The R package TropFishR is a new analysis toolbox compiling single-species stock assessment methods specifically designed for data-limited fisheries analysis using length-frequency data. It includes methods for (i) estimating biological stock characteristics such as growth and mortality parameters, (ii) exploring technical aspects of the fisheries (e.g. exploitation rate and selectivity characteristics), (iii) assessing size and composition of a fish stock by means of virtual population analysis (VPA), and (iv) assessing stock status with yield prediction and production models.

This paper introduces the package and demonstrates the functionality of a selection of its core methods.

TropFishR modernises traditional stock assessment methods by easing application and development and by combining it with advanced statistical approaches.