# Article information:

Applying length-based assessment methods to fishery resources in the Bay of Biscay and Iberian Coast ecoregion: Stock status and parameter sensitivity - ScienceDirect
<https://www.sciencedirect.com/science/article/abs/pii/S0165783621003258>

# Article summary:

1. This study applied two length-based methods, LBI and LBSPR, to assess the stock statuses of various species in the Bay of Biscay and the Iberian Coast ecoregion.

2. A sensitivity analysis was conducted on two important input parameters: L∞ (von Bertalanffy asymptotic average maximum body size) and M/k (ratio of natural mortality to von Bertalanffy growth rate).

3. The sensitivity analysis concluded that the variation/misspecification of both parameters had a considerable impact on the results given by both methods, with L∞ being more significant than M/k.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

This article is a comprehensive review of two length-based assessment methods used to evaluate data-limited stocks in the Bay of Biscay and theIberian Coast ecoregion. The article provides an in-depth analysis of how these methods can be used to assess stock statuses for various species, as well as a detailed sensitivity analysis on two important input parameters: L∞ (von Bertalanffy asymptotic average maximum body size) and M/k (ratio of natural mortality to von Bertalanffy growth rate). The article is well written and provides clear explanations for each step taken in the assessment process.

The article does not appear to have any biases or one-sided reporting, as it presents both sides equally and does not make any unsupported claims or omit any points of consideration. Furthermore, all evidence presented is supported by reliable sources such as ICES (International Council for the Exploration of the Sea), FAO (Food and Agriculture Organization), Froese et al., 2012, Hilborn et al., 2020, Carruthers and Hordyk, 2018, Chong et al., 2020, Hordyk et al., 2015a, Ault et al., 2005, Gedamke and Hoenig, 2006, Hordyk et al., 2015b , Mildenberger et al., 2017 , ICES 2015 , Rudd et al., 2019 .

The article also does not contain any promotional content or partiality towards either method; instead it provides an objective comparison between them based on their respective strengths and weaknesses. Additionally, possible risks associated with using these methods are noted throughout the article.

In conclusion, this article is trustworthy and reliable due to its comprehensive coverage of both length-based assessment methods used to evaluate data-limited stocks in the Bay of Biscay and theIberian Coast ecoregion.

# Topics for further research:

* Length-based assessment methods
* Data-limited stock assessment
* Von Bertalanffy asymptotic average maximum body size
* Natural mortality to von Bertalanffy growth rate
* Sensitivity analysis of length-based assessment methods
* Risk assessment of length-based assessment methods

# Report location:

<https://www.fullpicture.app/item/cbf61da90bd0be35757605d754b74e9b>