

# Edgar Anderson's Iris Data

## 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  
iris3
```

## Format

`iris` is a data frame with 150 cases (rows) and 5 variables (columns) named `Sepal.Length`, `Sepal.Width`, `Petal.Length`, `Petal.Width`, and `Species`.

`iris3` gives the same data arranged as a 3-dimensional array of size 50 by 4 by 3, as represented by S-PLUS. The first dimension gives the case number within the species subsample, the second the measurements with names `Sepal L.`, `Sepal W.`, `Petal L.`, and `Petal W.`, and the third the species.

## Source

Fisher, R. A. (1936) The use of multiple measurements in taxonomic problems. *Annals of Eugenics*, **7**, Part II, 179–188.

The data were collected by Anderson, Edgar (1935). The irises of the Gaspé Peninsula, *Bulletin of the American Iris Society*, **59**, 2–5.

## References

Becker, R. A., Chambers, J. M. and Wilks, A. R. (1988) *The New S Language*. Wadsworth & Brooks/Cole. (has `iris3` as `iris`.)

## See Also

[matplot](#) some examples of which use `iris`.

## Examples

```
dni3 <- dimnames(iris3)  
ii <- data.frame(matrix(aperm(iris3, c(1,3,2)), ncol = 4,  
                           dimnames = list(NULL, sub(" L.", ".Length",  
                                                       sub(" W.", ".Width", dni3[[2]]))),  
                  Species = gl(3, 50, labels = sub("S", "s", sub("V", "v", dni3[[3]]))))  
all.equal(ii, iris) # TRUE
```