

The background of the slide is a scenic landscape. In the foreground, there are several trees with green and reddish-orange foliage. In the middle ground, there are rolling green hills or fields. In the background, there are large, dark mountains silhouetted against a bright, hazy sky. The sun is low on the horizon, creating a warm, golden glow across the sky and the landscape. The overall atmosphere is peaceful and serene.

An IRRIplaceable Summer:
A Recap of our Internships at the
International Rice Research
Institute

Rice Science for a Better World

International Rice Research Institute

Reducing Poverty

Tackling Climate Change

Protecting the Environment

Making Rice Healthier

Increasing Food Security



Planting (Ft. Gretchen the water buffalo)



C₄ Rice

Converting C₃ to C₄

Analyzed genes and proteins

polymerase chain reaction

western blots



Entomology

- Insect sorting
 - Insects and spiders collected from various field sites
 - Separate by order, genus, species
- Independent project
 - Does the presence of flowering plants increase lifespan of the genus *Oligosita*?
 - The wasps eliminate rice pests



Genetics and Biotechnology



Genetic Transformation Laboratory

Genome Editing-Iron Biofortification of Rice

Polymerase Chain Reaction (PCR)

Gel Electrophoresis

DNA Cloning



Genetics and Biotechnology

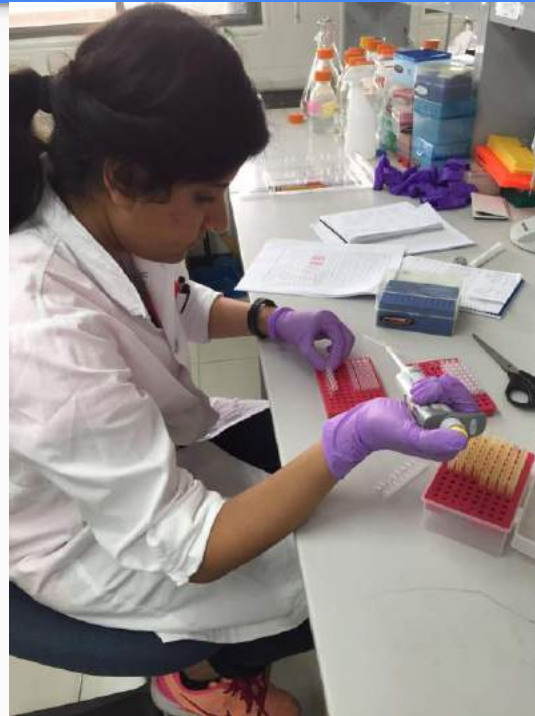
Incorporate Zinc in
endosperm

Constructs

PCR

Cloning

DNA extraction and
purification



Plant Pathology

- Genetics and Biotechnology Division
- UPLB - NIR spectroscopy Project
 - Detect pathogen in individual seeds
- Heirloom Rice Project
- Rice microbiome
- Bacterial Blight Resistance
 - PCR



Plant Breeding

Weed Competitive Ability In Rice Plants

Planting 14,400 seedlings

180 varieties

Weedy vs. Non-weedy condition

Data Collection

Plant height

7 day cycle for 4 weeks





