

CHAPTER 11



HOW TO DATA FITTING YOUR EXPERIMENTAL DATA ON CROP GROWTH: STEP-BY-STEP GUIDE USING MYCURVEFIT

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INTRODUCTION

Plant growth analysis is now a widely used tool in various fields such as plant breeding, physiology, and ecology. Changes in a phenotype during the growth period can be modelled via growth curves, such as generalized logistic, logistic or Gompertz growth curves. Behaviour of the growth curves can change according to the living organisms, the phenotype to be studied and environment to which it is exposed. To be able to evaluate the growth data correctly, it is required to select a suitable growth curve and its parameters should be able to be interpreted biologically.

Table 11.1: Common Functional Forms Used for Plant Growth Modelling

Name	Form	Model $\left(\frac{dM}{dt}\right)$
Exponential		rM
Monomolecular		$r(K - M)$