

List of Publications

PUBLICATIONS Research Papers Published

- Agrawal, Ranjana and Mehta, SC (2007). [Weather based forecasting of crop yields, pests and diseases -IASRI models](#). *J. Ind. Soc. Agril. Statist.*, **61(2)**, 255-263.
- Ahuja, Sangeeta, Malhotra, PK, Bhatia, VK and Parsad, Rajender (2008). [Statistical package for agricultural research \(SPAR 2.0\)](#). *J. Ind. Soc. Agril. Statist.*, **62(1)**, 65-74.
- Arora, Alka, Sharma, SD, Malhotra, PK and Goyal, RC (2008). [Agricultural statistician network \(ASN\)](#). *J. Ind. Soc. Agril. Statist.*, **62(1)**, 49-55.
- Arora, Alka, Upadhyaya, Shuchita and Jain, Rajni (2009). [Integrated approach of reduct and clustering for mining patterns from clusters](#). *Info. Tech. J.*, **8(2)**, 173-180.
- Chaturvedi, KK, Rai, Anil, Dubey, Vipin and Malhotra, PK (2008). [Online analytical processing in agrculture using multidimensional cubes](#). *J. Ind. Soc. Agril. Statist.*, **62(1)**, 56-64.
- Dahiya, Shashi, Chowdhury, RK, Mathur, DS (2006). [A web enabled networking of national seed project \(Crops\)](#). *Ann. Agril. Res.*, **27(2)**, 203-204.
- Dahiya, Shashi, Vats, MR, Dixit, Anshu and Sehgal, DK (2008). [A web based information system for long term fertilizer experiments in India](#). *J. Ind. Soc. Agril. Statist.*, **62(3)**, 76-82.
- Dey, Amitava, Ghosh, Himadri and Sharma, VK (2008). [Prediction for seemingly unrelated regressions with autocorrelated errors](#). *J. Ind. Soc. Agril. Statist.*, **62**, 34-41.
- Dwivedi, Lokesh, Varghese, Cini and Jaggi, Seema (2008). [Factorial change-over designs balanced for one factor](#). *Int. J. Stat. Sys.*, **3(2)**, 137-145.
- Ganguly, S, Anupama, Kumar, A and Parmar, BS (2008). [Nemagel -A formulation of the entomopathogenic nematode, *Steinernema thermophilum* mitigating the shelf life constraint of the tropics](#). *Nematologia Mediterranea*, **36**, 125-130.
- Ghosh, H, Iquebal, MA and Prajneshu (2008). [A bootstrap study of variance estimation under heteroscedasticity using genetic algorithm](#). *J. Statist. Theo. Prac.*, **2**, 55-69.
- Ghosh, H, Singh, RK and Prajneshu (2008). [Possibilistic linear regression analysis with fuzzy response variable for crop yield estimation](#). *Cal. Stat. Assoc. Bull.*, **60**, 123-44.
- Gupta, VK (2008). [Orthogonal arrays and their applications](#). *J. Ind. Soc. Agril. Statist.*, **62(1)**, 1-18.
- Gupta, VK, Parsad, Rajender, Bhar, LM and Kole, Basudev (2008). [Supersaturated designs for asymmetrical factorial experiments](#). *J. Statist. Theo. Prac.*, **2(1)**, 95-108.
- Gupta, VK, Parsad, Rajender, Kole, Basudev and Bhar, Lal Mohan (2008). [Computer-generated construction of efficient two level supersaturated designs](#). *J. Ind. Soc. Agril. Statist.*, **62(2)**, 183-194.
- Jha, Iti, Deb, Dibyendu, Malhotra, PK, Parsad, Rajender, Bhatia, VK and Ahuja, Sangeeta (2008). [AMMI, SREG and FREG models for stability analysis in SPAR 2.0](#). *J. Ind. Soc. Agril. Statist.*, **62(3)**, 283-288.

- Kankure, Ajay and Rai, Anil (2007). [Spatial ranked set sampling from spatially correlated population](#). *J. Ind. Soc. Agril. Statist.*, **61(3)**, 389-399.
- Kaul, Sushila and Ram, Ghasi (2008). [An assessment of climate change rice production in India](#). *Agri Situ. Ind.*, **65(6)**, 413-15.
- Kaur, Rajinder, Kumar, Pramod, Sharma, VK and Tomar, RS (2007). [Enhancing net return through intensification and diversification of rice varieties based crop sequences](#). *Asia Pacific J. Environ. Dev.*, **14(1)**, 65-79.
- Kumar, Bhupender, Rakshit, Sujay, Singh, RD, Gadag, RN, Nath, Ravindra, Paul, AK and Alam, Wasi (2008). [Genetics diversity of early maturing Indian maize \(*Zea mays L.*\) inbred lines revealed by SSR markers](#). *J. Plant Biochem. Biotech.*, **17**, 364-368.
- Kumar, Suman, Hooda, BK, Jaggi, Seema and Singh, Rajendra (2008). [Use of dummy variables for investigating structural stability in fertilizer-yield response models](#). *Ind. J. Agril. Sci.*, **78(2)**, 183-186.
- Lal, Krishan, Parsad, Rajender and Gupta, VK (2007). [Trend-free nested balanced incomplete block designs and designs for diallel cross experiments](#). *Cal. Stat. Assoc. Bull.*, **59(237-238)**, 203-221.
- Mandal, BN, Parsad, Rajender and Gupta, VK (2008). [Computer aided construction of balanced sampling plans excluding contiguous units](#). *J. Statist. Application*, **3(1)**, 59-85.
- Mandal, BN, Parsad, Rajender, Gupta, VK (2008). [IPPS sampling plans excluding adjacent units](#). *Comm. Statist. – Theory Methods*, **37(16)**, 25322550.
- Mandal, BN, Parsad, Rajender, Gupta, VK and Sud, UC (2008). [Nested stratified sampling](#). *Model Asst. Statist. Appl.*, **3(3)**, 211-223.
- Mandal, BN, Prasad, Rajender, Gupta, VK and Sud, UC (2009). [A family of distance balanced sampling plans](#). *J. Statist. Plann. Inf.*, **139**, 860-874.
- Mondal, K, Sugha, SK and Bhar, LM (2008). [Antibacterial potential of panchagavya-based microbes against bacterial wilt of tomato](#). *Ind. Phytopatho.*, **61**, 354-355.
- Nisar, K, Kumar, Jitendra, Kumar, MB Arun, Walia, Suresh, Shakil, Najam A, Parsad, Rajender and Parmar, Balraj S (2009). [Pesticidal seed coats based on azadirachtin-A: Release kinetics, storage life and performance](#). *Pest. Manage. Sci.*, **65(2)**, 175-182.
- Pateria, Dinesh Kumar, Jaggi, Seema, Varghese, Cini and Das, MN (2007). [A series of incomplete non-circular block designs for competition effects](#). *Statist. Appl.*, **5(1-2)**, 5-14.
- Prabhakaran, VT and Rao, AR (2008). [A new approach to the estimation of variance of sample heritability from full-sib analysis](#). *J. Ind. Soc. Agril. Statist.*, **62**, 208-213.
- Prajneshu (2008). [Fitting of Cobb-Douglas production functions: Revisited](#). *Agril. Eco. Res. Rev.*, **21**, 289-292.
- Rai, Anil, Dubey, Vipin, Chaturvedi, KK and Malhotra, PK (2008). [Design and development of data mart for animal resources](#). *Comp. Electron. Agric.*
- Rai, Anil, Sharma, SD, Sahoo, Prachi Misra and Malhotra, PK (2008). [Development of livelihood index for different agro-climatic zones of India](#). *Agril. Eco. Res. Rev.*, **21(2)**, 173-182.
- Ramasubramanian, V (2008). [Role of statistics and information technology in bioinformatics](#). *Current Biotica*, **2(1)**, 114-116.
- Sarkar, Ananta, Parsad, Rajender, Rathore, Abhishek and Gupta, VK (2007). [Efficient block designs for microarray experiments](#). *J. Ind. Soc. Agril. Statist.*, **61(2)**, 227-248.

- Sarkar, Susheel Kumar and Lal, Krishan (2008). **Profile analysis for animal growth data**. *Ind. J. Anim. Sci.*, **78**, 401-405.
- Sethi, S, Samuel, DVK and Lal, Krishan (2008). **Inter-relationship between cooking time and some physico-chemical characteristics in pigeon pea (*Cajanus Cajan*) genotypes**. *J. Agric. Engg.*, **45(2)**, 62-65.
- Singh, Gyan, Kaur, Rajinder and Kumar, Anil (2008). **Sustainable production management for rice-wheat cropping system**. *J. Farm. Sys. Res. Dev.*, **14(1)**, 56-59.
- Singh, Okendro N, Wahi, SD and Paul, AK (2008). **Optimum sample size for estimating the precision of heritability by parent-offspring regression**. *J. Genet. Evol.*, ICFAI University, **1(1)**, 28-35.
- Singh, Rama Krishna, Prajneshu and Ghosh, Himadri (2008). **A two-stage fuzzy least squares procedure for fitting linearized von Bertalanffy growth model**. *Ind. J. Fish.*, **55(3)**, 235-240.
- Singh, RK and Prajneshu (2008). **Artificial neural network methodology for modeling and forecasting maize crop yield**. *Agril. Eco. Res. Rev.*, **21**, 5-10.
- Singh, Surindra, Bhar, LM and Paul, AK (2008). **Growth pattern of crossbred cattle under homoscedastic and heteroscedastic error variance conditions**. *Ind. J. Anim. Sci.*, **78(5)**, 560-564.
- Singh, Surindra, Paul, AK and Bhar, LM (2008). **Growth pattern in double and triple crosses cattle at Dehradun farm**. *Ind. J. Anim. Sci.*, **78(6)**, 661662.
- Singh, RK and Prajneshu (2008). **Neuro-fuzzy approach for modelling and forecasting: An application**. *J. Ind. Soc. Agril. Statist.* **62**, 214-220.
- Singh, RK, Ghosh, H and Prajneshu (2008). **A modified fuzzy least-squares approach for fuzzy linear regression analysis: An application**. *J. Stat. Appl.*, **3**, 171-181.
- Singh, RK, Ghosh, H and Prajneshu (2008). **Possibility and necessity measures for fuzzy linear regression analysis: An application**. *J. Ind. Soc. Agril. Statist.*, **62**, 19-25.
- Srivastava, AK, Sud, UC and Chandra, H (2007). **Small area estimation – An application to National Sample Survey data**. *J. Ind. Soc. Agril. Statist.*, **61(2)**, 249-254.
- Sivaramane, N, Kumar, Anil, Singh, DR and Arya, Prawin (2008). **An economic analysis of traditional and hi-tech rose (*Rosa Spp.*) cultivation**, *J. Ornaml. Hort.*, **11(1)**, 21-26.
- Srivastava, R, Parsad Rajender, Dey, Amitava and Gupta, VK (2008). **A-optimal block designs for multiple parallel line assays**. *J. Ind. Soc. Agril. Statist.*, **62(3)**, 231-243.
- Sud, UC and Mishra, Dwijesh (2008). **Estimation of finite population mean using double ranked set sampling**. *J. Ind. Soc. Agril. Statist.*, **62(3)**, 203207.
- Sud, UC, Pal, Prasenjit and Sethi, IC (2007). **Estimating population mean square through predictive approach when auxiliary character is estimated**. *J. Ind. Soc. Agril. Statist.*, **61(3)**, 364368.
- Sunilkumar, G and Prajneshu (2008). **Modelling and forecasting India's marine fish production data using wavelet thresholding for autocorrelated errors**. *Ind. J. Fish.*, **55**, 291-294.
- Upadhyaya, Shuchita, Arora, Alka and Jain Rajni (2008). **Deriving cluster knowledge using rough set theory**. *J. Theo. and Appl. Info. Tech.*, **4(8)**, 688696.
- Upadhyaya, Shuchita, Arora, Alka and Jain, Rajni (2009). **Reduct driven pattern extraction from clusters**. *Int. J. Comp. Intel. Sys.*, **2(1)**, 10-16.

- Varghese, C, Rao, AR and Gupta, VK (2009). [Optimal change-over designs under treatment x unit interaction](#). *Int. J. Appl. Math. Statist.*, **14**, 27-34.
- Visakhi, P (2008). [Resource sharing of agricultural libraries in electronic era: An overview](#). *Ind. J. Agric. Lib. Info. Serv.*, **24**, 30 -38.
- Yadav, DK and Bhar, LM (2008). [Robust model fitting in muzaffarnagri sheep growth data under field conditions](#). *Ind. J. Anim. Sci.*, **78(11)**, 1285-1287.

Research Papers Published in Conference/ Workshop Proceedings

- Behera, TK, Staub, JE, Behera, S, Rao, AR and Manson, S (2008). [One cycle of phenotypic selection combined with marker assisted selection for improving yield and quality in cucumber](#). *Proceedings of the IX EUCARPIA Meeting on Genetics and Breeding of Cucurbitaceae (ed. M Pitrat), INRA, Avignon (France)*, 115-121.
- Bhar, LM, Parsad, Rajender and Gupta, VK (2008). [Outliers in designed experiments](#). Workshop Series 3, IASRI, New Delhi.
- Bhardwaj, SP (2008). [Contract farming](#). *E-publication of proceedings of 1st Annual Conference of Indian Society of Agri-Business Management on Emerging Trends in Agri-Business Management held at UAS Bangalore*, 1-10.
- Singh, Jagbir and Bathla, HVL (2008). [A note on employment and unemployment situation in India NSS 61st round](#). *National Seminar on NSS 61st Round Survey Results, National Sample Survey Organisation, Ministry of Statistics and Programme Implementation, Government of India*, 164-168.
- Sud, UC, Bathla, HVL, Chandra, H and Singh, Jagbir (2009). [Small area estimation: Some applications to NSS data](#). *National Seminar on NSS 62nd Round Survey Results, National Sample Survey Organisation, Ministry of Statistics and Programme Implementation, Government of India*, 72-82.

Book Chapters/Special Volumes

- Arora, Alka, Upadhyaya, Shuchita and Jain, Rajni (2008). [Learning Patterns from Clusters using Reduct, Rough Sets and Current Trends in Computing](#). *Lecture Notes in Computer Science*, Springer Berlin, 389-398.
- Bhatia, VK, Prajneshu, Parsad, Rajender, Jaggi, Seema, Rai, Anil and Rao, AR (2008). [Agricultural Statistics](#). *Advances in Post-Graduate Research for Improving Agricultural Growth and Prosperity*, IARI, New Delhi, 349-364.
- Kaul, Sushila (2008). [Assessment of Role of Dairy Cooperatives of India](#). *Leadership Role in Preserving Cooperative Identity (ed. Yashavantha Dongre, Akira Kurimotonand P Nair)*, *International Cooperative Alliance Asia Pacific*, 32-39.
- Malhotra, PK and Farooqi, Samir (2008). [Computer Application](#). *Advances in Post-Graduate Research for Improving Agricultural Growth and Prosperity*, IARI, New Delhi, 365-372.
- Parsad, Rajender, Crossa, Jose, Gupta, VK, Gupta, Raj K, Ladha, JK, Anitha, Raman K (2008). [Statistical Tools for Farmers' Participatory Trials for Conservation Agriculture](#). *Resource Conservation Agriculture. (eds. J.K. Ladha, Olaf Erenstein and Raj K. Gupta)*, IRRI, Philippines, Manila.
- Rai, A, Dubey, Vipin, Chatuvedi, KK and Malhotra, PK (2007). [Implementation of Fisheries Data Marts](#). *Bioinformatics and Statistics in Fisheries Research, Vol-III, CIFA*, 90-109.

- Vasisht, AK (2009). [Role of Market Intelligence and Commodity Futures in Risk Management and Price Discovery](#). *Agroforestry - Natural Resource Sustainability , Livelihood and Climate Moderation, NRC for Agroforestry, Jhansi (UP)*, 579-588

हिन्दी पत्रिका का प्रकाशन

- संस्थान द्वारा हिन्दी पत्रिका “सांख्यिकी-विमर्श : 2008-09” का प्रकाशन किया गया

A Pamphlet Published

- Varghese, Cini, Rao, AR, Gupta, VK and Sharma, Anu (2008). [SPRMD – Statistical Package on Repeated Measurements Designs](#). IASRI, New Delhi
- V.K. Mahajan, S.B. Lal and Anu Sharma (2008). [Software for Survey Data Analysis \(SSDA\) 1.0](#). IASRI, New Delhi

Popular Articles

संस्थान की हिन्दी पत्रिका सांख्यिकी-विमर्श : 2008-09 में निम्नलिखित लेख प्रकाशित हुए :

- बठला, हर विशन लाल एवं त्यागी, कृष्ण कान्त । [संस्थान के कीर्तिस्तम्भ : डॉ. दरोगा सिंह](#), 1.2
- बठला, हर विशन लाल, त्यागी, कृष्ण कान्त एवं बिन्दल, विजय । [कृषि अनुसंधान डाटा पुस्तिका](#), 23.26
- भाटिया, विजय कुमार । [भारतीय कृषि सांख्यिकी अनुसंधान संस्थान – वर्तमान परिदृश्य एवं भावी चुनौतियों की एक झलक](#), 21.22
- गुप्ता, अशोक कुमार, बठला, हर विशन लाल एवं बिन्दल विजय । [खाद्य फसलों के उत्पादन में कटाई एवं कटाई के पश्चात होने वाली हानियों का आकलन](#), 60.64
- गुप्ता, विष्णु हरि एवं बिन्दल, विजय । [दैनिक स्मरणीय सांख्यिकीय/ संगणक अनुप्रयोग सम्बन्धी शब्द-शतक \(संकलन\)](#), 81.82
- खण्डूरी, ओ.पी., बत्रा, पी.के. एवं सहगल, डी.के. । [कृषि खेत परीक्षण सूचना तंत्र](#), 39.42
- कुमार, अनिल । [वर्तमान फसलीय परिपेक्ष्य में गन्धक की उपयोगिता एवं प्रबंधन](#), 49.52
- कुमार, अनिल, आर्य, प्रवीण एवं कुमार, अशोक । [दीर्घकालिक कृषि प्रयोगों के अन्तर्गत दाने उपज का आकलन](#), 74.78
- पाल, सत्य, रामसुब्रमणियन वी. एवं कुमार, अमरेन्द्र । [सांख्यिकीय मॉडलों द्वारा दूध उत्पादन का पूर्वानुमान](#), 69.73
- राय, त्रिभुवन एवं चन्द्रहास । [विविक्तकर फलन पद्धति द्वारा धान की उपज का मौसम आधारित पूर्वानुमान](#), 33.38
- साहू, प्राची मिश्रा, राय, अनिल, अहमद, तौकीर, बिन्दल, विजय एवं उपाध्याय, संतोष कुमार । [भारतीय परिवेश में परिशुद्ध कृषि – सुदूर संवेदन एवं भौगोलिक सूचना तंत्र की भूमिका](#), 43.48
- सेठी, ईश्वर चन्द एवं मौर्या मुरली मनोहर । [पशु प्रजनन वैज्ञानिकों हेतु सांख्यिकीय पैकेज \(संस्करण-2\)](#), 65.68
- सिंह, धर्मराज, कौल, सुशीला, आर्य प्रवीण एवं सिवरामन एन. । [प्रवासी भेड़ पालन में प्रौद्योगिकी हस्तक्षेप के प्रभाव का आकलन : अजमेर जिले का एक अध्ययन](#), 53.59

- विशाखी, पी. एवं बिन्दल, विजय । पुस्तकालयों का कंसोर्टिआ: कृषि कंसोर्टियम में भारतीय कृषि अनुसंधान परिषद् की पहल , 27-32
- Farooqi, Samir, Islam, Shahnawazul, Chaturvedi, KK, Sharma, Kirti, Sikarwar, Harnam Singh (2008). **Identifying insects through expert system on wheat crop management – An information technology innovation: Social science perspectives in agriculture. A Thrust for Integration**, 520-523.
- Varghese, Cini and Jaggi, Seema (2008). **Analysis of Designs Involving Sequences of Treatments using SPSS**. *The SPSS Analyst*, Oct.-Dec., 16-21.

Project Report/User Manual/Technical Reports Published

- Ahmad, T, Bathla, HVL, Rai, A, Mathur, DC and Sood, RM (2008). **Pilot study to develop an alternative methodology for estimation of area and production of horticultural crops**. Final Draft Project Report.
- Ahmad, T, Bathla, HVL, Rai, A, Sahoo, Prachi M, Gupta, AK, Jain VK and Mhadgut, DV (2008). **Study to investigate the causes of variation between official and trade estimates of cotton production**, Interim Project Report.
- Bathla, HVL, Tyagi, KK, Khatri, RS, Singh, Jagbir and Jain, VK (2008). **Agricultural Research Data Book 2008**.
- Bathla, HVL, Ahmad, T, Srinath, M, Jayasankar, J, Kuriakose, S, Mini, KG, Mandal, SK and Tyagi, RK (2008). **Manual on Fishery Statistics**, CSO Publication.
- Batra, PK and Jaggi, Seema (2008). **Crop improvement**. *All India Coordinated Wheat and Barley Improvement Project. Directorate of Wheat Research, Karnal (Annual Report 2007-08 Vol. 1)*.
- Bhar, LM, Parsad, Rajender and Gupta, VK (2008). **Outliers in designed experiments**. Project Report.
- Dahiya, Shashi, Goyal, RC, Chaturvedi, KK, Bhardwaj, Anshu, Jaggi, Seema and Varghese, Cini (2009). **Content management for eLearning systems using MOODLE**. Workshop document under the project An eLearning Solution for Agricultural Education.
- Gupta, VK, Lal, Krishan and Parsad, Rajender (2008). **Experiments with mixtures: A bibliography**.
- Jaggi, Seema (2009). **Statistical techniques for research methodology**. E-manual and Reference Manual for training programme for scientists of ICFRE, Dehradun.
- Mahajan, VK, Lal, SB and Sharma, Anu (2008). **Software for survey data analysis**. Project Report.
- Marwaha, Sudeep, Agarwal, Hari Om and Singh, Pal (2008). **An intranet solution for PG School, IARI**. User Manual - Virtual Learning Environment.
- Parsad, Rajender and Khaled, EL Sharma (2008). **E-manual on Experimental Design and Data Analysis**. ICARDA, Aleppo, Syria.
- Parsad, Rajender (2009). **E-manual and Reference Manual of the Winter School on Advances in Design and Analysis of Agricultural Experiments**.
- Paul, AK, Singh, Indra and Prabhakaran, VT (2008). **Statistical Investigation on the performance of the different non-parametric stability measures when the genotype by environment data are non-normal**. Project Report.

- Rai, Anil, Sharma, SD, Sahoo, Prachi Misra and Malhotra, PK (2007). **Livelihood status of different agro-climatic zones in India**. Technical Series.
- Sahoo, Prachi Misra, Rai, Anil , Singh, Randhir, Handique, BK and Oza, MP (2007). **Development of remote sensing based methodology for collection of agricultural statistics in Meghalaya**. Project Report.
- Sharma, SD, Sud, UC, Bathla, HVL, Goyal, RC, Narang, MS, Mathur, DC, Gupta, AK, Pal, Satya, Jain, VK, Dass, Bhagwan and Arora, Alka (2008). **To assess the survey capabilities of private sector**. Project Report.
- Singh, Balbir, Arora, Alka, Farooqi, Samir and Dahiya, Shashi (2008). **Development of PERMISnet – II**. Project Report and User Manual.
- Tastad, Adrienne, Louchaichi, Mounir, Sidahmed, Ahmed, Battikha, Nabil, Khatib, Amin, Parsad, Rajender (2008). **Ecological status of protected and unprotected rangelands in Syria: Monitoring the impact of grazing on rangeland vegetation dynamics in three climatological zones**. *International Center for Agricultural Research in the Dry Areas, Aleppo, Syria*. Technical Report of Intern for Rangeland Rehabilitation and Management.
- Vasisht, AK and Singh, DR (2008). **Impact assessment of fisheries research in India**, (AP-Cess funded), Project Report.
- Vasisht, AK, Bhardwaj, SP and Singh, DR (2008). **Price trends and market integration**. User Manual for training programme under NAIP project Visioning, Policy Analysis and Gender (V-Page).