



B. A. COLLEGE OF AGRICULTURE
ANAND AGRICULTURAL UNIVERSITY
ANAND- 388 110 (GUJARAT)



Two Day, National Seminar on Experimental Designs in Agricultural Research Organized under BACA, Platinum Jubilee Celebration and NAHEP-CAAST on June 23-24 , 2022

As a part of platinum jubilee celebration of Bansilal Amrutlal College of Agriculture (BACA), Two Day, National Seminar on Experimental Designs in Agricultural Research was organized on June 23-24, 2022 in collaboration of National Agricultural Higher Education Project (NAHEP) and Department of Agricultural Statistics, BACA at the auditorium of College of Food Processing Technology and Bio Energy, Anand Agricultural University, Anand.

The seminar was inaugurated by lightening of lamp by Dr K B Kathiria, Hon'ble Vice-chancellor sir of Anand Agricultural University and president of the event, Dr M K Jhala Hon'ble Director of Research and Dean PG Studies, Invited guest Dr N M Patel Ex Principal, BACA, Dr N I Shah, I/C Principal and Dean, BACA, Dr R S Pundir Principal, IABMI and Dr A D Kalola, Professor and Head, Department of Agricultural Statistics, BACA. Dr A D Kalola welcomed everyone in his welcome speech.

In the presidential address Dr K B Kathiria, stressed on experimental designs and statistics in research related to development of various varieties, students' research and university research.

Dr M K Jhala focused on the contribution of the students of Department of Agricultural Statistics at national level and welcomed all the participants.

Dr R S Pundir, Convener of the seminar, related statistics to Market Intelligence and its importance to students and farmers.

Dr Y A Lad, Associate Professor, IABMI, offered a formal Vote of Thanks, Dr D J Parmar, Organizing Secretary of the Seminar, presented the report of the seminar. The program was anchored by Dr Prity Kumari, Asst. Professor, College of Horticulture.

Dr N M Patel delivered the keynote address on "Experimental Error" in the inaugural session with his vast experience. By giving live examples, he stressed on various sources of experimental error and the ways to overcome the same.

In the technical session I, Dr H R Pandya, Retd. Professor and Head, Department of Agricultural Statistics, NMCA, Navsari Agricultural University, Navsari explained “Basic Principles and Overview of Experimental Designs”. He explained all the basic designs like, CRD, RBD, LSD etc. in details. He also explained Missing Plot Techniques, Principles of Field Experimentation, Transformation etc.

In the technical session II, Dr P R Vaishnav, delivered a talk on “Concept of Factorial and Pooled Analysis”, he explained various designs with factorial concept such as, CRD, RBD, LSD etc. He also explained 2^2 , 2^3 and 3^2 factorial experiments, Split-plot and Strip-plot designs. Further, he explained the Concept of Pooled Analysis with and techniques to interpret results in all cases.

In the technical session III, Dr J S Patel, Retd. Professor and Head, Department of Agricultural Statistics, BACA, Anand Agricultural University explained “Statistical Approach in Genetic and Plant Breeding Designs” wherein, he explained various fixed, random and mixed effect models. He also explained GCV, PCV, Heritability, GA, Covariance, Co-heritability, ANCOVA, Genetic Correlation, Phenotypic Correlation, Compact Family Block Designs, Augmented Designs, IBD, BIBD, PBIBD, VBD, Generation Mean Analysis, LXT, Diallel, NCD I,II and III, etc. in details through various examples.

In the technical session IV, Dr Srinivasa Rao Valturi, Professor and Head, Statistics and Computer Applications, Acharya N G Ranga University, Andhra Pradesh, delivered a session on “Univariate, Bivariate and Multivariate Techniques”. He gave a brief introduction to assumptions, correlation, simple and multiple regression, logistic regression, ANOVA, Post-hoc tests, Conjoint Analysis, Factor Analysis, PCA, Path Analysis etc.

In the technical session V, Dr Sankalpa Ojha, Uttarbanga Krishi Vishwavidhyalaya, West Bengal, delivered a talk on “Parametric and Non-parametric Tests”. He narrated constraints in tests, test of randomness, median test, Wilcoxon Signed Rank Test, Small Sample Test, Man-Whitney U Test, Chi-squared test etc. with examples.

Dr D J Parmar, Associate Professor, Department of Agricultural Statistics, BA College of Agriculture, AAU delivered a practical session on various statistical applications on “Overview of Statistical Software: SAS, SPSS and R”. In this session he explained various statistical software with live examples.

The seminar was attended by about 200 PG students and 50 faculty members from Gujarat and other states.

