
```
dat <- read.csv("data.csv")
dat
```

```
## density richness
## 1      24      6
## 2       5     12
## 3      13      3
## 4      31      2
## 5      20     10
## 6       4      8
## 7      13     15
## 8       4     20
```

Honeysuckle Density	Species Richness
24	6
5	12
13	3
31	2
20	10
4	8
13	15
4	20

Analyze the data set. Do a linear regression of Species Richness on Honeysuckle Density.

```
library(graphics)
dat$richness ~ dat$density
```

```
## dat$richness ~ dat$density
regression <- lm(richness ~ density, data = dat)
anova(regression)
```

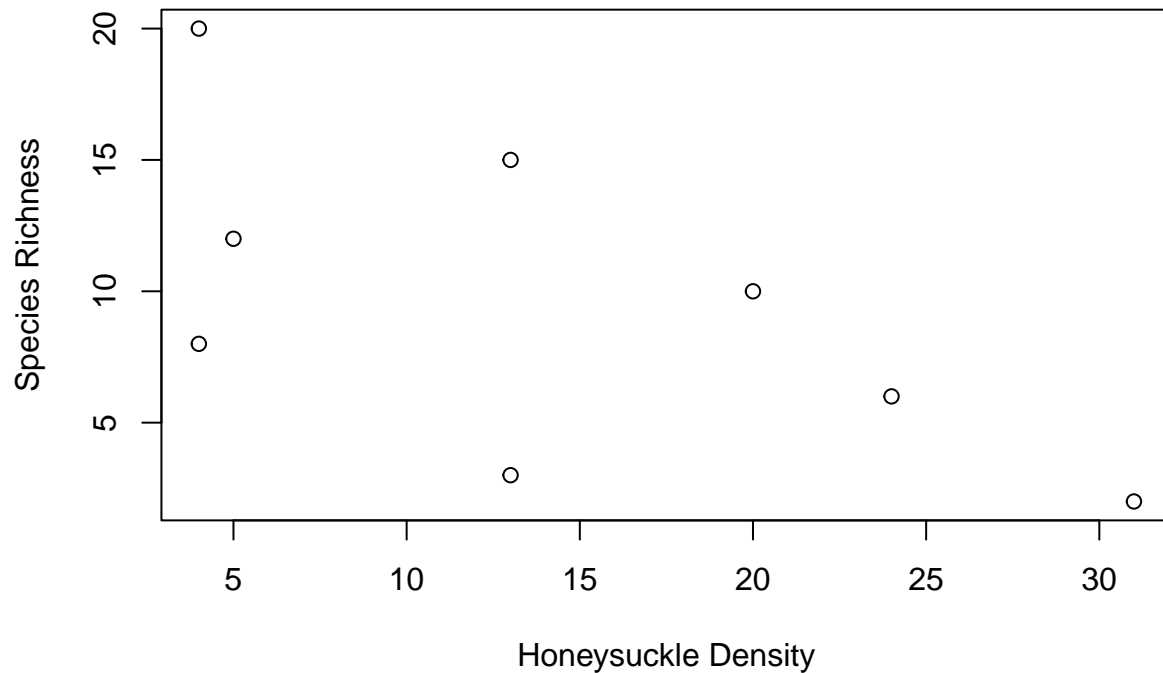
```
## Analysis of Variance Table
##
## Response: richness
##          Df Sum Sq Mean Sq F value    Pr(>F)
## density   1  103.8  103.804    3.9874 0.09283 .
## Residuals  6   156.2   26.033
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
summary(regression)
```

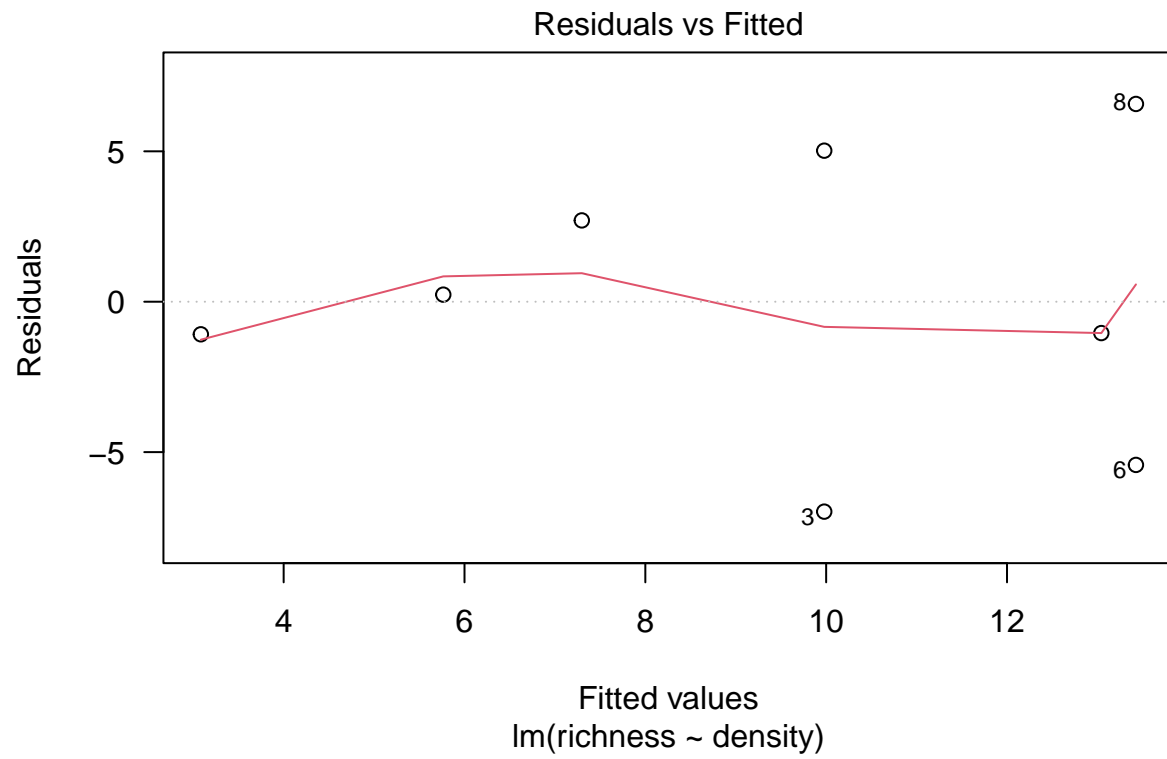
```
##
## Call:
## lm(formula = richness ~ density, data = dat)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -6.9788 -2.1696 -0.4042  3.2822  6.5739
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
```

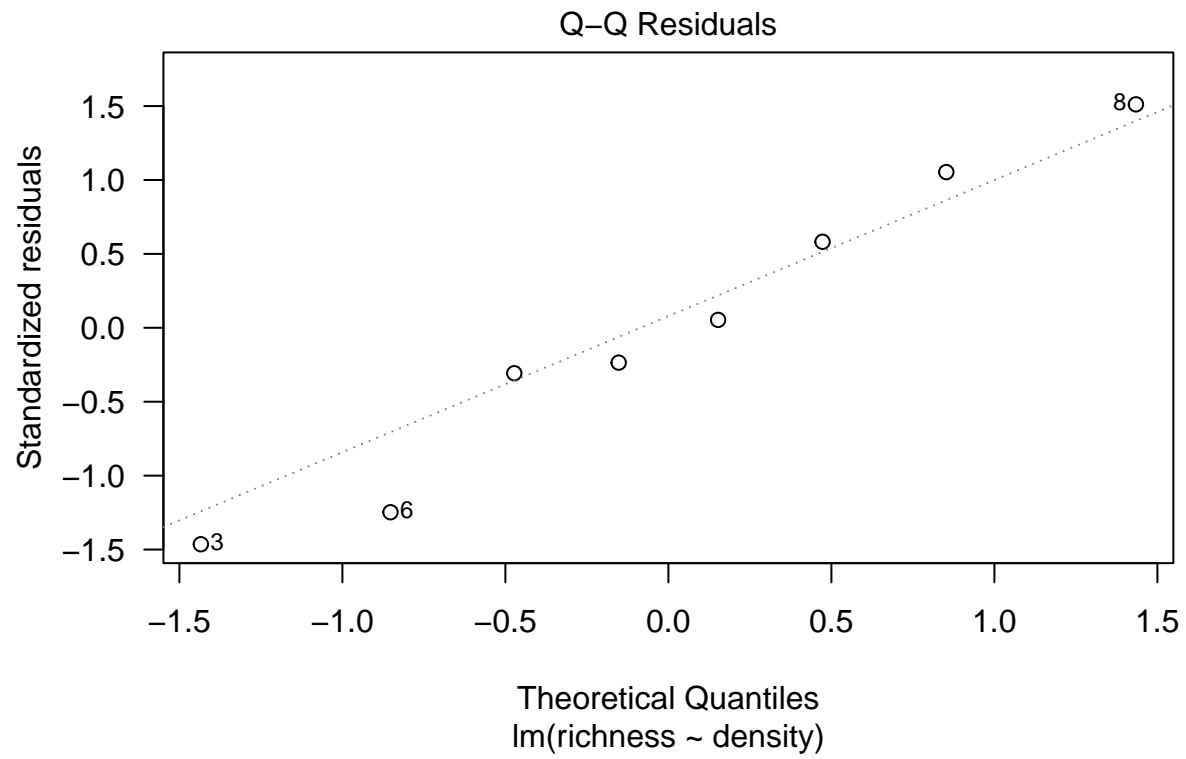
```
## (Intercept) 14.9583      3.2750   4.567  0.00382 **
## density     -0.3830      0.1918  -1.997  0.09283 .
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 5.102 on 6 degrees of freedom
## Multiple R-squared:  0.3992, Adjusted R-squared:  0.2991
## F-statistic: 3.987 on 1 and 6 DF,  p-value: 0.09283
```

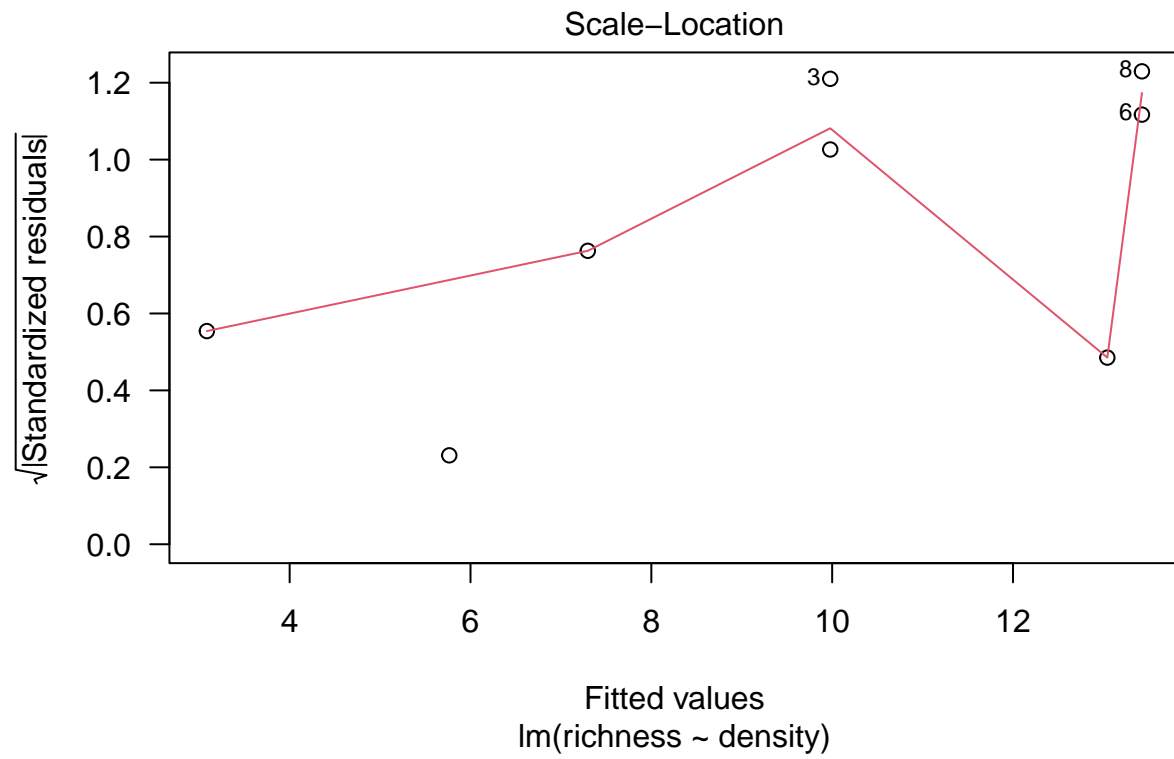
```
plot(
  richness ~ density,
  data = dat,
  xlab = "Honeysuckle Density",
  ylab = "Species Richness"
)
```

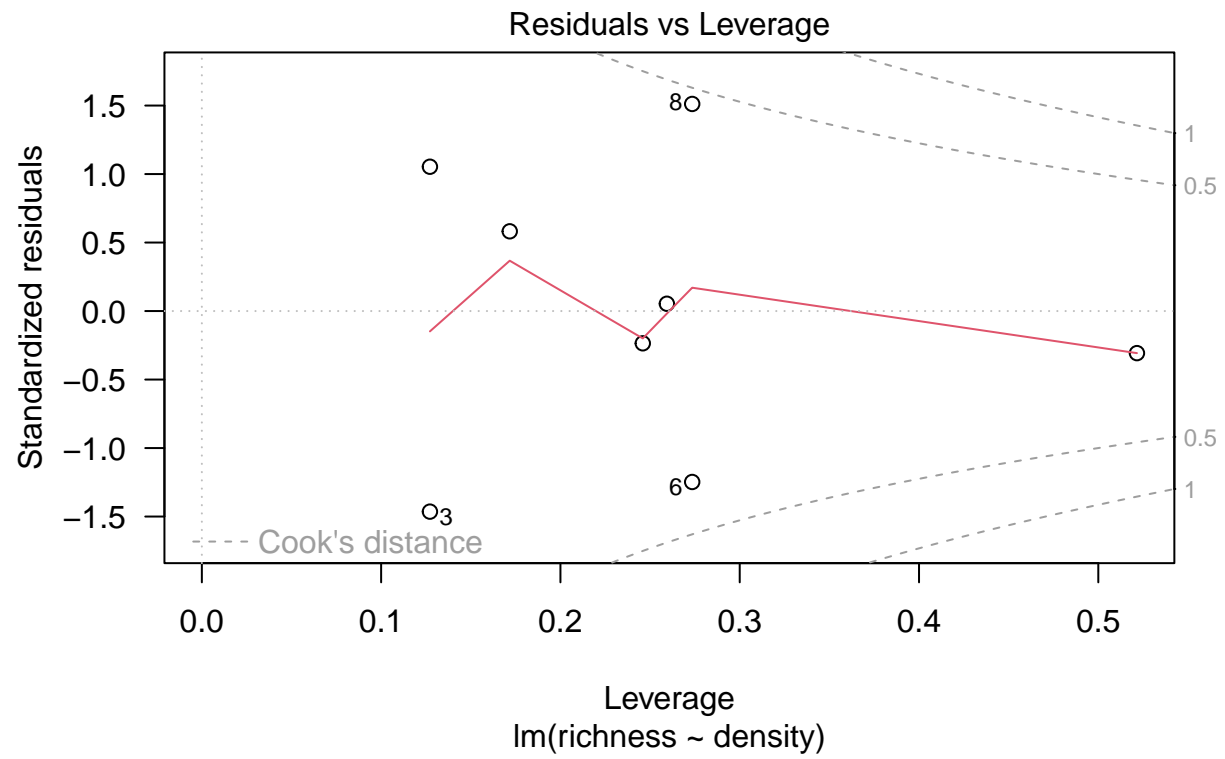


```
plot(regression, las = 1)
```









```
plot(dat$richness ~ dat$density, las = 1)
```

