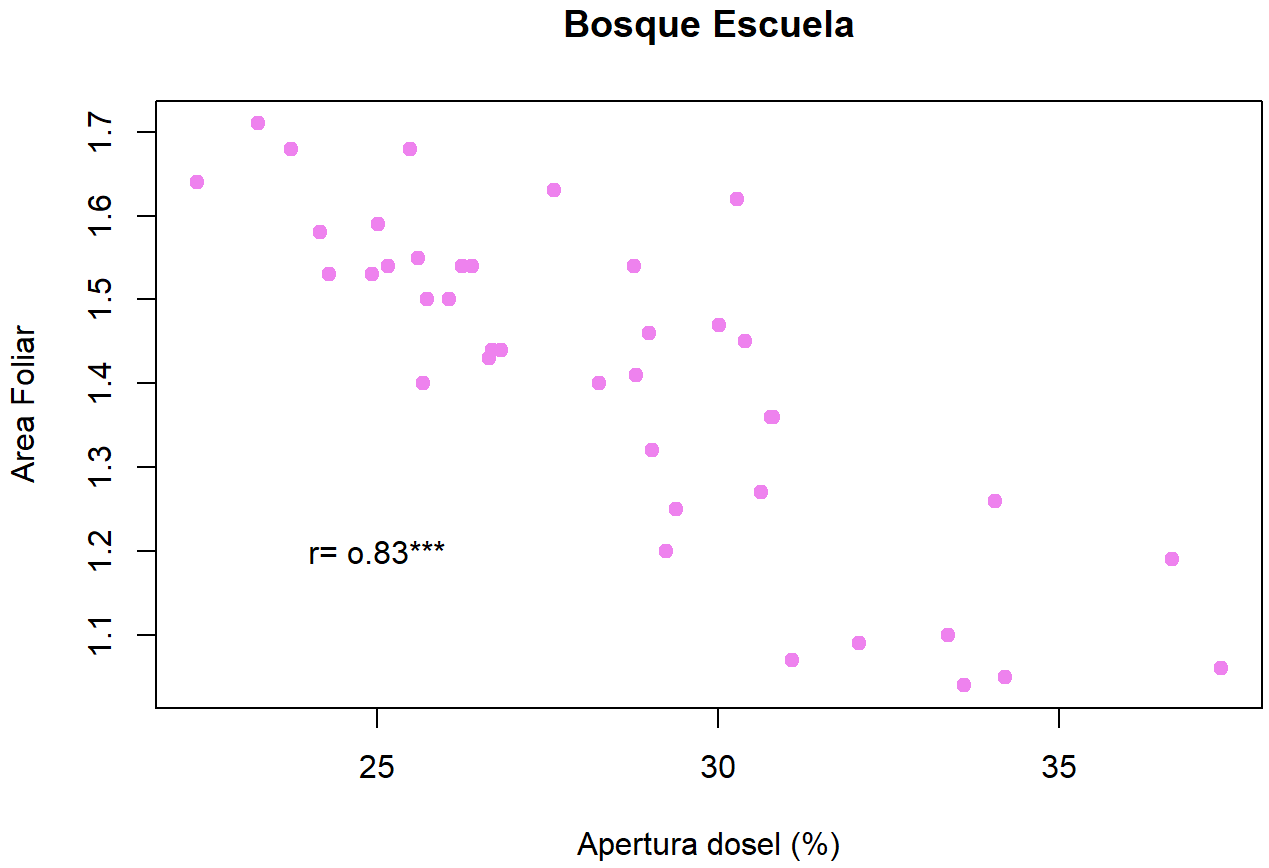

```
#Asociacion positiva cnpy vs GLI (luz que llega al suelo)

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




```
#Asociacion negativa entre cnp y vs LAI4

#Personalizar grafica
#Anotar el valor de R dentro de la grafica
plot(cnpy$Cnpy, cnpy$LAI4,
     xlab = "Apertura dosel (%)",
     ylab = "Area Foliar",
     col= "violet",
     pch= 19,
     main = "Bosque Escuela")
cor.test(cnpy$Cnpy, cnpy$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
```

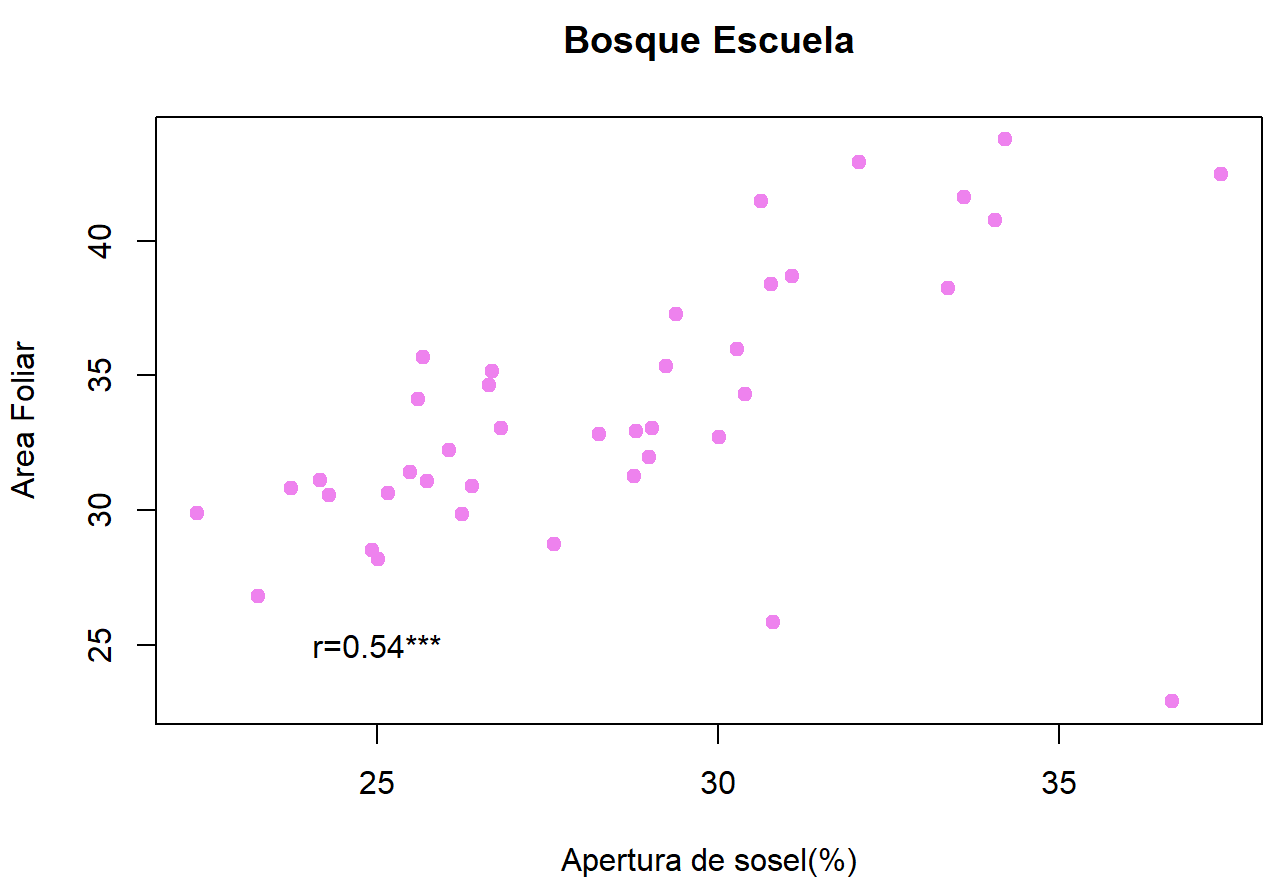
```
text(25, 1.2, "r= o.83***")
```




```
plot(cnpy$Cnpy, cnpy$GLI,
     xlab= "Apertura de sosel(%)",
     ylab =  "Area Foliar",
     col= "violet",
     pch= 19,
     main = "Bosque Escuela")
cor.test(cnpy$Cnpy, cnpy$GLI)
```

```
##
##  Pearson's product-moment correlation
##
## data:  cnpy$Cnpy and cnpy$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
```

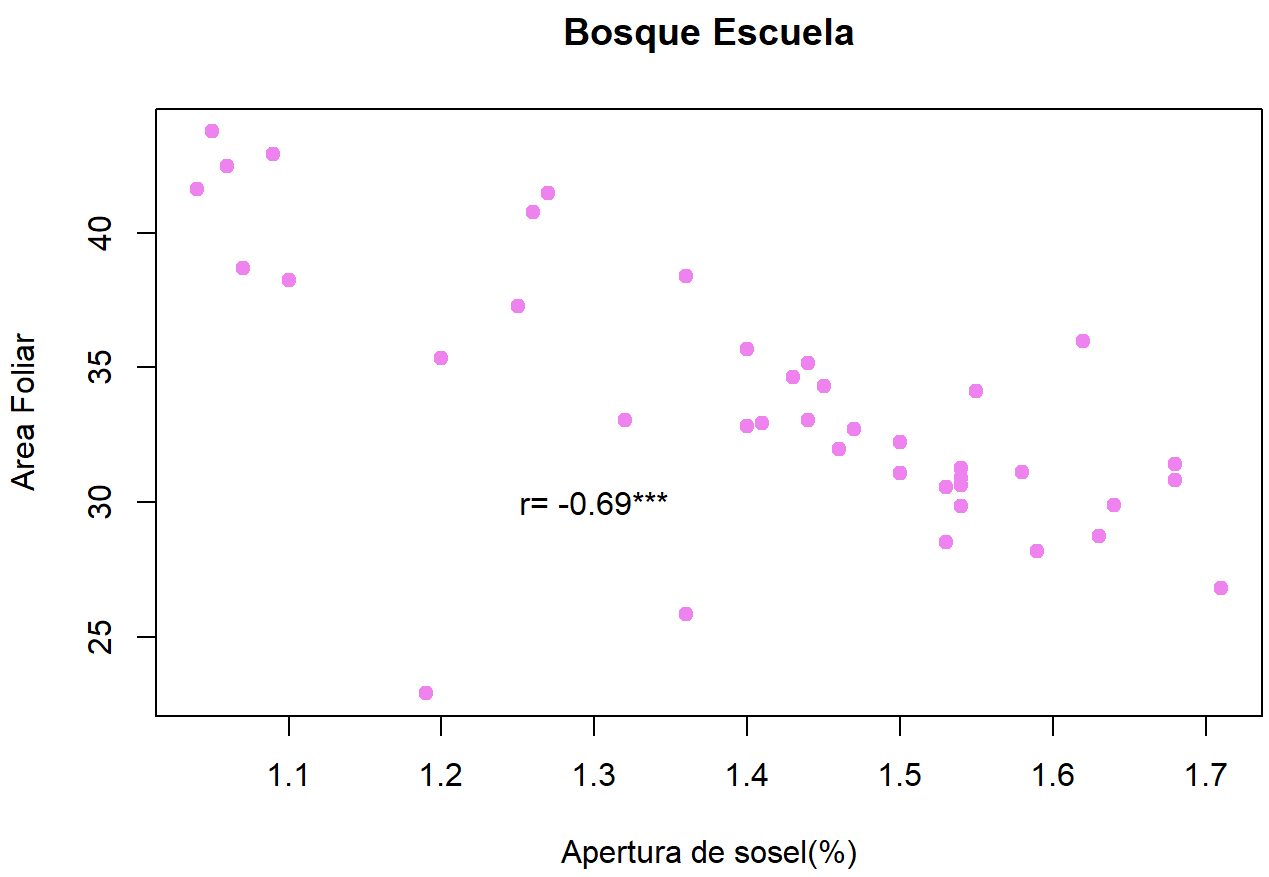
```
text(25, 25, "r=0.54***")
```




```
plot(cnpy$LAI4, cnpy$GLI,
     xlab= "Apertura de sosel(%)",
     ylab =  "Area Foliar",
     col= "violet",
     pch= 19,
     main = "Bosque Escuela")
cor.test(cnpy$LAI4, cnpy$GLI)
```

```
##
##  Pearson's product-moment correlation
##
## data:  cnpy$LAI4 and cnpy$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(1.3, 30,"r= -0.69***")
```


Bosque Escuela
Area Foliar
25
30
35
40
r= -0.69***
1.1
1.2
1.3
1.4
1.5
1.6
1.7
Apertura de sosel(%)