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MANUAL OF RESEARCH METHODS FOR CRUSTACEAN BIOCHEMISTRY AND PHYSIOLOGY

Issued on the occasion of the Workshop on CRUSTACEAN BIOCHEMISTRY AND PHYSIOLOGY jointly organised by the Department of Zoology, University of Madras and the Centre of Advanced Studies in Mariculture, Central Marine Fisheries Research Institute, field at Madras from 8 - 20 J me 1981



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orkshop on

central Marine Fishering Research Institute,
held at Madray from 3 - 20 June 1981

Manual of Research Methods for Crustacean Biochemistry and Physiology

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TESTS OF SIGNIFICANCE FOR REGRESSIONS *

25.1. 't' REGRESSION

This is a method of testing the significance of regression. Here we test whether the estimated value of slope(b) significantly deviates from zero. The 't' is calculated by the following formula.

$$t = b \sqrt{\frac{\sum x^2 - \frac{(\sum x)^2}{n}}{Sd^2}}$$

25.2. 'F' REGRESSION

The regression slopes of two dependent variables can be compared by F-test. The test for the difference (d) between two regression coefficients is given by the formula.

$$d = \frac{s_1^2 - b_2}{\sqrt{\frac{s_1^2}{\sum x_1^2 - \frac{(\sum x_1)^2}{n_1} + \frac{s_2^2}{\sum x_2^2 - \frac{(\sum x_2)^2}{n_2}}}}$$

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