

Dr. Basudev Mandal
M. Sc, Ph.D. FSAB.
Associate Professor



Department of Fishery Sciences
Vidyasagar University
Midnapore 721102 West Bengal

Date.....

Ref.....

TO WHOM IT MAY CONCERN

Certified that, the research work embodied in this thesis entitled "**BIOLOGY, CAPTIVE MATURATION AND BREEDING OF CHAMELEON DWARF, *Badis badis* (HAMILTON, 1822)**" is a compilation of the results of research work carried out by **Mrs. Mohua Dutta** (VU Registration No. 0980/Ph.D. (Sc.) on dated 24.11.2015) under my guidance and supervision. The results thereof have not been published by any other scientist/researcher.

This is also certified that, **Mrs. Mohua Dutta** has fulfilled all the requirements of the Vidyasagar University Ph. D. regulation for submission of the thesis. It is vouching that, there is no plagiarism and neither the thesis nor any part of it has been submitted for any other degree/diploma or any other academic award anywhere before.

I am pleased to forward this Ph. D. thesis for consideration of the award of the Degree of Doctor of Philosophy in Science under Vidyasagar University.

Date: 04.10.2020

Basudev Mandal

(Dr. Basudev Mandal)
Associate Professor and In-Charge
Department of Fishery Sciences
Vidyasagar University Midnapore - 721102
West Bengal, India