

**UNIVERSIDAD AUTÓNOMA DE NUEVO LEÓN**

**FACULTAD DE CIENCIAS FORESTALES**

**TAREA DOS**

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**AGOSTO, 2022**

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Emanuel

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rm (list = ls ())   
datos <- read.csv("cuadro1.csv", header = T)   
head(datos)

## Arbol Fecha Especie Posicion Vecinos Diametro Altura  
## 1 1 12 F C 4 15.3 14.78  
## 2 2 12 F D 3 17.8 17.07  
## 3 3 9 C D 5 18.2 18.28  
## 4 4 9 H S 4 9.7 8.79  
## 5 5 7 H I 6 10.8 10.18  
## 6 6 10 C I 3 14.1 14.90

H.media <- subset(datos$Altura, datos$Altura <= mean (datos$Altura))   
H.16 <- subset (datos$Altura, datos$Altura < 16.5)  
  
vecinos3 <- subset(datos$Vecinos, datos$Vecinos <= 3)  
Vecinos4 <- subset(datos$Vecinos, datos$Vecinos >4)   
  
vecinos3

## [1] 3 3 2 2 3 2 2 3 0 1 3 1 2 3 3 0 1 3 2 0 3 3 3 3 1 3

Vecinos4

## [1] 5 6 5 6 5 5 6 6 5 6 5

DBH.media <- subset(datos$Diametro, datos$Diametro < mean (datos$Diametro))   
DBH.16 <- subset (datos$Diametro, datos$Diametro > 16)  
  
DBH.media

## [1] 15.3 9.7 10.8 14.1 14.2 14.8 12.4 15.1 13.4 15.0 15.4 14.1 14.8 15.5 13.8  
## [16] 13.0 13.1 12.8 13.3 15.6 13.0 10.2 14.4 7.7 9.9

DBH.16

## [1] 17.8 18.2 17.1 20.6 18.2 16.1 19.1 16.7 18.9 17.3 22.7 17.7 16.2 18.5 18.8  
## [16] 16.1 17.8 18.5 18.2 22.3 17.8 16.6 20.4 20.9

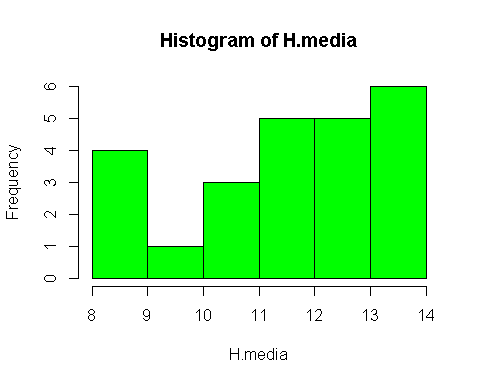
nuevas.filas=data.frame(Arbol=c(51,52,53,54,55,56,57,58,59,60),  
 Fecha=c(12,13,14,15,15,15,13,13,15,15),  
 Especie=c("C", "H", "F", "C", "H",   
 "F", "C", "HH", "F", "C"),  
 Posicion=c("C", "D", "D", "S", "C", "D", "D", "S", "S", "D"),  
 Vecinos=c(3, 2, 4, 4, 5, 5, 2, 3, 5, 2),  
 Diametro=c(20, 25, 10, 10, 23, 12, 13, 13, 16, 14),  
 Altura=c(14, 12, 13, 10, 12, 11, 12, 10, 10, 10))   
  
datos=rbind(datos, nuevas.filas)   
  
  
sum(with(datos, Diametro <= 16.9))

## [1] 38

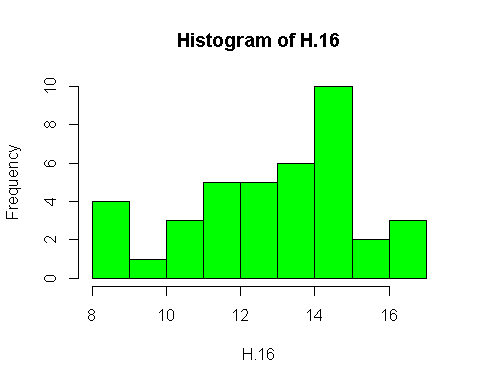
sum(with(datos, Altura > 18.5))

## [1] 2

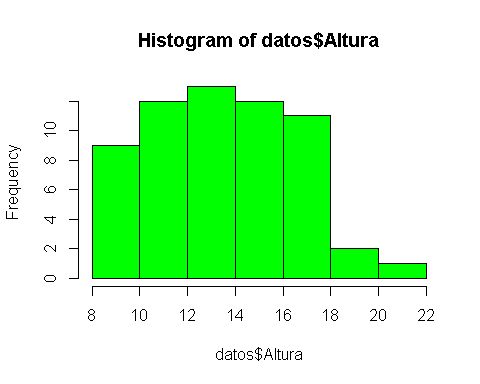
hist(H.media, col="green")



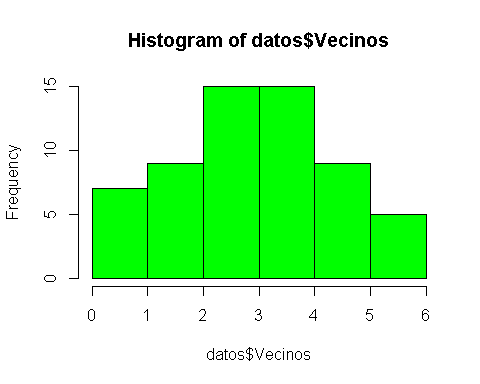
hist(H.16, col="green")



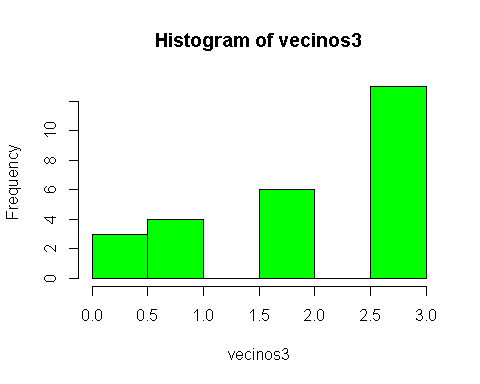
hist(datos$Altura, col="green")



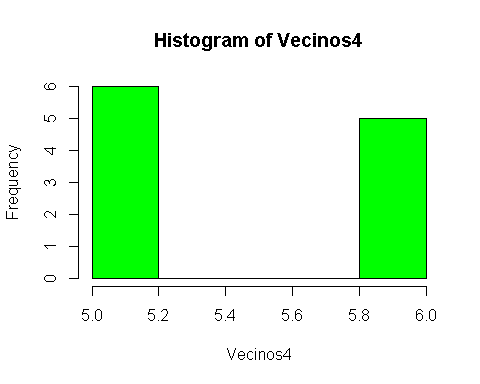
hist(datos$Vecinos, col="green")



hist(vecinos3, col="green")



hist(Vecinos4, col="green")



mean(H.media)

## [1] 11.53125

mean(H.16)

## [1] 12.85538

mean(datos$Altura)

## [1] 13.51933

mean(datos$Vecinos)

## [1] 3.366667

mean(vecinos3)

## [1] 2.115385

mean(Vecinos4)

## [1] 5.454545

mean(datos$Diametro)

## [1] 15.76167

mean(DBH.media)

## [1] 13.256

mean(DBH.16)

## [1] 18.4375

sd(H.media)

## [1] 1.74653

sd(H.16)

## [1] 2.210549

sd(datos$Altura)

## [1] 2.87134

sd(datos$Vecinos)

## [1] 1.540049

sd(vecinos3)

## [1] 1.070586

sd(Vecinos4)

## [1] 0.522233

sd(datos$Diametro)

## [1] 3.600805

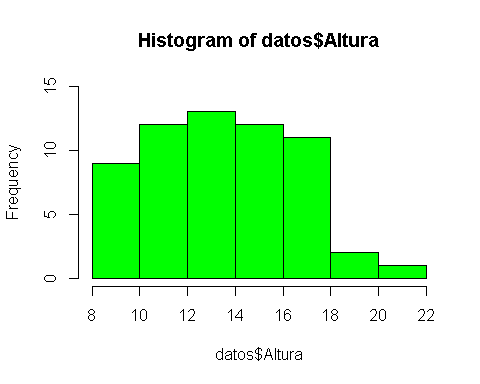
sd(DBH.media)

## [1] 2.098627

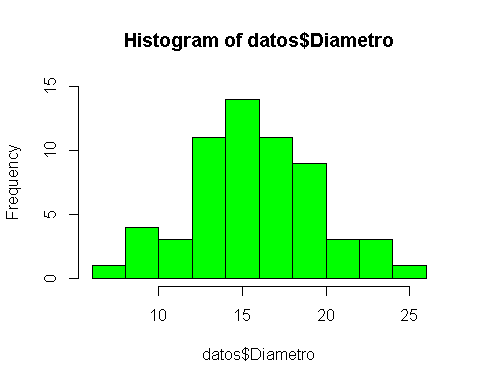
sd(DBH.16)

## [1] 1.815588

hist(datos$Altura,ylim=c(0,15), col="green")



hist(datos$Diametro, ylim=c(0,15), col="green")



hist(datos$Vecinos, col="green")

