04_Correlación.R

Usuario01

2023-09-25

```
# Correlación
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# Importar ----------------------------------------------------------------

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

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


# Gráfica -----------------------------------------------------------------

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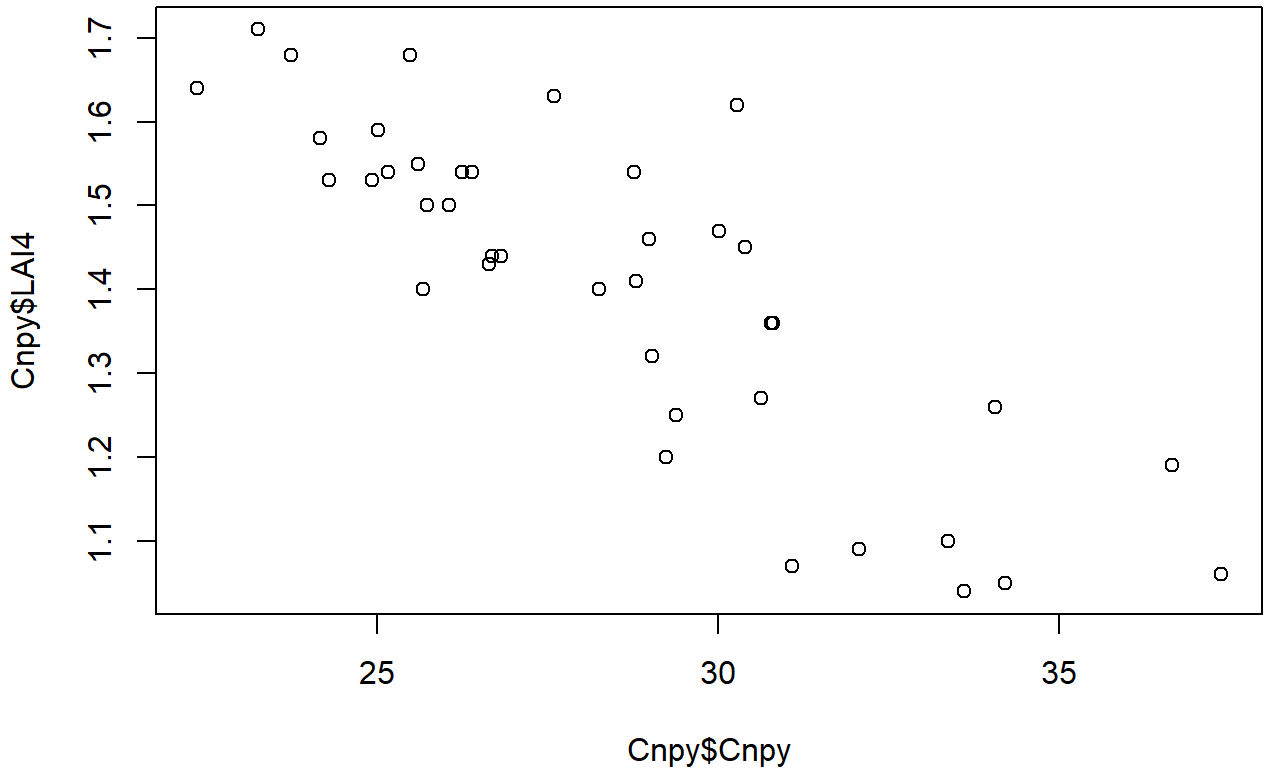
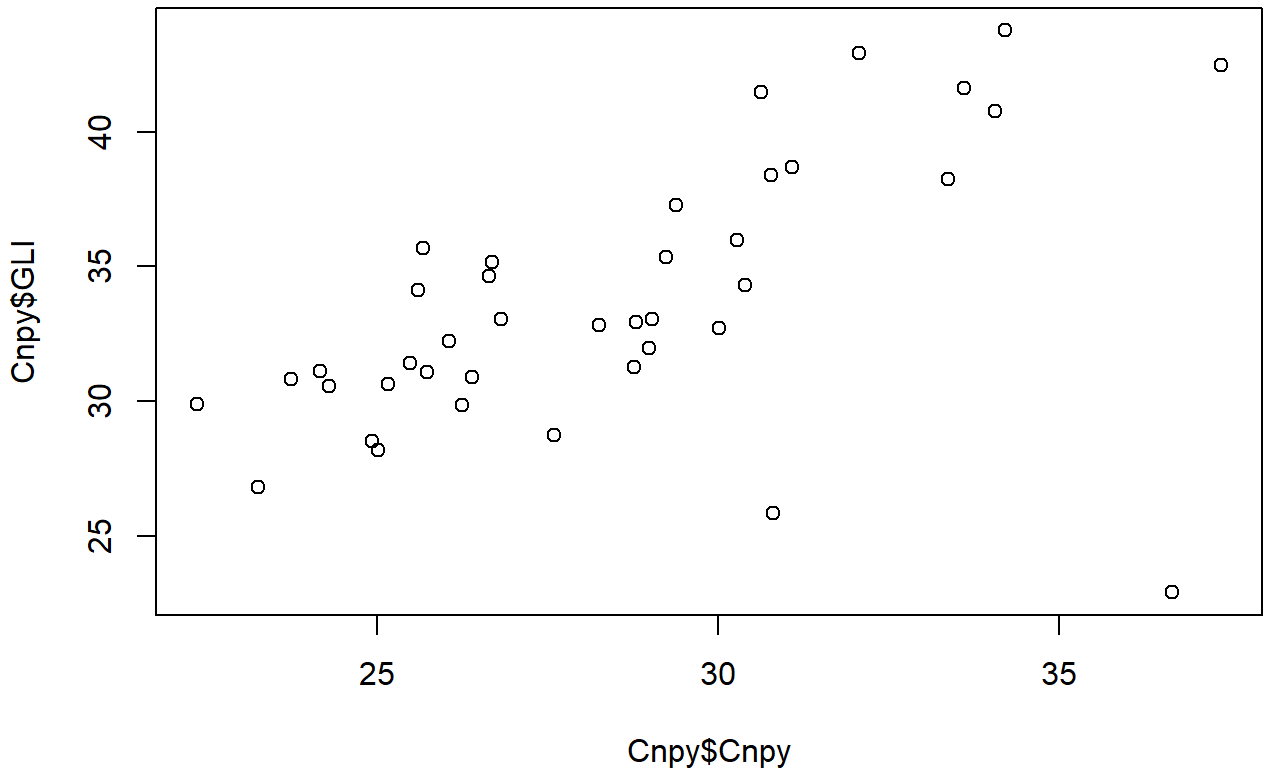
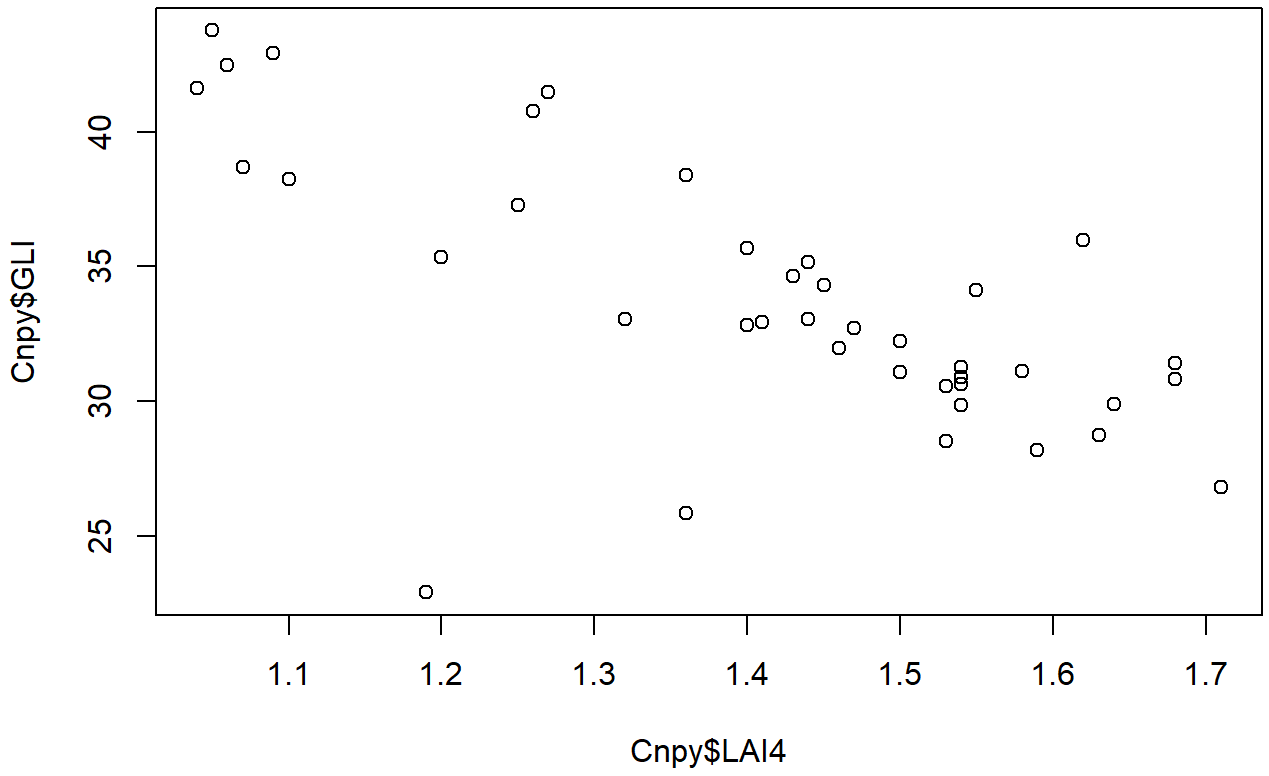



```
# Asociación negativa entre Cnpy vs LAI4

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



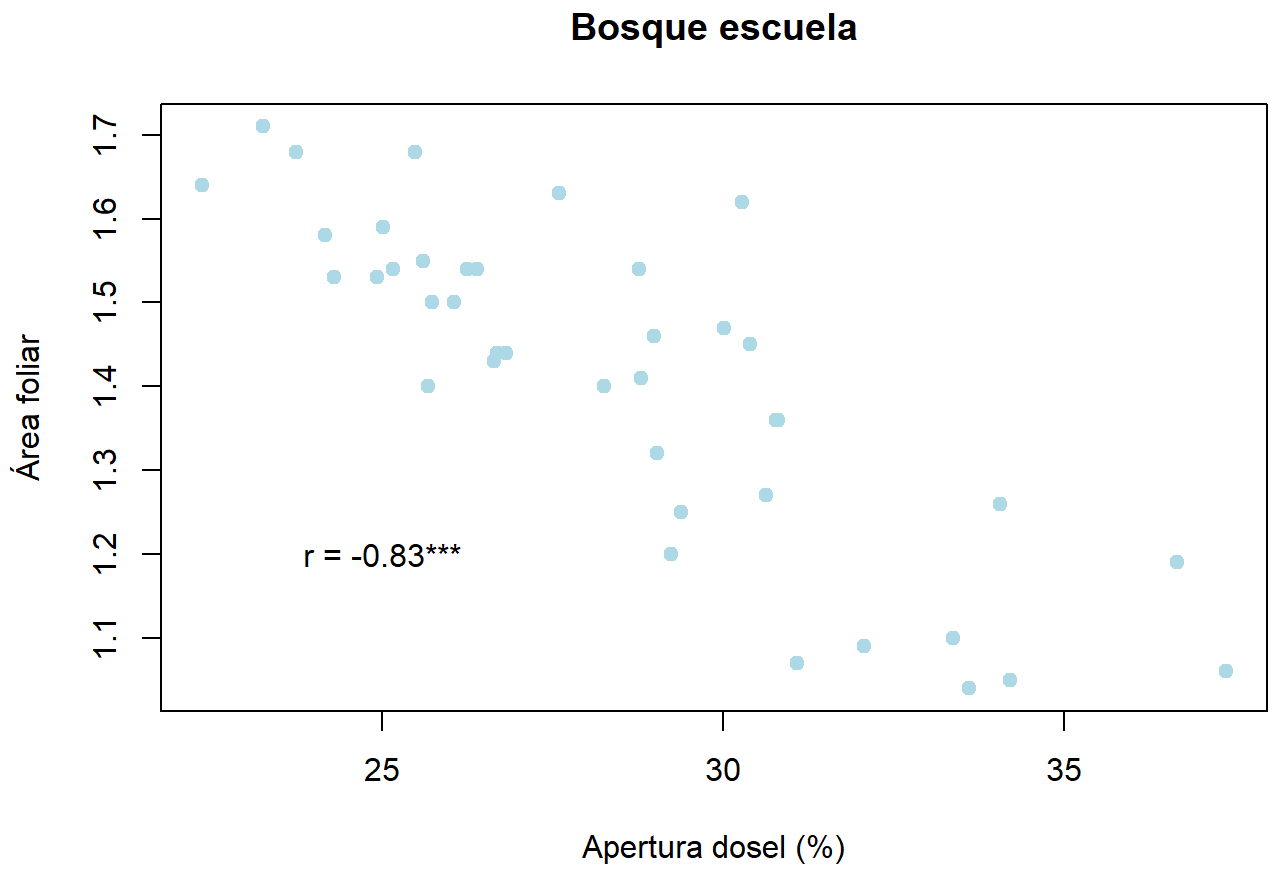

```
# Asociación positiva entre Cnpy vs GLI

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




```
# Asociación negativa entre LAI vs GLI


# Personalizar gráfica ----------------------------------------------------

plot(Cnpy$Cnpy, Cnpy$LAI4,
     xlab = "Apertura dosel (%)",
     ylab = "Área foliar",
     col = "Lightblue",
     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
```

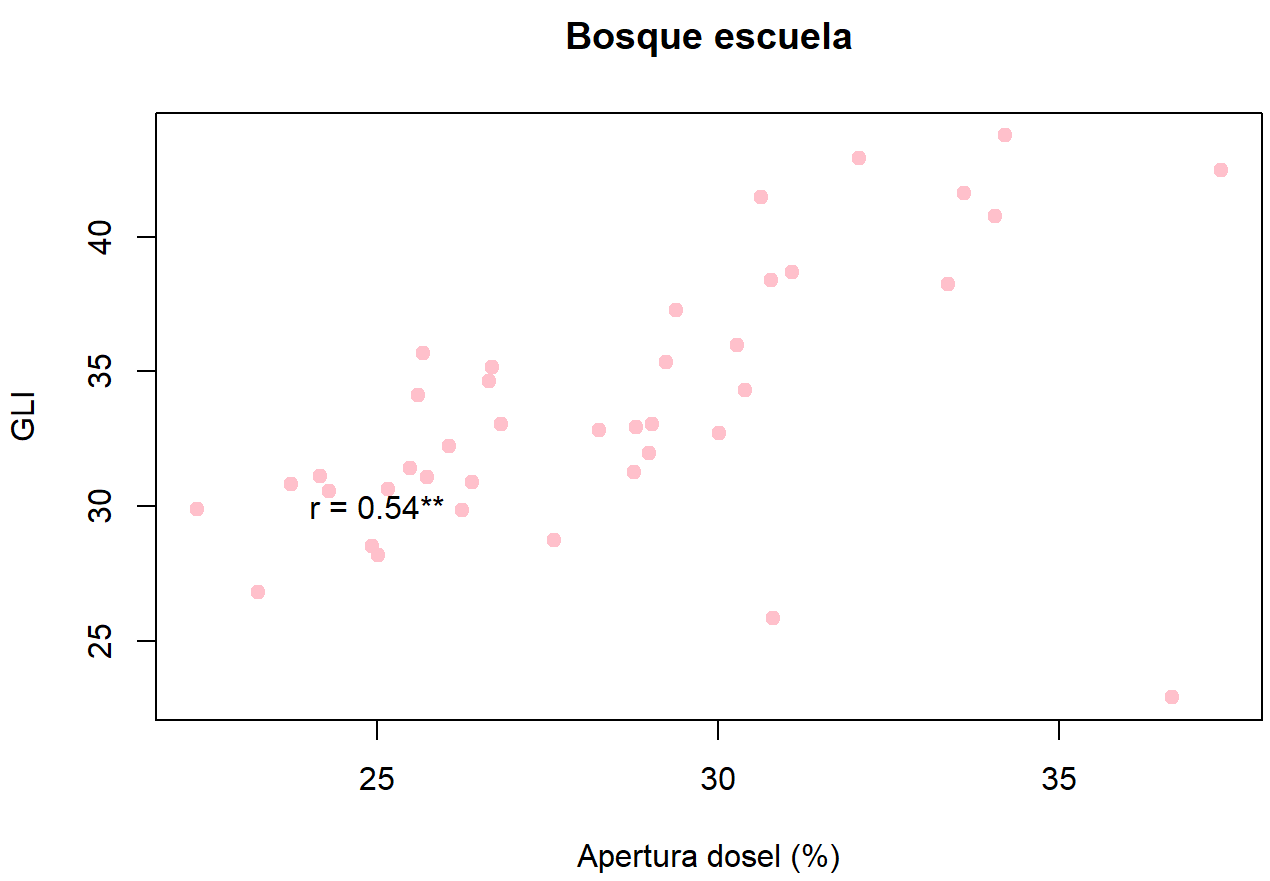
```
text (25,1.2, "r = -0.83***")
```



```
# Asociación negativa entre entre Cnpy vs LAI4
# Correlación altamente significativa


plot(Cnpy$Cnpy, Cnpy$GLI,
     xlab = "Apertura dosel (%)",
     ylab = "GLI",
     col = "pink",
     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
```

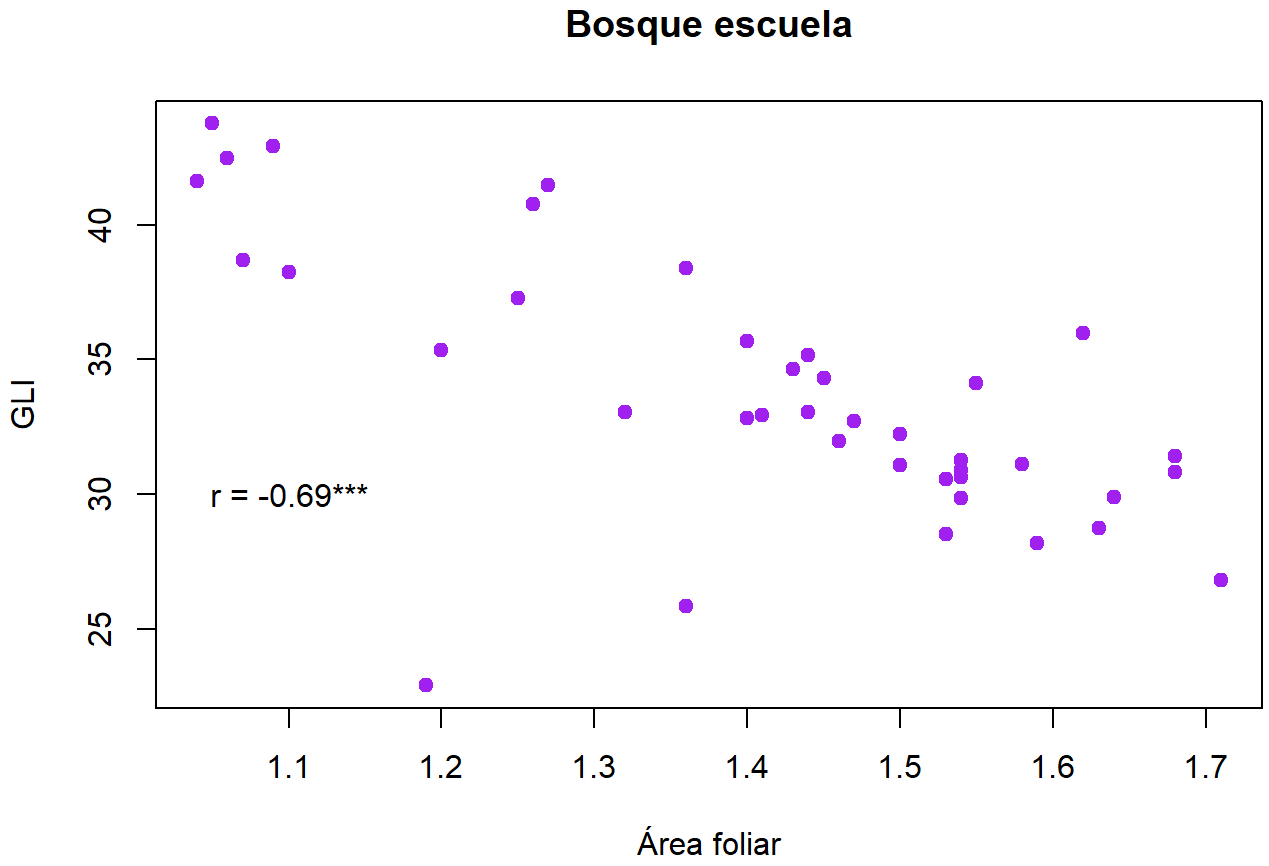
```
text (25, 30, "r = 0.54**")
```




```
# Asociación positiva entre Cnpy vs GLI
# Correlación altamente significativa


plot(Cnpy$LAI4, Cnpy$GLI,
     xlab = "Área foliar",
     ylab = "GLI",
     col = "purple",
     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 (1.1, 30, "r = -0.69***")
```




```
# Asociación negativa entre LAI4 vs GLI
# Correlación altamente significativa
```