#### **BACKGROUND**

Statistics is a vital tool for research and academic organizations to design, implement, and interpret the results coherently and logically. It lends credibility to a researcher's data and enables the policymakers to draw correct quantitative inferences from the solid firmament of statistically analyzed data to make decisions for nationbuilding measures. The knowledge of biometrical techniques aids scientists to apply statistical procedures in biological research. In this scenario, the trend of reliance on precise data generated from well-designed experiments is increasing day by day which calls for equipping the researchers and academicians with the latest skills and software tools for this subject. The workshop being organized by NIAB, Faisalabad is aimed to achieve this objective with a vision to upscale the know-how of the participants so that they can feel more facilitation and confidence in designing the experiments and data analysis.

# **Workshop Outline**

The workshop programme is aimed at the use of:

- The appropriate use of statistical methods and design
- Regression and correlation analysis
- Introduction to R software and principal component analysis
- Cluster analysis and visualization of correlation in R software
- Experimental design and data analysis using R software
- Biometrical techniques in agriculture and biology
- Quantitative genetics and estimation of genetic parameters

- Estimation of radio sensitivity in crop plants
- Introduction to data analytics

#### HOST ORGANIZATION

Nuclear Institute for Agriculture and Biology (NIAB), is a specialized institution of PAEC that aims to understand the problems faced by the country's agriculture, find solutions, and transform the research findings into useable packages of technology for the stakeholders. Since its establishment in 1972, the institute has been playing a vital role in the improvement of national agricultural productivity. NIAB is committed to developing high-yielding crop varieties tolerant to stresses, devising better plant protection measures, conserving & improving soil, water and environment, enhancing animal health and production, providing research services and developing trained human resources using nuclear and other advanced techniques to satisfy the end users.

#### **SCHEDULE**

# **Receipt of Applications**

Duly filled Application form along with copy of CNIC and two passport size photographs must reach the organizer by August 22, 2025. Application form can be downloaded from NIAB website (www.niab.org.pk). An advance copy of application (scanned) may be sent by email (jafar@niab.org.pk)

## **Registration Fee**

Reg. fee will be charged at registration desk:

Professionals: Rs. 4000/-Students: Rs. 2000/-

#### **Eligibility**

Researchers, students, academicians, and professionals in agricultural and biological sciences with an interest in data analysis are eligible. The selected candidates will be informed by August 26, 2025.

#### TRAVEL AND ACCOMMODATION

Participants are required to make their own arrangements for travel and accommodation.

#### **PATRON-IN-CHIEF**

Dr. Raja Ali Raza Anwar, HI, SI, PoP, Chairman, PAEC

#### **PATRON**

Dr. Masood Iqbal, CS/Member (Science), PAEC Dr. M. Yussouf Saleem, CS/DG Agri. & Biotech.

#### **ORGANIZING COMMITTEE**

Dr. Uzma Maqbool, DCS/Director NIAB Prof.Dr. M. Kashif Riaz Khan, DCS/Head PBGD

Dr. Naeem Ahmad, DCS/Head TSD

Prof. Dr. M. Jawad Asghar, PS

Mr. Jafar Hussain, PS

Mr. M. Arfan Tahir, Head Admin

Mr. Sajid Azmat, Head LAO

#### FOR FURTHER INFORMATION

Mr. Jafar Hussain, PS/Organizer

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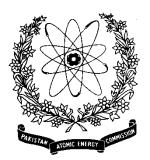
E-mail: jafar@niab.org.pk

Website: http://www.niab.org.pk

### **APPLICATION FORM**

# 2<sup>nd</sup> Training Workshop on "Statistical and Biometrical Techniques Used in Agricultural and Biological Sciences", 01-03 September, 2025

Name (Dr./Mr./Ms.):									Photo			
Father's Name:												
CNIC No.												
		-								-		
Qualification Name of Institution/Orga					nization Designation					nation		
Mailing Address Phone												
					E-mail							
Signature of the Applicant				Ke	Recommendation of Head of Institute/Department							
Recommended by Course Organizer					Approved by Director NIAB							



2<sup>nd</sup> Training Workshop on

# Statistical and Biometrical Techniques used in Agricultural and Biological Sciences

01 - 03 September, 2025



Organized by

Nuclear Institute for Agriculture and Biology (NIAB), Faisalabad

**PAKISTAN ATOMIC ENERGY COMMISSION**