Edgar Andersons's Iris Data

gamzekecibasvit

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Description

This famous (Fisher's or Anderson's) iris data set gives the measurements in centimeters of the variables sepal length and width and petal length and width, respectively, for 50 flowers from each of 3 species of iris. The species are *Iris setosa*, *versicolor*, and *virginica*.

Usage

iris

Format

iris is a data frame with 150 cases (rows) and 5 variables (columns) named:

- · Sepal.Length
- Sepal.Width
- · Petal.Length
- Petal.Width
- Species

Source

Anderson, Edgar (1935). "The irises of the Gaspe Peninsula." Bulletin of the American Iris Society, **59**: 2–5. Fisher, Ronald A. (1936). "The use of multiple measurements in taxonomic problems." Annals of Eugenics, **7** (Part II): 179–188.

Examples

We investigate the Sepal and Petal leaves for the three species in the Iris data:

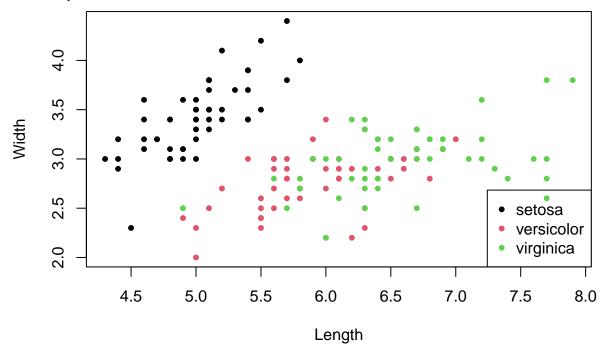
summary(iris)

```
Sepal.Length
                      Sepal.Width
                                       Petal.Length
                                                        Petal.Width
##
           :4.300
                            :2.000
                                              :1.000
##
    Min.
                     Min.
                                      Min.
                                                               :0.100
                                                       Min.
##
    1st Qu.:5.100
                     1st Qu.:2.800
                                      1st Qu.:1.600
                                                       1st Qu.:0.300
    Median :5.800
                     Median :3.000
                                      Median :4.350
                                                       Median :1.300
##
##
    Mean
           :5.843
                     Mean
                            :3.057
                                      Mean
                                             :3.758
                                                       Mean
                                                              :1.199
##
    3rd Qu.:6.400
                     3rd Qu.:3.300
                                      3rd Qu.:5.100
                                                       3rd Qu.:1.800
##
    Max.
           :7.900
                     Max.
                            :4.400
                                      Max.
                                              :6.900
                                                       Max.
                                                               :2.500
##
          Species
##
    setosa
               :50
##
    versicolor:50
##
    virginica:50
##
##
##
```

To examine the Sepal leaves, we select the length and the width:

```
llen <- iris$Sepal.Length
lwid <- iris$Sepal.Width</pre>
```

Then we plot the data:



We can also select the Petal leaves:

```
llen <- iris$Petal.Length
lwid <- iris$Petal.Width</pre>
```

This gives us the following plot

