



ಮೈಸೂರು ವಿಶ್ವವಿದ್ಯಾನಿಲಯ  
UNIVERSITY OF MYSORE

# DEPARTMENT OF STUDIES IN ZOOLOGY

Manasagangotri Mysuru- 570 006



## Vision

To contribute to the growth and development of the basic and applied Zoological sciences through meaningful and productive teaching and research.

## Mission

Overall capacity building of students and researchers through teaching and research of global standards.

To develop skill-based constructive and critical thinking abilities among students and researchers on current issues of Zoological sciences.

To encourage interdisciplinary approaches in teaching, research and extension activities.

## Genesis

The University of Mysore established Department of Studies in Zoology during 1960 under the stewardship of late Prof. M.R. Rajasekara Setty along with late Prof. B.N. Bole Gowda and late Prof. M. Appaswamy Rao. Subsequently, Prof. N.B. Krishnamurthy, Prof. H.B. Devaraj Sarkar, Prof. Sreerama Reddy, Prof. L. Siddaveere Gowda, Prof. S. R. Kanakaraj, Prof. H.A. Ranganath, Prof. N.H. Gopal Dutt, Prof. S.N. Hegde, Prof. V.A. Vijayan have contributed to the growth of this Department and also served as Chairmen and have been instrumental in the overall development of the Department. In addition, Prof. N.V. Ashwathanarayana, late Dr. C.R. Puttanna, late Dr. K. Gopinath, late Prof. M. Edward Gururaj, Sri. N. S. Gangadhar, Sri. B. Humza Hussain, Prof. V. Vasudev, Prof. Prakash R. Naik, Prof. S.R. Ramesh, Prof. Sadanand M. Yamakanamaradi, Prof. H.N. Yajurvedi and Prof. N.B. Ramachandra have served and contributed in various capacities. At present, the Department has six faculty members, six guest lecturers, 50 research scholars, four technical staff and 15 non-teaching staff. The Department has gained international status and the alumni of the Department have occupied esteemed positions in different parts of the globe.

## Academic Programmes

1. **M.Sc., in Zoology** – 2 years, 4 semesters program under CBCS pattern.

**Eligibility** : Candidates with Bachelor's Degree in Science with Chemistry, Botany, Zoology, Biotechnology, Microbiology with an aggregate minimum of 55% (50% in case of SC/ST) or equivalent grade.

2. **Ph.D. (with course work) Research Areas** : Zoology and Genetics – Admission through University entrance examination or UGC/CSIR/NET/SLET/GATE pass.

3. **Wildlife Conservation – Massive Online Open Course**, MOOC by MHRD, New Delhi supported by UGC-EMMRC, University of Mysore. (Any graduate at UG or PG level can offer this course and earn 4 credits during their academic studies).

### Funding Agencies & Research Projects:

University Grants Commission – SAP Phase I, II and III, UGC-SAP-CAS-I, Department of Science and Technology – FIST Phase-I, Unit on Evolution, Council of Scientific and Industrial Research, Indian Council of Agricultural Research, Indian Council of Medical Research, Department of Atomic Energy, Defense Research Development Establishment, Nagarahole Conservation Society, Department of Science and Technology, Department of Biotechnology.

### Thrust Areas of Research:

**Biology of Reproduction** : Reproductive aspects of animals.

**Cytogenetics** :

**Genetics** : Inheritance pattern & Chromosomal analysis.

**Entomology** : Identification, analysis of pests and anthropogenic interference and conservation.

**Endocrinology** :

**Apidology** : Identification, status analysis and conservation of wild honeybees.

**Human Genetics** : Genetic disorders, counselling & management.

**Developmental Genetics & Neuroscience** : Brain development, neurodegeneration & drug discovery Stress Biology

**Chronobiology** : Circadian disruption and health issues.

### Research Output

Ph.Ds. Awarded : 210

M.Phil. Guided : 05

Publications : 1365

Sequences Deposited : 04

## Wallace Zoological Museum



Infrastructure established with grants from funding agencies Computer Facility

### Research Facilities

Microscopes with Digital video camera with amplifier, Spectrofluorometer, Stereomicroscopes, Binocular Microscopes, Flash Evaporator, Inverted Microscope, Digital Camera, Fluorescent Research Microscope with karyotyping software, Perkin-Elmer PCR, Table top high speed refrigerated centrifuge, Gel documentation system,

Pharmacia-Biotech DNA Sequencing Unit, Laminar Air Flow, Drosophila Activity Monitor, Biophotometer, Gradient PCR and Eppendorf Centrifuge etc. Computational and networking facilities, Departmental Library, well established animal house.



# RESEARCH LABORATORIES

1. Endocrinology & Reproductive Biology



2. Unit on Evolution Laboratory



3. Human Genetics Laboratory



4. Developmental Genetics Laboratory



5. Apidology Laboratory



6. Chronobiology Laboratory



7. Stress Biology Laboratory



**Motto :** To promote and support the use of *Drosophila* at all levels of teaching and research. *Drosophila* Stock Centre is a 'Pride Possession' of our Department. Having recognized the long history and the strength of the ongoing *Drosophila* research. Under the stewardship of Prof. H.A. Ranganath, this national facility for *Drosophila* stocks was established in 1990 with the help of funds granted by DBT. The founder team had Dr. S.N. Hegde, Dr. S.R. Ramesh and Dr. V. Vasudev as coordinators. Envisaging its importance, subsequently University of Mysore has taken over the establishment with the approval of Karnataka State Government. It is the first of its kind in South-east Asia.

## Objectives

1. To maintain germplasm bank of *Drosophila* species and mutants to support widespread use in education and research.
2. Conducting *Drosophila* conferences at national level to provide interactive platform for the researchers.
3. Conducting short term collaborative *Drosophila* based projects.
4. Conducting workshops and individual training programs.
5. Supplying about 500 National Research Institutes, all UG & PG Life Science Departments in Karnataka and other states on free cost.

Houses about 2000 live stocks of Genetic strains, 50 species and 25 transgenic stocks of *Drosophila*.

Visitors/year : 1500. Trainees / year : 30.

## DROSOPHILA STOCK CENTRE A NATIONAL FACILITY



## Animal House: Central Facility

- Established in 1999 with the funds granted by UGC, New Delhi and maintaining by UOM
- Approves and Supervises animal experiments on Swiss Albino Mice, Norwegian Albino Rats
- Non-obese Diabetic Mice and Rabbits.
- Provides experimental animal requirement for all PG Life Science Departments of UOM & Yuvaraja's College.
- Animals are supplied free of cost
- Student visitors / year : 250

Used for teaching and research purposes



## Insectarium

Established in 1999 with UOM grants.  
Maintains more than 100 species of  
insects in the wooden cages.

Promoting education and research by Zoologists, Botanist and other Life Science fraternity. Student visitors/year: ~200



## Endowments instituted

- Smt. H. K. Shamantha Rathna Gold medal , • Prof. L. Siddaveere Gowda memorial Gold Medal
- Dr. S. N. Hegde Gold medal , • Late Sri N. C. Narasima Iyengar & Smt. Ranganayakamma, Sri M. C. Krishnaswamy, Smt. Chokkamma and Smt Rukkamma Memorial Cash prize, • Prof. H.N. Yajurvedi Cash Prize
- Prof. N.B. Ramachandra Gold Medal

## Faculty Profile



**Dr. Shivabasavaiah** Ph.D, Professor  
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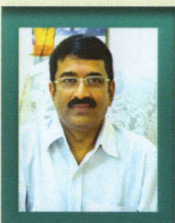
**Dr. B.V. Shyamala** Ph.D, Professor  
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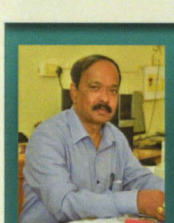
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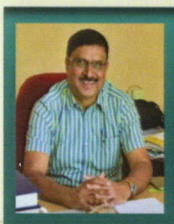
**Dr. S. Basavarajappa** Ph.D., PGDEE &  
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**Dr. T. Shivanandappa** Ph.D  
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**Specialization:** Reproductive Biology,  
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Toxicology and mode of action  
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## Future Plans

Consultancy services in insect identification. Counselling for the management of genetic disorders Extension activities to connect the Department and public regarding animal conservation. To collaborate with prestigious institutions to undertake cutting edge research. To equip the department for contemporary world class research.

## Contact:

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