Rioja Test Cases

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Using Implemented Method

The inbuilt dataset RLGH(Diatom stratigraphic data) is used for showing clustering via constrained HAC method which is done by chclust function of Rioja Package. In the code

```
data(RLGH)
```

The distance Matrix is calculated by dist function of R, by default it calculates Euclidean Distance Metric

```
#diss is computed distance matrix of diatomic species relative abundance
diss <- dist(sqrt(RLGH$spec/100))
```

Using chclust function for Constrained hierarchical clustering by coniss method, and comparing the dispersion of a hierarchical classification to that obtained from a broken stick model using bstick

```
clust <- chclust(diss)
```

bstick function compares the dispersion of a hierarchical classification to that obtained from a broken stick model. Hence plotting variances of ordination axes/components and overlaying broken stick distributions
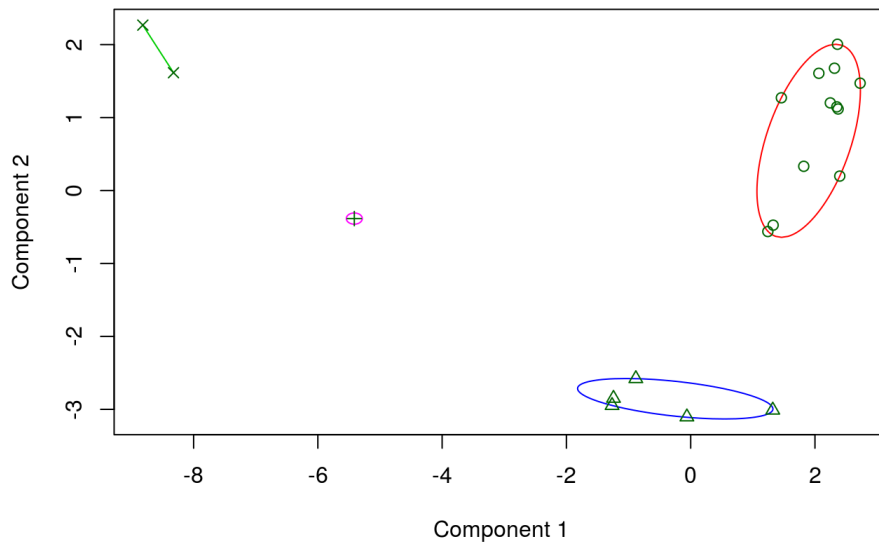
```
## This is rioja 0.9-9
```
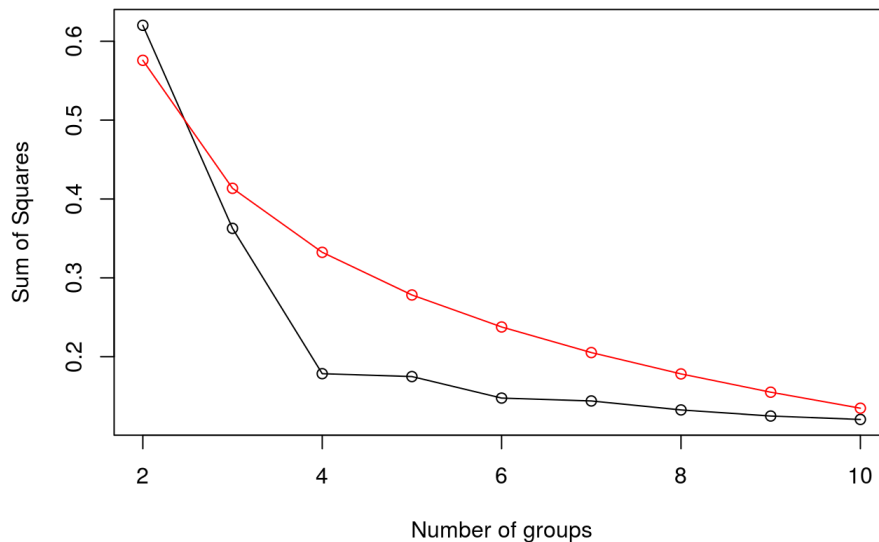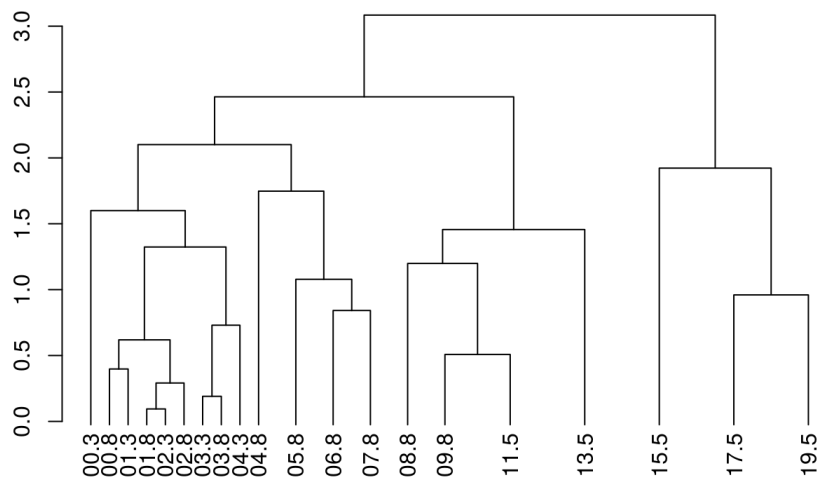
Plotting the dendogram diagram which we obtain after clustering, according to its distance.

CLUSPLOT(diss)

Component 1
These two components explain 75.81 % of the point variability.

Showing the Clusters we get using using the function hclust.

Hence this shows the Hierarchical clustering using the Rioja Package