

STUDIES ON TOTAL CORPUSCULAR AND PLASMA VOLUME IN RELATION TO BODY WEIGHT IN ATELEOSTEAN FISH, CLARIAS BATRACHUS (LINN.)

<http://anveshika.org/proceedings-of-the-zoological-society-of-india/wp-content/uploads/sites/2/2020/06/18-JUNE-2020.pdf>

July 1, 2020 · VOLUME 19 – ISSUE 1

APHSHA BANO¹, VIJAY KUMAR²

1 P.G. Department of Zoology, A. Islamia (P.G. College) Siwan-, 2 P.G. Department of Zoology, Z.A. Islamic (P.G.) College, Siwan (Bihar), BANO A, KUMAR V. STUDIES ON TOTAL CORPUSCULAR AND PLASMA VOLUME IN RELATION TO BODY WEIGHT IN ATELEOSTEAN FISH, CLARIAS BATRACHUS (LINN.): <http://anveshika.org/proceedings-of-the-zoological-society-of-india/wp-content/uploads/sites/2/2020/06/18-JUNE-2020.pdf>. Proceedings of the Zoological Society of India. 2020 Jul 1 [last modified: 2020 Jul 9]. Edition 1.

Abstract

Studies on total corpuscular and plasma volume in relation to body weight have been made in an air breathing siluroid fish *Clarias batrachus* (Linn) by Dye dilution technique using Evan blue (T-1824) for plasma volume and haematocrit method for corpuscular volume. Plasma and corpuscular volume per gram body weight decrease from lower to higher weight groups but become constant at 70 gram animals. The total plasma and corpuscular volume increase from lower to higher weight groups. They show the following relationship:

Body weight Vs. Plasma volume $\log Y = \log 0.0130 + 0.9227 \log W$

Body weight Vs. Corpuscular vol $\log Y = \log 0.0309 + 0.6000 \log W$

Plasmavol. Vs. Corpuscularvol. $\log Y = \log 0.5192 + 0.6479 \log W$

The coefficient of correlation between body weight Vs. Plasma volume, body weight Vs. corpuscular volume and between plasma volume Vs. corpuscular volume have been computed in be 0.9989, 0.9980 and 0.994 respectively. This shows high degree of correlation between all the foregoing parameters and sed

Key words

Plasma volume, *Clarias batrachus* (Linn).

[Download Full PDF](#)