

Curriculum Vitae

DR. MOHAMMAD NISAR



Contact Details:

Mailing Address: Department of Biotechnology/Botany/Zoology, University Of Malakand, Chakdara Dir (Lower) KP-Pakistan
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Personal Details:

Residence Status: Citizen of Pakistan

Qualifications:

Degree: **Doctor of Philosophy (Ph. D)**
Year of Completion: 2009
University: Quaid-i-Azam University, Islamabad (Pakistan)
Research Topic: "Genetic Diversity in *Pisum sativum* based on Morphological and Molecular characterization (SDS-PAGE, RAPD)

Degree: **Master of Philosophy (M. Phil)**
Year of Completion: 2004
University: Quaid-i-Azam University, Islamabad (Pakistan)
Research Topic: "Genetic Diversity in *Cicer arietinum* L. based on Morphological and Molecular characteristics

Degree: **Master of Science (Botany)**
Year of Completion: 2002
University: University of Peshawar, Khyber Pakhtunkhwa (Pakistan)
Research Topic: "Family Rosaceae of district Swat

Work Experience:

Jan 14, 2009 till up-to-date: Assistant Professor in the Department of Botany, University of Malakand, Khyber Pakhtunkhwa, Pakistan; on Tenure Track System (TTS).
Job Title: **Assistant Professor**
PBS: 19

Dec 03, 2008 Jan 13, 2009: Assistant Professor in the Department of Botany, University of Malakand, Khyber Pakhtunkhwa, Pakistan
Job Title: **Assistant Professor**
PBS: 19

Nov. 2007 Dec 02, 2008: Assistant Professor in the Department of Biotechnology, Faculty of Applied Sciences, University of Science and Technology, Bannu
Job Title: **Assistant Professor**
PBS: 19

Nov. 2006 June 2007: Six months teaching experience as a Lecturer in Department of Genetics Hazara University, Mansehra Khyber Pakhtunkhwa, Pakistan
Job Title: **Lecturer**
PBS: 17

May 2003-Oct. 2006: **THREE** years and **EIGHT** months' research experience under Agriculture Linkages Program Project in the Institute of Agri-Biotechnology and Genetic Recourses, NARC, Islamabad Pakistan.
Job Title: **Reach Fellow/Scientist**
PBS: 17

Administrative experience:

01-10-2009 - Head Department of Biotechnology/Botany/Zoology, University of Malakand, KP-Pakistan
2009 – 2010 Chief Proctor, University of Malakand, Khyber Pakhtunkhwa, Pakistan

Contribution during stay at Hazara University KP-Pak:

- 1- Established Proteomic and Genomics lab

Contribution during stay at Bannu University of Science & Technology KP-Pak:

- 1- Designed green house and field layout for Biotechnological experiments (4 million)
- 2- Established Bannu GeneBank (Launched in January 2008- present status 500 genotypes)
- 3- Prepared PC-1 for Biotechnology lab (on final stage)
- 4- Method development for the removal and detection of different proteins from *Pisum sativum* cultivars using SDS-PAGE

Completed projects:

- 1- Method development for the removal and detection of different proteins from *Pisum sativum* cultivars using SDS-PAGE. Project No. Ref: UOM/FIN/10/181: completion date: 28-03-2010:

Accepted projects:

- 1- Marker Assisted Selection (MAS) Breeding in *Pisum sativum* using Molecular Markers (RAPD and SSR marker). **(Accepted fund 3.7 million)**
- 2- Exploration, Collection, Biochemical and Molecular evaluation of Pakistani Chickpea germplasm. **(Accepted fund: one million)**

Submitted projects:

Submitted to HEC:

1. Strengthening of Molecular Biology Lab, in the Department of Botany/Biotechnology at University of Malakand. **(Fund: one million)**
Pakistan Science Foundation
2. PC-1 on **Pakistani Seed Bank** in Malakand University submitted to USAD donor conference celebrated in Pakistan **(Fund: 103.45 million)**

Workshop:

The use of DNA technology for plants improvement under process will be submitted to Higher education commission of Pakistan.

Laboratory Work:

- Gene Mapping
- PCR based analysis
- SDS-PAGE analysis
- Morphometrics
- Using Statistical software

Academic Awards / Qualifications:

- Approved Ph. D. supervisor by the HEC, Pakistan
- Reviewer of Pakistan Science Foundation Projects

Reviewer of International Journals:

- African Journal of Biotechnology
 - Journal of Agriculture Sciences(UK press)
 - Reviewer of Journal of Plant Breeding and Crop Sciences
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Ph. D Students Supervision (in progress):

S #	Name of Student	Title	Year of Registration
1.	Mr. Ali Hazrat	Taxo-Ethnobotany and DNA Finger Printing of Some elite species of Ranunculaceae, District Dir, N.W.F.P, Pakistan	25-11-2005
2.	Mis. Zakia Ahmad	Exploration, Collection, Biochemical and Molecular evaluation of Pakistani Chickpea germplasm	23-06-2009

M. Phil Students Supervised (Completed)

S #	Name of Student	Title	Year of Registration	Completion Date
1.	Mr. Sujaul Mulk Khan	Genetic Diversity in Pakistani Peas Germplasm through RAPD Markers	Spring, 2006	28-04-2008
2.	Mr. Farzana Akram	Genotypic elaboration of Chickpea Lines using DNA Makers	Autumn, 2005	12-04-2008

M. Phil Students Supervision (in progress):

S#	Name of Student	Year of Registration
3.	Mr. Irfan Ullah	April, 2008
4.	Mr. Zakir Ullah	April, 2008

Achievements during Ph. D Research Work

- 1- Selection of 3 super Resistant Genotype and 12 disease escaping (Work Published in Poland)
- 2- Mapped *er-1* gene of *Erysihe pisi* on chromosome IV of *Pisum sativum*
- 3- Three Super lines GN070140-2, GN070143-1 GN070140-0 were selected for cultivation (in-near future) in Pakistan (Work Published in CHINA)

Publications: (Books)

3. **Nisar, M.**, Nasurullah and Nausheen (2011). GENETIC DIVERSITY IN PHASEOLUS VULGARIS L: A report from the un-explored area of Khyber Pakhtunkhwa, Pakistan. VDM Verlag Dr. Muller Gmb, H & Co. KG; Dudweiler Landstr. 99, 66123 Saarbrucken, Germany. Projekt-ID (47262) and ISBN (978-3-639-37674-6).
4. Khan, SM., Ahmad, H. and **Nisar, M.** (2010). ELABORATION OF GENETIC DIVERSITY IN PEAS: Use of Molecular DNA Markers. VDM Verlag Dr. Muller Gmb, H & Co. KG; Dudweiler Landstr. 99, 66123 Saarbrucken, Germany; ISBN: 978-3-639-30116-8.

Publications (international): (Published):

5. A. Ali, **M. Nisar**, H. Ahmad, Nausheen, M. Idress, M. Bajwa (2011). Determination of HCV genotypes and viral loads in chronic HCV infected patients of Hazara Pakistan. Journal of Molecular Virology 8:466-472
6. **M. Nisar**^{*1}, A. Ghafoor², M. R. Khan³ Saddrudine and Nasurullah (2011). Novel Protocol for Albumin and Globulin detection in *Pisum sativum* genotypes using Sodium Dodecyl Sulphate polyacrylamide gel electrophoresis (SDS-PAGE). Pakistan Journal of Botany, 43(3): 1733-1734.
7. A. Ali, **M. Nisar**, M. Idress and Nausheen (2011). Determination of HCV genotypes and viral loads in chronic HCV infected patients of Hazara Pakistan. 9th International Conference, Functional Food Components In Health and Disease. University of San Diego, USA. 08, 16-18
8. Shafique, S., Khan, M. R., **Nisar, M.**, and Rehman, S., (2011). Investigation of Genetic Diversity in Black Gram [*Vigna mungo* (L.) Hepper]. *Pak. J. Bot.*, 43(2): 1223-1232.
9. Nasurullah Khan, M. Ahmad, M. Wahab, **M. Nisar** and M. F. Saddiqi (2011) Some Important Medicinal Plants of Chitral Goll National Park, Pakistan. *Pak. J. Bot.*, 43(2): 797-809,
10. Ali Hazrat, **M. Nisar**, Jehandar Shah and Shujaat Ahmad (2011). Ethnobotanical Study of Wild Plants of Dir Kohistan Valley, Khyber Pukhtunkhwa, Pakistan. *Pak. J. Bot.*, 43(2): 787-795.
11. **M. Nisar**, Shah Hussain, Nausheen, Nasurullah Khan and M. F Saddiqi (2011). Chemical Composition of

Sunflower (*Helianthus annuus* L.) Hybrid and Open Pollinated Populations. Pak. J. Bot. Vol. 43 (1): 157-164. 2070-3368

12. **M. Nisar**^{1*}, A. Ghafoor², Nausheen (2011). Linkage of a novel RAPD marker to the powdery mildew resistance *er-1* gene in *Pisum sativum* L. *Russian Journal of Genetics*, Vol. 47 (3): 300–304.
13. **M. Nisar**^{1*}, A. Ghafoor and M. R. Khan (2011). Phenotypic Variation in the Agronomic and Morphological Traits of *Pisum sativum* L. germplasm obtained from different parts of the globe. *Russian Journal of Genetics*, 47 (1): 19–25.
14. **M. Nisar**^{1*}, Muhammad Naeem, Nausheen, Zakia Ahmad and Abdul Ghafoor (2011). Genetic diversity and disease response of rust in bread wheat collected from Waziristan Agency, Pakistan. *International Journal of Biodiversity and Conservation* Vol. 3(1): 10-18.
15. **M Nisar** and Nausheen. Serial Analysis of Gene Expression, Poly Acrylamide Gel Electrophoresis and Mass. Track B4-13: BIT-^{1st} Annual Tetra-Congress of MoldMed-2010, Nov 10-12; 2010. China.
16. **M. Nisar**^{1*} and Ghafoor (2010) Inheritance studies of *Pisum sativum* F₁, F₂ and F₃ generation based morphological traits and selection of high yielding powdery mildew resistant lines. *Legume Genomics and Genetics*, Vol. 1, No. 4, Pp. 1-6 ISSN 1925-1580. 1.735 IP. Sophiapublisher
17. A. Hazrat, J. Shah, **M. Nisar**, S. Ahmad, A. Khaliq Jan and Sikandar (2010). Medicinal Plants of Ushera Valley, Dir, NWFP, Pakistan. *Pak. J. Bot.*, 42(1): 31-34.
18. **M. Nisar**^{1*}, A. Ghafoor, M. R. Khan and M. Subhan (2009a). Genetic similarity of Pakistani pea (*Pisum sativum* L.) germplasm with world collection using cluster analysis and Jaccard's similarity index. *J. Che. Society Pak.* 31(1): 138-144.
19. **M. Nisar**^{1*}, A. Ghafoor, M. R. Khan and Asmatullah (2009b) First proteomic assay of Pakistan *Pisum sativum* germplasm relation to geographic pattern. *Russian Journal of Genetics*, 45 (7): 807–812, (2009) 1608-3369
20. **M. Nisar**^{1*}, A. Ghafoor, H. Ahmad, M.R. Khan, A.S. Qureshi, H. Ali and M. Aslam. 2008. Evaluation of genetic diversity of pea germplasm through phenotypic trait analysis. *Pakistan Journal of Botany*, 40(5): 2081-2086.
21. **M. Nisar**, A. Ghafoor, M.R. Khan, H. Ahmad, A.S. Qureshi and H. Ali. 2007. Genetic diversity and geographic relationship among local and exotic chickpea germplasm. *Pakistan Journal of Botany*, 39(5): 1575-1581.
22. Ali, Z., A.S., Qureshi, W. Ali, H. Gulzar, **M. Nisar** and A. Ghafoor. 2007. Evaluation of genetic diversity present in pea (*Pisum sativum* L.) germplasm base don morphological traits, resistance to powdery mildew and molecular characteristics. *Pakistan Journal of Botany*, 39(7): 2739-2747.
23. **Nisar, M.**, A. Ghafoor, M.R. Khan and A.S. Qureshi, 2006. Screening of *Pisum sativum* (L.) Germplasm against *Erysiphe pisi* Syd. in relation with vegetative traits and SDS-PAGE profile. *Acta Biologica Cracoviensia, Series Botanica*, Poland, 48(2): 33-37. PL ISSN 0001-5296 ABCSB
24. **M. Nisar**^{1*} et al., (2006). Key to identify the plants of Family Rosaceae and their indigenous uses in Swat. *Scientific Khyber* 19(2): 165-17.
25. **Nisar M.**, et al., (2005). Genetic diversity and Geographic relationship among Local and Exotic Chickpea (*Cicer arietinum* L.) germplasm based on Seed SDS Poly Acryl amide Gel Electrophoresis and morphological characteristics. 10th International Congress of SABRAO held in Tsukuba Japan, Poster presentation List. Poster No. B 13, Registration No 0095. http://www.sabrao.com/poster_sessions.html
26. Ghafoor A., A. Qaum and **M. Nisar** (2005). Peas (*Pisum sativum* L.) Catalogue Pakistan Agricultural Research Council (PARC)
27. Javed I, **Nisar M**†. and Siraj-ud-Din, (2004). Herbal Recipes used by the local community of district Dir. Paper presented in International Symposium on Medicinal Plants: Linkages Beyond National Boundaries” held in NARC, Islamabad during 7-9 Sept., 2004, organized by WWF, PARC, Islamabad and **SOJ-JAPAN**

Publications: (Accepted)

28. Zakia Ahmad, **M. Nisar***, Memoona and Haidar Ali, Optimization of condition for sterilization and callus induction in Chickpea (*Cicer arietinum*). *Pakistan Journal of Botany*. (2011).

Publications: (Submitted)

29. Obaidullah, Muhammad Nisar Ahmad, Waqar Ahmad, Shafiq Ahmad Tariqe, **Muhammad Nisar** and Manzoor Ahmad (2011) Aconitum heterophyllum Wall; Norditerpenoid alkaloids; Heterophylline-A; Heterophylline-B; Anti-bacterial; Anti-fungal. *Journal of Enzyme Inhibition*.
30. **M. Nisar** and A. Ghafoor. Genetic diversity in Pakistani indigenous *Pisum sativum* germplasm detected by

agronomic traits, biochemical and molecular markers.

31. **M. Nisar**^{a*}, Asif Mehmood^a and Abdul Ghafoor^b, Genetic Diversity based on Morphological traits and Sodium Dodecyl Sulfate Polyacryl Amied Gel Electrophoresis in *Malus Pumila* (Mill) cultivars Reported from N-W.F.P, Pakistan. Turkish Journal of Botany.
32. **Mohammad Nisar**, Irfan Ullah, Abdul Ghafoor and Nausheen Detection of Albumin and Globulin in Pea using SDS-PAGE And Blue-Native PAGE. Biotechnology & Biotechnology Equipments.
33. Amjad Ali, **Mohammad Nisar**, Muhammad Idrees, Nausheen Saif (2011). Determination of HCV genotypes and viral loads in chronic HCV infected patients of Hazara Pakistan. Journal of Molecular Virology.
34. Nasrullah Khan and **Mohammad Nisar** (2011). Phytosociology, Structure and Dynamic of *Pinus roxburghii* from Northern Pakistan

Courses / Workshops/ Training:

Workshops/Trainings/symposia participated

1. Member of the Preliminary Meeting of NCRC in Fresh Water Biology and Fisheries held at HEC regional center Karachi from 1 – to 3 Nov, 2010
2. Identification, Maintenance and Preservation of Microorganisms. Organized by Microbiology Research Laboratory, Deptt. Biological Sciences, Quaid-I-Azam University, Islamabad, Pakistan, held during May 10-12, 2004.
3. International symposium on “Medicinal Plants: Linkage beyond national boundaries”. Organized by WWF, SOJ-Japan and PARC, Islamabad, held during September 7-9, 2004.
4. National Seminar on “Biotechnology for Development” Organized by Department of Biotechnology and Higher Education Commission of Pakistan Jun 10th 2008.

Computer Literacy:

Statistical Software (STATISTICA, MINITAB, NTYSIS, MAPMAKER, MVA and SSPS)

Interests:

Book reading, tours, Web surfing

Key Competencies:

- Ability to deal and solve the problems of students.
- Good communication skills with a good command on English language
- Good computer knowledge
- Ability to manage self and work team to meet scheduled work to a high standard to respond to a range of conflicting demands
- Ability to use my knowledge and skills sensibly in order to solve different problems
- Posses a willingness to learn things easily and not afraid for accepting challenging job.
- Understanding of the importance of teamwork, can work in a friendly manner considering myself as the part of the team

References: (Will be furnished on request)