

# Package ‘LogisticCurveFitting’

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**Type** Package

**Title** Logistic Curve Fitting by Rhodes Method

**Version** 0.1.0

**Description** A system for fitting Logistic Curve by Rhodes Method. Method for fitting logistic curve by Rhodes Method is described in A.M.Gun,M.K.Gupta and B.Dasgupta(2019,ISBN:81-87567-81-3).

**License** GPL-3

**Encoding** UTF-8

**RoxygenNote** 7.1.2

**NeedsCompilation** no

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**Repository** CRAN

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## Description

This function fits the Logistic Curve in population Data by Rhodes Method along with estimates of the parameters and predicted value.

**Usage**

```
rhodes.curve(p)
```

**Arguments**

`p` a numeric vector

**Details**

Suppose we have  $n$  observations from population size corresponding to  $n$  equivalent time points say, at  $t=0,1,\dots,n-1$ . Here we assume the Logistic law of population growth,  $p=L/(1+\exp(r*(\beta-t)))$ .

**Value**

`r.hat`, `L.hat`, `beta.hat` : the estimated values of the parameters  $r$ ,  $L$  and  $\beta$ .

`predicted.values` : the predicted values of  $p$

**Author(s)**

Arnab Roy, Debarghya Baul.

**Examples**

```
u=c(12, 15, 16, 18, 16, 21, 25, 27, 29, 30, 35, 36)
rhodes.curve(u)
```

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