

आचार्य नरेन्द्र देव कृषि एवं प्रौद्योगिक विश्वविद्यालय कुमारगंज, अयोध्या—224 229 (उ.प्र.), भारत

Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya-224 229 (U.P.), India

website: www.nduat.org

Email: registrar.nd.15@gmail.com

Phone :05270-262035



Research Ethics In The Research Methodology Course Work

S.no	Course Code	Course Title	Credit
1.	PGS 513 (e -course)	AGRICULTURAL RESEARCH, RESEARCH ETHICS AND RURAL DEVELOPMENT PROGRAMMES	1(0+1)
2.	SAF- 610	RESEARCH METHODOLOGY IN FORESTRY	
3.	VS - 613	RESEARCH METHODS IN VEGETABLE PRODUCTION	3(2+1) 2(0+2)
4.	PP-617	ADVANCED TECHNIQUES IN PLANT PROTECTION	2(0 +2)
5.	STAT-621	ADVANCE DESIGN OF EXPERIMENTS-I	2(1+1)
6.	STAT-622	ADVANCE DESIGN OF EXPERIMENTS-II	
7.	MOLECULAR APPROACHES IN ENTOMOLOGICAL		2(1+1)
8.	SS-615	TECHNIQUES OF SOIL RESEARCH AND INSTRUMENTATION	3(2+1)
9.	. AE-614 OPERATIONS RESEARCH IN AGRICULTURE - L		3 (2+1)
10.	AE-623	OPERATIONAL R E SE ARCH IN AGRICULTURE - II	3(2+1)
11.	VMD -511	ANIMAL WELFARE ETHICS AND JURISTRUDENCE	2(2+0)



PGS-513 AGRICULTURAL RESEARCH, RESEARCH ETHICS AND RURAL DEVELOPMENT PROGRAMMES (1+0)

Objective - To enlighten the students about the organization and functioning of agricultural research systems at national and international levels, research ethics, and rural development programmes and policies of Government.

Theory

UNIT I History of agriculture in brief; Global agricultural research system: need, scope, opportunities; Role in promoting food security, reducing poverty and protecting the environment; National Agricultural Research Systems (NARS) and Regional Agricultural Research Institutions; Consultative Group on International Agricultural Research (CGIAR): International Agricultural Research Centres (IARC), partnership with NARS, role as a partner in the global agricultural research system, strengthening capacities at national and regional levels; International fellowships for scientific mobility.

UNIT II Research ethics: research integrity, research safety in laboratories, welfare of animals used in research, computer ethics, standards and problems in research ethics.

UNIT III Concept and connotations of rural development, rural development policies and strategies. Rural development programmes: Community Development Programme, Intensive Agricultural District Programme, Special group – Area Specific Programme, Integrated Rural Development Programme (IRDP) Panchayati Raj Institutions, Co-operatives, Voluntary Agencies/NonGovernmental Organisations. Critical evaluation of rural development policies and programmes. Constraints in implementation of rural policies and programmes.

SAF- 610 RESEARCH METHODOLOGY IN FORESTRY 3(2+1) Theory

Unit I

Experimental Design: Research problem. Types of Research. Need for designing of experiments, Basic principles of design of experiment. Uniformity trials, size and shape of plots and blocks; Analysis of variance, Completely Randomized Design, Randomized Block Design and Latin Square Design. Factorial experiments, (symmetrical as well as asymmetrical). Confounding in symmetrical factorial experiments, Factorial experiments with control treatment. Split plot and strip plot designs; Analysis of covariance and missing plot techniques. Balanced incomplete block design, Fitting of response surfaces. Transformations of data. Groups of experiments.

Unit II

Sampling Theory: Basic terms used in sampling. Simple random sampling, Stratified random sampling, Systematic random sampling. Elementary idea of probability proportional to size, multistage, cluster and inverse sampling.

Unit III

Elementary idea to multivariate analytical tools- Classification and Discriminant function. Factor analysis, Principal component and cluster analysis.

Practical

Analysis of data obtained from CRD, RBD, LSD; • Analysis of factorial experiments without and with confounding; • Analysis with missing data; • Split plot and strip plot designs; • Transformation of data; Fitting of response surfaces. Balanced incomplete block design; • Groups of experiments. Simple random sampling, Stratified random sampling, Systematic random sampling.

VS - 613 RESEARCH METHODS IN VEGETABLE PRODUCTION 2(0+2) Practical

Recent advances in vegetable growing. Research methodology for leaf and tissue analysis. Quality evaluation of vegetables. Bioassay studies. Handling of various laboratory equipments.

PP - 617 ADVANCED TECHNIQUES IN PLANT PROTECTION 2(0+2)

Pest control equipment, principles, operation, maintenance, selection, application of pesticides and biocontrol agents, seed dressing, soaking, root dip treatment, dusting spraying (Low and high volume sprayers) Application through irrigation water. Soil disinfestation: soil fumigation sterilization, solarization, deep ploughing (summer), flooding (stagnent water treatment). Techniques to check the spread of pest through seed, bulbs, cutting, and cut flowers, Physical cleaning cutting and removal of infected parts, hot water treatment. Use of light, transmission and scanning electron microscopy. Protein isolation from the pest/pathogen and host plant and its quantification using SDS PAGE. DNA isolation from the pest/pathogen and host plant and its quantification. RFLP and RAPD studies of the isolated DNA. Use of tissue culture its techniques in plant protection. Computer application for predicting/ forecasting pest/ disease attack and identification. Statistical design for plant protection experiment.

STAT - 621 ADVANCE DESIGN OF EXPERIMENTS-I 2(1+1)

General properties and analysis ofblock designs. Balancing criteria. M-associate PBIB designs and their association schemes including lattice designs-properties and construction. Construction of mutually orthogonal latin squares, Designs for two-way elimination of heterogeneity including lattice square designs. Weighting designs, Augmented designs, optimality criteria and optimality of designs, robustness of designs. Response surface designs - Symmetrical and asymmetrical factorials, Response optimization and slope estimation, Blocking. Canonical analysis and ridge analysis. Experiments with mixtures: design and analysis

STAT- 622 ADVANCE DESIGN OF EXPERIMENTS-II 2(1+1)

Factorial experiments, Orthogonal and balanced arrays, Factorial replication, Regular and irregular fractions, Balanced factorial experiments-characterization and analysis (symmetrical and asymmetrical factorials).

ENT-624 MOLECULAR APPROACHES IN ENTOMOLOGICAL RESEARCH (PREREQUISITE: BASIC COURSE IN MOLECULAR BIOLOGY BIOCHEMISTRY) 2(1+1)

Introduction to molecular biology. Techniques used in molecular biology. DNA and RNA analysis in insects-transcription and translation mechanisms, DNArecombinant technology, identification of genes/nucleotide sequences for characters of interests. Genes of interest in entomological research-marker genes for sex identification, neuropeptides, JH esterase, BT toxins and venoms, chitinase, CPTI, lectins and proteases. Insect gene transformation. Biotechnology in relation to silk worms and honey bees. Introduction of lectin genes for pest suppression. DNA finger printing for taxonomy and phylogeny. DNAbased diagnostics. Insect immune systems in comparison to vertebrates. Molecular basis of metamorphosis. BT transgenics technology and implications. Molecular biology of baculovinuses, insecticide resistance. Molecular aspects of insect diseases. Molecular aspects of insect host, parasitoid and host piant interaction.

Practical

Isolation of DNA/RNA, purity determinations, base pair estimation, agarose gel electrophoresis, restriction mapping of DNA, demonstration of PCR, RFLP and RAPD echniques.

SS-615 TECHNIQUES OF SOIL RESEARCH AND INSTRUMENTATION 3(2+1)

Techniques of pots and sand cultures and field experimentation. Beer's, Lambert laws and its application. Flame photometry, potentiometery Nernst equation and ion selective electrodes, potentiometric titration, conductivity and conductometric titration, ion exchange chromatography, atomic absorption spectrophotometery, RF value, polarography and its application in soil.

Practical

Determination of nutrients in soil and plant, potentiometric titrations, ion ductometric titration, EME of cell and electrode

AE - 614 OPERATIONS RESEARCH IN AGRICULTURE - L 3 (2+1)

Nature, scope and subject matter of operation research, models concept, construction and solution of models. Extension of linear programming variable-price programmine variable resouce programming, Integer programming, dynamic programming, recursive programming, relation between linear and dynamic programming, quadratic programming Inventory models Elementary models with and without price breaks, and restrictions. Application of inventory models in agriculture. Spatial equilibrium models, The assignment problem with some models in agriculture. Spatial equilibrium models, The assignment problem with some models in agriculture. Spatial equilibrium models, The assignment problem with some illustrations of allocationn problems, including transporation problems. Treatment of risks and uncertainties.

AE - 623 OPERATIONAL RESEARCH IN AGRICULTURE - II 3(2+1)

The system approach: System terminology, categories of models static and dynamic deterministic models, static and dynamic stochastic models, system analysis. System components, methods related stops, alternate categories of models. L-System analysis relationships from empirial datea system synthesis Markov Chanin process, input-outpur analysis, economics, models ensitivity, statistical assessment, Decision theory Introduction decision analysis, concepts of utility and non-linear preference, Bernoullon pnn unidimentional utilities, multidimensional utilities, procedures for decision analysis, 18 series, approximation of utility functions, portfolio-like analysis, risk response analysis.

VMD- 511 JURISPRUDENCE, ETHICS, AND ANIMAL WELFARE 2(2+0)

Legal duties of veterinarians, laws related to medicine, evidence, common offences against animals and laws related to these offences. Examination of living and dead animals in criminal cases. Cruelty to animals and bestiality. Legal aspects of: Examination of animals for soundness, examination of injuries and post-mortem examination. Causes of sudden death in animals. Collection and despatch of materials for chemical examination, detection of frauds-doping, alteration of description, bishoping etc. Cattles Slaughter and evidence procedure in courts. Provincial und Central Acts relating to animals. Glanders and Farcy Act 1899 (13 of 1899). Dourine Act 1910 (5 of 1910). Laws relating to offences affecting Public Health. Laws relating to poisons and adulteration of drugs. Livestock importation act, liability and insurance. Code of conduct and ethics for veterinarians the regulations made under the Act. Animal welfare organizations and its role in animal welfare, welfare assessment, behaviour and animal welfare principles and philosophy

of animal welfare, animal welfare ethics, improving animal welfare through legislation and incentives, assessment of physiological, behavioural, disease and production measures of animal welfare, assessing welfare in practice, environment enrichment, cuthanasia, welfare of animals used in education and research and transportation, religion and animal welfare, human and animal welfare conflict, veterinary disaster management human-animal interactions, economics and animal welfare and veterinarians as animal welfare educators.



आचार्य नरेन्द्र देव कृषि एवं प्रौद्योगिक विश्वविद्यालय कुमारगंज, अयोध्या—224 229 (उ.प्र.), भारत

Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya-224 229 (U.P.), India

website: www.nduat.org

Email: registrar.nd.15@gmail.com

Phone :05270-262035



CODE OF ETHICS

The code of ethics of ANDUAT, Kumarganj, Ayodhya mandated research guides, research scholars and the system of assessment of academic and research work leading to award of degree at masters and Ph.D level. This leads in the form of thesis and research publications, chapters of books and other similar works which reflect the highest element of academic integrity and originality observed as per stipulations of the university and UGC in its draft policy.

The university is the autonomous body gives utmost importance to encouraging its faculty to follow ethical guidelines established by the university. ANDUAT follows the national and global ethics in its research. The university has established internal ethics committee for research involving agricultural animal science and community science subjects. The researches are done on Standard Operating Procedures (SOP) of ethics as approved by the respective committees such as ethical committee and animal ethical committees.

The research council of the university promotes intellectual honesty and integrity among researchers and encourages ideal research habbits to ensure such values the colleges of the university offers agricultural courses on research viz research ethics and rural development programmes and Research methodology in forestry and publication ethics for PhD scholars.

Animal ethics committee responsible for approving the monitoring research within Accredited Animal Research Establishments, including carrying out inspection of animals and facilities. The researchers of this university follow the animal ethical guidelines for any kind of research works related to animals as approved the committee.

The university encourages the departments to conduct workshops/webinar/trainings etc. in research methodology where ethics in research is our integral part, awareness is also created to faculty members by inviting talks on IPR, patents and ethics in research,

> Pamari Registrar

Registrar A N D Univ. of Agri. & Tech. Gunaceani, Ayodhya



College of Veterinary Sciences & Animal Husbandry Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya-224229 (U.P.), India

Year wise Poultry Position (Number)

S.No.	Financial Year	Poultry
1.	2017-2018	193
2.	2018-2019	193
3.	2019-2020	393
	(06.12.2019- 31.03.2020)	
4.	2020-2021	310
5.	2021-2022	618
		27

Prinicipal Investigator Poultry Project, RKVY

Principal Investigator
Poultry Project ,R.K.V.Y
C.V.St.& A.H., A.N.D.U.A.
Kumarganj-Ayedhya



College of Veterinary Sciences & Animal Husbandry Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya-224229 (U.P.), India

Year wise Livestock Position (Number)

S.No.	Year	Cattle	Buffalo	Sheep & Goat	Pig
1.	2017-2018	88	43	120	18
2.	2018-2019	119	48	93	27
3.	2019-2020	138	56	99	22
4.	2020-2021	116	55	76	23
5.	2021-2022	108	57	95	20

Head

I.L.F.C., CV.Sc. & A.H.

NO JA San To No. 2



भारत सरकार पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय पशु कल्वाण प्रभाग पशुओं पर परीक्षण के नियंत्रण एवं पर्यवेक्षण के प्रयोजनार्थ समिति (सीपीसीएसईए)

पशु कल्याण प्रभाग पशुओं पर परीक्षण के नियंत्रण एवं पर्यवेक्षण के प्रयोजनार्थ समिति (सीपीसीएसईए Government of India



Ministry of Environment, Forest and Climate Change Animal Welfare Division Committee for the Purpose of Control and Supervision of Experiments on Animals (CPCSEA)

Date:19/03/2019

To

The Professor College of Veterinary Science and Animal Husbandry Kumarganj Faizabad 224 229 E-mail:

Mobile: 5270262002

Subject: Registration of Establishment with CPCSEA / Constitution of Institutional Animals Ethics Committee (IAEC) - regarding

Sir,

This is with reference to your application on the above mentioned subject. Your establishment has been registered with CPCSEA for the purpose of '<u>Small animal:- Research for Education purpose</u>, Breeding for in-house use

Large animal:- Research for Education purpose '.

- The Registration number is <u>2060/GO/ReBi-S/Re-L/19/CPCSEA</u> and the registration is valid up to five years from the date of issue of this letter. Henceforth, the above registration number may be quoted in all your future correspondence with this office.
- Further, the biodata and consent letters of 5 IAEC members submitted by you are as per rule. Therefore, CPCSEA has accepted the following members recommended by your establishment:

S. No.	Name	Designation in IAEC
1	Dr V K Singh	Biological Scientist (Chairperson)
2	Dr S K Maurya	Scientist from different biological discipline (Member Secretary)
3	Dr Sushant Srivastava	Scientist from different biological discipline (NA)
4	Dr A K Gangwar	Veterinarian (NA)
5	Dr Rishikant	Scientist Incharge of Animal House Facility (NA)

• CPCSEA hereby nominates the following members to the Institutional Animals Ethics Committee (IAEC) of your establishment:

1	Dr. D.S. Upadhyay CSIR – Central Drug Research Institute, Luckno Professor (AcSIR), cum Chief Scientist & Head, Laboratory Animal Facility / Exp. About 35 years Chief Scientist & Head, Laboratory Animal Facility, B.S. 10/1, Sector 10, Jankipuram Extension, Sitapur Road, Lucknow – 226031, Uttar Pradesh Contact No :9415584217 Email :dsucdri@rediffmail.com	Main Nominee
2	Dr. Atul Kumar Baranwal Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow Veterinary Scientist – I, Animal House 3 years of experience S-568, Sanskriti Enclave, Eldeco Udyan II, Raebareli Road, Lucknow – 226025, Uttar Pradesh Contact No :9721906660 Email :doctordrug@gmail.com	Link Nominee

3	Dr. Mahadeo Kumar CSIR – Indian Institute of Toxicology Research, Lucknow Scientist (Animal Facility) • More than 10 years experience in Laboratory Animal Facility • Genetic monitoring of Laboratory animals. H.No. 04, Mayur Residency Extension, Faridinagar, Lucknow – 226015, Uttar Pradesh Contact No :9450111076 Email :mahadeokumar@gmail.com	Scientist from out side of the Institute
4	Dr. Alok Kumar Shukla Amity Institute of Pharmacy, Amity University, Uttar Pradesh, Lucknow Associate Professor, Amity Institute of Pharmacy, Amity University, Uttar Pradesh, Lucknow Campus Experience of 11 years Associate Professor, Amity Institute of Pharmacy, Amity University, Uttar Pradesh, Lucknow Campus, Near Malhaur Railway Station, Gomti Nagar Extn., Lucknow - 226028, Uttar Pradesh Contact No:9039298670 Email:alokshukla51@rediffmail.com	Socially aware Nominee

(Please note that any change in IAEC members can be made only with prior approval of CPCSEA.)

- You are requested to convene the meeting of the constituted IAEC within 30 days and forward the Minutes of the meeting to the O/o CPCSEA, New Delhi.
- In addition, it is to inform you that only approved IAEC members can sign on the attendance sheet with date of the meeting. Decisions will be made only in meetings where quorum is complete, the minimum of 6 members are required to compose a quorum and CPCSEA Nominees must be present in the meetings (*In absence of the Main Nominee, Link Nominee will be called to attend the meeting*).
- Further, it is to inform you that the IAEC is required to be reconstituted at the time of renewal of registration as per CPCSEA guidelines. Therefore, the IAEC of your establishment is valid up to the validity of Registration.
- It is also to inform you that before commencing any research on large animals you are required to send the research protocols with due recommendation of IAEC to CPCSEA for their approval (Procedure for submission of Research Protocols is available on the Website of CPCSEA).
- Kindly acknowledge the receipt of this letter.

(S. Gowri Shankar) Deputy Secretary (AW) & Member Secretary (CPCSEA)

Copy for necessary action to: Nominees of CPCSEA.

The Main Nominee is requested to ensure conduct of the IAEC meeting as stipulated in the SOP and to furnish the Annual Inspection Report of the Animal House Facility regularly to the O/o CPCSEA (check list enclosed).

Encl.: as above.

This is a computer-generated document and it does not require a signature. This document shall not be invalidated solely on the ground that it is not signed.

5वां तल, वायु ब्लॉक, इंदिरा पर्यावरण भवन, जोर बाग रोड, नई दिल्ली-110003 टेलीफेक्स 011-24695424 ईमेल :cpcsea-mef@govin, वेबसाईट :http://cpcsea.nic.in

5º Floor, Vayu Block, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi – 110003 Telefax: 011-24695424, Email: cpcsea-mef@gov.in, Website: http://cpcsea.nic.in



INSTITUTIONAL ANIMAL ETHICS COMMITTEE (IAEC) COLLEGE OF VETERINARY SCIENCE & ANIMAL HUSBANDRY, KUMARGANJ AYODHYA

Proceedings of the first meeting (after registration) of IAEC held on april 10th, 2019. Following members were present-

- 1. Dr. V. K. Singh, Dean, CVSc & AH and Chairperson
- Dr. D. S. Upadhyay, Main Nominee, CPCSEA
- 3. Dr. S. K. Maurya, Member Secretary
- 4. Dr. A. K. Baranwal, Link Nominee, CPCSEA
- 5. Dr. Mahadeoo Kumar, Scientist from other institute
- 6. Dr. Alok Kumar Shukla, Socially aware nominee
- 7. Dr. Sushant Srivastava, Scientist from other biological discipline, member
- 8. Dr. Rishikant, Incharge, Animal House, member
- . The meeting started with a formal welcome by the chairman followed by introduction of all the members.
- . Dr. A. K. Baranwal, Dr. Alok Shukla and Dr. Mahadeo Kumar emphasized on the follow up of strict animal ethics, animal care and animal welfare. Even research protocols having only blood collections from animals must be approved from IAEC. The matter was agreed by all.
- . Dr. D. S. Upadhyay, main nominee emphasized that all study protocols must be conducted only after the approval of IAEC or CPCSEA (as the case may be). He also suggested that there must be a reference number for each research/ study protocol. Matter was agreed by all.
- · An SOP of IAEC was presented before committee by Dr. S. K. Maurya for finalization. It was discussed and agreed that it should have page numbers and all proforma related with submission of research protocols by Principal Investigators to IAEC along with checklist formulated for that purpose.
- . Chairman Dr. V. K. Singh put the matter of mandatory animal protocols as per the part of UG course curriculum as per Veterinary Council of India (VCI) norms. The matter was discussed in detail and agreed that a list of such compulsory protocols related with animal involvement (as per the course curricula) be prepared in form "B" and put in IAEC for approval.
- · Research Advisory Committee approved synopsis of research works were put up before the committee by the member secretary for the endorsement of IAEC. Chairman informed that these were only observational and non-invasive research works which started in last year that were near the end of their completion. The matter was discussed in detail and all members were of the opinion that as the IAEC of college is just now registered (registered on 19.03.2019); but with a view to follow the mandate of VCI gazette for education, in the current situation, the proposals may be permitted and approved and the CPCSEA may be informed. (List of proposals reviewed attached)
- · It was also agreed that now onwards, no research protocol on animals will start without approval from IAEC/ CPCSEA.

Meeting ended with vote of thanks.

(Dr. D. S. Upadhyay)

Main Nominee

(Dr. A. K. Baranwal)

Link Nominee

(Dr. Mahadeb Kumar)

Scientist from other

(Dr. Alok Kumar Shukla)

Socially Aware Nominee

(Dr. Rishikant)

Incharge Animal House

(DrSushnat Srivastav

Member

(Dr. S. K. Maurya)

Member Secretary

LIST OF RESEARCH PROPOSALS REVIEWED IN THE IAEC MEETING HELD ON APRIL 10th, 2019

[A.] BIRDS

SN	Name of Major Advisor	Title of thesis	Animal requirements	Status	Remarks of IAEC
I	Dr. Vijay Kumar Singh, Animal Nutrition (D.r Amit Tiwari)	Assessment of Phytobiotics and enzymes combination as an alternative of antibiotic growth promoter in broiler chickens	Poultry (Managementa & blood collection) 250 No.	Completed	Affirmed
2	Dr. Sachin Gautam, Animal Nutrition (Dr. Dileep Kumar Chaudhari)	Effect of herbal mixture, exogenous enzymes and butyric acid supplementation on the performance of broiler chickens.	Poultry (Managementa & bl collection) 300 No.	Completed	Affirmed
3	Dr. Sachin Gautam, Animal Nutrrition (Dr. Alka Yadav)	Performance of broiler chickens fed diet supplemented with phytobiotic and organic acid	Poultry (Managementa 1 & bl collection) 250 No	Completed	Affirmed
4	Dr. D. Niyogi, Vet. Pathology (Dr. Abhishek Mishra)	Studiies on the incidence and pathology of colibacillosis in broiler birds in Gonda district of north eastern plain zone of Uttar Pradesh	Poultry (post mortem cases) >200 No.	Completed	Affirmed
5	Dr. D. Niyogi, Vet. Pathology (Dr. Rakesh Kumar Gupta)	Studies on the incidence, pathology and immunohistochemistry of chronic respiratory disease of poultry in Ayodhya district of eastern Uttar Pradesh	Poultry About 50-100 birds	Completed	Affirmed
6	Dr.P.S.Pramanik, LPM (Dr.Vishwa Nath Gupta)	Performance of Broiler Chickens under Different Litter Materials	Poultry (Managemental procedure) 240 No.	Completed	Affirmed
7	Dr.P.S.Pramanik, LPM (Dr. Prabhat Gautam)	Impact of different monochromatic light combination and white L.E.D. on growth and behavior of broiler chickens.	Poultry (Managemental procedure) 240 No.	Completed	Affirmed
8	Dr.P.S.Pramanik, LPM (Dr. Gasurav Pandey)	Effect of additives mixture neem (Azadirachtaindica), Amla (Emblea officinalis) and black cumin (Nigella sativa) on performance in broiler chickens.	Poultry (Biophysiologic al & behavioral study) 450 No.	Ongoing	Affirmed

(Dr. D. S. Upadhyay) Main Nominee

(Dr. A. K. Baranwal) Link Nominee (Dr. Mahadeo Kumar) Scientist from other institute (Dr. Alok Kumar) Socially Aware Nominee

(Dr. Rishikant)

Incharge Animal House

(DrSushnat Srivastava) Member

(Dr. S. K. Maulya) Member Secretary (Dr. V. K. Singh) CHAIRMAN IDITADOR ANIMALS

SN	Name of Major Advisor	Title of thesis/ project	Animal requirements	Status	Remarks of IAEC
I	Dr. H.C. Verma, Vet Extension (Dr Pradeep Kumar)	Study on knowledge and adoption level of scientific Goat rearing practices among goat farmers in Hardoi Diostrict of Uttar Pradesh.	Interaction with livestock owner	Completed	Affirmed
2	Dr. J.P.Singh, Vet Medicine . (Dr. Ramnayan Yadav)	Studies on In Vitro efficacy of emblica officinalis against MRSA in buffaloes suffering from sub clinical mastitis.	Buffalo (About 200 milk samples from natural cases of mastitis)	Completed	Affirmed
3	Dr. H.N. Singh, Vet Surgery (Dr. Pragya Prakash Mishra)	Impact of mineral supplementation in hoof disorders of cattle in Ayodhya District	Cattle (Blood collection from natural cases)	Completed	Affirmed
4	Dr. Kh. Sangeeta Devi, Vet Surgery (Dr. Ranjeet Kumar)	Comparison of analgesic efficacy of xylazine and ketorolac in combination with lignocaine for upper and lower intravenous regional anesthesia (IVRA) in bovine	Cattle (Drug trial)	Completed	Affirmed
5	Dr. Kh. Sangeeta Devi, Vet Surgery (Dr. Ravi Prakash Goyal)	Decellularization of caprine esophagus and aorta using 5% aqueous extract of fruit pericarp of sapindus mukorossi.	Goat (From slaughter house)	Completed	Affirmed
6	Dr. A.K. Gangwar, Vet Surgery (Dr. Yogendra Singh)	Comparison of analgesic efficacy of dexmedetomidine and tramadol in combination with lognocaine for upper and lower intravenous regional anesthesia (IVRA) in bovine	Cattle (Drug trial)	Completed	Affirmed
7	Dr. Bhoopendra Singh, Vet Gyn. & Obst. (Dr. Narendra Singh)	Studies on therapeutic efficacy of uterine lavage, levamisole, PGF ₂ α and its combinations in the management of sub-clinical endometritis in buffaloes	Buffalo (From field clinical cases) 50-60 No	Ongoing	Affirmed
8	Dr.P.S.Pramanik, LPM (Dr. Birendra Singh)	Lambing behavior and its association with haemato- biochemical profile in Muzzafarnagri Sheep	Sheep (Biophysiological & behavioral study) 10-15 No	Ongoing	Affirmed
9	Dr. Sushant Srivastava Vet Gynecology & Obstetrics	Frozen semen bank for indigenous livestock	Cattle & buffalo bull & buck (Permission for semen collection through artificial means & blood collection) 50 No	Ongoing	Affirmed
10	Dr. Sushant Srivastava Vet Gynecology & Obstetrics	Conservation propagation & genetic improvement of Sahiwal cattle	Sahiwal cattle (Reproductive study Blood collection) About 350 No	ongoing	Affirmed

Dr. D. S. Upadhyay

Main Nominee

Dr. Rishikant I/C Animal House Dr A K Baranwal

Link Nominee

Dr Mahadeo Kumar Scientist from other institute

Dr Sushant Srivastava Member

Dr S K Maurya Member Secy

Dr. Alok Kumar Shukla Socially Aware Nominee

Dr V K Singh Chairman



Office of the Institutional Animal Ethics Committee (IAEC)

COLLEGE OF VETERINARY SCIENCE & ANIMAL HUSBANDRY

Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Azodhya- 224 229
(Registration No.: 2060/GO/ReBi-S/Re-L/19/CPCSEA)

Minutes of the 2st IAEC meeting held on Jan. 10, 2020 at CVSc, Kumarganj, at 11.00 AM

The 2rd IAEC meeting of CVSc Kumarganj was held in the CVSc on Jan. 10, 2020. Meeting was attended by almost all the IAEC members and the CPCSEA nominees including CPCSEA link nominee Dr Atul Barnwal. Dr. Sushant Srivastava, scientist from other biol discipline was absent on health grounds. Meeting was chaired by Dr. V. K. Singh. Concern investigators were also invited for clarifications related to their proposals.

At the outset the Chairperson welcomed the members and other participants. He emphasized upon judicious use of animals (both small and large animals as well as the birds) for advancement of scientific knowledge in view to improve their lives and overall benefit of the animals and the society. Since, no comments were received on the Minutes of the previous meeting circulated; the same was confirmed by the IAEC. The Member Secretary further initiated the discussions as per the meeting agenda.

In total, 21 research proposals were evaluated by the IAEC. Out of these, 8 proposals were related with use of laboratory rabbits and the farm reared birds (poultry), while 13 proposals were related with collection and screening of different specimens and samples like milk, blood, tissues etc from large animals from private and organized farms, field cases and the slaughter houses. Few experiments were associated with herbal treatment of anestrous condition in bovines. An in-depth evaluation of all the proposals including those of large animals in terms of their experimental plans and designing, intended scientific/societal objectives, proposed species and the numbers, humane endpoints, welfare issues, procedures for analgesia, anesthesia or euthanasia etc was made by the committee and the observations recorded in this regard are placed as below:

- Most of the small animal experiments were scientifically and technically valid, hence were granted IAEC approval.
 Those small animal experiments which involved minor surgeries but proposed to be performed under proper anesthesia were also approved by the committee.
- Experimental plans of 2 proposals were modified and revised with suggestion of the IAEC and subsequently approved by the committee. Two proposals were also merged viewing their repetitive nature.
- 3) Since there were no invasive or painful procedures involved in mere sampling or screening process of proposed large animal experiments, the objectives and plans of such proposals were also clearly defined, the committee decided to approve the same without any stipulation about animal welfare issues in accordance with the noting of the CPCSEA contained in its "Compendium" on page no. 198. However, proper consent form from the animal owner should be obtained before such sampling, committee suggested.
- 4) The IAEC made certain recommendations in order to improve the overall functioning of the IAEC as well as to popularize the animal welfare guidelines and norms of the CPCSEA amongst the PIs and the researchers. These suggestions are placed as below:
 - Every member of the IAEC bearing the identical credence has to participate in protocol evaluation and review process and the decision has to be taken unanimously with approval by the Chairman.
 - Every investigator has to perform animal experiments strictly in accordance with the animal welfare guidelines and the statutory regulations of the CPCSEA.
 - e) Seminars/ Workshops should be organized periodically at institutional level in order to sensitize the concerned Pls, research fellows, technical staff etc about animal welfare issues, 4Rs principle, suitable use of analysesia, anesthesia or euthanasia agents, proper filing of the animal experiment applications and proper record keeping (as per Form B. C, D, E etc).
- The CPCSEA nominees and committee members also visited various experimental animal sheds, farms and places and observed it clean and tidy.
- Animal research proposals approved by the committee are listed as ANNEXURE-1 on page 2.

Finally, the meeting ended with vote of thanks to the Chair.

Dr. D. S. Upadhyay (Maia Nominee, CPCSEA)

Dr. Rishikant (In-charge, Animal House) Dr. A. K. Baranaval (Link Nominee, CPCSEA)

Dr. A. K. Gangwar (Veterinarian) Dr. Alok Kumar Shakla (Socially aware nominee)

Dr. S. K. Maurya (Member Secretary) Dr. Mahadeo Kunnar (Sci. from outside institute)

LIST OF SMALL ANIMAL PROJECTS DISCUSSED AND APPROVED

SN	Ref#	Title	PI	Animal	No.
2.1	19	Effect of Azolla feeding on growth performance and carcass characteristics of broiler chicks	Dr. K. D. Singh	Poultry	160
2.2	20	Effect of Azolla feeding on the performance of broiler chickens	Dr. P. S. Parmanik	Poultry	160
2.3	21	Decellularization of caprine dermis and fish swam bladder using Sapindus mickurossi fruit pericarp extract and its use for construction of skin defects in New Zealand white rabbits	Dr. A. K. Gangwar	Rabbits	12
2.4	24	Effect of phytibiotics and organic acid supplementation on performance of broiler chickens	Dr. V. K. Singh	Poultry	300
2.5	25	Performance of broiler chickens fed corn soybean based diet with phytobiotic feed additives and enzymes	Dr. V. K. Singh	Poultry	300
2.6	27	Antifertility effect of Dendrophthoe falcata in male rabbits	Dr. Bhoopendra Singh	Rabbits	18
2.7	36	Effect of Moringa oleifera supplementation on performance of broilers	Dr. P. S. Parmanik	Poultry	250
2.8	39	Evaluation of decellularized caprine periosteum for repair of critical sized bone defect in rabbits	Dr. A. K. Gangwar	Rabbits	18

LIST OF LARGE ANIMAL PROTOCOLS DISCUSSED AND APPROVED

		Details of large animal tissu	e samples to be coll	
3.1	22	Gross morphological and histological studies on the kidneys of Barbari goats	Dr. K. N. Singh	24 slaughtered Goa Kidneys
3.2	23	Studies on antimicrobial efficacy of Moringa oleifera leaves against sub clinical mastitis in cows	Dr. J. P. Singh	200 milk samples from Cattle
3.3	26	Mitochondrial DNA analysis in Cattle & Buffaloes	Dr. S. K. Maurya	100 blood samples from Cattle & Buff.
3.4	28	Studies on epidemiology, therapeutics and impact analysis of udder health kit in bovine mastitis	Dr. J. P. Singh	60 milk samples from Cattle
3.5	29	Effect of herbal antioxidant on cryopreservability and fertility of Murrah bull semen	Dr. Sushant Srivastava	8 semen samples from Buffalo
3.6	30	Efficacy of various therapeutic regimens on estrus induction response in post partum anestrus cows	Dr. Rajesh Kumar	24 blood samples from Cattle
3.7	31	Assessment of therapeutic efficacy of Aegle marmelos, Oophorinum and Progetserone on induction of estrus in post partum anestrus buffaloes	Dr. Rabindra Kumar	24 blood samples from Buffaloes
3.8	32	Molecular characterization and sero prevalence studies on equine hacmoprotozoan diseases with special reference to Trypanosoma evansi	Dr. Amit Singh	500 blood samples from Horse
3.9	33	Studies on in vitro and in vivo anthelmintic efficacy of Maringa oleifera leaf extract on ovine gastro intestinal nematodes	Dr. Amit Singh	30 blood samples from Sheep
3.10	34	Molecular characterization and plasmid profiling of extended spectrum beta lactamase and carbapenemase producting Escherichia coli of bovine origin	Dr. R. K. Joshi	400 Milk & Feces from Cattle & buffalo
3.11	35	Molecular characterization and anti microbial sensitivity pattern of methicillin resistant Staphylococcus aureus among farm animals	Dr. R. K. Joshi	600 Milk, Blood, Nasal swab from Critic, buffalo, sheep, goat, pig & rabbit
3.12	37	Studies on genetic characterization of non descript sheep in Fatehpur district of Uttar Pradesh	Dr, V. K. Singh	200 Blood samples from Sheep
3.13	38	Skin thickness & its relation to milk yield in dairy animals	Dr. P. S. Parmanik	60 skins from Cattle & Buffaloes for physical measurement

Dr. D. S. Upadhyay

(Main Nominee, CPCSEA)

Dr. Rishikant (In-charge, Animal House) Dr. A. K. Barzawal (Link Nominee, CPCSEA)

Dr. A. K. Gangwar (Veterimerian)

Dr. Alok Kumar Shukla (Socially aware nominee)

Alm.

Dr. S. K. Maurya (Member Secretary) Dr. Mahadeo Kumar (Sci. from outside institute)

Mahado



Office of the Institutional Animal Ethics Committee (IAEC)

COLLEGE OF VETERINARY SCIENCE & ANIMAL HUSBANDRY

Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya- 224 229 (Registration No.: 2060/GO/ReBi-S/Re-L/19/CPCSEA)

Minutes of the 3rd IAEC meeting held on December, 18, 2020

The 3rd IAEC meeting of CVSc Kumarganj was held on December 18, 2020 at 11.00 AM in the Seminar room of the College. All the IAEC members including Chairperson attended the meeting. The PIs were also invited regarding the queries if any about their proposal.

At the outset the Chairperson welcomed the members and other participants and informed the committee that no comments were received on the Minutes of the previous meeting circulated; the same was confirmed by the IAEC. The Member Secretary further initiated the discussions as per the meeting agenda and presented 15 protocols (05 small animals, 01 of poultry market slaughter tissue/ meat; 09 of large animal sample collection etc.) for discussions and approval.

The small animal projects were discussed. After making some corrections in few proposals the committee approved these projects (Annexure I).

The proposals of large animal study were critically evaluated. The projects involving only sample/data collection based studies without any painful procedure/surgery/etc were also evaluated. The committee had no objection in conducting such experiments which did not require any animal procedure.

The committee suggested for follow up of the guidelines of the CPCSEA with regard to the large animals and poultry studies to comply with and it advised that any observation of CPCSEA regarding these projects will be immediately communicated to respective PIs for proper compliance.

A previously approved protocol with approval reference number IAEC/CVSc/2/P-39/2020/33 was presented by PI Dr. A. K. Gangwar for its extension due to the delay due to corona. Committee discussed and agreed to extend its duration for one year.

The committee members including Main Nominee, CPCSEA visited various experimental animal sheds & farms; observed and inspected thoroughly and found satisfactory. Remarks and suggestions of each member and the nominees were duly noted and institutional members ensured for compliance.

Finally, the meeting ended with vote of thanks to the Chair.

(Main Nominee, CPCSEA)

Dr. A. K. Baranwal (Link Nominee,

CPCSEA)

Dr. Alok Kumar Shukla

(Socially aware nominee) (Sci. from outside institute)

(In-charge, Animal House)

(Veterinarian)

Dr. Sushant Srivastay (Mem. From other biol. discipline)

Dr. S. K. Maurya (Member Secretary)

LIST OF SMALL ANIMAL PROJECTS DISCUSSED AND APPROVED

SN	Ref#	Title & PI	Animal & No.	Comments of IAEC
	02	Evaluation of crosslinked decellularized caprine periosteum with or without undifferentiated bone marrow stem cells for repair of critical sized bone defect in rabbits Dr. A. K. Gangwar	Rabbit, 18	Approved
	03	Evaluation of crosslinked decellularized caprine aortic seaffold with or without platelet rich plasma (PRP) for repair of critical sized bone defect in rabbits Dr. A. K. Gangwar	Rabbit, 18	Approved
	04	Decellularization of caprine traches and ear cartilage using Sapindus mukorossi fruit carp extract Dr. Kh Sangeeta Devi	Rabbit, 2	Approved .
	05	Development of caprine rumen and reticulum derived extracellulr matrices by using fruit carp extract of Sapindus mukorossi Dr. Kh Sangeeta Devi	Rabbit, 2	Approved
	08	Studies on antifertility effect of Azadirachta indica (Neem) and Madhuka indica (Mahua) in male rabbits Dr. Bhoopendra Singh	Male Rabbits, 30	Approved
5	11	Efficacy of Moringa leaf on storage quality of chicken nuggets under refrigeration condition Dr. Ruma Devi	Poultry meat from market	Committee has No Objection since there is no animal involvement

1	01	Process optimization and quality characterization of Turmeric fortified milk shakes with honey as sugar replacer Dr. S. S. Sengar	100 Milk samples from market	Committee has No Objection since there is no animal involvement.		
2	07	Study on prevalence of congenital, acquired, anatomical and pathological abnormalities affecting reproductive tract of buffaloes slaughtered in Unnao Dr. Rabindra Kumar	Survey on 1000 slaughtered buffaloes	Committee has No Objection since there is no animal involvement		
3	06	Effect of L Cysteine HCl and Dalchini (Cinnamomum zeylanicum) on freezability of Murrah bull semen Dr. Sushart Srivastava	48 Semen samples from 6-8 Buffalo buils			
4	09	Influence of thermal stress on adaptability, haematobiochemical & physiological response in Cattle in central plane zone of Uttar Pradesh Dr. P. K. Choudhary	140 Blood samples from 18 Cattle			
5	10	Heat stress in relation to adaptability, haematobiochemical & physiological response in Buffaloes in eastern plane zone of Uttar Pradesh Dr. P. K. Choudhary	140 Blood samples from 18 Buffalo	Recommended as there is no painful animal procedure		
6	12	To study the efficacy of essential oil of Cinnamomum zeylanicum and Melafenca as an alternative post milking teat dip in lactating buffaloes Dr. J. P. Singh	Teat dip to 60 buffaloes	involved		
7	13	In vitro study on antimicrobial potential of Vetiveria zizaniodes oil against bacteria involved in sub clinical mastitis of milch cows Dr. J. P. Singh	100 Milk samples from cows			
	14	Studies on in vitro antimicrobial efficacy of Nyctanthes arbor tristis Linn. Leaves against sub clinical mastitis in cows Dr. J. P. Singh	100 Milk samples from cows			
,	15	Studies on in vitro antimicrobial rfficacy of Psidium guajava leaves against sub clinical mastitis in buffuloes Dr Ramakarst	100 Milk samples from buffaloes			

Dr. D. S. Upadhyay (Main Nominee, CPCSEA)

Dr. A. K. Baranwai (Link Nominee, CPCSEA

12/12/2020 Dr. Alok Kumar Shukla (Socially aware nominee)

Dr. Mahadeo Kumar (Sci. from outside institute)

Dr. A. K. Gangwar (Veterinarian)

Dr. Rishikant Dr. Sushant Srivastav Dr. S. K. Maurya (In-charge, Animal House (Mem. From other biol. discipline) (Member Secretary)

Dr. V. K. Singh

(Chairman)



Office of the Institutional Animal Ethics Committee (IAEC)

COLLEGE OF VETERINARY SCIENCE & ANIMAL HUSBANDRY

Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya- 224 229 (Registration No.: 2060/GO/ReBi-5/Re-L/19/CPCSEA)

Minutes of the 4th IAEC meeting held on March. 20, 2021

The 4th IAEC meeting of CVSc Kumargani was held on March 20th, 2021 at 11.00 AM in the Seminar room of the College. All the IAEC members including Chairperson attended the meeting. The PIs were also invited regarding the queries if any about their proposal.

At the outset the Chairperson welcomed the members and other participants and informed the committee that no comments were received on the Minutes of the previous meeting circulated; the same was confirmed by the IAEC. The Member Secretary further initiated the discussions as per the meeting agenda. A total of 04 protocols (03 avian and 01 of large animals) were included for discussions and approval by IAEC.

The avian projects based on their scientific and technical merits were approved by the IAEC.

The proposal of large animal study was related with collection and screening of fecal sample after feeding of Moringa seeds extracts. The committee has no objection on this protocol. The protocols discussed and approved in this meeting are listed in Annexure I.

The committee suggested to follow the guidelines of the CPCSEA with regard to the animal and poultry studies.

The committee members including Main Nominee, CPCSEA visited various experimental animal sheds & farms; observed and inspected thoroughly and found satisfactory. IAEC recommended rat, mouse and rabbit cages with watering and feeding facilities to be updated in small animal house. Remarks and suggestions of each member and the nominees were duly noted for compliance.

Finally, the meeting ended with vote of thanks to the Chair,

Dr. D. S. Upadhyay

(Main Nominee, CPCSEA)

Dr. A. K. Baranwal

(Link Nominee, CPCSEA)

Dr. Alok Kumar Shukla

(Socially aware nominee)

(Sci. from outside institute)

(In-charge, Animal House)

Dr. Sushant Srivastav (Mem. From other biol.

discipline)

Dr. S. K. Maurya (Member Secretary)

Dr. V. K

(Chairman, IAEC)

LIST OF AVIAN PROTOCOLS DISCUSSED AND APPROVED

SN	Ref#	Title	PI	Animal	No.
1	16	Impact of Stocking Density Density on Performance and Welfare of Broiler chickens	Dr. K. D. Singh	Poultry	240
2	17	Studies on Shatavari (Asparagus racemosus) supplementation on the performance of Broiler Chickens	Dr. P. S. Pramanik	Poultry	200
3	18	Effect of Ginger and Garlic Supplements on the performance of Broiler Chickens	Dr. S. S. Chauhan	Poultry	200

LIST OF LARGE ANIMAL PROTOCOLS DISCUSSED AND APPROVED

		Details of large animal tissue sample	s to be collect	ted and examined	Observation made by IAEC
4	19	In vitro and In vivo anthelmintic evaluation of Moringa oleifera seed extract in sheep naturally infected with strongyles		24 female sheep; feeding of Moringa	Recommended as there is no painful animal procedure involved

Dr. D. S. Upadhyay (Main Nominee, CPCSEA) Dr. A. K. Baranwal

(Link Nominee, CPCSEA)

Dr. Alok Kumar Shukla (Socially aware nominee) Dr. Mahadeo Kumar

(Sci. from outside institute)

Dr. Rishikani

(In-charge, Animal House)

Dr. A. K/Gangwar (Veterinarian) Dr. Sustiant Srivastav (Mem. From other biol.

discipline)

Dr. S. K. Maurya (Member Secretary)



Office of the Institutional Animal Ethics Committee (IAEC)

COLLEGE OF VETERINARY SCIENCE & ANIMAL HUSBANDRY

Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya- 224 229
(Registration No.: 2060/GO/ReBi-S/Re-L/19/CPCSEA)

Minutes of the 5th IAEC meeting held on December. 29, 2021 at 11.00 AM in the Seminar room of the College

Members Present:

	ITACIAN CONTRACTOR	
1	Dr. V. K. Singh,	Chairperson, IAEC
2	Dr. D. S. Upadhyay,	Main Nominee
3.	Dr. Atul Kumar Baranwal	Link Nominee
4.	Dr. Alok Kumar Shukla,	Socially aware nominee
5.	Dr. Mahadeo Kumar	Scientist from outside institute
6.	Dr. S. K. Maurya	Member Secretary, IAEC
7.	Dr. Rishikant	Incharge, Animal House
8.	Dr. Sushant Srivastava	Member from other biological discipline

At the outset the Chairperson welcomed the members and informed the committee that no comments were received on the Minutes of the previous meeting circulated; the same was confirmed by the IAEC.

The Member Secretary further initiated the discussions as per the meeting agenda and informed the committee that a total of 14 protocols (07 of small animals including avian and 07 of large animals) were included for discussions and approval by IAEC.

The committee began its deliberations with a discussion on the scientific and technical merits of all protocols considering least sufferings to the animals. The small animal protocols including avian were approved by the IAEC based on their merits.

The committee also discussed the proposals of large animal study that were related with collection and screening of blood samples, semen samples, milk samples etc. The committee is of the view that these protocols of large animals didn't include any invasive procedures but of only sample collection from these animals so expressed no objection for them. Committee is of the view that consent from owners/ farms must be obtained by the respective PIs for collection of samples from large animals and the same must be submitted along with projects.

The protocols discussed and approved/recommended in this meeting are listed in Annexure 1. Committee made following suggestions—

- The protocols which are not as per format of CPCSEA and where the methodology & use of animals are not clearly written should not be approved in future.
- Small animals facilities needs immediate updation with all recommended facilities as per CPCSEA recommendations without which no protocols will be approved in future.

Remarks and suggestions of each member and the nominees were duly noted for compliance.

The members of the committee dispersed with a vote of thanks to the Chair.

Dr. D. S. Upadhyay (Main Nominee, CPCSEA) Dr. A. K. Buranwal (Link Nominee, CPCSEA)

Dr. Alok Kumar Shukla (Socially aware nominee) Dr. Mahadeo Kuthar (Sci. from outside institute)

pt 29/12/2021

Dr. Rishi Kant (In-charge, Animal House) Dr. Sushant Srivastav (Mem. From other biol.

Dr. S. K. Maurya (Member Secretary)

LIST OF SMALL ANIMAL PROTOCOLS DISCUSSED AND APPROVED

SN	Ref#	Title	PI	Animal	No.
1	20	Effects of dietary supplementation of Moringa oleifera leaf meal and Neem leaf meal (Azadirochia indica) on the performance of Kadaknath layers.	Dr. Ajeet Kr. Verma	Poultry	72
2	27	Effects of dietary Spirulina platensis supplement on broiler chickens performance	Dr. P. S. Pramanik	Poultry	200
3	22	Effect of hyaluronidase treatment on efficacy of Sapindus mukorossi fruit pericarp extract for decellularization of caprine rumen and reticulum	Dr. Kh. Sangeeta Devi	Rabbits	02
4	23	Decellularization of hyaluronidase treated caprine omasum and abomasum tissue by aqueous fruit pericurp extract of Sapindus mukorossi	Dr. Kh. Sangeeta Devi	Rabbits	02
5	26	Decellularization of caprine diaphragm and pericardium using hyaluronidase and Sapindus mukorossi fruit pericarp extract treatment.	Dr. A. K. Gengwar	Rabbits	02
6.	32	Effect of Histidine supplementation on the performance, hemato-biochemical profile and careass characteristics of broiler chickens	Dr. V. K. Singh	Poultry	200
7-	33	Effect of dietary supplementation of Nicotinic acid on the performance of broiler chickens	Dr. Dharmesh Tewari	Poultry	200

LIST OF LARGE ANIMAL PROTOCOLS DISCUSSED AND RECOMMENDED

	43	Details of large animal tissu	ie samples to be colle	ected and examined ,
1	21	Effects of Moringa oleifera and Phyllanthus emblica on sperm characteristic in cryopreserved back semen.	Dr. Sushant Srivastava	50 semen samples from bucks
2	24	Effects of Ginger (Zingiber officinale) and Black Pepper (Piper nigrum) on cryopreservability of buck spermatozoa.	Dr. Rajesh Kumar	50 semen samples from bucks
3	25	Effects of Curcumin (Curcuma longa) and Ashwagandha (Withania xomnifera) on cryopreservability of buck spermatozoa.	Dr. Bhoopendra Singh	50 semen samples from bucks
4	28	Study on prevalence and molecular characterization of bovine haemoprotozoans with special reference to Theileriosis	Dr. Amit Singh	500 Blood samples from Cattle & Buffaloes
5	29	Studies on In-vitro efficacy of Nigella sativa against common causing mustitis pathogens	Dr. J. P. Singh	100 Milk samples from Cattle & Buffaloes
6	30	Studies on in vitro efficacy of Curcuma longa and Withania sominifera against bovine mastitis	Dr. S. V. Singh	100 Milk samples from Cattle
7	31	Studies on metabolic profile status of periparturient buffaloes	Dr. S. V. Singh	30 Blood samples from Buffalo

Dr. D. S. Upadhyay (Main Nominee, CPCSEA) Dr. A. K. Baranwal (Link Nominos, CPCSEA)

Dr. Alek Kumur Shukta (Socially aware nominee) Dr. Mahadeo Kumar (Sci. from outside institute)

Dr. Rishikant (In-charge, Animal House)

Dr. Sushant Srivastav (Mem. from other biol. discipline)

Dr. S. K. Maurya (Member Secretary)



Office of the Institutional Animal Ethics Committee (IAEC)

COLLEGE OF VETERINARY SCIENCE & ANIMAL HUSBANDRY

Acharya Narendra Deva University of Agriculture & Technology, Kamergenj, Ayodhya-224 229 (Registration No.: 2060/GO/ReBi-S/Re-L/19/CPCSEA)

Minutes of the 6th IAEC meeting held on March. 15, 2022 at 11.00 AM in the Seminar room of the College

Members Present:

1	De	V.	K.	Si	ngh,
	1276.4		371	. 447 (8	41/69-15

2 Dr. D. S. Upadhyay,

3. Dr. Atul Kumar Baranwal

4. Dr. Mahadeo Kumar

5. Dr. S. K. Maurya

6. Dr. Rishikant

7. Dr. A. K. Gangwar

8. Dr. Sushant Srivastava

Chairperson, IAEC

Main Nomince

Link Nominee

Scientist from outside institute

Member Secretary, IAEC

Incharge, Animal House

Veterinarian

Member from other biological discipline

Chairperson started the meeting with welcome of the members and informed the committee that no comments were received on the Minutes of the 5th IAEC meeting circulated; the same was confirmed by the IAEC.

The Member Secretary continued the discussions and informed the committee that only one new small animal protocol has been received for discussion and approval by IAEC. Member secretary also informed the committee that 04 protocols have been received for modification/ revision that include use of samples from large animals.

The committee in its deliberations and discussion on the scientific and technical merits of small animal

The committee also discussed the proposals for modification of approved protocols of large animal study that were related with collection and screening of blood samples, semen samples, milk samples etc. The committee is of the view that these modifications may be accepted as they do not affect the procedures recommended in earlier IAEC meeting.

The protocols discussed and approved/ recommended in this meeting are listed in Annexure 1.

The committee visited the animal house including small and large animal quarters and found the facilities neat and sturdy. Remarks and suggestions of each member and the nominees were duly noted for compliance.

The members of the committee dispersed with a vote of thanks to the Chair.

Dr. D. S. Upadhyay

(Main Nominee, CPCSEA)

Dr. A. K. Baranwal

(Link Nominee, CPCSEA)

Dr. Mahadeo Kumar

(Sci. from outside institute)

r. A. K. Gangwar

(Veterinarian)

17,5/03/20

Dr. Rishi Kant (In-charge, Animal House) Dr. Sushant Srivastav (Mem. From other biol.

discipline)

Dr. S. K. Maurya (Member Secretary)

A.] LIST OF SMALL ANIMAL PROTOCOLS DISCUSSED AND APPROVED

-car	IAEC	Title	PI	Remarks/ Ani	No.
37	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Dr. A. K.	Rabbit	24
1		Evaluation of cross linked decellularized urinary bladder, pericardium and diaphragm scaffold of caprine origin prepared using sapindus mukorossi fruit pericarp extract for regeneration of urinary bladder defects in New Zealand white rabbits	Omigen		

B. LIST OF APPROVED PROTOCOLS CONSIDERED FOR MODIFICATION

SN	IAEC ref	Approved Title	PI	Proposed Title	Comments/ remarks
1	24/21	Effects of Ginger (Zingiber officinale) and Black Pepper (Piper nigrum) on cryopreservability of buck spermatozos.	Dr. Rajesh Kumar	Effects of Ginger (Zingiber officinale) and Ascorbic acid on cryopreservability of buck spermatozoa.	Committee accepted the revision as proposed by the respective PIs.
2	25/21	Effects of Curcumin (Curcuma longa) and Ashwagandha (Withania somnifera) on cryopreservability of buck	Dr. Bhaopendra Singh	Effects of L- Cysteine and Cureumin (Cureuma langa) on cryopreservability of buck spermatozoa.	
3	29/21	Studies on In-vitro efficacy of Nigella sativa against common causing mastitis pathogens	Dr. J. P. Singh	Studies on In-vitro efficacy of Cinnamomum zylanicum against S. aureus isolated from buffaloes with mastitis	
4	30/21	Studies on in vitro efficacy of Curcuma longa and Withania sominifera against bovine mastitis	Dr. S. V. Singh	Studies on in vitro efficacy of Curcuma longa ugainst S. aureus isolated from buffaloes with mastitis	

Dr. D. S. Upadhyay (Main Nominee, CPCSEA)

Dr. A. K. Buranwal (Link Nominee, Co.

Dr. Mahadeo Kumur (Sci. from outside institute) Dr. A. K. Gangwar (Veterinarian)

Dr. Rishi Kant (In-charge, Animal House) Dr. Sushant Sewastav (Mem. From other biol,

discipline)

Dr. S. K. Maurya (Member Secretary)



आचार्य नरेन्द्र देव कृषि एवं प्रौद्योगिक विश्वविद्यालय कुमारगंज, अयोध्या—224 229 (ज.प्र.), भारत

Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya-224 229 (U.P.), India

website: www.nduat.org

Email: registrar.nd.15@gmail.com

Phone :05270-262035



PLAGIARISM CHECK

URKUND is used to check accuracy of MSc. and PhD thesis with signature of both research scholar and concerned research guide as per UGC guidelines. " Promotion of academic integrity and prevention of plagiarism in higher educational institutional regulations, 2018".

URKUND is a completely automated system against plagiarism. The Plagiarism Detection Software (PDS) - URKUND has been provided from Shodhsudhi, which is an initiative of UGC, Ministry of Education under Inflibnet, India Nation wide. Inflibnet is main provider/distributor of this science free of cost to all universities in India. The library, ANDUAT has taken the initiative to provide URKUND user account to Head of the Department and Research Scholars of the university.

प्रसामसंबोधित आवार्य नव्येवकृत्यं प्रौवविवविव कुमारमंज,अयोध्या,उव्यव





विश्वविद्यालय अनुदान आयोग University Grants Commission

(मानव संसाधन विकास मंत्रालय, भारत सरकार) (Ministry of Human Resource Development, Govt. of India)

बहादुरशाह ज़क़र मार्ग, नई दिल्ली-110002 Bahadur Shah Zafar Marg, New Delhi-110002

> Ph.: 011-23236288/23239337 Fax: 011-2323 8858 E-mail: secy.ugc@nic.in

D.O.No.F.1-18/2010(CPP-II)

6th August, 2018

Dear Sir/Madam,

In order to put a check on plagiarism and to recommend some institutional mechanism to eliminate the scope of this menace in higher education system in the country, University Grants Commission in its 530th meeting held on 20.03.2018 considered and approved the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018. These Regulations have been notified in the Official Gazette of India on 31st July, 2018 and are available on UGC website i.e. www.ugc.ac.in.

You are requested to put in force these Regulations in your esteemed University and affiliated colleges and ensure compliance of the same.

This may be accorded Top Most Priority.

With kind regards,

Yours sincerely,

(Rajnish Jain)

The Vice-Chancellor of all Universities.

Copy to:

The Publication Officer, UGC for uploading on UGC website.

(Rajnish Jain)



असाधारण

EXTRAORDINARY

भाग III—खण्ड 4

PART III—Section 4

प्राधिकार से प्रकाशित

PUBLISHED BY AUTHORITY

सं. 287] No. 287] नई दिल्ली, मंगलवार, जुलाई 31, 2018/श्रावण 9, 1940

NEW DELHI, TUESDAY, JULY 31, 2018/ SHRAVANA 9, 1940

विश्वविद्यालय अनुदान आयोग

अधिसूचना

विश्वविद्यालय अनुदान आयोग (उच्चतर शिक्षा संस्थानों में अकादिमक सत्यनिष्ठा एवं साहित्यिक चोरी की रोकथाम को प्रोत्साहन) विनियम, 2018

नई दिल्ली, 23 जुलाई, 2018

मि. सं. 1-18/2010 (सीपीपी-II).-

प्रस्तावना

जबकि, विश्वविद्यालय अनुदान आयोग (यूजीसी) अधिनियम, 1956 के अनुसार, उच्च शिक्षा के मानकों को समन्वित एवं सुनिश्चित करने के लिए आदेशाधीन है।

तथा जबिक, किसी छात्र या संकाय या शोधकर्ता या कर्मचारी द्वारा निष्णात तथा शोध स्तर पर डिग्री प्रदान करने हेतु आंशिक रूप से सम्पादित किया गया कार्य, जिसका अकादिमक एवं शोधकार्य का मूल्यांकन किया जा चुका हो, जो शोध—निबन्ध, शोध—प्रबन्ध, शोध पत्रों के प्रकाशन, पुस्तकों में अध्याय, सम्पूर्ण पुस्तकों के रूप में हो तथा कोई अन्य समरूप कार्य, जो अकादिमक, सत्यनिष्ठा एवं मौलिकता के मूल तत्वों को दर्शाये तथा जिसका उच्चतर शिक्षा संस्थानों (HEIs) द्वारा अपनायी गई विभिन्न संबंधित प्रक्रियाओं में अवलोकन किया जाए।

अतः, वि. अ. आ. अधिनियम 1956 के अनुच्छेद 26 के उप अनुच्छेद (1) के खण्ड (एफ) एवं (जी) के साथ पठित अनुच्छेद 12 के खण्ड (जे) के द्वारा प्रदत्त अधिकारों का प्रयोग करते हुए, वि. अ. आ. ने एतद्द्वारा निम्नलिखित विनियम निर्मित किए हैं:—

1. संक्षिप्त शीर्षक, अनुप्रयोग तथा प्रारंभ :

- (ए) इन नियमों को, विश्वविद्यालय अनुदान आयोग (उच्चतर शिक्षा संस्थानों में अकादमिक सत्यनिष्ठा एवं साहित्यिक चोरी की रोकथाम को प्रोत्साहन) विनियम 2018 कहा जाएगा।
- (बी) ये विनियम, देश के सभी उच्चतर शिक्षा संस्थानों के छात्रों, संकायों, शोधकर्ताओं तथा कर्मचारियों पर लागू होंगे।
- (सी) ये विनियम, सरकारी राजपत्र में उनकी अधिसूचना की तारीख से प्रभावी होंगे।

4416 GI/2018 (1)

2. परिभाषाः

- इन विनियमों में, जब तक कि प्रसंग में अन्यथा अपेक्षित न हो-
- (ए) ''अकादिमक सत्यनिष्ठा '' से तात्पर्य, किसी क्रियाकलाप को प्रस्तावित करने, निष्पादित करने, सूचित करने एवं बौद्विक ईमानदारी से है, जिससे बौद्विक गुणों का सृजन हो सके।
- (बी) ''रचनाकार'' रचनाकार के अंतर्गत उच्चतर शैक्षिक संस्थान (HEI) के छात्र या संकाय या शोधकर्ता या कर्मचारी आते हैं जो विचाराधीन कार्य के सुजनकर्ता होते हैं।
- (सी) ''आयोग'' से अभिप्राय वि. अ. आ. से है, जैसा कि वि. अ. आ. अधिनियम, 1956 में यथापरिभाषित है।
- (डी) ''सामान्य ज्ञान'' से अभिप्राय, सुप्रसिद्व तथ्य, उद्वरण, आंकडा या जानकारी से है जिसकी अधिकांश व्यक्तियों को जानकारी हो।
- (ई) ''डिग्री'' से अभिप्राय, वि. अ. आ. द्वारा निर्धारित की गई ऐसी डिग्री से है जो कि वि. अ. आ. अधिनियम 1956 के अनुच्छेद 22 के अंतर्गत सरकारी राजपत्र में अधिसूचित की गई हो।
- **(एफ)** ''विभागीय अकादिमक सत्यनिष्ठा नामसूची'' से तात्पर्य होगा विभागीय स्तर पर गठित निकाय, जो साहित्यिक चोरी के आरोपों की जांच पडताल करेगा।
- (जी) ''संकाय'' से तात्पर्य, किसी उच्चतर शिक्षा संस्थान में नामांकित किसी व्यक्ति से है जो छात्रों को शिक्षण तथा / या मार्गदर्शन प्रदान करता हो, चाहे वह किसी भी क्षमता का हो अर्थात् नियमित, तदर्थ, अतिथि, अस्थायी, मुलाकाती आदि।
- (एच) ''उच्चतर शिक्षा संस्थान (HEI)'' से अभिप्राय ऐसे वि. वि. से है जो वि. अ. आ. अधिनियम, 1956 के अनुच्छेद 2(एफ) के अंतर्गत मान्यताप्राप्त हो या वि. अ. आ. अधिनियम 1956 के अनुच्छेद 3 के अंतर्गत वह संस्थान जो मानित वि. वि. के अंतर्गत आता हो या मान्य महाविद्यालय/संस्थान या किसी वि. वि. की एक संघटक इकाई हो।
- (आई) ''सूचना'' इसके अंतर्गत आंकड़े, संदेश, पाठ्यवस्तु, आकृतियां, ध्वनि, आवाज, कोड, कम्प्यूटर कार्यक्रम, सॉफ्टवेयर एवं डाटाबेस या माइक्रोफिल्म या कम्प्यूटर सृजित माइक्रोफिश सम्मिलित हैं।
- (जे) ''संस्थागत अकादिमक सत्यिनिष्ठा नामसूची'' से अभिप्राय एक ऐसे निकाय से है जो विभागीय अकादिमक सत्यिनिष्ठा नामसूची की सिफारिशों पर विचार करने के लिए तथा साहित्यिक चोरी के आरोपों के बारे में उचित निर्णय लेने तथा दण्ड लागू करने संबंधी निर्णय लेने के लिए संस्थागत स्तर पर गठित किया गया हो। अपवादिक मामलों में यह न्यास संस्थागत स्तर पर साहित्यिक चोरी के आरोपों की जांच करेगा।
- (के) ''अधिसूचना'' से तात्पर्य, सरकारी राजपत्र में प्रकाशित की गई अधिसूचना से है तथा अधिसूचित करने की अभिव्यक्ति का उसके समानार्थी तथा व्याकरणीय भिन्नता के अनुरूप अनुमान लगाया जाएगा।
- (एल) ''साहित्यिक चोरी'' से अभिप्राय किसी अन्य के द्वारा किए गए कार्य या विचार को निज प्रयोग में लेना तथा अपने नाम से दूसरे को देना।
- (एम) ''पाठ्यक्रम'' से तात्पर्य, अध्ययन किया जाने वाला वह पाठ्यक्रम जिसके लिए निष्णात एवं शोध स्तर पर डिग्री प्रदान की जाए।
- (एन) 'शोधकर्ता'' से तात्पर्य है उच्चतर शैक्षिक संस्थानों में अकादिमक / वैज्ञानिक शोध करने वाला व्यक्ति।
- (ओ) ''पाण्डुलिपि'' के अंतर्गत शोध—लेख, शोध—निबन्ध, शोध—पत्र, पुस्तकों में अध्याय, सम्पूर्ण पुस्तकें तथा अन्य समान कार्य का मूल्यांकन / अभिमत हेतु जमा किया जाने वाला कार्य जो उच्चतर शिक्षा संस्थान के छात्रों या संकाय या शोधकर्ता या कर्मचारी द्वारा निष्णात एवं शोधस्तर की डिग्नियों को प्राप्त करने या प्रिंट या इलेक्ट्रॉनिक मीडिया में प्रकाशन हेतु तैयार किया जाए। तथापि, इसमें नियत कार्य / आविधक पत्र / परियोजना रिपोर्ट / पाठ्यक्रम संबंधी कार्य / निबन्ध तथा उत्तर पुस्तिकाएं शामिल नहीं होंगी।
- (पी) "स्त्रोत" से अभिप्राय, किसी भी स्त्रोत से किसी भी रूप में प्राप्त की गई प्रकाशित मुख्य एवं गौण अध्ययन सामग्री से है, जिसमें लिखित जानकारी तथा अन्य व्यक्तियों अर्थात विख्यात विद्वानों, लोकप्रिय हस्तियों, किसी भी प्रकार के पेशेवर व्यक्तियों से प्रत्यक्षतः प्राप्त किये गए दृष्टिकोण को शामिल किया गया हो। इसके अतिरिक्त, इलेक्ट्रॉनिक रूप में आंकड़े एवं सूचना यथा श्रव्य, दृश्य, आकृति या पाठ्यक्रम के रूप में, जिसकी सूचना समान अर्थ में, सूचना प्रौद्योगिकी अधिनियम 2000 के अनुच्छेद 2(1)(V) के अंतर्गत वर्णित है तथा जिसको यहां विनियम 2(1) में पुनः प्रस्तुत किया गया है।

- (क्यू) ''कर्मचारी'' से तात्पर्य उच्चतर शिक्षा संस्थानों में कार्यरत् गैर–शैक्षणिक कर्मचारी वर्ग से है, जो किसी भी क्षमता अर्थात नियमित, अस्थायी, अनुबन्धात्मक, बाहय स्त्रोत आदि में कार्यरत हों।
- (आर) ''छात्र'' से तात्पर्य उस व्यक्ति से है, जिसका विधिवत दाखिला हुआ हो, पाठ्यक्रम का अध्ययन कर रहा हो, जिसमें किसी भी पद्धति (पूर्णकालिक या अंशकालिक या दूरस्थ माध्यम) से अध्ययन करने वाले शोध पाठ्यक्रम को सिम्मिलित किया गया है।
- (एस) ''विश्वविद्यालय'' से अभिप्राय उन विश्वविद्यालयों से है, जो केन्द्रीय अधिनियम, प्रान्तीय अधिनियम या राज्य अधिनियम के अधीन स्थापित अथवा निगमित हैं तथा उनमें वह मानित वि. वि. संस्थान सम्मिलित हैं जो यूजीसी अधिनियम, 1956 के अनुच्छेद (3) के अंतर्गत आते हैं।
- (टी) "वर्ष" से तात्पर्य वह अकादिमक सत्र है, जिसमें प्रमाणित अपराध किया गया हो।
 ऐसे शब्द तथा अभिव्यक्तियां, जिन्हें इन विनियमों में परिभाषित नहीं किया गया है, लेकिन वि.अ.आ. अधिनियम,
 1956 में परिभाषित हैं तथा इन विनियमों के साथ सुसंगत नहीं हैं उनका इस अधिनियम में निर्दिष्ट तद्नुरूप
 अर्थ लगाया जाएगा।

3. उद्देश्यः

- 3.1 शोध, शोध–पत्र, शोध–निबन्ध के दायित्वपूर्ण आचरण, अकादिमक सत्यनिष्ठा के प्रोत्साहन के प्रति जागरूकता पैदा करना, छात्र संकाय, शोधकर्ता एवं कर्मचारी वर्ग में अकादिमक लेखन में साहित्यिक चोरी सिहत कदाचार से बचाव करना।
- 3.2 शिक्षण एवं प्रशिक्षण के जरिये, संस्थानात्मक तंत्र स्थापित करना, जिससे शोध, शोध–पत्र शोधनिबन्ध, अकादिमक सत्यनिष्ठा तथा साहित्यिक चोरी के निवारण में प्रोन्नित सहज हो सके।
- 3.3 साहित्यिक चोरी का पता लगाने के लिए पद्वतियां विकसित करना तथा साहित्यिक चोरी से बचाव के लिए रचना—तंत्र की स्थापना करना तथा उच्चतर शिक्षा संस्थान के छात्र, संकाय, शोधकर्ता या कर्मचारी को साहित्यिक चोरी का कृत्य करने पर दण्डित करना।

4. उच्चतर शिक्षा संस्थान के दायित्व :

प्रत्येक उच्चतर शिक्षा संस्थान को एक ऐसे तंत्र की स्थापना करनी चाहिए जैसा कि इन विनियमों में निर्दिष्ट किया गया है, जो कि शोध एवं अकादिमक कार्यकलापों के दायित्वपूर्ण आचरण के प्रति जागरूकता लाने में संवर्धन करे, साथ ही अकादिमक सत्यनिष्ठा को प्रोन्नत करे तथा साहित्यिक चोरी से बचाव करे।

5. जागरूकता कार्यक्रम एवं प्रशिक्षण :

- (क) उच्चतर शिक्षा संस्थान, अपने छात्रों, संकायों, शोधकर्ताओं तथा कर्मचारियों को उचित आरोपण के संबंध में अनुदेश देगा, जहां कहीं भी आवश्यक हो, लेखक से स्वीकृति की मांग करेगा, आवश्यकतानुसार उन सुसंगत तथा अनुमतिनिर्दिष्ट अनुशासनों के स्त्रोत की जानकारी प्राप्त करेगा तथा जो नियमों के अनुरूप, अंतर्राष्ट्रीय सम्मेलन तथा स्त्रोत को नियंत्रित करने वाले विनियमों से संबंधित होंगे।
- (ख) उच्चतर शिक्षा संस्थान, प्रत्येक सत्र में सम्मेलन / जागरूकता कार्यक्रमों का सुग्राही संचालन करेगा, जो शोध, शोध–पत्र, शोध–निबन्ध के दायित्वपूर्ण आचरण तथा अकादिमक सत्यनिष्ठा की प्रोन्नित तथा छात्रों, संकायों, शोधकर्ताओं तथा कर्मचारियों के लिए शिक्षा में नैतिकता को बढावा देगा।
- (ग) उच्चतर शिक्षा संस्थान, निम्नलिखित कार्यों पर जोर देगा :
 - i. एक अनिवार्य पाठ्यक्रम कार्यविधि / माड्यूल के रूप में स्नातकपूर्व (यूजी) / स्नातकोत्तर (पीजी) / निष्णात डिग्री की पाठ्यवस्तु में अकादिमक सत्यिनिष्ठा के आधारभूत सिद्वांतों को सम्मिलित करना।
 - ii. निष्णात एवं शोधविशेषज्ञों के लिए अनिवार्य पाठ्यक्रम कार्यविधि / मॉड्यूल के रूप में शोध एवं प्रकाशन के दायित्वपूर्ण आचरण संबंधी मूल तत्वों को सिम्मिलित करना।
 - iii. उच्चतर शिक्षा संस्थान के संकाय एवं कर्मचारी सदस्यों हेतु अभिमुखी एवं पुनश्चर्या पाठ्यक्रमों को आयोजित करना, शोध एवं प्रकाशन के आधारभूत दायित्वपूर्ण आचरण के तथ्यों को शामिल करना।
 - iv. छात्र, संकाय, शोधकर्ता एवं कर्मचारियों को साहित्यिक चोरी का पता लगाने वाले उपकरणों / साधनों तथा संदर्भप्रबन्धन उपकरणों को प्रयुक्त करने का प्रशिक्षण प्रदान करना।
 - v. साहित्यिक चोरी का पता लगाने हेतु आधुनिक प्रौद्योगिकियों सहित सुविधा उपकरणों की स्थापना करना।

vi. अंतर्राष्ट्रीय शोधकर्ताओं की पंजीकरण पद्धतियों पर छात्र, संकाय शोधकर्ता एवं कर्मचारी सदस्य के पंजीकरण को प्रोत्साहित करना।

6. साहित्यिक चोरी पर रोकथाम :

- (ए) उच्चतर शिक्षा संस्थान, उपयुक्त सॉफ्टवेयर प्रयुक्त करते हुए प्रौद्योगिकी आधारित रचनातंत्र की घोषणा एवं कार्यान्वयन करेगा, जिससे यह सुनिश्चित हो सके कि शोध—पत्र, शोध—निबन्ध, प्रकाशन या कोई अन्य दस्तावेज उसकी प्रस्तृति के समय साहित्यिक चोरी से मुक्त हैं।
- (बी) ऊपर (ए) में वर्णित रचनातंत्र, शोधकार्य में संलिप्त सभी छात्रों को उपलब्ध कराया जाएगा जिसमें छात्र, संकाय शोधकर्ता एवं कर्मचारी सदस्य आदि भी सम्मिलित होंगे।
- (सी) प्रत्येक छात्र, जो शोध—पत्र, शोध—निबन्ध या समान दस्तावेज, उच्चतर शिक्षा संस्थान को प्रस्तुत करने जा रहा है, वह एक ऐसा वचन—बंध प्रस्तुत करेगा जिसमें यह दर्शाया जाएगा कि प्रस्तुत दस्तावेज उसके द्वारा तैयार किया गया है तथा यह दस्तावेज उसका मौलिक लेखन कार्य है तथा किसी भी प्रकार की साहित्यिक चोरी से मुक्त है।
- (डी) इस वचन—बंध में यह तथ्य भी शामिल किया जाएगा कि इस दस्तावेज की उच्चतर शिक्षा संस्थान द्वारा साहित्यिक चोरी का पता लगाने वाले उपकरणों के जरिये विधिवत जाँच कर ली गई है।
- (ई) संस्थान, साहित्यिक चोरी के संबंध में एक ऐसी संबंधित नीति का विकास करेगा तथा इससे संबंधित विधायी निकायों / प्राधिकरणों से उसे स्वीकृत कराएगा। स्वीकृत नीति को HEI वेबसाइट के होमपेज पर डाउनलोड किया जाएगा।
- (एफ) प्रत्येक पर्यवेक्षक, एक प्रमाण–पत्र प्रस्तुत करेगा जिसमें यह निर्दिष्ट किया जाएगा कि शोधकर्ता द्वारा किया गया अमुक कार्य, शोधकर्ता के द्वारा तथा मेरे अधीन रहकर किया गया है तथा यह साहित्यिक चोरी से मुक्त है।
- (जी) संस्थान, सभी निष्णात, शोध पाठ्यक्रम के शोध—पत्रों तथा शोध—निबन्धों को, डिग्री प्रदान किए जाने के पश्चात् 1 माह के भीतर **'शोध गंगा ई—रिपोजिटरी'** के अंतर्गत डिजीटल रिपोजिटरी को पोषित करने हेतु इनफ्लीबनेट पर इसकी सॉफ्ट प्रतियां प्रस्तुत करेगा।
- (एच) संस्थान, संस्थानात्मक रिपोजिटरी का संस्थान की वेबसाइट पर सृजन करेगा जिसमें शोध—निबन्ध/ शोध—पत्र/पत्र—आलेख/प्रकाशन तथा अन्य आंतरिक (इन—हाउस) प्रकाशनों को भी सम्मिलित करेगा।

7. साहित्यिक चोरी के बहिष्करण हेतु समरूपता रोकथाम :

साहित्यिक चोरी के लिए समानता जांच में निम्नवत वर्जित होंगे :

- i. सभी अनिवार्य अनुमतियों और / अथवा गुणधर्म के साथ उद्धृत कार्य।
- ii. सभी सदर्भ, पुस्तकसूची, विषयवस्तु की तालिका, आमुख तथा साभार।
- iii. सभी सामान्य शब्दावली, विधि, मानक, चिहन तथा मानक समीकरण।

नोट:

छात्रों, संकाय, शोधकर्ताओं तथा कर्मचारिवृंदों द्वारा किया गया शोधकार्य, मूल विचार पर आधारित होगा, जिसमें केवल संक्षेपण, सारांश, अवधारणा, टिप्पणियां, परिणाम, निष्कर्ष तथा सिफारिशें शामिल होंगी तथा इसमें कोई समानताएं नहीं होंगी। इसमें चौदह (14) क्रमगत शब्दों तक सामान्य ज्ञान अथवा अनुरूप शब्दावली विवर्जित होगी।

8 साहित्यिक चोरी के स्तर :

साहित्यिक चोरी को परिभाषित करने के प्रयोजनार्थ उसकी गंभीरता के बढ़ते क्रम में साहित्यिक चोरी को निम्नवत स्तरों में मापा जाएगाः

- i. स्तर शून्य : दस प्रतिशत तक समानता— थोड़ी बहुत समानताएं, कोई दण्ड नहीं।
- ii. प्रथम स्तर : दस प्रतिशत से चालीस प्रतिशत तक समानताएं।
- iii. द्वितीय स्तर : चालीस प्रतिशत से साठ प्रतिशत तक समानताएं।
- iv. तृतीय स्तर : साठ प्रतिशत से अधिक समानताएं।

9. साहित्यिक चोरी का पता लगाना/जानकारी प्रदान करना/कार्यवाही करना:

यदि शैक्षिक समुदाय का कोई सदस्य उपर्युक्त प्रमाण के साथ संदेह व्यक्त करता है कि किसी दस्तावेज में साहित्यिक चोरी का कोई प्रकरण बनता है, वह इस मामले की जानकारी विभागीय शैक्षिक सत्यनिष्ठा पेनल (डीएआईपी) को देगा। डीएआईपी, ऐसी शिकायत अथवा आरोप की प्राप्ति पर मामले की जांच करेगा तथा उच्चतर शिक्षा संस्थान की संस्थागत शैक्षिक सत्यनिष्ठा नामसूची (आईएआईपी) को अपनी सिफारिशें सौंपेगा।

उच्चतर शिक्षा संस्थान के प्राधिकारी साहित्यिक चोरी के कृत्य का *स्वयंमेव* संज्ञान भी ले सकते हैं और इन विनियमों के तहत कार्यवाहियां कर सकते हैं। इसी प्रकार, परीक्षक के निष्कर्षों के आधार पर भी उच्चतर शिक्षा संस्थान द्वारा कार्यवाही आरंभ की जा सकती है। ऐसे सभी मामलों की आईएआईपी द्वारा जांच की जाएगी।

10. विभागीय शैक्षिक सत्यनिष्ठा नामसूची (डीएआईपी) :

- i. उच्चतर शिक्षा संस्थान के सभी विभाग एक डीएआईपी को अधिसूचित करेंगे जिसकी संरचना नीचे दी गई है:
 - क. अध्यक्ष-विभागाध्यक्ष
 - **ख.** सदस्य—विभाग से इतर एक वरिष्ठ शिक्षाविद्, जिसे उच्चतर शिक्षा संस्थान के प्रमुख द्वारा नामित किया जाएगा।
 - ग. सदस्य–साहित्यिक चोरी के साधनों से भली–भांति परिचित एक व्यक्ति, जिसे विभागाध्यक्ष द्वारा नामित किया जाएगा।

बिंदु 'ख' तथा 'ग' के संबंध में सदस्यगणों का कार्यकाल दो वर्षों का होगा। बैठक के लिए सदस्यों की गणपूर्ति 3 में से 2 सदस्यों द्वारा होगी (सभापति सहित)।

- ii. डीएआईपी, छात्रों, संकाय, शोधकर्ताओं तथा कर्मचारिवृंदों के विरूद्ध साहित्यिक चोरी के आरोपों के संबंध में निर्णय देते हुए नैसर्गिक न्याय के सिद्धांतों का पालन करेगा।
- iii. डीएआईपी, को साहित्यिक चोरी के स्तरों का मूल्यांकन करने तथा तदनुसार, दण्ड की सिफारिश करने की शक्तियां प्राप्त होंगी।
- iv. शिकायत प्राप्त होने / कार्यवाहियां आरंभ किए जाने की तिथि से 45 दिनों के भीतर डीएआईपी, जांच उपरांत, अपनी रिपोर्ट सहित लगाए जाने वाले दण्डों पर अपनी सिफारिशों को आईएआईपी को प्रस्तुत करेगी।

11. संस्थागत शैक्षिक सत्यनिष्ठा पेनल (आईएआईपी) :

- i. उच्चतर शिक्षा संस्थान, आईएआईपी को अधिसूचित करेंगे जिसकी संरचना नीचे दी गई है:
 - क. अध्यक्ष-उच्चतर शिक्षा संस्थान का सम-क्लपति / संकाय अध्यक्ष / वरिष्ठ शिक्षाविद्।
 - ख. सदस्य–उच्चतर शिक्षा संस्थान के अध्यक्ष द्वारा नामित एक वरिष्ठ शिक्षाविद।
 - ग. सदस्य—उच्चतर शिक्षा संस्थान से इतर किसी अन्य उच्चतर शिक्षा संस्थान द्वारा नामनित किया जाने वाला एक सदस्यगण।
 - **घ**. सदस्य—साहित्यिक चोरी के साधनों से भली—भांति परिचित एक व्यक्ति, जिसे विभागाध्यक्ष द्वारा नामित किया जाएगा।

एक ही व्यक्ति, डीएआईपी और आईएआईपी का अध्यक्ष नहीं होगा। अध्यक्ष सिहत सिमति के सदस्यगणों का कार्यकाल 3 वर्षों का होगा। बैठक के लिए सदस्यों की गणपूर्ति 3 में से 2 सदस्यों (सभापित सिहत) द्वारा होगी ।

- ii. आईएआईपी, डीएआईपी की सिफारिशों पर विचार करेगा।
- iii. आईएआईपी, इन विनियमों में उल्लिखित उपबंधों के अनुसार साहित्यिक चोरी के मामलों की जांच भी करेगा।
- iv. आईएआईपी, उच्चतर शिक्षा संस्थान के छात्रों, संकाय, शोधकर्ताओं तथा कर्मचारिवृंदों के विरूद्ध साहित्यिक चोरी के आरोपों के संबंध में निर्णय देते हुए नैसर्गिक न्याय के सिद्धांतों का पालन करेगा।
- v. आईएआईपी को विधिवत् औचित्य के साथ दण्ड सहित डीएआईपी की सिफारिशों की समीक्षा करने की भी शक्तियां प्राप्त होंगी।
- vi. आईएआईपी जांच उपरांत रिपोर्ट तथा उच्चतर शिक्षा विभाग के प्रमुख द्वारा लगाए जाने वाले दण्ड संबंधी सिफारिशों को डीएआईपी द्वारा शिकायत प्राप्त होने/ कार्यवाहियां आरंभ किए जाने की तिथि से 45 दिनों के भीतर भेजेगा।
- vii. आईएआईपी उस व्यक्ति(यों) को रिपोर्ट की प्रति उपलब्ध कराएगा जिसके विरुद्ध जांच रिपोर्ट प्रस्तुत की गई है।

12. दण्ड :

साहित्यिक चोरी के मामले में निष्णात तथा शोध कार्यक्रमों के स्तर पर उच्चतर शिक्षा संस्थान में अध्ययनरत छात्रों तथा उच्चतर शिक्षा के संस्थानों के शोधकर्ताओं, संकाय तथा कर्मचारिवृंदों पर केवल उस स्थिति में ही दण्ड लगाया जाएगा जब बिना किसी संदेह के किसी व्यक्ति विशेष द्वारा शैक्षिक कदाचार किए जाने की पुष्टि हो जाती है और जब अपील के सभी विकल्पों को पूर्णतः उपयोग कर लिया जाता है और जब अमुक व्यक्ति को अपना बचाव करने के लिए स्पष्ट अथवा पारदर्शी पद्धित से पर्याप्त अवसर प्रदान किया गया हो।

12.1 शोध-प्रबंध (थीसीस) तथा शोध-निबंध (डिसरटेशन) को प्रस्तुत करने के मामले में साहित्यिक चोरी :

संस्थागत शैक्षिक सत्यनिष्ठा नामसूची (आईएआईपी) साहित्यिक चोरी की गंभीरता पर विचार कर दण्ड आरोपित करेगा :

- i. स्तर शून्य : दस प्रतिशत तक समानताएं— थोड़ी बहुत समानताएं, कोई दण्ड नहीं।
- ii. प्रथम स्तर : दस प्रतिशत से चालीस प्रतिशत तक समानताएं— ऐसे छात्रों को अधिकतम छह माह की विनिर्धारित अवधि के भीतर संशोधित आलेख जमा करने को कहा जाएगा।
- iii. **द्वितीय स्तर : चालीस प्रतिशत से साठ प्रतिशत तक समानताएं—** ऐसे छात्रों को अधिकतम एक वर्ष की अवधि के लिए संशोधित आलेख जमा करने से वंचित किया जाएगा।
- iv. **तृतीय स्तर : साठ प्रतिशत से अधिक समानताएं** ऐसे छात्रों के उस कार्यक्रम के लिए पंजीकरण को रद्द कर दिया जाएगा।

नोट 1: बार—बार साहित्यिक चोरी करने पर दण्ड : प्रत्येक छात्र को साहित्यिक चोरी के लिए दण्डित किया जाएगा यदि उसके द्वारा की गई साहित्यिक चोरी पिछली बार की गई साहित्यिक चोरी से एक स्तर अधिक हो। यदि सर्वोच्च स्तर की साहित्यिक चोरी की गई हो तो उसे कारगर दंड दिया जाएगा।

नोट 2: उस स्थित में साहित्यिक चोरी जब उपाधि/क्रेडिट पहले ही प्राप्त किया गया हो— यदि उपाधि/क्रेडिट किए जाने, जैसा भी मामला हो, प्रदान किए जाने की तिथि के बाद में साहित्यिक चोरी सिद्ध हो तो उसकी उपाधि/क्रेडिट को आईएआईपी द्वारा संस्तुत अविध के लिए आस्थिगित रखा जाएगा तथा संस्थान के प्रमुख द्वारा अनुमोदित किया जाएगा।

12.2 शैक्षिक तथा शोध प्रकाशनों में साहित्यिक चोरी के मामले में दण्ड :

- I. स्तर शून्य : दस प्रतिशत तक समानताएं— थोड़ी बहुत समानताएं, कोई दण्ड नहीं।
- II. प्रथम स्तर : दस प्रतिशत से चालीस प्रतिशत तक समानताएं
 - i. ऐसे छात्रों को, पांडुलिपि वापस लेने को कहा जाएगा।
- III. द्वितीय स्तर : चालीस प्रतिशत से साठ प्रतिशत तक समानताएं
 - i. उन्हें पांडुलिपि वापस लेने को कहा जाएगा।
 - ii. उन्हें एक वार्षिक वेतन वृद्धि के अधिकार से वंचित किया जाएगा।
 - iii. उन्हें दो वर्ष की अवधि के लिए किसी नई निष्णात, एम.फिल., पीएच.डी. छात्र / विद्वान का पर्यवेक्षण करने की अनुमति नहीं दी जाएगी।
- IV. तृतीय स्तर : साठ प्रतिशत से अधिक समानताएं
 - i. उन्हें पांड्लिपि वापस लेने को कहा जाएगा।
 - ii. उन्हें लगातार दो वार्षिक वेतन वृद्धि के अधिकार से वंचित किया जाएगा।
 - iii. उन्हें तीन वर्ष की अवधि के लिए किसी नए निष्णात, एम.फिल., पीएच.डी. छात्र / विद्वान का पर्यवेक्षण करने की अनुमति नहीं दी जाएगी।

नोट 1: बार— बार साहित्यिक चोरी करने पर दण्ड : उन्हें पांडुलिपि वापस लेने को कहा जाएगा और उन्हें की गई साहित्यिक चोरी के निम्न स्तर से एक स्तर ऊपर की साहित्यिक चोरी के लिए दिण्डित किया जाएगा। यदि की गई साहित्यिक चोरी सर्वोच्च स्तर की हो तो उसके लिए विहित दंड लागू होगा। यदि तृतीय स्तर के दोष की पुनरावृत्ति की गई हो तो उच्चतर शिक्षा संस्थान द्वारा सेवा नियमों के अनुसार निलंबन/सेवा समाप्ति सहित अनुशासनात्मक कार्रवाई की जाएगी।

नोट 2: उस स्थिति में दण्ड, जब साहित्यिक चोरी का लाम अथवा क्रेडिट पहले ही प्राप्त किया गया हो— यदि लाम अथवा क्रेडिट प्राप्त किए जाने, जैसा भी मामला हो, की तिथि के बाद साहित्यिक चोरी सिद्ध हो तो उसके द्वारा प्राप्त लाम अथवा क्रेडिट को आईएआईपी द्वारा संस्तुत अविध के लिए आस्थिगित रखा जाएगा तथा संस्थान के प्रमुख द्वारा अनुमोदित किया जाएगा।

- नोट 3: उच्चतर शिक्षा संस्थान ऐसा तंत्र विकसित करेंगे ताकि यह सुनिश्चित किया जाए कि छात्र, संकाय, शोधकर्ता अथवा कर्मचारिवृंद द्वारा प्रकाशित किए गए प्रत्येक पत्र/शोध—प्रबंध (थीसीस) तथा शोध—निबंध (डिसरटेशन) को अग्रेषित/ प्रस्तुत किए जाने के समय साहित्यिक चोरी के लिए जांचा जाए।
- नोट 4: यदि उच्चतर शिक्षा संस्थान के प्रधान के विरूद्ध साहित्यिक चोरी की कोई शिकायत हो तो, इन विनियमों के अनुरूप उच्चतर शिक्षा संस्थान के नियंत्रण अधिकारी द्वारा उपर्युक्त कार्रवाई की जाएगी।
- नोट 5 : यदि संस्थागत स्तर पर विभागाध्यक्ष / प्राधिकारियों के विरूद्ध साहित्यिक चोरी की कोई शिकायत हो तो, इन विनियमों के अनुरूप आईएआईपी द्वारा उपयुक्त कार्रवाई की जाएगी जिसे सक्षम अधिकारी द्वारा अनुमोदित किया जाएगा।
- नोट 6: यदि डीएआईपी अथवा आईएआईपी के किसी सदस्यगण के विरूद्ध साहित्यिक चोरी की कोई शिकायत हो तो, ऐसा सदस्य ऐसी बैठकों में भाग नहीं लेगा जहां उसके मामले के संबंध में चर्चा की जा रही हो/अथवा जांच की जा रही हो।

13. कठिनाइयों का निवारण

विश्वविद्यालय अनुदान आयोग, इन विनियमों के कार्यान्वयन के दौरान सामने आने वाली कठिनाइयों को भारत सरकार / मानव संसाधन विकास मंत्रालय के परामर्श से निवारण करने का अधिकार सुरक्षित रखता है।

प्रो. रजनीश जैन, सचिव

[विज्ञापन—III / 4 / असा. / 161 / 18]

UNIVERSITY GRANTS COMMISSION

NOTIFICATION

UNIVERSITY GRANTS COMMISSION (PROMOTION OF ACADEMIC INTEGRITY AND PREVENTION OF PLAGIARISM IN HIGHER EDUCATIONAL INSTITUTIONS) REGULATIONS, 2018

New Delhi, the 23rd July, 2018

F. 1-18/2010(CPP-II).—

Preamble

Whereas, University Grants Commission (UGC), as per UGC Act, 1956, is mandated to coordinate and determine the standards of higher education;

And whereas, assessment of academic and research work done leading to the partial fulfillment for the award of degrees at Masters and Research level, by a student or a faculty or a researcher or a staff, in the form of thesis, dissertation and publication of research papers, chapters in books, full-fledged books and any other similar work, reflects the extent to which elements of academic integrity and originality are observed in various relevant processes adopted by Higher Educational Institutions (HEIs);

Therefore, in exercise of the powers conferred by clause (j) of Section 12 read with clauses (f) and (g) of subsection (1) of Section 26 of the University Grants Commission Act, 1956, the University Grants Commission hereby makes the following regulations:-

1. Short title, application and commencement -

- a. These regulations shall be called the University Grants Commission (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018.
- b. They shall apply to the students, faculty, researchers and staff of all Higher Educational Institutions in the country.
- c. These regulations shall come into force from the date of their notification in the Official Gazette.

2. Definitions -

In these regulations, unless the context otherwise requires—

- a. "Academic Integrity" is the intellectual honesty in proposing, performing and reporting any activity, which leads to the creation of intellectual property;
- b. "Author" includes a student or a faculty or a researcher or staff of Higher Educational Institution (HEI) who claims to be the creator of the work under consideration;
- "Commission" means the University Grants Commission as defined in the University Grants Commission
 Act, 1956;
- d. "Common Knowledge" means a well known fact, quote, figure or information that is known to most of the people;
- e. "Degree" means any such degree specified by the University Grants Commission, by notification in the Official Gazette, under section 22 of the University Grants Commission Act, 1956;
- f. "Departmental Academic Integrity Panel" shall mean the body constituted at the departmental level to investigate allegations of plagiarism;
- g. "Faculty" refers to a person who is teaching and/or guiding students enrolled in an HEI in any capacity whatsoever i.e. regular, ad-hoc, guest, temporary, visiting etc;
- h. "Higher Educational Institution (HEI)" means a university recognized under section 2(f) of the UGC Act, 1956 or an institution deemed to be university under section 3 of the UGC Act, 1956 or an affiliating college / institution or a constituent unit of a university;
- i. "Information" includes data, message, text, images, sound, voice, codes, computer programs, software and databases or microfilm or computer generated microfiche;
- j. "Institutional Academic Integrity Panel" shall mean the body constituted at Institutional level to consider recommendations of the departmental academic integrity panel and take appropriate decisions in respect of allegations of plagiarism and decide on penalties to be imposed. In exceptional cases, it shall investigate allegations of plagiarism at the institutional level;
- k. "Notification" means a notification published in the Official Gazette and the expression "notify" with its cognate meanings and grammatical variation shall be construed accordingly;
- 1. "Plagiarism" means the practice of taking someone else's work or idea and passing them as one's own.
- m. "Programme" means a programme of study leading to the award of a masters and research level degree;
- n. "Researcher" refers to a person conducting academic / scientific research in HEIs;
- o. "Script" includes research paper, thesis, dissertation, chapters in books, full-fledged books and any other similar work, submitted for assessment / opinion leading to the award of master and research level degrees or publication in print or electronic media by students or faculty or researcher or staff of an HEI; however, this shall exclude assignments / term papers / project reports / course work / essays and answer scripts etc.;
- p. "Source" means the published primary and secondary material from any source whatsoever and includes written information and opinions gained directly from other people, including eminent scholars, public figures and practitioners in any form whatsoever as also data and information in the electronic form be it audio, video, image or text; Information being given the same meaning as defined under Section 2 (1) (v) of the Information Technology Act, 2000 and reproduced here in Regulation 2 (1);
- q. "Staff" refers to all non-teaching staff working in HEIs in any capacity whatsoever i.e. regular, temporary, contractual, outsourced etc.;
- r. "Student" means a person duly admitted and pursuing a programme of study including a research programme in any mode of study (full time or part-time or distance mode);
- s. "University" means a university established or incorporated by or under a Central Act, a Provincial Act or a State Act, and includes an institution deemed to be university under section 3 of the UGC Act, 1956;
- t. "Year" means the academic session in which a proven offence has been committed.

Words and expressions used and not defined in these regulations but defined in the University Grants Commission Act, 1956 shall have the meanings respectively assigned to them in UGC Act, 1956.

3. Objectives

- 3.1 To create awareness about responsible conduct of research, thesis, dissertation, promotion of academic integrity and prevention of misconduct including plagiarism in academic writing among student, faculty, researcher and staff.
- 3.2 To establish institutional mechanism through education and training to facilitate responsible conduct of research, thesis, dissertation, promotion of academic integrity and deterrence from plagiarism.
- 3.3. To develop systems to detect plagiarism and to set up mechanisms to prevent plagiarism and punish a student, faculty, researcher or staff of HEI committing the act of plagiarism.

4. Duties of HEI:

Every HEI should establish the mechanism as prescribed in these regulations, to enhance awareness about responsible conduct of research and academic activities, to promote academic integrity and to prevent plagiarism.

5. Awareness Programs and Trainings:

- (a) HEI shall instruct students, faculty, researcher and staff about proper attribution, seeking permission of the author wherever necessary, acknowledgement of source compatible with the needs and specificities of disciplines and in accordance with rules, international conventions and regulations governing the source.
- (b) HEI shall conduct sensitization seminars/ awareness programs every semester on responsible conduct of research, thesis, dissertation, promotion of academic integrity and ethics in education for students, faculty, researcher and staff.
- (c) HEI shall:
 - i. Include the cardinal principles of academic integrity in the curricula of Undergraduate (UG)/Postgraduate (PG)/Master's degree etc. as a compulsory course work/module.
 - ii. Include elements of responsible conduct of research and publication ethics as a compulsory course work/module for Masters and Research Scholars.
 - iii. Include elements of responsible conduct of research and publication ethics in Orientation and Refresher Courses organized for faculty and staff members of the HEI.
 - iv. Train student, faculty, researcher and staff for using plagiarism detection tools and reference management tools.
 - v. Establish facility equipped with modern technologies for detection of plagiarism.
 - vi. Encourage student, faculty, researcher and staff to register on international researcher's Registry systems.

6. Curbing Plagiarism

- a) HEI shall declare and implement the technology based mechanism using appropriate software so as to ensure that documents such as thesis, dissertation, publications or any other such documents are free of plagiarism at the time of their submission.
- b) The mechanism as defined at (a) above shall be made accessible to all engaged in research work including student, faculty, researcher and staff etc.
- c) Every student submitting a thesis, dissertation, or any other such documents to the HEI shall submit an undertaking indicating that the document has been prepared by him or her and that the document is his/her original work and free of any plagiarism.
- d) The undertaking shall include the fact that the document has been duly checked through a Plagiarism detection tool approved by the HEI.
- e) HEI shall develop a policy on plagiarism and get it approved by its relevant statutory bodies/authorities. The approved policy shall be placed on the homepage of the HEI website.
- f) Each supervisor shall submit a certificate indicating that the work done by the researcher under him / her is plagiarism free.
- g) HEI shall submit to INFLIBNET soft copies of all Masters, Research program's dissertations and thesis within a month after the award of degrees for hosting in the digital repository under the "Shodh Ganga e-repository".
- h) HEI shall create Institutional Repository on institute website which shall include dissertation / thesis / paper / publication and other in-house publications.

7. Similarity checks for exclusion from Plagiarism

The similarity checks for plagiarism shall exclude the following:

- i. All quoted work reproduced with all necessary permission and/or attribution.
- ii. All references, bibliography, table of content, preface and acknowledgements.
- iii. All generic terms, laws, standard symbols and standards equations.

Note:

The research work carried out by the student, faculty, researcher and staff shall be based on original ideas, which shall include abstract, summary, hypothesis, observations, results, conclusions and recommendations only and shall not have any similarities. It shall exclude a common knowledge or coincidental terms, up to fourteen (14) consecutive words.

8. Levels of Plagiarism

Plagiarism would be quantified into following levels in ascending order of severity for the purpose of its definition:

- i. Level 0: Similarities upto 10% Minor similarities, no penalty
- ii. Level 1: Similarities above 10% to 40%
- iii. Level 2: Similarities above 40% to 60%
- iv. Level 3: Similarities above 60%

9. Detection/Reporting/Handling of Plagiarism

If any member of the academic community suspects with appropriate proof that a case of plagiarism has happened in any document, he or she shall report it to the Departmental Academic Integrity Panel (DAIP). Upon receipt of such a complaint or allegation the DAIP shall investigate the matter and submit its recommendations to the Institutional Academic Integrity Panel (IAIP) of the HEI.

The authorities of HEI can also take *suomotu* notice of an act of plagiarism and initiate proceedings under these regulations. Similarly, proceedings can also be initiated by the HEI on the basis of findings of an examiner. All such cases will be investigated by the IAIP.

10. Departmental Academic Integrity Panel (DAIP)

- i. All Departments in HEI shall notify a DAIP whose composition shall be as given below:
 - a. Chairman Head of the Department
 - b. Member Senior academician from outside the department, to be nominated by the head of HEI.
 - c. Member A person well versed with anti plagiarism tools, to be nominated by the Head of the Department.

The tenure of the members in respect of points 'b' and 'c' shall be two years. The quorum for the meetings shall be 2 out of 3 members (including Chairman).

- ii. The DAIP shall follow the principles of natural justice while deciding about the allegation of plagiarism against the student, faculty, researcher and staff.
- iii. The DAIP shall have the power to assess the level of plagiarism and recommend penalty(ies) accordingly.
- iv. The DAIP after investigation shall submit its report with the recommendation on penalties to be imposed to the IAIP within a period of 45 days from the date of receipt of complaint / initiation of the proceedings.

11. Institutional Academic Integrity Panel (IAIP)

- i. HEI shall notify a IAIP whose composition shall be as given below:
 - a. Chairman Pro-VC/Dean/Senior Academician of the HEI.
 - b. Member Senior Academician other than Chairman, to be nominated by the Head of HEI.
 - c. Member One member nominated by the Head of HEI from outside the HEI
 - d. Member A person well versed with anti-plagiarism tools, to be nominated by the Head of the HEI.

The Chairman of DAIP and IAIP shall not be the same. The tenure of the Committee members including Chairman shall be three years. The quorum for the meetings shall be 3 out of 4 members (including Chairman).

- ii. The IAIP shall consider the recommendations of DAIP.
- iii. The IAIP shall also investigate cases of plagiarism as per the provisions mentioned in these regulations.

- iv. The IAIP shall follow the principles of natural justice while deciding about the allegation of plagiarism against the student, faculty, researcher and staff of HEI.
- v. The IAIP shall have the power to review the recommendations of DAIP including penalties with due justification.
- vi. The IAIP shall send the report after investigation and the recommendation on penalties to be imposed to the Head of the HEI within a period of 45 days from the date of receipt of recommendation of DAIP/complaint/initiation of the proceedings.
- vii. The IAIP shall provide a copy of the report to the person(s) against whom inquiry report is submitted.

12. Penalties

Penalties in the cases of plagiarism shall be imposed on students pursuing studies at the level of Masters and Research programs and on researcher, faculty & staff of the HEI only after academic misconduct on the part of the individual has been established without doubt, when all avenues of appeal have been exhausted and individual in question has been provided enough opportunity to defend himself or herself in a fair or transparent manner.

12.1 Penalties in case of plagiarism in submission of thesis and dissertations

Institutional Academic Integrity Panel (IAIP) shall impose penalty considering the severity of the Plagiarism.

- i. Level 0: Similarities upto 10% Minor Similarities, no penalty.
- **ii. Level 1: Similarities above 10% to 40%** Such student shall be asked to submit a revised script within a stipulated time period not exceeding 6 months.
- iii. Level 2: Similarities above 40% to 60% Such student shall be debarred from submitting a revised script for a period of one year.
- iv. Level 3: Similarities above 60% -Such student registration for that programme shall be cancelled.

Note 1: Penalty on repeated plagiarism- Such student shall be punished for the plagiarism of one level higher than the previous level committed by him/her. In case where plagiarism of highest level is committed then the punishment for the same shall be operative.

Note 2: Penalty in case where the degree/credit has already been obtained - If plagiarism is proved on a date later than the date of award of degree or credit as the case may be then his/her degree or credit shall be put in abeyance for a period recommended by the IAIP and approved by the Head of the Institution.

12.2 Penalties in case of plagiarism in academic and research publications

- I. Level 0: Similarities up to 10% Minor similarities, no penalty.
- II. Level 1: Similarities above 10% to 40%
 - i) Shall be asked to withdraw manuscript.

III. Level 2: Similarities above 40% to 60%

- i) Shall be asked to withdraw manuscript.
- ii) Shall be denied a right to one annual increment.
- iii) Shall not be allowed to be a supervisor to any new Master's, M.Phil., Ph.D. Student/scholar for a period of two years.

IV. Level 3: Similarities above 60%

- i) Shall be asked to withdraw manuscript.
- ii) Shall be denied a right to two successive annual increments.
- iii) Shall not be allowed to be a supervisor to any new Master's, M.Phil., Ph.D. Student/scholar for a period of three years.

Note 1: Penalty on repeated plagiarism - Shall be asked to withdraw manuscript and shall be punished for the plagiarism of one level higher than the lower level committed by him/her. In case where plagiarism of highest level is committed then the punishment for the same shall be operative. In case level 3 offence is repeated then the disciplinary action including suspension/termination as per service rules shall be taken by the HEI.

Note 2: Penalty in case where the benefit or credit has already been obtained - If plagiarism is proved on a date later than the date of benefit or credit obtained as the case may be then his/her benefit or credit shall be put in abeyance for a period recommended by IAIP and approved by the Head of the Institution.

- **Note 3:** HEIs shall create a mechanism so as to ensure that each of the paper publication/thesis/dissertation by the student, faculty, researcher staff of the HEI is checked for plagiarism at the time of forwarding/submission.
- **Note 4:** If there is any complaint of plagiarism against the Head of an HEI, a suitable action, in line with these regulations, shall be taken by the Controlling Authority of the HEI.
- **Note 5:** If there is any complaint of plagiarism against the Head of Department/Authorities at the institutional level, a suitable action, in line with these regulations, shall be recommended by the IAIP and approved by the Competent Authority.

Note 6: If there is any complaint of plagiarism against any member of DAIP or IAIP, then such member shall excuse himself / herself from the meeting(s) where his/her case is being discussed/investigated.

13. Removal of Difficulty

UGC reserves the right to remove difficulty/difficulties in the course of implementations of these Regulations in consultation with the Government of India/ Ministry of Human Resource Development.

Prof. RAJNISH JAIN, Secy. [ADVT.-III/4/Exty./161/18]

RAKESH SUKUL Digitally signed by RAKESH SUKUL Date: 2018.07.31 22:44:34

कार्यवृत्ति :-

दिनोंक 24.07.2021 को माननीय कुलपति महोदय की अध्यक्षता में पी0जी0 एवं पी0एच0डी0 छात्रों द्वारा थीसिस जमा करते समय Plagiarism निर्धारित करने हेतु माननीय कुलपति महोदय के समाकक्ष में बैठक आहूत की गयी जिसमें निम्नलिखित शिक्षक / वैज्ञानिक उपस्थित हुए।

- 1- डा० विजेन्द्र सिंह, माननीय कुलपति ।
- 2— डा० वेद प्रकाश, डीन, पी०जी०एस०।
- 3— डा० वी०एन०राय, अधिष्ठाता, कृषि, कृषि महाविद्यालय।
- 4— डा० आर०के०जोशी, अधिष्ठाता, पशुचिकित्सा एवं पशुपालन महाविद्यालय।
- 5- डा० ओ०पी०राव, अधिष्ठाता, उद्यान एवं वानिकी महाविद्यालय।
- 6- डा० आर०के० मेहता, अधिष्ठाता, महामाया कृषि अभियांत्रिकी महाविद्यालय, अम्बेडकर नगर।
- हा० निमता जोशी, अधिष्ठाता, सामुदायिक विज्ञान महाविद्यालय।
- 8- डा० पी०एस० प्रमानिक, अधिष्ठाता, मात्स्यकीय महाविद्यालय
- 9- डा० चन्द्र शेखर, पुस्तकालयाध्यक्ष।
- 10- डा० जशवन्त सिंह, कुलपति के सचिव।
- 11— डा० आदेश कुमार, तकनीकी सहायक, डीन, पीoजीoएस०।

उक्त बैठक में निम्नलिखित निर्णय लिये गये :--

क0सं0	थीसिस चैप्टर का नाम	Dit
1.		Plagiarism की निर्धारित अधिकतम सीमा (प्रतिशत में
2.	Introduction	10% 70% 80%
	Review of Literature	
3.	Materials and Methods	
4.	Results and Di	
5.	Results and Discussion Summary and Conclusions	10%
		10%

X12117121 (वेद प्रकाश) अधिष्ठाता परास्नातक अध्ययन



Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya-224229 (U.P.) NEHRU LIBRARY

No. 300/NL/ 2020

Date: 05/+1/2020

To.

The Hon'ble Director INFLIBNET Center. An IUC of University Grants Commission, Infocity, Gandhinagar - 382007

SUBJECT: Regarding URKUND Plagiarism Detection Software

Th: Proper channel

Sir

We want to access URKUND Plagiarism Detection Software in our University. Our Institute is already registered in your system SodhSudhi. So please provide our Institute ID and Password in this Email ID (nehrulibrary2020@gmail.com) because this is our working official email. For this, the following person will work as coordinator from our University:

Name: Dr. P.S. Pramanik

Designation: Prof. & OIC Library

Mobile No: 09454268993

Email ID: pramanikps@gmail.com

Forwarded

This is for your kind necessary action at your end.

Thanking you.

Dr. P.S. Pramanik

STEPS FOR OURIGINAL/PLAGIARISM DETECTION

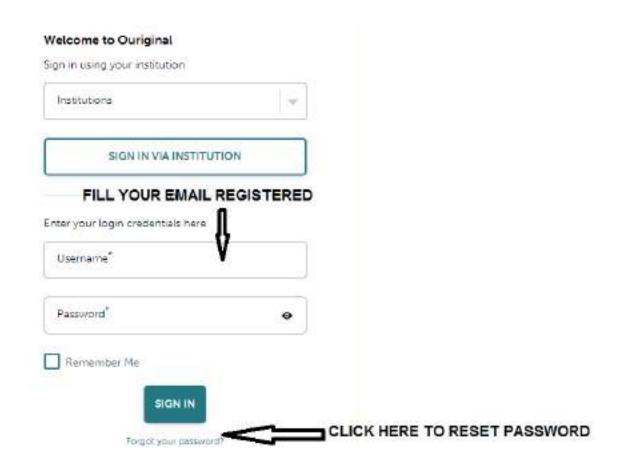
• GO TO https://www.ouriginal.com/ > LOGIN

OR

- GO TO https://www.ouriginal.com/login/
- CLICK ON LOGIN TO WEBINOX (GLOBAL) LINK AND NOT TO ANY OTHER OPTIONS

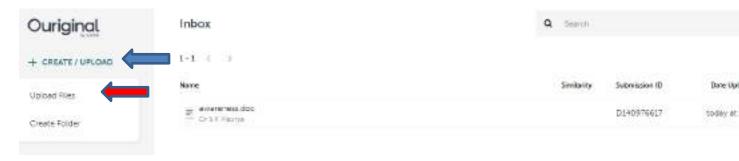


YOU WILL GET A SCREEN LIKE THIS



LOGIN

AFTER LOGIN



CLICK ON CREATE/UPLOAD THEN UPLOAD FILES (AS SHOWN IN IMAGE)

• AFTER SELECTING FILE TO UPLOAD YOU WILL GET A SCREEN LIKE THIS



- NOW SELECT ANALYSIS ADDRESS FROM DROP DOWN MENU AND CLICK ON UPLOAD FILE
- YOUR FILE IS UPLOADED FOR ANALYSIS
- ANALYSIS WILL COME TO YOUR EMAIL/ CAN BE SEEN IN AT THE PLACE OF UPLOADING (YOUR LOGIN PANEL AT OURIGINAL) AFTER 8-10 MINUTES



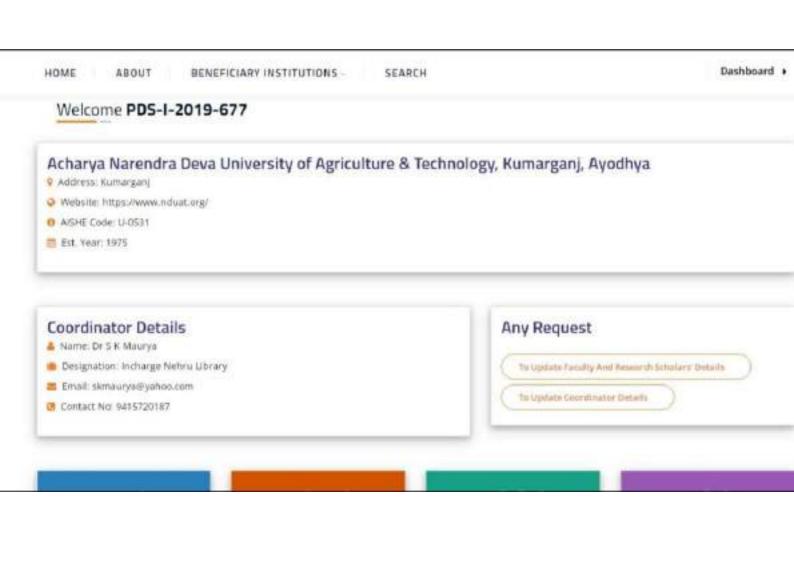


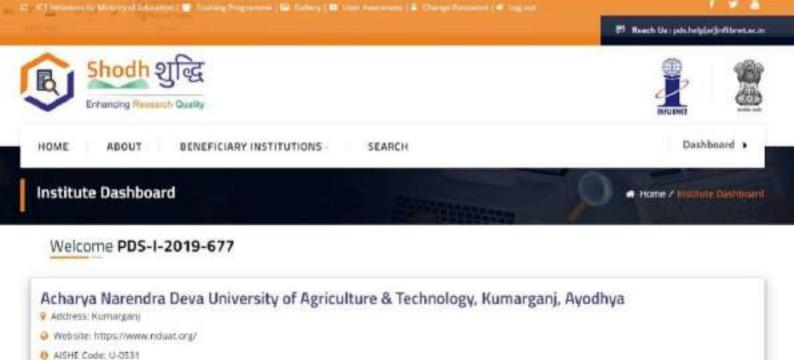
Dear Sir/Madam,

As per your request, the PDS-ShodhShuddhi portal: 'Coordinator Login' password has been reset. Please login to your account with the new password as mentioned below:

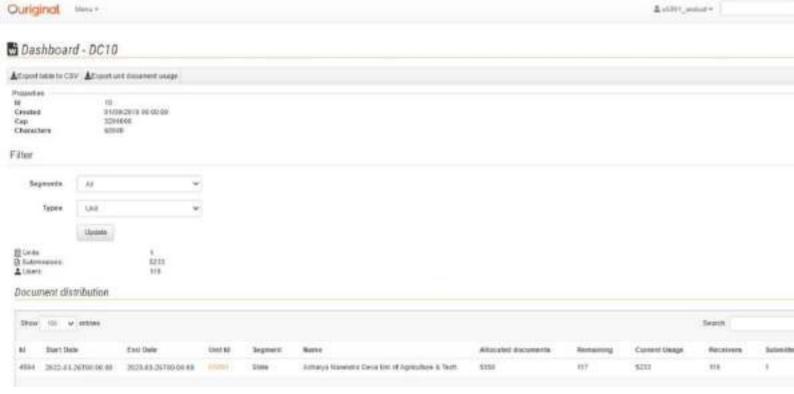
- Institute Name: Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya Ayodhya
- Username: PDS-I-2019-677 (Case-Sensitive)
- Password: 463147 (change password on first time login)
- Weblink: https://pds.inflibnet.ac.in/vlogin.php

Note: This PDS-ShodhShuddhi portal is maintained by INFLIBNET Centre that updates PDS data daily. This web-portal facilitates University Coordinators (UC) to monitor their usages and data like current No. of Faculty, No. of Research Scholars, Other Users, Remaining Documents in the CAP, UC details, etc. This credential is different from OURIGINAL (formerly URKUND) credentials, the web-portal does not allow you to check similarity/plagiarism in OURIGINAL. If you don't have OURIGINAL- Admin Panel credentials please





Est. Year: 1975







नरेन्द्र देव कृषि एवं प्रौद्यौगिकी विश्वविद्यालय कुमारगंज- 224229, फैजाबाद, (उ०प्र०), भारत



Department of Livestock
Production Management
College of Veterinary Science and A. H.
A.N. D.U.A.&T., Kumarganj-224 229
Ayodhya, (U.P.), INDIA

CERTIFICATE-III DECLARATION FOR ANTI-PLAGIARISM

Additives mixture Neem (Azadirachta indica), Amla (Emblica officinalis) and Black Cumin (Nigella sativa) on performance in broiler chickens." submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Livestock Production Management to the College of Veterinary Science and Animal Husbandry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 02/08/2021

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Head of the Department

(Major Advisor)

O REDMI NOTE 9 PRO
ALIGNAPASAMERA

Dean,

I Dr. Vijendra Kumar Pal, Id. No. V-10626/18 certify that the thesis entitled "Molecular characterization and Sero-prevalence studies on equine haemoprotozoan diseases with special reference to Trypanosoma evanst" submitted in partial fulfillment of the requirements for the degree of Ph.D. in Veterinary Parasitology to the College of Veterinary Science & Animal Husbandry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate

Date: 27/07/11

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

110 -

Head of the Department

areau or the preparts

I Varsha Verma, Id. No.- V 8360/14/19 certify that the thesis entitled "Efficacy of Moringa Leaf Powder on Storage Quality of Chicken Nuggets under Refrigeration Condition" submitted for the degree of "Master of Veterinary Science" submitted in partial fulfillment of the requirements for the degree of M.V.Sc. in Livestock Products Technology to the College of Veterinary Science and Animal Husbandry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Signature of the candidate

Date:

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor

Head of the Department

O REDM BUSTE 9 PRO

I, Shailendra Kumar Singh, Id. No. V-11217/19 certifies that the thesis entitled "Effect of Ginger & Garlic Supplements on the performance of broiler chickens" submitted in partial fulfilment of the requirements for the degree of M.V.Sc. in Livestock Production Management to the college of Veterinary Science and Animal Husbandry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not wilfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 18 - 08 - 2021

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

Post Library Studies

Development of caprine rumen and reticulum derived extracellular matrices using fruit pericarp extract of Sapindus mukorossi" submitted in partial fulfillment of the requirements for the degree of M.V.Sc. in Veterinary Surgery and Radiology to the College of Veterinary Science and Animal Husbandry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date:

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

Dean Dean PRO

DECLARATION FOR ANTI-PLAGIARISM

I, Mr. Mayank Kumar Dubey, I.D. No. V-3132/14/10661/19T certifies that the thesis entitled "Study on prevalence of anatomical and pathological abnormalities affecting reproductive tract of buffaloes slaughtered in Unnao district of U.P." submitted in partial fulfilment of the requirements for the degree of M.V.Sc. in "Veterinary Gynaecology and Obstetrics" to the College of Veterinary Science and Animal Husbandry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not wilfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 09/2021

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

DECLARATION FOR ANTI-PLAGIARISM

I, Mr. Ajay Kumar, Id. No. V-5682/11/19 certify that the thesis entitled "Awareness regarding Health care and Hygiene Practices Followed by Dairy Farmers in Sultanpur District of Uttar Pradesh" submitted in partial fulfillment of the requirements for the degree of Master of Veterinary Science in Veterinary and Animal Husbandry Extension Education to the College of Veterinary Science & Animal Husbandry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

pros

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date:

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

> Dr. R.K. Singh (Major Advisor)

DECLARATION FOR ANTI-PLAGIARISM

I, Mr. Ajay Kumar Gautam, Id. No. V-3095/14/10646/19T certify that the thesis entitled "Study on Knowledge and Adoption Level of Scientific Animal Husbandry Practices among Dairy Farmers in Basti District of Uttar Pradesh" submitted in partial fulfillment of the requirements for the degree of Master of Veterinary Science in Veterinary and Animal Husbandry Extension Education to the College of Veterinary Science & Animal Husbandry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumargani, Ayodhya

(Signature of the candidate)

Date:

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Dr. H.C. Verma

(Major Advisor)

Head of the Department

REDMI NOTE 9 PRO Dean, PGS AT QUAD CAMERA

DECLARATION FOR ANTI-PLAGIARISM

I, Mr. Deepraj, Id. No. V-8337/14/19 certify that the thesis entitled "Studies on antimicrobial efficacy of Nyctanthes arbor-tristis Linn leaves against sub-clinical mastitis in cows" submitted in partial fulfillment of the requirements for the degree of Master of Veterinary Science in Veterinary Medicine to the College of Veterinary Science & Animal Husbandry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate

Date:

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Dr. Jitendra Pratap Singh (Major Advisor)

Head of the Department



Spoki

DECLARATION FOR ANTI-PLAGIARISM

I, Mr. Shikhar Yadav, Id. No. V-11213/19 certify that the thesis entitled "In vitro study on antimicrobial potential of Vetiveria zizanioides oil against bacteria involved in sub clinical mastitis of milch cows" submitted in partial fulfillment of the requirements for the degree of Master of Veterinary Science in Veterinary Medicine to the College of Veterinary Science & Animal Husbandry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date:

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Dr. Jitendra Pratap Singh (Major Advisor)

Head of the Department

REDMINOTE POPPEO

DECLARATION FOR ANTI-PLAGIARISM

DECELLULARIZATION OF CAPRINE TRACHEA AND EAR CARTILAGE USING 5% AQUEOUS EXTRACT OF FRUIT PERICARP OF Sapindus mukorossi's submitted in partial fulfillment of the requirements for the degree of M.V.Sc. in Veterinary Surgery and Radiology to the College of Veterinary Science and Animal Husbandry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Signature of the candidate

Date:

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

REDMIZNOTE 9 PRO

A DOWN DESAMERA

Post Graduate Studies

DECLARATION FOR ANTI-PLAGIARISM

I, Raj Kapoor Verma, Id. No. V-11216/19 certifies that the thesis entitled "Studies on shatavari (Asparagus racemosus) supplementation on the performance of broiler chickens" submitted in partial fulfilment of the requirements for the degree of M.V.Sc. in Livestock Production Management to the college of Veterinary Science and Animal Husbandry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not wilfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 05/08/02/

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

REDM NOTE 9 PRO

I, Dr. Sandeep Kumar Jaiswal, Id. No. V-11209/19 certifies that the thesis entitled "Studies on the etiopathology of lung lesions of goat in Gorakhpur and Maharajganj districts of North Eastern Plain Zone of Uttar Pradesh" submitted in partial fulfilment of the requirements for the degree of M.V.Sc. in Veterinary Pathology to the college of Veterinary Science and Animal Husbandry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not wilfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date:

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Head of the Department

(Major Advisor)

Dean

Post Graduate Studies REDMI NOTE 9 PRO AI QUAD CAMERA

DECLARATION FOR ANTI-PLAGIARISM

I, Mr. Kabir Alam, I.D. No. V-3121/14/10653/19T certifies that the thesis entitled "Effect of L-Cysteine Hydrochloride and Cinnamomum zeylanicum on Freezability of Murrah Bull Semen" submitted in partial fulfilment of the requirements for the degree of M.V.Sc. in "Veterinary Gynaecology and Obstetrics" to the college of Veterinary Science and Animal Husbandry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not wilfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work. Xantr Dan

Place: Kumargani, Ayodhya

Date:

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

DECLARATION FOR ANTI-PLAGIARISM

I, Mr. Deepak Yadav, Id. No. V-8338/14/19 certify that the thesis entitled "Studies on antimicrobial efficacy of Psidium guajava leaves against sub clinical mastitis in buffalo" submitted in partial fulfillment of the requirements for the degree of Master of Veterinary Science in Veterinary Medicine to the College of Veterinary Science & Animal Husbandry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date:

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

DECLARATION FOR ANTI-PLAGIARISM

I. Mr. Abhishek Kumar, Id. No. V-5677/11/19 certify that the thesis entitled "Influence of Extreme Hot Condition on Adaptability, Haemato-Biochemical and Physiological Responses in Cross Bred Cattle in Central Plane Zone of Uttar Pradesh" submitted in partial fulfillment of the requirements for the degree of Master of Veterinary Science in Veterinary Physiology to the College of Veterinary Science & Animal Husbandry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 30.09-2021

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

> Dr. P.K. Choudhary (Major Advisor)

DECLARATION FOR ANTI-PLAGIARISM

I, Dr. Pankaj Chauhan, I.D. No. V-11215/19 certifies that the thesis entitled "Impact of Stocking Density on Performance and Welfare of Broiler Chickens" submitted in partial fulfilment of the requirements for the degree of M.V.Sc. in Livestock Production Management to the college of Veterinary Science and Animal Husbandry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not wilfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 10/08/2021

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the

best of my knowledge.

(Major Advisor

Head of the Department

Dean

O REDMINITE 9 PRO
O A DEAGREGAMERA

I, Dr. Vatsal Verma, I.D.No. V-11214/19 certifies that the thesis entitled "Process Optimization and Quality Characteristics of Turmeric Fortified Milkshake with Honey as Sugar Replacer" submitted in partial fulfilment of the requirements for the degree of M.V.Sc. in Livestock Products Technology to the college of Veterinary Science and Animal Husbandry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not wilfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 01/10/21

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the

best of my knowledge.

Department

Dean

Head of the Department

DREEDWINOTE 9 PRO

DECLARATION FOR ANTI-PLAGIARISM

I, Mr. Vikas Rai, Id.No. V-3128/14/19 certify that the thesis entitled "Extreme Hot Condition in Relation to Physio-Biochemical Responses and Adaptability of Buffalo in Eastern Plane Zone of Uttar Pradesh" submitted in partial fulfillment of the requirements for the degree of Master of Veterinary Science in Veterinary Physiology to the College of Veterinary Science & Animal Husbandry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 30 - 09 - 2021

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

DECLARATION FOR ANTI-PLAGIARISM

I Ajeet Kumar Verma, Id.No. A-11103/19 certify that the thesis entitled "Studies on genetic variability, character association and path coefficient analysis in barley (Hordium valgare L." submitted in partial fulfillment of the requirements for the degree of M.Sc. (Ag.) in Genetics and Plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has University with published work not more than minor similarities as per the UGC (Promotion of Similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 30/07/02/

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Head okthe Department

Dean, College of Agriculture A. N. D. Univ. of Agric. & Tech. Kumarganj - Ayodhya

Dean; Posen Post Graduate Studies

DECLARATION FOR ANTI-PLAGIARISM

I Abhay Singh, Id.No. A-11102/19 certify that the thesis entitled Genetical studies on certain matrics traits of barley (H.Vulgare L.)." submitted in partial fulfillment of the requirements for the degree of M.Sc. (Ag.) in Genetics and Plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj. Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Abhay Singh (Signature of the candidate)

Date: 31/07/2021

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Head of the Department

(Major Advisor)

Dean, PGS Tourist

Dean, College of Agriculture
A. N. D. Univ of Agric. & Tech.

I Mr. Gaurav Singh, Id. No. A-11108/19 certify that the thesis entitled "Genetic Divergence Analysis and Character association in wheat Germplasm (Triticum aestivum L.) under late sown condition" submitted in partial fulfillment of the requirements for the degree of in Genetics and Plant Breeding to the College of Agriculture, Acharya Narendra Deva University Of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 29/07/21

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Head of the Department

(Vinod Singh) (Major Advisor)

Graduate Studies

DeanDeal A. N. D. Univ. of Ag Kumargani - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

I Omkar, Id. No. A-1111/19 certify that the thesis entitled "Studies on genetic variability of chickpea (Cicer arietinum L.) germplasm" submitted in partial Master of Science fulfillment of the requirements for the degree of (Agriculture) in Genetics and Plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., oravailable at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 29-07-2021

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the

best of my knowledge.

(Major Advisor)

• देवक • एवं श्रीकृतिक विक, फेलाबाट

Dean, College of Agriculture

A. N. D. Univ. of Agric & Tech.

Kumarganj - Ayounya

DECLARATION FOR ANTI-PLAGIARISM

l. Ms. Niharika Yaduvanshi, ld. No. A-11110/19 certify that the thesis entitled "Studies on genetic variability, character association, path analysis and D2 analysis of chickpea (Cicer arietinum L.) under late sown condition" submitted in partial fulfillment of the requirements for the degree of Master of Science in Genetics and Plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 28 July 2021

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Dr. Shiva Nath (Major Advisor)

Dean, Chilege of Agriculture A. N. D. Univ. of Agric. & Tech. Kumarganj - Ayodhya

I Juhi Pandey, Id. No. A-11109/19 certify that the thesis entitled "Genetic divergence analysis and character association in different genotypes of wheat (Triticum aestivum L.)" submitted in partial fulfillment of the requirements for degree of M. Sc. (Ag) in Genetics and Plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., oravailable at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 29

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to thebest of my knowledge.

Head of the Department

ज्ञानुषद्धकीय एवं पादच प्रान्तन म्वदेवकृत्वं भौवित्वंवव,अयोध्य

Post Graduate Studies

(Major Advisor)

Dean, College A. N. D. Univ. of Agric, & Tech. Kumarganj - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

I Akhilesh Kaushal, Id. No. A- 11104/19 certify that the thess entitled "Studies on genetic variability and character association in wheat (Triticum aestivum L. em. Thell.) under timely sown condition" submitted in partial fulfilment of the requirements for the degree of M.Sc.(Agriculture) in Genetics and Plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university. I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 3/1)204

(Signature of the candidate)

(Major Advisor)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Head of the Department

Deptt. of G.P.B. 4 N.D.U.A.T. Kumarganj Ayordyya

> Dean, Cellege of Agriculture A. N. D. Univ of Agric. & Tech. Kumarganj - Ayodhya

Post Gladuate Studies

DECLARATION FOR ANTI-PLAGIARISM

"Studies Dr. Character Assa A. Grenetic Diver in wheat " submitted in of Agriculture & Technology, Kumargani, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Sudhanshu Singh. Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 27/07/2/

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Head of the Department

Post Graduate Studies

I Sachin Kumar Verma Id. No. A-11157/19 certify that the thesis entitled "Study on cost and returns of wheat cultivation in Hardoi District of Uttar Pradesh." submitted in partial fulfillment of the requirements for the degree of M.Sc.(Ag.) in Agricultural Economics to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumargani, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 5/9/2021

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

Depth of Agril, Economics A.N.D.U.A&T, Ayocays U.P.

Designate Studies

Dean, College of Agriculture A. N. D. Univ. of Agric. & Tech. Kumargani, - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

I Aditya Bhooshan Srivastava id. No. A-11154/19 certify that the thesis entitled Modelling and forecasting of Wheat in Uttar Pradesh and it's instability," submitted in partial fulfillment of the requirements for the degree of M.Sc. (Ag.) in Agricultural Economics to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 04 |08/2021

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Head of the Department

AND U.AST Systems U.I

Dean, Coalgo of Agoculture A. N. D. Univ. of Agric, & Tech.

Kumargani - Ayodhya

(Major Advisor)

Post Graduate Studios

DECLARATION FOR ANTI-PLAGIARISM

I Saurabh Verma Id. No. A-8487/15/19 certify that the thesis entitled "Economic analysis of paddy cultivation in Ambedkar nagar District Uttar Pradesh." submitted in partial fulfillment of the requirements for the degree of M.Sc. (Ag.) in Agricultural Economics to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarmanj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya Date: 5/08/2021

Sauroby Verry (Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

by ETBT21

WEIGHT (Major Advisor)

Head of the Department

Here of April Economics AN DU AST Ayodiya U.P.

Dean.

*(11/10)21 Dean, Collegistate culture A. N. D. Univ. of Agric & Tech. Kumargan, - Ayounya

DECLARATION FOR ANTI-PLAGIARISM

I Piyush Chandra Mishra ld. No. A-8546/15/19 certify that the thesis entitled "Impact of Integrated Farming System Approach on Doubling Farmer's Income in Ayodhya District of Uttar Pradesh" submitted in partial fulfilment of the requirements for the degree of M.Sc. (Ag.) in Agricultural Economics to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology. Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not wilfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 07/08/21

Piyush Chandra Mishra (Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Head of the Department

A.N.D.U.AST, Ayodaya U.F.

(Major Advisor)

Dean, College of Agriculture A. N. D. Univ. of Agric. 8 Tech. Kumargani - Ayodaya

DECLARATION FOR ANTI-PLAGIARISM

I Narendra Kumar Id. No. A-11155/19 certify that the thesis entitled "Cucurbits: A study on economic aspects popularly grown in Jaunpur districtof Uttar Pradesh". submitted in partial fulfillment of the requirements for the degree of M.Sc. (Ag.) in Agricultural Economics to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work para, text, data, results etc reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesisand cited as my own work.

Place: Kumargani, Ayodhya

Date: 06 |08 |2021

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the bestof my knowledge.

> hu 6/8/21 (Major Advisor)

Dean

Dean, College of Agricu A. N. D. Umin. of Aprilo & Tel Kumarcang-Ayuustya

DECLARATION FOR ANTI-PLAGIARISM

I, Ravi Kumar Yadav, Id. No. H-11206/19, certify that the thesis entitled "Studies on genetic variability, character association and divergence analysis in coriander (Coriandrum sativum L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Horticulture) in Vegetable Science to the College of Horticulture and forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 19/7/2021

Raw Kumar Yadav (Signature of the candidate)

CERTIFICATE FROM THE MAJOR

ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

DECLARATION FOR ANTI-PLAGIARISM

I, Rishabh Tiwari, Id. No. H-11204/19, certify that the thesis entitled "Studies on genetic variability for yield and its attributes in tomato (solanum lycopersicum L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Horticulture) in Vegetable Science to the College of Horticulture and Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., oravailable at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Rishaltwee

Date: 28-07-2021

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to thebest of my knowledge.

Head of the Department

Dean, PGS

Scanned by PDF Scanner

on flowering, fruiting and fruit quality of ber (Zizyphus mauritiana Lamk.) cv. Gola." submitted in partial fulfillment of the requirements for the degree of M.Sc. in Fruit Science to the College of Horticulture and Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Ambrush Kumar (Signature of the candidate)

Date: 07 08 2021

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

Professor & Head Department of Fruit Science

Dean Pream

Dean

Dean
College of Horticulture & Forestry
A.N.D.U.A.T. Kurnarganj
Alyodhya (U.P.)

Scanned by PDF Scanner

Himanshu Singh, Id. No.H-11203/19 certify that the thesis entitled "Studies on genetic variability, character association and genetic divergence in tomato (Solanum lycopersicum L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science in Horticulture (Vegetable Science) to the College of Horticulture and Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Himonghu Singh (Signature of the candidate)

Date: 15/07/2021

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

Deans PGS
Post Graduate Studies

I Shubham Yadav, Id. No. A-8493/15/19 certify that the thesis entitled "Studies on performance of onion (Allium cepa L.) varieties as intercropping in pre bearing kinnow (Citrus reticulata Blanco) orchard." submitted in partial fulfillment of the requirements for the degree of Master of Science (Horticulture) in Fruit Science to the College of College of Horticulture & Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 30, July, 2021

Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best

of my knowledge.

Department of Fruit Science

College of Horizone & Forestry

DECLARATION FOR ANTI-PLAGIARISM

I Nidhi Singh Id. No.H-11192/19 certify that the thesis entitled "Response of organic sources of nutrients on performance of strawberry (Fragaria×ananassa Duch.) cv. Winter Dawn" submitted in partial fulfillment of the requirements for the degree of Master of Science (Horticulture) in Fruit Science to the College of Horticulture & Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my ownwork.

Place: Kumarganj, Ayodhya

Date: 31 07/2021

Midhi Singh (Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best

of my knowledge.

(Major Advisor)

Heaten Department of Fruit Science

DEAN

College of Hortouture & Forestr

DECLARATION FOR ANTI-PLAGIARISM

l Radha Krishna, Id. No. H-11194/19 certify that the thesis entitled "Effect of plant growth regulators on fruit quality and yield of ber (Zizyphus mauritiana Lamk.) cv. Gola." submitted in partial fulfillment of the requirements for the degree of M.Sc. in Fruit Science to the College of Horticulture and Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., oravailable at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 06/08/2021

Post Graduata Studies

Radha Knichna (Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to thebest of my knowledge.

Dr. Ashok Kulmar (Major Advisor)

Och 2 18121

Head of the Department

Professor & Head Department of Fruit Science

Dean

Dean
College of Horticulture & Forestry

A.N.D.U.A.T. Kumarganj Avodhva (1. P.)

Scanned by PDF Scanner

DECLARATION FOR ANTI-PLAGIARISM

I, Vikas Kori, Id. No. A-8576/15/19, certify that the thesis entitled "Effects of micronutrients on fruiting and yield on guava (Psidium guajava L.) ev. Lalit." submitted in partial fulfillment of the requirements for the degree of Master of Science (Horticulture) in Fruit Science to the College of Horticulture and Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not will fully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date:05/682021

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Head of the Department

(Major Advisor)

Dean

Post Graduate Stories

Biotertilizers application on growth yield and quality of Aonla (Emblica officinalis) CV. NA-7." submitted in partial fulfillment of the requirements for the degree of M.Sc. in Fruit Science to the College of Horticulture and Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 27/07/2021

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Dr. Bhanu Pratap (Major Advisor)

Horofatish's Reservment Department of Fruit Science

Perhability Studies

College of Hankulture & Forest

DECLARATION FOR ANTI-PLAGIARISM

1 Rahmat Gul Hassanzai Id. No H-10675/19 certify that the thesis entitled
"Studies on effect of bagging and foliar application of different chemicals on postharvest quality of Mango Fruits (Mangifera indica L.) ev. Amrapali" submitted in
partial fulfilment of the requirements for the degree of Master of Science (Horticulture)
Major in Fruit Science and Minor in Vegetable Science the College of Horticulture &
Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj,
Ayodhya (U.P.) is original work and has similarities with published work not more than
minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of
Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the
university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 23/07/2021

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Tille.

Head of the Department

Dean, PGS

Bean

CERTIFICATE-III DECLARATION FOR ANTI-PLAGIARISM

I. Krishna Pratap Singh, Id. No. H-11190/19, certify that the thesis entitled "Effect of foliar feeding of Plant Growth Regulators and Micro-nutrient on fruiting, yield and quality of Ber (Zizyphus mauritiana Lamk.) cv. Gola." submitted in partial fulfillment of the requirements for the degree of Master of Science (Horticulture) in Fruit Science to the College of Horticulture & Forestry. Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018. adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my ownwork.

Place: Kumarganj, Ayodhya

Date: 23/07 2021 CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

(Signature of the candidate)

CERTIFICATE-III DECLARATION FOR ANTI-PLAGIARISM

I, Krishna Pratap Singh, Id. No. H-11190/19, certify that the thesis entitled "Effect of foliar feeding of Plant Growth Regulators and Micro-nutrient on fruiting, yield and quality of Ber (Zizyphus mauritiana Lamk.) cv. Gola." submitted in partial fulfillment of the requirements for the degree of Master of Science (Horticulture) in Fruit Science to the College of Horticulture & Forestry. Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my ownwork.

Place: Kumarganj, Ayodhya

Date: 23/07/2021

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

Dean, PGS

DECLARATION FOR ANTI-PLAGIARISM

I Sharifullah Dowlatzai Id. No H-10673/19 certifies that the thesis entitled "Elucidating effect of pre-harvest treatment on post-harvest quality of rainy season guava (Psidium guajava L.) cv. Lalit" submitted in partial fulfilment of the requirements for the degree of Master of Science (Horticulture) Major in Fruit Science and Minor in Vegetable Science the College of Horticulture & Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018 adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others work, Para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 29/07/2021

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Head of the Department

Scanned by PDF Scanner

I Ambreesh Kumar, Id. No. H-11188/19 certify that the thesis entitled "Effect of micro-nutrients on flowering, fruiting and fruit quality of ber (Zizyphus mauritiana Lamk.) ev. Gola." submitted in partial fulfillment of the requirements for the degree of M.Sc. in Fruit Science to the College of Horticulture and Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Ambrush kumar

(Signature of the candidate)

Date: 07 08 2021

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

reparement of Fruit Science

Dean

College of Horifculture & Forestry A.N.D.U.A.T. Kumarganj Ayodhya (U.P.)

Scanned by PDF Scanner

DECLARATION FOR ANTI-PLAGIARISM

I, Mr. Pawan Kumar Yadav, Id. No. H-11193/19 certify that the thesis entitled "Response of plant harmones and calcium salts on ber (Zizyphus mauritiana Lamk.) fruits cv. Banarasi Karaka" submitted in partial fulfillment of the requirements for the degree of Master of Science in Fruit Science to the College of Horticulture & Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 13/08/2021

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Dr. Bhagwan Deen (Major Advisor)

Head of the Department

Department of Fruit Science

Policiand Con Studies

College of Hericulture & Forestry A.N.D.U.A.T. Kumarganj Ayodhya (U.P.)

I, Mr. Pawan Kumar Yadav, Id. No. H-11193/19 certify that the thesis entitled "Response of plant harmones and calcium salts on ber (Zizyphus mauritiana Lamk.) fruits cv. Banarasi Karaka" submitted in partial fulfillment of the requirements for the degree of Master of Science in Fruit Science to the College of Horticulture & Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 13/08/2021

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Dr. Bhagwan Deen (Major Advisor)

Head of the Department

Department of Fruit Science

Dean Studies

College of Holean to & Forestry
A.N.D.U.A.T. Kurnargani

Scanned by PDF Scanner

DECLARATION FOR ANTI-PLAGIARISM

Ritik, Id. No. H-11195/19 certify that the thesis entitled "Effect of foliar feeding of nutrients on yield and quality of ber (Zizyphus mauritiana Lamk.) ev. Banarasi Karaka." submitted in partial fulfillment of the requirements for the degree of M.Sc. in Fruit Science to the College of Horticulture and Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 31-07 .2.21

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

Dean Praduate Stodies

DECLARATION FOR ANTI-PLAGIARISM

Ritik, Id. No. H-11195/19 certify that the thesis entitled "Effect of foliar feeding of nutrients on yield and quality of ber (Zizyphus mauritiana Lamk.) ev. Banarasi Karaka." submitted in partial fulfillment of the requirements for the degree of M.Sc. in Fruit Science to the College of Horticulture and Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj. Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 31-07-2-21

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

Dearl Braduate Studies

DECLARATION FOR ANTI-PLAGIARISM

I Nidhi Singh Id. No.H-11192/19 certify that the thesis entitled "Response of organic sources of nutrients on performance of strawberry (Fragaria×ananassa Duch.) ev. Winter Dawn" submitted in partial fulfillment of the requirements—for the degree of Master of Science (Horticulture) in Fruit Science to the College of Horticulture & Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my ownwork.

Place: Kumarganj, Ayodhya

Date: 31/07/2021

Widthi Sirgh (Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Head of the Department

-Mage of Horitalium & Forestr.

DECLARATION FOR ANTI-PLAGIARISM

I, Mr. Pawan Kumar Yadav, Id. No. H-11193/19 certify that the thesis entitled "Response of plant harmones and calcium salts on ber (Zizyphus mauritiana Lamk.) fruits cv. Banarasi Karaka" submitted in partial fulfillment of the requirements for the degree of Master of Science in Fruit Science to the College of Horticulture & Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 13/08/2021

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Dr. Bhagwan Deen (Major Advisor)

Headpartine Department

popularitati di Fiuit Scie

College of HDeanture & Forestry
A.N.D.U.A.T. Kumarganj
Ayodhya (U.P.)

Scanned by PDF Scanner

DECLARATION FOR ANTI-PLAGIARISM

I, Putan Vadav, Id. No. HF-8646/15/19, certify that the thesis entitled "Studies on genetic variability, character association and genetic divergence in garden pea (Pisum sativum L. var. hortense)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Horticulture) in Vegetable Science to the College of Horticulture and Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 20/07/202/

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the

best of my knowledge.

Major Advisor)

Head of the Department

I Aditya Vikram Singh, Id. No.H-11199/19 certify that the thesis entitled "Studies on genetic variability, for yield and its attributes in coriander (Coriandrum sativum L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science in Horticulture (Vegetable Science) to the College of Horticulture and Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis, I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Polityo Vikram Sirgh (Signature of the candidate)

Date: 17/07/2021

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Post Graduate Studies

Hareesh Kumar Maurya, Id. No.H-11202/19 certify that the thesis entitled "Studies on genetic variability, character association and divergence analysis in fenugreek (Trigonella foenum-graecum L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science in Horticulture (Vegetable Science) to the College of Horticulture and Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 17/07/2021

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

DECLARATION FOR ANTI-PLAGIARISM

I, Ramesh Rajbhar, Id. No. H-11205/19, certify that the thesis entitled "Studies on genetic variability, character association and genetic divergence for seed yield and its contributing traits in coriander (Coriandrum sativum L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Horticulture) in Vegetable Science to the College of Horticulture and forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 26/07/2021

Ramesh Register (Signature of the candidate)

CERTIFICATE FROM THE MAJOR

ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

DECLARATION FOR ANTI-PLAGIARISM

I, Rang Nath Pandy, Id. No. HF-8654/15/19 certify that the thesis entitled "Study on genetic variability for growth, yield and attributing, traits in coriander (Coriandrum Sativum L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science in Horticulture (Vegetable Science) to the College of Horticulture and Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 27 7 21

Rong Noth Pandey (Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

Dept of Vegetinia Science

Post Shirtles

College of Herricadores & Francis

DECLARATION FOR ANTI-PLAGIARISM

I Ravi Saroj, Id. No. H-11207/19 certify that the thesis entitled "Germplasm evaluation for growth, yield and its contributing traits in coriander (Coriandrum sativum L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Horticulture) in Vegetable Science to the College of Horticulture & forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Signature of the candidate)

Date: 19.07-2021

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

DECLARATION FOR ANTI-PLAGIARISM

"Germplasm evaluation, character association and genetic divergence for growth, yield and its component traits in fennel (Foeniculum vulgare Mill.)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Horticulture) in Vegetable Science to the College of Horticulture & Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some other's work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 20/07/2021

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

Decit of Vagemitia Science

PopleGrankase Studies

College of Herticipese & French

DECLARATION FOR ANTI-PLAGIARISM

I, Hari Shanker Verma, Id. No. HF-8632/15/19, certify that the thesis entitled "Genetic variability in brinjal (Solanum melongena L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Horticulture) in Vegetable Science to the College of Horticulture and Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., oravailable at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Harushanker Vermey (Signature of the candidate)

Date: 28/9/2-21

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to thebest of my knowledge.

Major Advisor)

Head of the Department

Dean, PGS

DECLARATION FOR ANTI-PLAGIARISM

"Genetic variability, character association and genetic divergence in brinjal (Solanum melongena L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science in Horticulture (Vegetable Science) to the College of Horticulture and Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., oravailable at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 20/07/2021

Ankur Kumor Pal (Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to thebest of my knowledge.

(Major Advisor)

Head of the Department

Dean, PGS 1912

DECLARATION FOR ANTI-PLAGIARISM

I Ritik .ld. No. H-11195/19 certify that the thesis entitled "Effect of foliar feeding of nutrients on yield and quality of ber (Zizyphus mauritiana Lamk.) ev. Banarasi Karaka." submitted in partial fulfillment of the requirements for the degree of M.Sc. in Fruit Science to the College of Horticulture and Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumargani, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 31-07-20-4

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

Dean

DECLARATION FOR ANTI-PLAGIARISM

Plant growth regulators on fruit quality and yield of ber (Lizyphus maneitiana Lamk.) ev. Gola." submitted in partial fulfillment of the requirements for the degree of M.Sc. in Fruit Science to the College of Horticulture and Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., oravailable at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Radha Khichna (Signature of the candidate)

Date: 06/08/2021

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to thebest of my knowledge.

Dr. Ashok Kimar (Major Advisor)

Head of the Department

Professor & Head Department of Pruit Science

Post Graduate Studies

Dean

Dean
College of Proficulture & Porestry
A.N.D.U.A.T. Kumergeni
Ayodhya (U.P.)

DECLARATION FOR ANTI-PLAGIARISM

I Niharika singh, Id. No.II-11708/20 certify that the thesis entitled "Studies on genetic variability and divergence analysis for yield and its attributing traits in coriander (Coriandrum sativum L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science in Horticulture (Vegetable Science) to the College of Horticulture and Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university. I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya Date: 16 0 7 1 2022 (Signature of the cardidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best

of my knowledge.

(Major Advisor)

Head of the Department

Department of Vegetable Science

Dean, PGS Dean

Poet Graduate Studies

College of Horriculture & Forestry

N D U A L April Grant, Avodina (UP)

DECLARATION FOR ANTI-PLAGIARISM

I Jaswant Prajapati, Id. No. II-11707/20 certify that the thesis entitled "Studies on genetic variability, character association, path coefficient and genetic divergence in fennel (Foeniculum vulgare Mill.)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Horticulture) in Vegetable Science to the College of Horticulture & Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some other's work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 1(/07/2022

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my

knowledge.

Department of Vegetable Science

College of Hornculture & Forestry

N (H) Dean Kumargani, Avndhva (U.P.)

Post Graduate Studies

CERTIFICATE – III DECLARATION FOR ANTI- PLAGIARISM

I, Priya Rai, Id. No. II-11710/20, certify that the thesis entitled "Genetic variability and divegence analysis in potato (Solanum tuberosum L.)." submitted in partial fulfilment of the requirement for the degree of Master of Science (Horticulture) in Vegetable Science and Minor in Fruit Science the College of Horticulture and forestry, Acharya Narendra Deva University of Agriculture and Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others work, para, text, data, results etc., or available at web – sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 18 07 22

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

DESTRUCTION SCHOOL

Policocadurate Studies

College of Horticulture & Forestry A.N.D.U.A.T. Kumarganj

Ayodhya (U.P.)

DECLARATION FOR ANTI-PLAGIARISM

I, Dharamraj Kumar, Id.No.II-11774/20 certifies that the thesis entitled "Studies on genetic variability, character association and genetic divergence in pumpkin (Cucurbita moschata Duch. ex. Poir.)" submitted in partial fulfillment to the requirements for the degree of M.Sc. (Hort.) in Vegetable Science to the College of Horticulture and Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not will fully lifted up some others' work. Para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate

Date: 16/07/22

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Head of the Department

Department of

Post Graduate Studies

Dean

Ueala

Ueala

Ueala

Double Torestry

Avodova (UP)

Avodova (UP)

DECLARATION FOR ANTI-PLAGIARISM

I. Dharamraj Kumar, Id.No.II-11774/20 certifies that the thesis entitled "Studies on genetic variability, character association and genetic divergence in pumpkin (Cucurbita moschata Duch, ex. Poir.)" submitted in partial fulfillment to the requirements for the degree of M.Sc. (Hort.) in Vegetable Science to the College of Horticulture and Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumargani, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not will fully lifted up some others' work. Para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 16/07/22

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my

knowledge.

Head of the Departmen

Department of

Post Graduate Studies

Dean

Ayodhya Lup

DECLARATION FOR ANTI-PLAGIARISM

I Lokesh Yadav, Id. No.HF-9310/16/20 certify that the thesis entitled "Studies on Genetic Variability in Tomato (Solanum lycopersicum L.)"submitted in partial fulfillment of the requirements for the degree of Master of Science (Horticulture) in Vegetable Science to the College of Horticulture and Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at well-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 14/07/2022

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Major Advisor)

Head Stepartment of Vegetable Science

Dear FESS Post Graduate Studies

Dean
College of Horticulture & Forestry
A.N.D.U.A.T. Kumarganj
Ayodhya (U.P.)

DECLARATION FOR ANTI-PLAGIARISM

I, Saurabh Tiwari Id. No. A-9197/16/20, certify that the thesis entitled "Effect of plant growth regulators on yield and quality of winter season guava (*Psidium guajava* L.) ev. Lucknow-49" submitted in partial fulfillment of the requirements for the degree of Master of Science (Horticulture) in Fruit Science to the College of Horticulture and Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not will fully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 6/7/2022

Saunabh Tiwari (Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

ıt

Hendepil blindi straisument A.N.D.U.A.T. Kumargani Ayodhya

Dear Brans Post Graduate Studies

College of Horticulture & Forestry
ANDUAT Kum a jung
Ayodhya (C. P.)

DECLARATION FOR ANTI-PLAGIARISM

I Manish Kumar Gautam, Id. No.A-9252/16/20 certify that the thesis entitled "Studies on genetic variability, correlation and divergence analysis in fennel (Foeniculum vulgare Mill.)"submitted in partial fulfillment of the requirements for the degree of Master of Science in Horticulture (Vegetable Science) to the College of Horticulture and Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 16/07/ 2022

Manish Kamas Gaulam -(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

lead of the Head riment Department of

Vegetable Science

Dean Dennadose Studios

College of Horticulture & Forestry A.N.D.U.A.T. Kumarganj Ayodhya (U.P.)

DECLARATION FOR ANTI-PLAGIARISM

I, Anjana C.S., Id. No. H-11773/20 certify that the thesis entitled "Estimation of heterosis, combining ability and gene action in brinjal (Solanum melongena L.)" submitted in partial fulfillment of the requirements for the degree of M. Sc. (Horticulture.) in Vegetable science to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some other's work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Datel July 2022

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

, Hoad

of of Vocatable Science

Dean Dean St vilos

ANDUAT Kumarganj Ayodhya (U.P.)

CERTIFICATE-HI

DECLARATION FOR ANTI-PLAGIARISM

I. Amar, Id.No.H-11772/20 certifies that the thesis entitled "Studies on genetic variability in pumpkin (Cucurbita moschata Duch. ex. Poir.)" submitted in partial fulfillment to the requirements for the degree of M.Sc. (Hort.) in Vegetable Science to the College of Horticulture and Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not will fully lifted up some others' work, Para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 16/7/22.

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Head of the Head tment Department of

Vegetable Science

Dein, Dann Beet Graduate Stydies Deal 17/22

Dean

College of Horiculture & Forestry

ANDUAT Kumargani

Ayodhya (U.P.)

DECLARATION FOR ANTI-PLAGIARISM

I Sandeep Kumar, Id. No. H-11712/20 certify that the thesis entitled "Genetic variability, character association and genetic divergence in brinjal (Solanum melongena L.)" submitted in partial fulfillment of the requirements for the degree of M. Sc. (Horticulture.) in Vegetable science to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not wilfully lifted up some other's work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: Suly 2022

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

. Head

De Lol Vagulation Science

Dean Dean Post Graduate Studies

College of Horticulture & Fo A.N.D.U.A.T. Kumargar Ayodhya (U.P.)

DECLARATION FOR ANTI-PLAGIARISM

I Akhil Kumar Chaudhary, Id. No. II-11705/20 certify that the thesis entitled "Studies on genetic variability and character association for yield and its contributing traits in brinjal (Solamum melongena L.)" submitted in partial fulfilment of the requirements for the degree of M. Sc. (Horticulture.) in Vegetable science to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some other's work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 18 July 2022

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

Department of Vegetable Science

Post Graduate Studies

Dean

College of Horticulture & Forestry
A.N.D.U.A.T. Kumarganj
Ayodhya (U.P.)

DECLARATION FOR ANTI-PLAGIARISM

I, Shubham Sharma, Id. No.- II-11703/20, certify that the thesis entitled "Effect of organic sources on vegetative growth, fruit quality and yield of Phalsa (Grewia subinaequalis D.C.)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Horticulture) in Fruit Science to the College of Horticulture & Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.)is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to, and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results, etc., reported in the journals, books, magazines, reports, dissertations, thesis, etc., or available on websites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 07-07-2022

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

HEAD
Deptt. of Fruit Science
HeakNottuletDepurganjent

Post Graduate Studies

(IMO) C(upo/y
(upo/y
(u

(Major Advisor)

DECLARATION FOR ANTI- PLAGIARISM

I. Preeti Yadav, Id. No. H-11709/20, certify that the thesis entitled "Genetic evaluation for the yield and its component traits in fennel (Foeniculum vulgare Mill.)" submitted in partial fulfillment of the requirement for the degree of Master of Science (Horticulture) in Vegetable Science to the College of Horticulture and Forestry, Acharya Narendra Deva similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others work, Para, text, data, results etc., or available at web – sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 16 07 22

(Signature of the enndidate)

CERTIFICATE FROM MAJOR ADVISOR

ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Malthe Advisor)

Head of the Department

Head
Department of
Vegetable Science

Dean, Bean Deal Conducto Sticles

College of Humbershield & Foresting FINE AT Yorkegant Avodora (UP)

DECLARATION FOR ANTI-PLAGIARISM

I Garima Yadav Id. No II-11700/20 certifies that the thesis entitled "Effect of preharvest spray of PGRs, calcium and cow urine on yield and quality of aonla fruit (Emblica officinalis Gaertn.) ev. NA-7." submitted in partial fulfilment of the requirements for the degree of Master of Science (Horticulture) Major in Fruit Science and Minor in Vegetable Science the College of Horticulture & Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018 adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis.I further certify that I have not willfully lifted up some others work, Para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Post Graduate Studies

0Dean e of Horticulture & Fore A.N.D.U.A.T. Kumargani Ayodhya (U.P.)

DECLARATION FOR ANTI-PLAGIARISM

1 Rahul Singh, Id. No. H-11702/20, certify that the thesis entitled "Regulation of summer season flowering to enhance the fruiting of mrig bahar in guava (Psidium guajava L.) ev. Lucknow-49 under sodic soil "submitted in partial fulfilment of the requirements for the degree of Master of Science (Horticulture) in Fruit Science to the College of Horticulture and Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not will fully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 30/6/2022

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the

best of my knowledge.

Head of the Department

Evittoya

-Dean, Dean Post Graduate Studies DEAN

College of Horticulture & Foresty A.N.D.U.A.T., Kumargani-Ayochya

DECLARATION FOR ANTI-PLAGIARISM

I, Diwakar Nath Mishra, Id. No.- H-11699/20, certify that the thesis entitled "Integrated Nutrient Management in Aonla (Emblica officinalis Gaertn.) ev. NA-10" submitted in partial fulfillment of the requirements for the degree of Master of Science (Horticulture) in Fruit Science to the College of Horticulture & Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.)is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to, and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results, etc., reported in the journals, books, magazines, reports, dissertations, thesis, etc., or available on websites and included them in this thesis and cited as my ownwork.

Place: Kumarganj, Ayodhya

Date: 30 106 122

Diwakar Nath Mishro (Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

HeDeptifelieut Enactment A.N.D.U.A.T., Kumarganj Ayodhya

Dean, Dean
Post Graduete Studies

College of Horticulture & Foresty A.N.D.U.A.T., Kumarganj-Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

Laman Kumar Singh, Id. No.- H-11706/20 certify that the thesis entitled "Estimation of genetic variability, correlation and genetic divergence in tomato (Solanum lycopersicum L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Horticulture) in Vegetable Science to the College of Horticulture & Forestry, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results, etc., reported in the journals, books, magazines, reports, dissertations, thesis, etc., or available on websites and included them in this thesis and cited as my ownwork.

Place: Kumarganj, Ayodhya

Date:

Aman Kumory Singh (Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Religion)

Head of Beat cpartment

Vacatable Science

Post Graduate Studies

Dean

Dean
College of Horlin thure & Forestry
AND D

An

CERTIFICATE-Ш

DECLARATION FOR ANTI-PLAGIARISM

I Niharika Gurudev, Id. No. H-11701/20, certify that the thesis entitled
"Studies on preservative free low calorie beverages from guava pulp and
aonla juice blends" submitted in partial fulfillment of the requirements for the
degree of Master of Science (Horticulture) in Fruit Science to the College of
Horticulture and Forestry, Acharya Narendra Deva University of Agriculture
& Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities
with published work not more than minor similarities as per the UGC (Promotion
of Academic Integrity and Prevention of Plagiarism in Higher Educational
Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 14 /072022

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to thebest of my knowledge.

Headorthe Department

(Major Advisor)

Dean, PGS___

Dean

Post Graduate Studies

College of Horticulture & Foresty

A.N.D.U.A.T., Kumarganj-Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

I Anoj Yadav Id. No. H-11248/19 certify that the thesis entitled "Heterosis and combining ability for yield and quality traits in bottle gourd [Lagenaria siceraria (Mol.) Standl.]." submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy (Horticulture) in Vegetable Science to the College of Horticulture and forestry. Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumargani, Ayodhya

Anoj yadas (Signature of the candidate)

Date: 18(02/22

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

> Dr. G. C. Yadav (Major Advisor)

Hemilo 2/2
Hement of Vegetable Science

Dean, Posan ost Graduate St idies

College of Horticulture & Foresty A.N.D.U.A.T. Kumargani-Ayodhya

Scanned by PDF Scanner

DECLARATION FOR ANTI-PLAGIARISM

I, Ram Pratap Pal, Id. No.: A-11095/19 certify that the thesis entitled "Response of nitrogen levels under different varieties of hybrid rice (Oryza sativa L.) in eastern Uttar Pradesh." submitted in partial fulfillment of the requirements for the degree of M.Sc. (Ag.) Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 08/09/2021

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Repartment

Dean, PGS Dean Dean Bost Graduate St idies Dean, Correge of Agriculture A. N. D. Univ. of Agric. & Tech. Kumarganj - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

I, Mr. Moh Vaheed, Id. No. A-8542/15/19 certify that the thesis entitled "Effect of tillage and weed management on yield and economics of wheat (Triticum aestivum L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 04/08/2021

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Head of the Department

49

Post Graduate Studies

Dr. B.N. Singh

(Major Advisor)

Dean, College of Agriculture A. N. D. Univ. of Agric. & Tech. Kumarganj - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

I, Mr. Shubhendu Singh, Id. No. A-11098/19 certify that the thesis entitled "Effect of different doses of Nitrogen and Plant growth regulator on growth and yield parameters of wheat (Triticum uestivum L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: |3|09|202|

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Head of the Department

Post Graduate Studies

Dean, College or Agriculture

A. N. D. Univ. of Agric. & Tech.

Kumarganj - Ayodhya

Dr. Rafesh Kumar

(Major Advisor)



DECLARATION FOR ANTI-PLAGIARISM

I, Miss. Srishti Singh, Id. No. A-11100/19 certify that the thesis entitled "Effect of nitrogen and weed management on yield and economics of Wheat (Triticum aestivum L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 08 09 2021

(Signature of the candidate)

Soviette Singh

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Dr. B.N. Singh

(Major Advisor)

Head of the Departmentony

Dean, PGS Dean Post Graduate Studies A. N. D. Univ. of Agric. & Tech Kumarganj - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

I Vineet Kumar Shukla, Id. No. A-11101/19 certify that the thesis entitled ""Response of method of planting and integrated nutrient management on rice (Oryza sativa L.)" submitted in partial fulfillment of the requirements for the degree of M.Sc.(Ag.) Agronomy to the College of Agriculture Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis.I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 30 |08 |2021

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to thebest of my knowledge.

(Major Advisor)

N. D. Univ. of Agricultura N. D. Univ. of Agric. & Tech Kumarganj - Ayodhya

Head of the Department

Deptt. of Agronomy

Post Graduate Studies

Dear Light on

Francis Alexandre June

DECLARATION FOR ANTI-PLAGIARISM

I, Mr. Adesh, Id. No. A-8394/15/19 certify that the thesis entitled "Response of bio-fortification in fodder maize and sorghum for enhancing zinc and iron content" submitted in partial fulfillment of the requirements for the degree of Master of Science in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 0 | 09 | 2.21

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Dr. Ram Pratap Singh

(Major Advisor)

Head of the Web Atment Deptt, of Agronomy

parents, where green deed and peap as Golf to a

continued and object that the six six wall and

Dean, Post Graduate Studies

Dean, College of Agriculture A. N. D. Univ. of Agric. & Tech. Kumarganj - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

I, Mr. Deepraj Verma, Id. No. A-11091/19 certify that the thesis entitled "Studies on the response of plant growth regulators and micronutrient (zinc and boron) on fodder sorghum (Sorghum bicolor L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 01 09 2021

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of

my knowledge.

(Major Advisor)

Head of the Department

Deptt, of Agronomy

Dean, College of Agriculture A. N. D. Univ. of Agric. & Tech.

Kumargani-Ayedhya

DECLARATION FOR ANTI-PLAGIARISM

I Ambikesh Tripathi, Id. No A-11084/19 certify that the thesis entitled "Response of potato varieties to cut seed tuber technology." submitted in partial fulfillment of the requirements for the degree of M.Sc. (Ag.) Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., oravailable at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Ambikush Tripathi (Signature of the candidate)

Date: 28 |07 202

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

-

Dean, PGS

Post Graduate Studies

Head of the Department Doptt. of Agronomy

> Dean, Coilege MAgriculture A. N. D. Univ. of Agric. & Tech. Kumarganj - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

I, Mr. Abdul Salim, Id. No. A-8391/15/19 certify that the thesis entitled "Effect of weed management and foliar spray of different nutrients in rainfed rice (Oryza sativa L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 01/00/2024

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best ofmy knowledge.

Head of the Dept tment Deptt. of Agronom (Rajesh Kumar) (Major Advisor)

Dean Dean Pleas Budies

Dean, College of Agriculture A. N. D. Univ. of Agric. & Tech. Kumarganj - Ayodhya



DECLARATION FOR ANTI-PLAGIARISM

I Mr. Ankit Singh, Id. No. A-11085/19 certify that the thesis entitled "Response of phosphorus levels on growth and yield of cowpea varieties (Vigna unguiculata L.)" submitted in partial fulfillment of the requirements for the degree of M.Sc. in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 09 |08 |2021

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to thebest of my knowledge.

Major Advisor

Head of the Department

Post Graduate Studies

A. N. D. Unix Dean addition A. N. D. Unix Dean A. & Tech. Kumarganj - Ayouhya

DECLARATION FOR ANTI-PLAGIARISM

I, Mr. Ashish Kumar Verma, Id. No. A-11087/19 certify that the thesis entitled "Effect of cutting and splitting of nitrogen on quantity and quality of different varieties of fodder oat (Avena sativa L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, Para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 09/08/2021

Ahigh keuran Uma (Signature of the candidate)

Dr. Vishuddha Nand

(Major Advisor)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Dean, College of Agriculture A. N. D. Univ. of Agric. & Tech.

Kumargani - Ayedhya

DECLARATION FOR ANTI-PLAGIARISM

I Bhayankar, Id. No A-11088/19 certify that the thesis entitled "Influence of Irrigation scheduling on the transplanted rice(Oryza sativa L.)." submitted in partial fulfillment of the requirements for the degree of M.Sc. (Ag.) Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., oravailable at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Bhayankaur (Signature of the candidate)

Date: 30 07 2021

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Dean, College of Agriculture A. N. D. Univ. of Agric. & Tech. Kumarganj - Ayodhya

Head of the Department

Deptt. of Agronomy

Dean, PGS Dean Post Graduate Studio

Scanned with CamScanner

DECLARATION FOR ANTI-PLAGIARISM

I. Mr. Ashcesh Kumar, Id. No. A-11086/19 certify that the thesis entitled "Effect of Weed management practices on weeds and productivity of timely sown wheat (Triticum aestivum L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, Para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Dr. Rajesh Kumar

(Major Advisor)

Date:

Dean, Po

ost Graduate Studies

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Head AthADepartment

Dentt. of Agronomy

Dean, College of Agriculture

A. N. D. Univ. of Agric & Teurs. Kumarum, -Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

I Brijesh Kumar, Id. No A-11089/19 certify that the thesis entitled "Effect of phosphorus levels on performance of differente varieties of Barseem (Trifolium Alexandrinum L.)" submitted in partial fulfillment of the requirements for the degree of in Agronomy to the College of Agriculture, Acharya Narendra Deva University Of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumargani, Ayodhya

Brigosh kumon (Signature of the candidate)

Date: 10/08 2021

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Dr. Vishuddha Nand (Major Advisor)

Dean Por Graduate Studies

Dean, College of Agriculture A. N. D. Univ. of Agric. & Tech. Kumarganj - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

I, Mr. Darshan, Id. No. A-11090/19 certify that the thesis entitled "Effect of nitrogen levels on forage yield of promising entries of dual cut oat (Avena sativa L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 07/09/2021

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Dr. Vishuddha Nand (Major Advisor)

Head of the Donartment

Deptt. of Agronomy

Post Graduate Studies

Dean, Explose of Agriculture

A. N. D. Univ. of Agric, & Tech.

Kumargani - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

I Deependra Kumar, Id. No. A-8531/15/19 certify that the thesis entitled "Effect of nitrogen levels and weed management practices on growth and yield of direct seeded rice (Oryza sativa L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Agriculture) in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 1/-08-9021

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Dr. B.N. Singh (Major Advisor)

BHEAT OF A BEGINNING

Dean, Posan

Dean, College of Agriculture A. N. D. Univ. of Agric. & Tech Kumurganj - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

I, Miss. Sanjana Maurya, Id. No. A-11097/19 certify that the thesis entitled "Effect of weed control methods on growth and yield of wheat (Triticum aestivum L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 69/00 2

Sanjana Maurya (Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of

my knowledge.

Dean, POsan

Head of the Department

HEAD

Deptt. of Agronomy

Dr. Vishuddha Naha J

(Major Advisor)

Dean, College of Agriculture A. N. D. Univ. of April & Tach.

Rumargani - Ayo iti /a

DECLARATION FOR ANTI-PLAGIARISM

I Mohammad Nabi Marufi Id. No A-10674/19 certify that the thesis entitled "Effect of weed management practices on growth and yield of direct seeded rice (Oryza sativa L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Agriculture) Major in Agronomy and Minor in Soil Science the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books are azines, reports, dissertations, thesis etc., or available at web-sites and include thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: July, 16, 2021

that ampfing state I were being on this cortin A

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

I feneral our thetarized grow from the event of monde to expense my flager (Major Advisor)

Head of the Department

uncompart participal limit, mental support and interestion all the other of or

Dean, PGS

Dean

DECLARATION FOR ANTI-PLAGIARISM

I, Mr. Ankit gupta, Id. No. A-8413/15/19 certify that the thesis entitled "Effect of weed management on Productivity of transplanted Rice (Oryza sativa L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 08 |03 | 2021

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Deste be Agreementy

Dean, PGS
Dean
Dean
Post Graduate Studies

Dean, College of Agriculture A. N. D. Univ. of Agric. & Tech. Kumarganj - Ayodhya

(Major Advisor)

DECLARATION FOR ANTI-PLAGIARISM

I Manju Singh, Id.No. A-11093/19 certify that the thesis entitled "Effect of nutrient management and weed control practices on weeds and productivity of wheat (Triticum aestivum L.) submitted in partial fulfillment of the requirements for the degree of Master of Science (Agriculture) in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 01/09/2021

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my

knowledge.

Dean, College of Agriculture A. N. D. Univ. of Agrin, & Tech.

Kurangam - Ayouthya

DECLARATION FOR ANTI-PLAGIARISM

I Pooja Yadav, Id. No.A-11094/19 certify that the thesis entitled "Bio-efficacy of new herbicide (Prosulfocarb) against weed specially Phalaris minor in wheat crop" submitted in partial fulfillment of the requirements for the degree of Master of Science (Agriculture) in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 28107 |21

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Deptt. of Agronomy

Denti, Posean Post Graduate Studies

Kumarganj - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

I, Hariom Mishra, Id. No.: A-11092/19 certify that the thesis entitled "Effect of Fertility level and weed management Practices on yield and economics of Wheat under irrigated condition." submitted in partial fulfillment of the requirements for the degree of M.Sc. (Ag.) Agronomy to the College of Agriculture. Acharya Narendra Deva University of Agriculture & Technology. Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 06/09/2021

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor

Head of the Aspartment Deptt. of Agronomy

Post Graduate Studies

Dean, College of Agraculture A. N. O. United of Agraculture Kompanier Associate

DECLARATION FOR ANTI-PLAGIARISM

I Shubhranshu Singh, ld No.A-H099/19 certify that the thesis entitled "Study the effect of irrigation scheduling in potato (Solanum tuberosum L.) varieties" submitted in partial fulfillment of the requirements for the degree of Master of Science (Agriculture) in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Pramotion of Academic Integrity and Prevention of Plagrarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the fext and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc reported in the journals, books, magazines, reports dissertations, thesis etc. or available at web-sites and included them in this thesis and cited as my own toose.

Place: Kumarganj, Ayodhya

Signature of the candidate)

Date: 27 /-7 /2021

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Hend of the HenAdouent

Deptt. of Agronomy

Post Granuele Studies

Dean Dean Dean College of Specialists
A 11, 11 disk of Agric A Ted
Russian in Av. Test

DECLARATION FOR ANTI-PLAGIARISM

I Mr. Abhishek Mishra Id. No. A-11607/20 certify that the thesis entitled "Effect of weed control methods on weed dynamics and productivity of transplanted rice (Oryza sativa L.) in Eastern Uttar Pradesh" submitted in partial fulfillment of the requirements for the degree of Master of Science in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: /06/2022

Abheshek mushon (Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Dr. Vishuddha Nand

(Major Advisor)

DHead of the Departmently A.N.D.U.A.T., Kumargani

AYODHYA

Dean, College of Agriculture

A. N. D. Univ. of Agric. & Tech.

Post Graduate Studies

DECLARATION FOR ANTI-PLAGIARISM

I Abhishek Raj Ranjan, Id. No. A-9102/16/20 certify that the thesis entitled "Effect of planting geometry and phosphorus levels on growth and yield of summer moong (Vigna radiata L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Agriculture) in Agronomy to the college of Agriculture, Acharya Narendra Deva University of Agriculture & Technology kumarganj, Ayodhya (U.P) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and prevention of plagiarism in Higher Education Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been eited in the text and body of the thesis. I further certify that I have not willfully lifted up some other's work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc. or available at web-cited and included them in thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 08/01/22

Abhister for fundame

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to

the best of my knowledge.

Head of Depart Deptt. of Agronomy

> A.N.D.U.A.T., Kumargani AYODHYA

Dean, College of Agriculture A. N. D. Univ. of Agric, & Tech.

Kumarganj - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

I, Mr. Ajay Maurya, Id. No. A-11608/20 certify that the thesis entitled "Effect of split doses of nitrogen and sulphur application on productivity of late sown wheat (Triticum aestivum L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 4/07/2022

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of

my knowledge.

Dr. Vishuddha Nan

(Major Advisor)

1

Head of the Department

Dean, PGS Dean

Post Graduate Studies

Dean, Coffege of Agriculture A. N. D. Univ. of Agric. & Tech. Kumarganj - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

I Amit Babu, Id. No. A-11609/20 certify that the thesis entitled "Effect of integrated nutrient management on productivity of late sown wheat (Triticum aestivum L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Agriculture) in Agronomy to the college of Agriculture. Acharya Narendra Deva University of Agriculture & Technology kumarganj, Ayodhya (U.P) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and prevention of plagiarism in Higher Education Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some other's work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc. or available at web-cited and included them in thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 07/07/2022

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the

best of my knowledge.

Head of Department

Deptt. of Agronomy

(Major Advisor)

431

Dean

Dean, College of Agriculture A. N. D. Univ. of Agric. & Tech.

Kumarganj - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

I, Mr. Atish Yadav, Id. No. A-9241/16/20 certify that the thesis entitled "Studies on the Bio-efficacy of post emergence herbicide on Rabi maize (Zea mays L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date 30/06/2022

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my

knowledge.

Dr. A.K. Singh

(Major Advisor)

Dean PGS

Deptt. of Agronomy A.N.D.U.A.T., Kumarganj AYODHYA

Head of the Department

Dean, College of Agriculture A. N. D. Univ. of Agric. & Tech. Kumarganj - Ayodhya

DECLARATION FOR ANTI PLAGIARISM

I, Mr. Digvijay Singh, Id. No. A-11610/20 certify that the thesis entitled "Effect of irrigation and weed management practices on growth, yield attributes and yield of drum seeded rice (Oryza sativa L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 05/07/2022

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Dr. A. K. Singn

(Major Advisor)

Dean, College of Agriculture A. N. D. 1990, of Agric. 8 Tech. Head of the Treps conciny
A.N.D.U.A.T., Kumarganj
AYODHYA

Post Graduate Sturfles

DECLARATION FOR ANTI-PLAGIARISM

IMiss. Divya Singh Id. No. A-9131/16/20 certify that the thesis entitled "Studies on the bio-efficacy of pre & post emergence herbicides in winter maize (Zea mays L.)"submitted in partial fulfillment of the requirements for the degree of Master of Science in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some other's work, Para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available in this thesis and cited as my own work. at web-sites and include

Place: Kumarganj, Ayodhya

Date3d06/2022

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my on Dr. Burndra Singh, Boathle For a boards knowledge.

stead and In. And Kenner

Major Advisor

Head of the Department

Deptt. of Agronomy A.N.D.U.A.T., Kumargani Dean, Confede of Agriculture AYODHYA

Kumaryani Ayodhya

DECLARATION FOR

ANTI PLAGIARISM

I, Mr. Lakhan Kumar, Id. No. A-11611/20 certify that the thesis entitled "Evaluation Of Herbicides Against Different Weed Flora In Wheat (Triticum Aestivum L.) Crop" submitted in partial fulfillment of the requirements for the degree of Master of Science in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or availableat web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 07/09/2021

achan kumis (Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of

my knowledge.

Dr. Rajesh Kumar

(Major Advisor)

Agronomy tmenti., Kumarganj

> Dean, College of Agriculture A. N. D. Univ. of Agric. & Tech.

Kumarganj - Ayodhya

Post Graduate Studies

DECLARATION FOR ANTI-PLAGIARISM

I, Mr. Neeraj Kumar, Id. No. A-11612/20 certify that the thesis "Studies on weed management practices under different methods of crop establishment in rice (Oryza sativa L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Agriculture) in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Signature of the candidate)

Date: 14.09-2022

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

Deptt. of Agronomy

Dean, PGS
Dong
Dong
Statuete States

Dean, College of Agdculture

A. J. D. Univ. of Agno. & Tech.

Isomery 14, Ayndhya

DECLARATION FOR ANTI-PLAGIARISM

I. Parthik Gangwar, Id. No.: A-11613/20 certify that the thesis entitled "Effect of Fertility level management on the productivity of late sown Wheat (Triticum aestivum L.)" submitted in partial fulfillment of the requirements for the degree of M.Sc. (Ag.) Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj. Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the

UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumargani, Ayodhya

Date: 14-07-2022

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advi:

Head of the Department

Deptt. of Agronomy

Poet Graduate Studies

Dean, College of Amountaine A. N. D. University of Tech. Kuntargany - Ayachya

DECLARATION FOR ANTI-PLAGIARISM

I, Mr. Pradeep Kumar, Id. No. A-11614/20 certify that the thesis entitled "Effect of integrated nutrient management on growth, yield quality of Indian mustard (Brassica juncea L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 08/07/2022

Pradcep Kumar Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my

knowledge,

Dr. Vishuddha

(Major Advisor)

Head of the Department

Dean

Post Graduate Studies

Dean, College of Agriculture A. N. D. Univ. of Agric. & Tech. Kumarganj - Ayodnya

DECLARATION FOR ANTI-PLAGIARISM

I, Mr. Prashant Verma, Id. No. A-9257/16/20 certify that the thesis entitled, "Effect of sulphur levels on productivity of different varieties of mustard (Brassica juncea L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 07 |07 | 2022

Prashant Verma (Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Depter Department of

AYODHYA

Pact Graduate Studies

Dean, College of Agriculture A. N. D. Hohat Agric & Tech.

Major Advisor

DECLARATION FOR

ANTI PLAGIARISM

I, Mr. Praveen Kumar, Id. No. A-11615/20 certify that the thesis entitled "Effect of date of sowing and planting geometry on growth and yield of Indian mustard (Brassica juncea L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

18-07-2022 (Signature of the candidate)

Place: Kumarganj, Ayodhya

Date: 12-072022

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of

my knowledge.

Dr. Anil Kumar Singh

(Major Advisor)

Head of the

Department

Dear

Post Graduate Studing

Dean, College of Agriculture A. N. D. Univ. of Agric. Kumarganj - Ayo.i.

DECLARATION FOR ANTI-PLAGIARISM

I, Mr. Pravesh Kumar, Id. No. A-11616/20 certify that the thesis entitled "Effect of moisture regime under different sowing dates of wheat crop (Triticum aestivum L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumargani, Ayodhya

Signature of the candidate)

Date: 08-07-2022

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of

Head of the Department

my knowledge.

Dr. Anil Kumar Singh

(Major Advisor)

Post Graduate Studies

Dean, College of Agricultu A. N. D. Univ. of Agric. & Tes Kumarganj - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

I Rishi Kumar Yadav, Id. No. A-11617/20 certify that the thesis entitled "Real time nitrogen management in rice (Oryza sativa L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Agriculture) in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., oravailable at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date:

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Head of the Department

Deptt. of Agronomy

Dean, College of Agriculture A. N. D. Univ. of Agric, & Tech. Kumarganj - Ayodhya

Scanned with CamScanner

DECLARATION FOR ANTI-PLAGIARISM

I. Satendra Singh, Id. No.: A-11618/20 certify that the thesis entitled "Effect of different herbicides on weeds and productivity of timely sown wheat (Triticum aestivum L.)." submitted in partial fulfillment of the requirements for the degree of M.Sc. (Ag.) Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date:

(Signature of the candidate)

(Major Advisor)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the

best of my knowledge.

Head of the Department Deptt. of Agronomy

Post Graduate Studies

Dean, Collage of Agriculture A. N. D. Univ. of Agric. & Tank Kumarganj - / , c ..., a

DECLARATION FOR ANTI-PLAGIARISM

I Savita Patel, I.D. No. A-11619/20 certify that the thesis entitled "Effect of zinc on growth, yield attributes and yield of potato (Solanum tuberosum L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Agriculture) in Agronomy to the college of Agriculture, Acharya Narendra Deva University of Agriculture & Technology Kumarganj, Ayodhya (U.P) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and prevention of plagiarism in Higher Education Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some other's work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc. or available at web-cited and included them in thesis and cited as my own work.

Saulta

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date:

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Deptt. of Agronomy

Poet Graduate Studies

Dean, College of Agriculture A. N. D. Univ

Kullio 5-15

DECLARATION FOR ANT 8-PLAGIARISM

I, Shubham Kumar Dwivedi, Id. No.: A-11620/20 certify that the thesis entitled "Evaluation of weed management practices under organic system in rice (Oryza sativa L.)" submitted in partial fulfillment of the requirements for the degree of M.Sc. (Ag.) Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sixes and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date:

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Hea

bepte Departmentmy

A.N.D.U.A.T., Kumarganj AYODHYA

Post Graduate Studies

Dean, College An Agriculture A. N. D. Univ. of Agric. & Tech. Kumargenj - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

I Miss. Sidra Qidwai, Id. No.- A-11621/20 certify that the thesis entitled "Effect of sulphur and nitrogen levels on growth, yield and quality of mustard [Brassica juncea (L.)]" submitted in partial fulfillment of the requirements for the degree of Master of Science (Agriculture) in Agronomy to the college of Agriculture, Acharya Narendra Deva University of Agriculture & Technology kumarganj, Ayodhya (U.P) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and prevention of plagiarism in Higher Education Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some other's work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc. or available at web-cited and included them in thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 19July 2022

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to

the best of my knowledge.

(Major Advisor)

Head of Department money A.F.D.U.A.T., Kumargan)

AYOUHYA

Dean

Dean PGS

DECLARATION FOR ANTI-PLAGIARISM

I, Mr.Utkarsh Singh Id. No.: A-11622/20 certifies that the thesis entitled "Bioefficacy evaluation of Prosulfocarb on weed dynamics and productivity of Wheat crop" submitted in partial fulfilment of the requirements for the degree of "Master of Science (Agriculture)" with major in "Agronomy" to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not wilfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 30-06-2027

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of

my knowledge.

(Major Advisor)

Head of the Department

Poet Graduate Studies

Dean, CDean of Agriculture A. N. D. Univ. of Agric. & Tech. Kumangan, - Ayouhya

DECLARATION FOR ANTI-PLAGIARISM

1, Vikas, Id. No.: A-11623/20 certify that the thesis entitled "Efficacy of herbicides against diverse weed flora of wheat (Triticum aestivum L.)" submitted in partial fulfillment of the requirements for the degree of M.Sc. (Ag.) Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 14.03.2022

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Deptt. of Agronomy Head of the Department

A. N. D. Univ. of Artifo, & Tech. Kumargang - Ayodhya

DECLARATION FOR ANTI-

PLAGIARISM

I, Mr. Vinod Kumar, Id. No. A-11624/20 certify that the thesis entitled "Effect of weed management practices on weeds and productivity of chickpea (Cicer arietinum L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or availableat web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 27/07/2022

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

the gronomy tell., Kumarganj Dr. Rajesh Kumar

(Major Advisor)

Dean Dean
Post Graduate Studies

Dean, College of Agriculture A. N. D. Univ of Agric. & Tech.

Scanned with CamScanner

DECLARATION FOR ANTI-PLAGIARISM

I, Mr.Jampana Gangadhar Reddy, Id. No. A-11749/20 certify that the thesis entitled "Study on performance of nitrogen management through conventional urea and nano urea in wheat crop (Triticum aestivum L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date 25/06/2022

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Head of the Department

HEAD

Deptt. of Agronomy

Dr. Vishuddha Na

(Major Advisor)

Dean, College of Agriculture A. N. D. Univ. of Agric. & Tech. Kumarganj-Ayodhya

I Sampriti Bormudoi, Id No. A-11752/20 certify that the thesis entitled "Effect of establishment methods and nitrogen levels on the productivity of rice (Oryza sativa L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Agriculture) in the subject of Agronomy to the Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university. I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that that I have not will fully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 30 June, 2022.

(Signature of the candidate)

Sevenudar

CERTIFICATE FROM THE MAJOR ADVISOR

This is to clarify that the above statement made by the candidate is correct to the

best of my knowledge.

Head of the Departmenty A.N.D.U.A.T., Kumarganj

AYODHYA

Post Graduate Studies

Dean, College of Agriculture A. N. D. Univ. of Agric. & Tech,

Kumarganj - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

I, Shiv Sundar Jena, Id.No.A- 11753/20 certifies that the thesis entitled "Assessing the influence of integrated weed management practices on productivity of drum seeded rice" (Oryza sativa L.) submitted in partial fulfilment to the requirements for the degree of M.Sc. (Ag.) in Agronomy to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not will fully lifted up some others' work, Para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 4th July 2022

Shir Sundar jene (Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is

correct to the best of my knowledge.

Headout the Department A.N.D.U.A.T., Kancargeral

AYOUHYA

Post Graduate Studies

Dean, College of Agriculture A. N. D. Univ. of Agric. & Tech. Kumarganj - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

I Vimlesh Kumar ld No A-11182/19 certify that the thesis entitled "Knowledge and Adoption of Improved Sugarcane Production Technology by the farmers in Lakhimpur (Kheri) District of Uttar Pradesh" submitted in partial fulfilment of the requirements for the degree of M.Sc. (Ag.) in Extension Education to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not wilfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Vinleth Kumay (Signature of the candidate)

Date: 03/08/2021

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

अग्रान्तादेव कृषि एवं प्रीविकाचित कृपारगंज प्रायेन्य

Dean, College of Agnorithme A. N. D. Univ. of tage - A feeth.

Kunnagan - the Pt. I

DECLARATIONFORANTI-PLAGIARISM

I Subedar Yadav, Id. No A-11180/19 certify that the thesis entitled "Study on knowledge and adoption of Farmers about Hybrid Rice Production Technology in Sultanpur District of Uttar Pradesh" submitted in partial fulfilment of the requirements for the degree of M.Sc. (Ag) in Extension Education to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not wilfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 02 08 21

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Depa Fillent ANDUAT, Kumarganj-Ayodhya

Post Graduate Sturios

Dean, College of Agricultu A. N. D. Univ. of Agric A Ter Kumargang - Ayuma, a

I, Shankar Dayal, Id. No. A -11179/19 certify that the thesis entitled "Study on Knowledge and Adoption of weed management practices in rabl crops in Lakhimpur Kheri District of (U.P.)" submitted in partial fulfillment of the requirements for the degree of M.Sc. (Ag.) in Extension Education to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at

web-sites and included them in this thesis and cited as my own work.

Shankan Dayal

(Signature of the candidate)

Date: 09-8-2021

Place: Kumarganj, Ayodhya

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the

best of my knowledge.

(Major Advisor)

Head of the Departmenthnj-Ayodhya

Dean, College of Agriculture A. N. D. Univ. of Agric. S Tech.

Kumargan; Ayo thya

Dean Dear Studies

DECLARATION FOR ANTI-PLAGIARISM

I Sapana Maurya, Id. No A-11178/19 certify that the thesis entitled "Study on Knowledge & Adoption level of farmers on Production Technology & Marketing of Maize in Jaunpur District of Uttar Pradesh." submitted in partial fulfilment of the requirements for the degree of M.Sc.(Ag.) in Extension Education to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not wilfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya Date: 31/07/2021

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

ANDUAT, Kumarganj-Ayodhya

A. N. D. Univ. of Agric, & Tech. Kumarganj - Ayodaya

(Major Advisor)

I, Girijesh Kannaujiya, Id.No. A-11174/19 certify that the thesis entitled "Study on knowledge and adaption of soil testing regarding utility of soil health card in Maharajganj district of Uttar Pradesh" submitted in partial fulfillment of the requirements for the degree of M.Sc. (Ag.) in Extension Education to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., oravailable at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya (Signature of the candidate)

Date:

This is to certify that the above statement made by the candidate is correct to thebest of my knowledge.

(Major Advisor)

Head of the Department

Deptt, of Ext. Edu. ANDUAT, Kumarganj-Ayodhya

ost Graduate Studies

Dean

Dean, Gollege of Agriculture A. N. D. Unio of Agric, & Tech, Kemargan; - Ayodhya

I Ankit Kumar Id. No A-11173/19 certify that the thesis entitled "Adoption of improved mango cultivation practices by the farmers in Lucknow District of Littar Pradesh" submitted in partial fulfilment of the requirements for the degree of M.Sc. (Ag.) in Extension Education to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumargani, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not wilfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 03 08 2021

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Head of the Department

Dean, College of Agriculture A. N. D. Univ. of Agric. 3 Tech. Kumurganj - Avodnya

DECLARATION FOR ANTI-PLAGIARISM

I Manoj Kumar Id. No. A -11175/19 certify that the thesis entitled "Adoption of improved maize production technology by the farmers in Badaun District of (U.P.)" submitted in partial fulfillment of the requirements for the degree of M.Sc. (Ag.) in Extension Education to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis

and cited as my own work.

Place: Kumarganj, Ayodhya

raduate Studies

Date: 09/08/21

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

> Head of the Department Deptt. of Ext. Edu.

ANDUAT, Kumareani-Ayodhya

I Piyush Tripathi Id. No A-11176/19 certify that the thesis entitled "Study on knowledge and adoption of dairy in Gorakhpur District of Uttar Pradesh" submitted in partial fulfilment of the requirements for the degree of M.Sc. (Ag.) in Extension Education to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not wilfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date:

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

Dean 27 1914

Dean, College of Agric, & Tech A. N. D. Urpean Agric, & Tech

DECLARATION FOR ANTI-PLAGIARISM

I Ritesh Singh, Id. No A-11177/19 certify that the thesis entitled "Critical analysis of problems and prospects of radish cultivation in Jaunpur district of Uttar Pradesh." submitted in partial fulfilment of the requirements for the degree of M.Sc. (Ag.) in Extension Education to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not wilfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 30th July

(Signature of the candidate

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head Dephsologne Banent ANDUAT, Kumarganj-Ayodhya

- 11300 - 1100

Dean, PGS

Dean, Colle Dean

A. N. D. Univ. of Artic. & Tech.

Kumargan; - Ayodriya

DECLARATION FOR ANTI-PLAGIARISM

I Rajesh Kumar, Id. No. A-11112/19 certify that the thesis entitled "Genetic analysis of yield it's contributing characters of chickpea (Cicer arietinum L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Agriculture) in Genetics and Plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis.I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 6/10/

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the

best of my knowledge.

(Major Advisor)

N.D.U.A.T., Kumarganj Falzabao

Head of the Department

24/19/4/M

Dean, College of Agriculture A. N. D. Univ. of Agric, & Tech. Kumaganj - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

I Satyam Pathak, Id.No. A-11637/20 certify that the thesis entitled "Germplasm evaluation of scented and non-scented rice (Oryza sativa L.) under irrigated condition" submitted in partial fulfillment of the requirements for the degree of Master of Science (Agriculture) in Genetics and Plant Breeding to the College of Agriculture. Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date:

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of

my knowledge.

Head of the Department

HEAD Deptt. of G.P.B.

N.D.U.A.T., Kumarganj Falzabad

Poet Graduate Sturlies

Dean, College A. N. D. Univ. of Agric. & Tech Kumarganj - Ayodhya

(Major Advisor)

DECLARATION FOR ANTI-PLAGIARISM

I Manoj Tiwari, Id. No. A-11629/20 certify that the thesis entitled "Genetic variability and divergence analysis in indigenous and exotic barley (Hordeum vulgare L.)" submitted in partial fulfillment of the requirements for the degree of M. Sc. (Ag.) in Genetics and Plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some other's work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya Date: 16 06 2022

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

he Department

Deptt. of G.P.B.

N.D.U.A.T., Kumargani Falzabed

Dean, CoDean of Agriculture A. N. D. Une. at Agric & Tech Kuthan and my La /a

(Major Advisor)

DECLARATION FOR ANTI-PLAGIARISM

1 Vimal Kumar Singh, Id No. A-11640/20 certify that the thesis entitled "Genetic variability and association studies in barley (Hordenn vulgare L.)" submitted in partial fulfilment of the requirements for the degree of M.Sc. (Ag) in Genetics and Plant Breeding to the collage of Agriculture , Acharya Narendra Deva University of Agriculture, Kumarganj, Ayodhya (U.P) is original work and has similarities with published work not more than minor similarities as per UGC (promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018 adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not wilfully lifted up some others' work, para, data results etc. Reported in the journal, books, magazines, reports, dissertations, thesis etc. Or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 16. 6. 2022

Vinal Kumar Singh (Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of

my knowledge.

Major Advisor

Head of the Department

HEAD Deptt. of G.P.B.

Post Graduate Studies

D.U.A.T., Kumarganj Falzabac

Dear Codege of Agric, S. Louis A. N. Normandell - Agric, S. Louis

DECLARATION FOR ANTI-PLAGIARISM

1 Abhishek Dwivedi, Id. No. A-11625/20 certify that the thesis entitled "Genetic variability and association studies in wheat (*Triticum aestivum* L.) under restricted irrigation condition" submitted in partial fulfillment of the requirements for the degree of M. Sc. (Ag.) in Genetics and Plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some other's work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj. Ayodhya

Date: June 2022

Athieliek Derived

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to cartify that the above statement made by the candidate is correct to the best of my

knowledge.

(Major Advisor)

Head of the Department

Deptt. of G.P.B.

N.D.U.A.T. Kumargani Falzabad

Dean, PGS

Poet Graduate Sturling

Dean

Dean, College of Agriculture

A. N. D. Univ. of Agric. & Tech.

Kumarganj - Ayodhya

1, VAIBHAV CHAUHAN, Id. No. A-11639/20 certify that the thesis entitled "Genetic variability and association studies in wheat (Triticum aestivum L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Agriculture) in Genetics and Plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumargani, Ayodhya

Vaibhav (Signature of the candidate)

Date: 03/06/2022

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of

my knowledge.

(Major Advisor)

Head of the Department

Deptt of GPB A N.D.U.A.T. Kumarganj Ayadhyn

Post Graduate Studies

Dean, College of Assignifure A. N. D. C. & Tech. hamilianing ony danya

DECLARATION FOR ANTI-PLAGIARISM

I, Neha Jha, I.d. No. A-11630/20 certify that the thesis entitled "Studies on character association and genetic diversity in wheat (Triticum aestivum L. em. Thell) under Sodic Soil condition" submitted in partial fulfillment of the requirements for the degree of Master of Science (Agriculture) in Genetics and Plant Breeding to the College of Agriculture. Acharya Narendra Deva University of Agriculture & Technology. Kumarganj. Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 4/6/22

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Head of the De

Deptt. of GP.B A.N.D.U.A.T. Kumargan Ayodhya

Post Graduate Studies

Dean, College of Agriculture A. N. D. Univ. of Agric. & Tech. Kimarganj - Ayo thya

DECLARATION FOR ANTI-PLAGIARISM

I, Poonam Sharma, I.D. No. A-11755/20 certifies that the thesis entitled "Genetic variability and association in indigenous and exotic rice (*Oryza sativa L.*) under sodic soil" submitted in partial fulfilment of the requirements for the degree of M.Sc.(Agriculture) in Genetics and Plant Breeding to college of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Narendra Nagar Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university. I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not wilfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc.. or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

'Date:

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of

my knowledge.

(MajorAdvisor)

Head of the Department

Deam, PGS Dean

Post Graduate Studies

Dean, Corego of Agricultur A. N. D. Univ. of Agric. & Tec Kurnargan; - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

1 Sajan Kumar, Id.No. A-11636/20 certify that the thesis entitled "Studies on genetic variability and character association in chickpea (Cicer arietinum L.)" submitted in partial fulfilment of the requirements for the degree of M.Sc. (Ag.) in Genetics and Plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2020, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 27/06/2022

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the

best of my knowledge.

(Major Advisor)

Head of the Department

Deptt. of G.P.B.

N.D.U.A.T., Kumargani Fatrabad

Dean, PGS Dean Studies Dean, CoDean of Agricultur A. N. El all publication

DECLARATION FOR ANTI-PLAGIARISM

1 Roshani Singh, Id. No. A-11635/20 certify that the thesis entitled "Studies on Genetic Divergence analysis and Character Association of Wheat (Triticum aestivum L.) in timely sown Condition" submitted in partial fulfillment of the requirements for the degree of M. Sc. (Ag.) in Genetics and plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some other's work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and ened as my own work.

Place: Kumargani, Ayodhya

Roskani Singh (Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to

the best of my knowledge

(Major Advisor)

Head of the Department

Deptt. of GPB A.N.D.U.A.T. Kumarnas

Post Graduate Studies

Dean, College of Agricultura A. N. D. Univ. of Agnic. & Tech. Kumurganj - Ayadhya

DECLARATION FOR ANTI-PLAGIARISM

I, Anubhav Yadav , Id.No. A-11626/20 certify that the thesis entitled "Genetical studies on certain metric traits of barley (Hordeum vulgare L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Agriculture) in Genetics and Plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 23-06-2022

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of

my knowledge.

Head of the Department

HEAD Deptt. of G.P.B A.N.D.U.A.T. Kumargani Ayodhya

lege of Agriculture A. N. D. Univ. of Agric. & Tech. Kumarganj - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

I Hariome Singh, Id. No. A-9247/16/20 certify that the thesis entitled "Studies on character association and genetic divergence in wheat (Triticum aestivum L.) for heat tolerance condition" submitted in partial fulfillment of the requirements for the degree of M.Sc. (Ag.) in Genetics and plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some other's work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 27/6/22

Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Head of the Department

A.N.D.U.A.T. Kumarpary
Avodtus

(Major Advisor

Post Graduate Studies

A. N. D. Univ of Agric. & Tech. Kumarganj - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

I Shivam Tripathi, Id. No. A-11638/20 certify that the thesis entitled "Assessing genetic diversity of wheat (Triticum aestivum L. em. Thell) using morphological characters" submitted in partial fulfillment of the requirements for the degree of M. Sc. (Ag.) in Genetics and Plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not will fully lifted up some other's work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date/June 2022

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to Piyusha Sing (Major Advisor)

the best of my knowledge.

Head of the Department

Deptt, of G.P.B.

N.D.U.A.T., Kumargant Salzahad

ean, College of Agriculture A. N. D. Univ. of Agric. & Tech.

DECLARATION FOR ANTI-PLAGIARISM

I Sandeep, Id.No. A-9186/16/20 certify that the thesis entitled "Genetic Analysis of Yield and Its Contributing Characters in Rice (Oryza sativa L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Agriculture) in Genetics and Plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 28/6/22

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of

my knowledge.

(Major Advisor

Head of file Department A.N.D.U.A.T. Kumargani Ayodhya

Post Graduate Studies

Dean

Dean, College of Agriculture A. N. D. Univ. of Agriculture Kernarganj - sy Juhya

DECLARATION FOR ANTI-PLAGIARISM

I Ashok Kumar Verma, Id. No. A-11627/20 certify that the thesis entitled "Studies on genetic variability and character association in wheat (Triticum aestivum L. em. Thell) under late sown condition" submitted in partial fulfillment of the requirements for the degree of M. Sc. (Ag.) in Genetics and Plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some other's work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 14 June 2022

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my

knowledge.

(Major Advisor)

Head of the Department

Deptt. of G.P.B A.N.D.U.A.T. Kumargant Ayodhya

Dean Dean

Post Graduate Studies

Dean, College of Agriculture A. N. D. Univ. of Agric, & 7 sh.

algati, - Aycul, a

DECLARATION FOR ANTI-PLAGIARISM

1 Pramod Kumar Bind, Id. No. A-11632/20 certify that the thesis entitled "Studies on genetic variability, character association and genetic divergence for yield and its components in chickpea (Cicer arietinum L.) submitted in partial fulfillment of the requirements for the degree of M. Sc. (Ag.) in Genetics & Plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some other's work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 27/06/2022

Premod Keemar bind (Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Head of the Department

Deptt of GPB A.N.D.U.A.T. Kumargani Ayodhya

(Major Advisor)

Dean, College of Agriculture A. N. D. Univ. of Agric. & Tech. Kumarganj - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

on genetic variability, associations and divergence in rice (Oryza sativa L.)"submitted in partial fulfilment of the requirements for the degree of M.Sc. (Ag) in Genetics and Plant Breeding to the collage of Agriculture, Acharya Narendra Deva University of Agriculture, Kumarganj, Ayodhya (U.P) is original work and has similarities with published work not more than minor similarities s per UGC (promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018 adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referrd to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not wilfully lifted up some others' work ,para, data results etc. Reported in the journal, books, magazines, reports, dissertations, thesis etc. Or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 17-6-2022

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my

knowledge.

Major Advisor

Head of the Department

Dean, Doan

Post Graduate Studies

Dean, College of Agriculture A. N. D. Univ. of Agric. & Tech, Kumarganj - Ayednya

DECLARATION FOR ANTI-PLAGIARISM

1, Ramanujam, Id.No. A-11634/20 certify that the thesis entitled "Genetic variability and association studies in rice (Oryza sativa L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Agriculture) in Genetics and Plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 07/06/2022

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the lest of my knowledge.

(Major Advisor

Head of the Department

HEAD
Deptt. of G.P.B
A.N.D.U.A.T. Kumargan)
Ayodhya

Post Graduate Studies

Dean, College of Agriculture A. N. D. Univ. of Agric. & Tech. . Kumarganj - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

I Atul Kumar, Id. No. A-11628/20 certify that the thesis entitled "Evaluation of urdbean (Vigna mungo L.) germplasm" submitted in partial fulfillment of the requirements for the degree of M. Sc. (Ag.) in Genetics and plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumargani, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some other's work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya Date: 17-6-2022

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Head of the Department

ANDUAT Kumaigani Ayadhya

Deptt of GPB

(Major Advisor)

Dean, Collage of Agriculture A. N. D. Univ. of Agric. & Tech Kumarganj - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

analysis in mungbean (Vigna radiata L. Wilczek)" submitted in partial fulfillment of the requirements for the degree of M. Sc. (Ag.) in Genetics and plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some other's work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 27-06-2022

Priya Sharma

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to

the best of my knowledge.

(Major Advisor)

Head of the Dopputment

Deptt. of G.P.B A.N.D.U.A.T. Kumargan:

Dean, Posan

Post Graduate Studies

Dean, College of Agriculture A. N. D. Univ. of Agric. & Tech. Kumargan, - Ayodhya

I, Ramanujam, Id.No. A-11634/20 certify that the thesis entitled "Genetic variability and association studies in rice (Oryza sativa L.) " submitted in partial fulfillment of the requirements for the degree of Master of Science (Agriculture) in Genetics and Plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumargani, Ayodhya

Date: 07/06/2022

Ramanga (Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my

knowledge.

Head of the Department

HEAD Deptt of GPB A N.D.U.A.T. Kumargani **Eyrlboya**

Post Graduate Studies

A. N. D. Univ. of Agric. & Tech.

Kumarganj - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

I Rajesh Kumar, Id. No. A-11112/19 certify that the thesis entitled "Genetic analysis of yield it's contributing characters of chickpea (Cicer arietinum L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Agriculture) in Genetics and Plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 06/04/2022

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

dvisor)

Head of the Department

Post Graduate Studies

7 19 4 1

Doen, College of Agriculture A. N. D. Univ. of Agric & L. n. Kumarganij - Ayodinya



DECLARATION OF ANTI PLAGIARISM

I Anand Mohan Choudhary, Id No.-A-8149/14/16 certify that the thesis entitled "Genetic Variability, gene action and heterosis for yield and its contributing traits in rice (Oryza sativa L.) under sodic soil" submitted in partial fulfillment of the requirements for the degree of Ph.D. in Genetics & Plant Breeding to the college of agriculture, Acharya Narendra Deva University of Agriculture and Technology, Kumarganj, Ayodhya, (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of academic integrity and prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at the website and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Signature of candidate

Date:

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my

knowledge.

Major Advisor

Head of the department

Deptt. of G.P.B A.N.D.U.A.T. Kumarganj Ayodhya Hean Structure

DECLARATION FOR ANTI-PLAGIARISM

l, Poonam Sharma, I.D. No. A-11755/20 certifies that the thesis entitled "Genetic variability and association in indigenous and exotic rice (Oryza sativa L.) under sodic soil" submitted in partial fulfilment of the requirements for the degree of M.Sc.(Agriculture) in Genetics and Plant Breeding to college of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Narendra Nagar Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university. I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not wilfully lifted up some others7 work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 15/422

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of

my knowledge.

Head of the Department

Post Graduate Studies

Dean, College of Agriculture A. N. D. Univ of Agric, & Tech. Kumarganj - Ayodhya

DECLARATION FOR ANTI- PLAGIARISM

I Narang Kapoor, I.d. No. A-11695/20 certify that the thesis entitled "Studies on Seed and Seedling traits in Rice (Orgza sativa L.)" submitted in partial fulfilment of the requirements for the degree of M.Sc. (Ag) in Seed Science and Technology to the College of agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institution) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not will fully lifted up some others work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Marcing Korpoen (Signature of the candidate)

Date: .. 24. 6/22

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

Deptt. of Seed Science & Technology

N. D. U. A. & T., Kumargan

Dean, PGS

Post Graduate Studies

Dean

Dean, College of Agriculture A. N. D. Univ. of Agric. & Tech Kumurganj - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

Lakhandar Chauhan, Id. No. A-11694/20 certify that the thesis entitled "Studies on genetic variability, seed dormancy and seed quality parameters in rice (Oryza sativa L.)" submitted in partial fulfillment of the requirements for the degree of M. Sc. (Ag.) in Seed Science and Technology to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some other's work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place:Kumarganj, Ayodhya

Date: 13 June 2022

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Departmen

Dean, Post Graduate Studies

Dean, Colleg Demogriculture A. N. D. Univ. of Agric. & Tech Kutnerganj - Ayochya

I, VAIBHAV CHAUHAN, Id. No. A-11639/20 certify that the thesis entitled "Genetic variability and association studies in wheat (Triticum aestivum L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Agriculture) in Genetics and Plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

06/202

Vaibhav (Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of

my knowledge.

Head of the Department

HEAD

Deptt. of G.P.B A.N.D.U.A.T. Kumarganj

Avodhya

Dean, College of Apriculture A. N. D. Univ of Agric & Tech. Kumurgun) - Ayo dhya

oet Graduate Studies

I, Anubhay Yaday , Id.No. A-11626/20 certify that the thesis entitled "Genetical studies on certain metric traits of barley (Hordeum vulgare L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Agriculture) in Genetics and Plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 23-06-2022

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of

my knowledge.

Advisor)

Head of the Department

HEAD

Deptt. of G.P.B. A.N.D.U.A.T. Kumarganj

Ayodhya

Post Graduata Studios

Ocan, College of Agriculture A. N. D. Univ. of Agric. & Te on.

Kumargani - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

I Ajay Pratap Singh, Id. No. A-11693/20 certify that the thesis entitled "Studies on genetic variability and character association for yield, yield contributing attributes and seed quality parameters in rice (Oryza sativa L.)" submitted in partial fulfillment of the requirements for the degree of M. Sc. (Ag.) in Seed Science and Technology to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up-some other's work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 13 June, 2022

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor

Head of the Department

Post Graduate Studios

Dean, College of Agriculture A. H. D. Univ. of Agric, & Tech Kurnarguli, Agridhya

to - or o mound



DECLARATION OF ANTI PLAGIARISM

I Anand Mohan Choudhary, Id No.-A-8149/14/16 certify that the thesis entitled "Genetic Variability, gene action and heterosis for yield and its contributing traits in rice (Oryza sativa L.) under sodic soil" submitted in partial fulfillment of the requirements for the degree of Ph.D. in Genetics & Plant Breeding to the college of agriculture, Acharya Narendra Deva University of Agriculture and Technology, Kumarganj, Ayodhya, (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of academic integrity and prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at the website and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Signature of candidate

Date:

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Major Advisor

Head of the department

Deptt. of G.P.B A.N.D.U.A.T. Kumarganj Ayodhya

I Satyam Pathak, Id.No. A-11637/20 certify that the thesis entitled "Germplasm evaluation of scented and non-scented rice (Oryza sativa L.) under irrigated condition" submitted in partial fulfillment of the requirements for the degree of Master of Science (Agriculture) in Genetics and Plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: G

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of

my knowledge.

Major Advisor)

Head of the Department

HEAD

Deptt. of G.P.B.

N.D.U.A.T., Kumarganj Falzabad

Post Graduate Studies

Dean, College of Apricetture

A. N. D. Univ. of Agric. & Tech.

Kumargani - Avoohya

I Sandeep, Id.No. A-9186/16/20 certify that the thesis entitled "Genetic Analysis of Yield and Its Contributing Characters in Rice (Oryzu sutien L.)" submitted in partial fulfillment of the requirements for the degree of Muster of Science (Agriculture) in Genetics and Plant Breeding to the College of Agriculture, Acharya Natendra Deva University of Agriculture & Technology, Kumargan), Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the Fandidate)

Date:

25/1/22

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of

my knowledge.

Poet Graduate Studies

Head of the Department HEAD

Deptt of G.P.B A.N.D.U.A.T. Kumarganj Ayodhva

Down

Dean, College of Agriculture

Branching of the second

DECLARATION FOR ANTI- PLAGIARISM

I Narang Kapoor, I.d. No. A-11695/20 certify that the thesis entitled "Studies on Seed and Seedling traits in Rice (Oryza sativa L.)" submitted in partial fulfilment of the requirements for the degree of M.Sc. (Ag) in Seed Science and Technology to the College of agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institution) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not will fully lifted up some others work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signal

Narang Kapoen

(Signature of the candidate)

Date: .. 24. 6)22

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

Deptt. of Seed Science & Technology

H. D. U.A. & T., Kumergan

Dean, PGS

Post Graduate Studies

Dean

Dean, College of Agriculture A. N. D. Univ. of Agric. & Tech Kuniurganj - Ayodhya

DECLARATION FOR ANTI-PLAGIARISM

I, Poonam Sharma, I.D. No. A-11755/20 certifies that the thesis entitled "Genetic variability and association in indigenous and exotic rice (Oryza sativa L.) under sodic soil" submitted in partial fulfilment of the requirements for the degree of M.Sc.(Agriculture) in Genetics and Plant Breeding to college of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Narendra Nagar Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university. I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not wilfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

(Signature of the candidate)

Date: 15/6/22

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of

my knowledge.

Head of the Department

Dean, C.O.A

A. N. D. Univ of Agric & Tech. Kumarganj - Ayedhya

Post Graduate Studies

DECLARATION FOR ANTI-PLAGIARISM

Lakhandar Chauhan, Id. No. A-11694/20 certify that the thesis entitled "Studies on genetic variability, seed dormancy and seed quality parameters in rice (Oryza sativa L.)" submitted in partial fulfillment of the requirements for the degree of M. Sc. (Ag.) in Seed Science and Technology to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some other's work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 13 June 2022

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

Post Graduate Studies

Dean, Colleg Deingriculture A. N. D. Univ. of Agric. & Tech. Kutnergenj - Ayodhya

I, VAIBHAV CHAUHAN, Id. No. A-11639/20 certify that the thesis entitled "Genetic variability and association studies in wheat (Triticum aestivum L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Agriculture) in Genetics and Plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Jaibha V (Signature of the candidate)

Date:

08/06/2022

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of

my knowledge.

(Major Advisor)

Head of the Department

HEAD

Deptt. of G.P.B A.N.D.U.A.T. Kumarganj

Ayodhya

Poet Graduate Studies

Dean

Dean, College of Agriculture

A. N. D. Univ of Agriculture

Kumungung-reyodhya

I, Anubhay Yaday, Id.No. A-11626/20 certify that the thesis entitled "Genetical studies on certain metric traits of barley (Hordeum vulgare L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Agriculture) in Genetics and Plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 23-06-2022

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of

my knowledge.

Head of the Department

HEAD

Deptt. of G.P.B

A.N.D.U.A.T. Kumarganj

Ayodhya

Death, College, of Agriculture A. N. D. Univ. of Agric. & Tean.

Kumarganj - Ayodhya

Dean, I

Post Graduata Studias

DECLARATION FOR ANTI-PLAGIARISM

I Ajay Pratap Singh, Id. No. A-11693/20 certify that the thesis entitled "Studies on genetic variability and character association for yield, yield contributing attributes and seed quality parameters in rice (Oryza sativa L.)" submitted in partial fulfillment of the requirements for the degree of M. Sc. (Ag.) in Seed Science and Technology to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj. Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some other's work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 13 June, 2022

(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

Head of the Department

Dean, PGS Post Graduate Studies Dean, College of Agriculture A. N. D. Univ. of Agric. 8. Tech Kamananan ang alitya

transfer or operating

DECLARATION FOR ANTI-PLAGIARISM

I Rajesh Kumar, Id. No. A-11112/19 certify that the thesis entitled "Genetic analysis of yield it's contributing characters of chickpea (Cicer arietinum L.)" submitted in partial fulfillment of the requirements for the degree of Master of Science (Agriculture) in Genetics and Plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 06/04/2022

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

(Major Advisor)

.T. Kumargani Falzabad Head of the Department

Post Graduate Studies

Dagn, College of Agricultura A. N. D. Univ. of Agric & L. n. Kumargant - Ayodaya

I, Ramanujam, Id.No. A-11634/20 certify that the thesis entitled "Genetic variability and association studies in rice (Oryza sativa L.) " submitted in partial fulfillment of the requirements for the degree of Master of Science (Agriculture) in Genetics and Plant Breeding to the College of Agriculture, Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya (U.P.) is original work and has similarities with published work not more than minor similarities as per the UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018, adopted by the university.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and body of the thesis. I further certify that I have not willfully lifted up some others' work, para, text, data, results etc. reported in the journals, books, magazines, reports, dissertations, thesis etc., or available at web-sites and included them in this thesis and cited as my own work.

Place: Kumarganj, Ayodhya

Date: 07/06/2022

Romanfor
(Signature of the candidate)

CERTIFICATE FROM THE MAJOR ADVISOR

This is to certify that the above statement made by the candidate is correct to the best of my

knowledge.

Head of the Department

HEAD

Deptt. of G.P.B. A N.D.U.A.T. Kumargani Ayodhya

of Agriculture A. N. D. Univ. of Agric. & Tech. Kumarganj - Ayodnya

COLLEGE OF HORTICULTURE AND FORESTRY

A.N.D. University of Agriculture & Technology, Kumarganj-224 229, Ayodhya

OFFICE MEMRENDOM

No. 82/CHF/2022

Dated: 05/05/2022

The following research advisory committee constituted for smooth running of research work of College of Horticulture & Forestry

1.	Dr. O.P. Rao	Dean, Chairman
2.	Dr. O.P. Rao	HOD, Silviculture and Agroforestry
3.	Dr. Sanjay Pathak	HOD, Fruit Science
4.	Dr. D. Ram	HOD, Medicinal and Aromatic Plants
5.	Dr. Bhagwan Deen	HOD, Post Harvest Technology
6.	Dr. Ashok Kumar	HID, Floriculture and Landscape
7:	Dr. G.C. Yadav	Incharge HOD, Vegetable Science
8.	Dr. Bhanu Pratap	Associate Professor, Fruit Science, Secretary

(O. P. Rao) Dean, CHF

No. 82/ CHF/2022

Dated: 05/05/2022

C.C. for information and necessary action.

- 1. All members
- 2. DAES
- 3. Dean, PGS
- 4. S.V.C.

(O. P. Rao) Dean, CHF

Mahamaya College of Agricultural Engineering and Technology Ambedkar Nagar

Research Advisory Committee

Chairman

Dr. H. C. Singh

Dean

Members

1. Dr R. K. Mehta

Professor

2. Er. R. J. Singh

Associate Professor

Secretary

1. Dr. P. K. Mishra

Assistant Professor

MCAET Ambedkar Nagan

MCAET, Ambedkar Nagar

College of Veterinary Science and Animal Husbandry Acharya Narendra Deva University of Agriculture & Technology Kumarganj, Ayodhya

Research Advisory Committee Dean— Chairman Member- All HODs

- 1. Dr. P.S. Parmanik, LPM
- 2. Dr. Namita Joshi, VPH
- Dr. D. Niyogi, Veterinary Pathology
- 4. Dr. A.K. Gangwar, Veterinary Surgery and Radilogy
- Dr. Vijai Kumar Singh, Animal Nutrition
- 6. Dr. Sushant Srivastava, Veterinary Gyncology and Obstrics
- 7. Dr. R.K. Singh, Veterinary Animal Husbandry Extension
- 8. Dr. Sonu Jaiswal, Veterinary Clinical Complex
- 9. Dr. Amit Singh, Veterinary Paracitology
- 10. Dr. S.P. Singh, Livestock Farm Complex
- Dr. Jaswant Singh, AGB

12. Dr. Chandra Shekhar - Secretary

Approved

Dean

College of Vety. Science & A.K. NDUA&T. Kummgari, Fatzabad

आदेश

सामुदायिक विज्ञान महाविद्यालय से सम्बन्धित शोध परियोजनाओं, शोध पत्र एवं अन्य रिसर्च एक्टीविटीज को गुणवत्तापूर्ण करने हेतु महाविद्यालय स्तर पर एक Research Advisory Committee का गठन किया जाता है। जो निम्नवत् है।

1. डा० निमता जोशी, अधिष्ठाता अध्यक्ष

डा० सुमन प्रसाद मौर्य, सह प्राध्यापक एवं विभागाध्यक्ष सचिव

डा० साधना सिंह, सह प्राध्यापक एवं विभागाध्यक्ष सदस्य

डा० पूनम सिंह, सहायक प्राध्यापक एवं प्रभारी सदस्य

/ अधिष्ठाता

सामुदायिक विज्ञान महाविद्यालय

आचार्य नरेन्द्र देव कृषि एवं प्रौद्योगिक विश्वविद्यालय, कुमारगंज, अयोध्या

पत्रांकः ए.एन.डी.यू.ए.टी.-52/2022/240

दिनांक:06/07/2022

उपरोक्त की प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हतु प्रेषित।

1. कुलपति के सचिव को माननीय कुलपति महोदय के अवलोकनार्थ।

2. उपरोक्त समिति के अध्यक्ष / सचिव एवं समस्त सदस्यों को।

अभिष्याखाता सःमुदायिक विज्ञान महाविद्यालय आ० न० दे० कृषि एवं प्रौ० वि० वि० कुमारगंज, अयोध्या

College of Agriculture

Research Advisory Committee

Dean - Chairman

Members - All HODs

- Dr. Suresh Kumar Incharge, Soil Science
- 2. Dr. Ashok Kumar Singh HOD, Crop Physiology
- 3. Dr. A.K.Singh HOD, Agronomy
- 4. Dr. S.C. Vimal HOD, GPB
- 5. Dr. Sushil Kumar HOD, Plant Pathology
- 6. Dr. Vishal Mehta I/C HOD, Statistics
- 7. Dr. Umesh Chandra I/C HOD, Entomology
- 8. Dr. Pratibha Singh HOD, Biochemistry
- 9. Dr. D.K.Dwivedi HOD, Biotechnology
- Dr. S.R. Mishra HOD, Agril. Meteorology
- 11. Dr. R.K. Dohrey, Incharge Extension Education
- 12. Dr. K.K. Singh Incharge Agril. Economics

Secretary - Dr. Alok Kumar Singh

Dean, College of Agriculture

A. N. D. Univ. of Agric, & Tech.

Kumarganj - Ayodhya

ORDER

Research Advisory Committee is being constituted for College of Fisheries and following members are being nominated in Research Advisory Committee for monitoring of research work at College of Fisheries.

1.	Dr. A K Gangwar, Dean, College of Fisheries		Chairman
2.			Member
3.	Dr. Dinesh Kumar, Assistant Professor	1.0	Member
			Member
	Dr. C P Singh, Associate Professor		Secretory

(A. K. Gangwar) Dean

College of Fisheries

College of Fisheries Acharya Narendra Deva University of Agriculture and Technology Kumarganj Ayodhya, UP-224229

Date ... 19127.22

- 1. Secretory to Hon'ble Vice Chancellor Sir for kind information please.
- 2. To all members of committee.

(A. K. Gangwar)

Dean

College of Fisheries