



UNIVERSITAS GADJAH MADA
FAKULTAS BIOLOGI

Laboratory of Genetics and Breeding

The Laboratory of Genetics and Breeding supports teaching and research in genetics, molecular biology, and organism breeding. Equipped with modern instruments, it provides facilities for developing technical competencies, applying scientific methods, and fostering innovations in genetics, and sustainable resource management. In recognition of its quality and reliability, the laboratory has been officially accredited by the National Accreditation Committee (KAN), enabling it to provide KAN-accredited laboratory services and laboratory instrument services to support academic, research, and applied scientific activities.



Lecturers



Prof. Dr. Budi Setiadi Daryono,
M.Agr.Sc.
Genetics and Breeding
Email : bs_daryono@ugm.ac.id



Prof. Dr. Dra. Tuty Arisuryanti,
M.Sc.
Population Genetics
Email : tuty-arisuryanti@ugm.ac.id



Prof. Dr. Niken Satuti Nur Handayani,
M.Sc.
Molecular Genetics
Email : niken_satuti@ugm.ac.id



Ganies Riza Aristya., S.Si., M.Sc.,
Ph.D.
Genetics Engineering
Email : ganies_riza@ugm.ac.id



Indra Lesmana., S.Si., M.Sc.
Medical Genetics
Email : indra.lesmana@ugm.ac.id



Main Laboratory Equipment



Polymerase Chain
Reaction (PCR)
Photo: Faculty of Biology



Eporator
Photo: Muslifah H



Thermal Cycler
Photo: Muslifah H



Refrigerated
Centrifuge
Photo: Muslifah H



Spektrofotometer NanoDrop
Photo: Muslifah H



Mini centrifuge
Photo: Muslifah H



Dry Bath
Photo: Muslifah H



Ultrasonic Cleaner
Photo: Muslifah H



Orbital Shaker Incubator
Photo: Muslifah H

Others:

- Vortex
- DNA Electrophorator
- Spin down
- Analytical Balance
- Biological Safety Cabinet (BSC)



Source : Canva (Stock Image)



Scope of Expertise

- ✓ Basic Genetics
- ✓ Cytogenetics
- ✓ Molecular Genetics
- ✓ Population Genetics
- ✓ Genetics and Breeding
- ✓ Genetics Engineering
- ✓ Medical Genetics



Research Topics

- ✓ Genetics Disorders in Human
- ✓ Human Genetics
- ✓ Thalassemia
- ✓ Molecular characterization of plant diseases
- ✓ Molecular and phylogenetic marker
- ✓ Plant endurance-gene inheritance cluster
- ✓ Genetics diversity of aquatic living resources
- ✓ Genetics
- ✓ Molecular Genetics
- ✓ Engineering Genetics



Courses offered for doctoral programme

- ✓ Plant and Animal Breeding
- ✓ Molecular Systematics
- ✓ Cell and Molecular Genetics
- ✓ Applied Genetic Engineering
- ✓ Population Genetics and Conservation



Public Service

- ✓ Plant Chromosome Analysis
- ✓ Genetic Uniformity Analysis
- ✓ DNA Barcoding Analysis in Plants and Animals