Rpackage for the automatic estimation of the parameters of the Von Bertalanffy fish growth model

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Abstract

This is the abstract.

Introduction

This package was created as part of the training course "Good practices for reproducible research in digital ecology" co-organized by the Cesab of the FRB and the GDR EcoStat. It uses the model de Bertalanffy (1938).

Material and methods

Datasource. The data used comes from the website https://www.fishbase.in/home.htm.

Statistical methods. The Growth model of Von Bertalanffy is

$$Linf.(1 - exp^{-K*(a-to)})$$

with Linf = maximum size, a = fish age, K and t0 are fixed parameters.

Model was adjusted using the method described by Rafail (1973).

Results

```
## $y
## [1] "Estimated length (cm)"
##
## attr(,"class")
## [1] "labels"
```

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Discussion

Working with others on a project is much more complicated than working alone, but much faster.

References

Bertalanffy, L. von, 1938. A quantitative theory of organic growth (inquiries on growth laws ii). Human Biology 10, 181–213.

Rafail, S.Z., 1973. A simple and precise method for fitting a von Bertalanffy growth curve. Marine Biology 19, 354–358. doi:10.1007/BF00348907