Analysis of formulae for determination of seaweed growth rate

Abstract

The increasing demand for products derived from seaweeds has led to an increasing amount of research being directed towards studies related to their growth and productivity. Several investigators have attempted to develop different formulae for the estimation of growth rates and caused confusion to the readers. In this study, accuracy and reliability of the average growth rate formulae were analyzed using geometric progression theory and compared to each other. The lowest degree of error (0.023 %) and the highest matched point (61.90 %) was achieved by applying $[(Wt/W0)1/t-1]\times100 \text{ \%}$ in growth rate determination. This formula has been tested and proven to be the most accurate among all the currently available ones