Department of Mathematics & Statistics

Dr. D.R. Aneja,
Scientist (Statistics)

Address:

Office: Department of Mathematics and Statistics,
CCS Haryana AgriculturalUniversity, Hisar – 125004

Residence: H.No. 489, Sector 15A,
Hisar – 125001 (Haryana)
Phone: 01662-243617
Mob.: 09813776060

Email: draneja@hau.ernet.in

Academic Qualifications:

B.Sc. (Non-Medical), M.Sc. (Statistics), Ph.D. (Statistics)

Professional Experience:

Designation	Date of joining	Date of leaving	Nature of duties performed
Scientist (Statistics)	19.04.1999	To-date	Research/Teaching
Asstt. Scientist (Selection Grade)	01.01.1996	18.04.1999	Research/Teaching
Asstt. Scientist (senior scale)	17.08.1990	31.12.1995	Research/Teaching
Asstt. Scientist	30.10.1982	16.08.1990	Research/Teaching
Research Associate	12.05.1980	23.07.1980	Research/Teaching

Academic Interests:

(i) Determination of Field plot technique – estimation and forecasting of yields of major crops of Haryana.

(ii) To develop suitable models for predicting the yield in relation to weather and biometrical characters.

(iii) To provide statistical consultation to the researchers/students of the university.

(iv) Construction and analysis of incomplete block designs for diallel and partial diallel crosses.

(v) Analysis of double cross mating designs using combining ability approach.

Research Highlights:

1. Statistical models were developed for wheat crop using weekly weather data viz. minimum and maximum temperature, rainfall, R.H. (morning and evening), bright sun shine hours and average productivity of wheat crop at Hisar using 20 years (1981-2000) data.

2 Models were developed for cotton crop in Hisar district in terms of artificial generated variables and yield assessment was made there from. The 20 years data (i.e. from 1981 to 2000) on cotton yield and weather parameters.

3. Analysis of double class hybrids for fixed effect model using combining ability approach has been given.

4. Methods of construction and analysis of truncated double crosses and partial tetra allel crosses (PTAC) using BIB & PBIB Designs.

5. Incomplete block designs for diallel and partial diallel crosses have been provided.

6. A three state Markov Chain Model for rainfall occurrence has been developed. Expressions for various aspects of rainfall viz., expected lengths of wet, semi-wet and dry spells have been derived.

7. PDC plans for varying mating applications (5-12) in partial diallel crosses have been provided.

National and International Exposure:

a) Trainings Attended:

i) Training in Computer Fundamentals and Programming, Deptt. of Math. & Stat. in collaboration with ECIL

ii) Training Course on Design and Analysis of Field Experiments, Indian Agricultural Statistics Research Institute, New Delhi.

iii) Faculty Development Programme in Educational Technology, AAREM, CCSHAU, Hisar.

iv) Refresher Course on Design and Analysis of Agricultural Experiments, AAREM in collaboration with Department of Math. & Stat., CCS HAU, Hisar.

v) Refresher Course on Research Management, AAREM, CCSHAU, Hisar

b) Trainings Organized:

i) Dissemination Workshop on the conclusion of ICAR funded project entitled "To obtain optimal plans for partial diallel crosses and to prepare software package for important mating designs," from 28-30 October, 2003 in the department of mathematics and statistics, CCS HAU Hisar.

ii) Worked as a Co-ordinator in the ICAR sponsored workshop on "Mating Designs for Breeding Experiments" organised by AAREM from 2-11 August, 2004. Also delivered five lectures in this training.

iii) Resource person for various trainings in Statistics organised by the Department of Mathematics and Statistics and AAREM.

c) Conferences Attended:

i) Forty Third Conference of Indian Society of Agricultural Statistics held in the Department of Mathematics and Statistics, HAU, Hisar, 1989.

ii) National Seminar on perspective planning for Agril. Development-2000 A. D. held at HAU Hisar.

iii) Second Annual Conference of Indian Society of Information Theory and its Applications and National Symposium in Statistics held at CCS HAU, Hisar, 1997.

iv) First Annual Conference of Society of Statistics Computer and Applications held at CCS HAU, Hisar, 1998.

v) Fifth Annual Conference of Society of Statistics Computer and Applications held at Udaipur, 2003.

vi) Fifty Seventh Annual Conference of Indian Society of Agricultural Statistics held at G.B. Pant University of Agriculture and Technology, Pantnagar, 2004.

vii) Seventh Annual Conference of Society of Statistics Computer and Applications held at Lord Venketeswara College New Delhi, 2005.

viii) Eleventh Annual Conference of Society of Statistics Computer and Applications held at University of Madras, Chennai, 2009.

Awards and Honours:

i) Placed in Merit list of Board of School Education Haryana in Matriculation Examination.

ii) Placed in Merit list of Kurukshetra University B.Sc. Examination.

iii) Awarded Merit Certificate in M.Sc.

iv) A software **"Statistical Package for Mating Designs (SPMD)"** has been given copyright by **National Research Development Corporation, New Delhi**, 2005.

v) Received **Certificate of Honour** from HAUTA in recognition to publishing of manuals/course compendium during 2004-07.

Professional Affiliations:

1. Life Member of Indian Society of Agricultural Statistics, New Delhi.
2. Life Member of Society of Statistics, Computers and Applications.
3. Life Member of Society of Applied Statistics and Computer Science.

Professional/other responsibilities held:

1. Worked as Executive Member of Society of Statistics Computer and Applications for three years (2003-05).
2. Worked as a Co-PI in ICAR funded research scheme (2001-03)
3. Worked as a Course Co-Ordinator in ICAR sponsored short course on 'Mating Designs for Breeding Experiments' organized by AAREM.

Books/Manuals Published:

i) Fundamentals of Economic Statistics, Agrotech Publishing Academy, Udaipur.

ii) Manual on Mating Designs, Department of Math & Stat. CCS HAU, Hisar, 2003.

iii) Mating Designs for Breeding Experiments. Course compendium, Academy of Agricultural Research and Education Management, CCS HAU, Hisar.

iv) Research Bulletin "Statistical Models for Pre-Harvest Estimation of Cotton Yield", Department of Math & Stat. CCS HAU, Hisar, 2007.

v) Working Manual for Statistical Package for Mating Designs. Department of Mathematics and Statistics, CCS HAU, Hisar, 2003.

Important Publications:

1. Statistical Package for Mating Designs(SPMD). Copyright/Patent by National Research Development Corporation, New Delhi, 2005.
2. Markov Chain Model for Rainfall Occurrence. Jour. Ind. Soc. Agril. Stat **52**(2) **:** 169-175.
3. Incomplete block designs for circulant partial diallel crosses. Environment and Ecology **25**(3) : 629-35.
4. Comparison of efficiency of various designs on PDC. Recent Advances in Mating Designs. Edited book by Kaushik and Hasija, Dhanpat Rai & Co. Delhi: pp 6.1-6.29.
5. Pre-harvast cotton yield based on plant biometrical characters. Proceeding of the workshop on remote sensing and GIS for rural development with special reference to Haryana, 2003.
6. Plans for truncated double crosses. Recent Advances in Mating designs. Edited book by L.S. Kaushik and R.C. Hasija. Dhanpat Rai and Co. Delhi : pp 18.1.-18.11.