Package 'ImVol'

January 20, 2025

Type Package

Title Volume Prediction of Trees Using Linear and Nonlinear Allometric Equations

Version 0.1.0

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Description Volume prediction is one of challenging task in forestry research. This package is a comprehensive toolset designed for the fitting and validation of various linear and nonlinear allometric equations (Linear, Log-Linear, Inverse, Quadratic, Cubic, Compound, Power and Exponential) used in the prediction of conifer tree volume. This package is particularly useful for forestry professionals, researchers, and resource managers engaged in assessing and estimating the volume of coniferous trees. This package has been developed using the algorithm of Sharma et al. (2017) <doi:10.13140/RG.2.2.33786.62407>.

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Encoding UTF-8

Imports stats, tidyverse, nls2, caret, ggplot2, dplyr, tidyr

RoxygenNote 7.2.1

Depends R (>= 2.10)

NeedsCompilation no

Repository CRAN

Date/Publication 2023-12-04 16:50:05 UTC

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ImVoL	*Volume Prediction of Trees Using Linear and Nonlinear Allometric Equations*

Description

Volume Prediction of Trees Using Linear and Nonlinear Allometric Equations

Usage

```
ImVoL(data)
```

Arguments

data   Datasets

Value

- results: Results

References

- Sharma, A., Gupta.R.K., Mahajan, P.K and Shilp. 2017.Volume Equation for Cedrus deodara in Kullu District of Himachal Pradesh. Indian Journal of Ecology . 44(6) : 781-784.http://dx.doi.org/10.13140/RG.2.2.33786.62407

- Tabassum, A., Jeelani, M.I.,Sharma,M., Rather, K R ., Rashid, I and Gul,M.2022. Predictive Modelling of Height and Diameter Relationships of Himalayan Chir Pine .Agricultural Science Digest - A Research Journal. DOI:10.18805/ag.D-555

Examples

```
library("ImVol")
data <- system.file("extdata", "data_test.csv", package = "ImVol")
Data<- read.csv(data)
Vol <- ImVoL(Data)
```

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