

Length-weight relationship of *Barbatula barbatula* from Slovenia, sampled from 20.04.2010 to 30.07.2024 (n = 792, length range from 2.30 cm to 13.60 cm, specimen condition: mixed)

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- Data source: BIOS, Fisheries Research Institute of Slovenia
- Analysed on: 08.11.2024
- Country: SVN
- Species: *Barbatula barbatula*
- Length type: TL (biometry_id = 76)
- Season: combined
- Sex: mixed
- Specimen condition: mixed
- Sampled from: 20.04.2010
- Sampled to: 30.07.2024
- n: 792
- L min [cm]: 2.30
- L max [cm]: 13.60
- W min [g]: 0.10
- W max [g]: 29.00
- Data transformation: natural logarithm
- a: 0.0104492
- b: 2.9151557

Statistics - summary

Linear model:

```
##
## Call:
## lm(formula = ln_w_y ~ ln_l_x, data = data_clean)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.8502 -0.0998  0.0021  0.0825  0.8822
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  -4.5612     0.0268   -170    <2e-16 ***
## ln_l_x         2.9152     0.0151    193    <2e-16 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.158 on 790 degrees of freedom
## Multiple R-squared:  0.979, Adjusted R-squared:  0.979
## F-statistic: 3.71e+04 on 1 and 790 DF, p-value: <2e-16
```

ANOVA:

```
##              Df    Sum Sq    Mean Sq  F value Pr(>F)
## ln_l_x         1 930.87685 930.8768463 37118.38      0
## Residuals    790  19.81209   0.0250786      NA     NA
```

Visualization

