

**A STUDY ON THE BIOLOGY, ECOLOGY AND  
POPULATION OF FRESHWATER COPEPODS IN  
MUVATTUPUZHA RIVER BASIN, KERALA**

**Thesis submitted to  
Mahatma Gandhi University, Kottayam  
for the award of the Degree of Doctor of Philosophy  
in Zoology  
(Faculty of Science)**

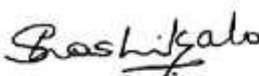
**By**

**Sasikala K. Joseph**

**February, 2014**

## DECLARATION

I do hereby declare that the thesis entitled, "**A Study on the Biology, Ecology and Population of Freshwater Copepods in Muvattupuzha River Basin, Kerala**" is an authentic record of original research carried out by me under the supervision and guidance of Dr. Shaju Thomas at the research centre in the Postgraduate Department of Zoology, CMS College, Kottayam, in partial fulfilment of the requirements for the degree of Doctor of Philosophy of the Mahatma Gandhi University and that no part of this thesis has formed the basis for the award of any degree, diploma or any other similar titles of any university.

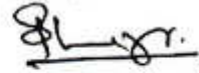
  
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## CERTIFICATE

I do hereby certify that the thesis entitled, "**A Study on the Biology, Ecology and Population of Freshwater Copepods in Muvattupuzha River Basin, Kerala**" is an original work carried out by Mrs. Sasikala K. Joseph, Associate Professor, Postgraduate Department of Zoology, Nirmala College, Muvattupuzha under my supervision and guidance in partial fulfilment of the requirements for the award of Doctor of Philosophy in Zoology. This work has not been submitted for any other degree or diploma earlier.



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24-02-2014



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