CURRICULUM VITAE

PERSONAL

NAME	**DR. MUNAWAR FAZAL**
FATHER'S NAME	DR. SYED FAZAL UDDIN
DATE OF BIRTH	April 17, 1966
NATIONALITY	INDIAN
RELIGION	ISLAM (SUNNI)
MARITAL STATUS	MARRIED
PASSPORT NUMBER	AO287920 (VALIDITY-2007)
ADDRESS	
CORRESPONDANCE	DEPARTMENT OF LAND MANAGEMENT FACULTY OF AGRICULTURE UNIVERSITY PUTRA MALAYSIA 43400 UPM, SERDANG SELANGOR DE, **MALAYSIA** Munawarfazal@hotmail.com
PERMANENT	C/O MR. S. MUSLIMUDDIN HAIDER 123B, ROAD NO. 8A, RAJENDRA NAGAR PATNA-16 (BIHAR), **INDIA** Ph No.: 0091-612-656213

ACADEMIC

Year	Degree/certificate	Division	University/Board	Subject Offered
1993	Ph.D.	Awarded	AMU*	Botany (Plant pathology/Pant Nematology)
1989	M.Phil	Awarded	AMU	Botany(Plant pathology/Pant Nematology)
1987	M.Sc	1st	AMU	Botany(Plant pathology/Pant Nematology)
1985	B.Sc. (Hons.)	1st	AMU	Botany
1981	Pre-University course	IInd	AMU	Life Science
1980	High School	1st	Bihar Board	Science

- Aligarh Muslim University, Aligarh-202002, Uttar Pradesh, INDIA

Present Position : Post-Doctoral Fellow (1994-Till Date)
Presently At : Department Of Land Management, University Putra Malaysia, Malaysia
Presently working on Thesis: : Arbuscular Mycorrhiza, Fertilizer and Pesticides

Ph.D. Studies on root-knot and reniform nematodes associated with black gram
M.Phil Studies on plant parasitic nematodes associated with important pulse crops.
M.Sc. Evaluation of Nema-toxicity of some selected plants

Project Report : **Integrated Nematode Management**

Scholarship :
1. Junior Research Fellowship
2. Senior Research Fellowship
3. Research Associateship (CSIR, New Delhi)
4. Post-Doctoral Fellowship (UPM, Malaysia)

Publications :

Articles	:	2
Foreign Journal	:	13
Indian Journal	:	19
Abstract	:	9

EXPERIENCE

Research Experience	:	10 Years (including 6 years as Post Doctoral)
Research Training	: 1.	Participated in the summer training course on "Diseases of Pulses and Oil seed Crops and their Management" organized by the Department of Nematology, Rajasthan College of Agriculture, Udaipur, Rajasthan, India, sponsored by ICAR, New Delhi (1989)
	: 2.	Imparted training in general methods in Tissue Culture Techniques at National Botanical Research Institute, Lucknow, India
Abilities and Skills		Identification of nematodes, bacteria and fungi including mycorrhiza (endomycorrhiza). Isolation, culturing of nematodes, bacteria and fungi including mycorrhizal fungal spores in pot and field condition and their maintenance etc. Experience in *in vitro* cell and tissue culture of selected crop species.
Field of Interest	:	Microbiology/Plant Pathology/Plant Nematology/ *In vitro* Culture
Major Field of Interest	:	Arbuscular Mycorrhiza/ Plant Pathology/ Plant Nematology
Teaching	:	Mycology, Plant Embryology, Plant Pathology, Plant Nematology and the papers of Botany assigned
Extra Curricular Activities	:	Sports and Games

DR MUNAWAR FAZAL
Department of Land Management
Faculty of Agriculture
University Putra Malaysia
Serdang, Selangor D.E.
Malaysia
Ph. No. 00603-9459778

LIST OF PUBLICATIONS OF DR. MUNAWAR FAZAL

Article

M FAZAL, MI KHAN and ZA SIDDIQUI 1997 Breeding for nematode resistance: A Review. **In: Plant Breeding Advances and *in vitro* Culture**. (eds. BA Siddiqui and SU Khan). CBS Publisher, New Delhi, 196-207

M FAZAL, M IMRAN, MMA RAZA and ZA SIDDIQUI 1997. Competitive interaction between *Meloidogyne incognita* and *Rotylenchulus reniformis* on green gram *Vigna radiata* L. **In: Frontiers in Plant Science** (Ed. IA Khan). The Book Syndicate, Hyderabad, 553-558.

International

M IMRAN, **M FAZAL** and SK SEXANA 1992. Morphological response of pigeon pea cultivars to *Meloidogyne incognita.* **Afro-Asian Nematol Network**, (India) 1:21-24

M FAZAL, M IMRAN, ZA SIDDIQUI and M IMRAN, 1992. Effect of pre , post and simultaneous inoculations of *Rhizobium, Rotylenchulus reniformis* and *Meloidogyne incognita* on lentil. **Nematol. Medit**., Italy, 20-27

M FAZAL, MNH SHAH**,** MI KHAN and ZA SIDDIQUI 1994. Evaluation of tomato cultivars for resistance to*Rotylenchulus reniformis* **Ann. App. Biol. Suppl. (TAC-15),** Britian 124: 124-125

M FAZAL, MNH SHAH**,** MI KHAN and ZA SIDDIQUI 1994. Response of some tomato cultivars to root-knot nematode, *Meloidogyne incognita*. **Ann. App. Biol. Suppl. (TAC-15),** Britian 124: 126-127

MNH SHAH**, M FAZAL,** MI KHAN and MF AZAM 1994. Response of six mung bean accessions to *Rotylenchulus reniformis* **Ann. App. Biol. Suppl. (TAC-15),** Britian 124: 80-81

MNH SHAH**, M FAZAL,** MI KHAN and MF AZAM 1994. Response of some mung bean accessions *Meloidogyne incognita* **Ann. App. Biol. Suppl. (TAC-15),** Britian 124: 80-81

M FAZAL, MI KHAN, MMA RAZA and ZA SIDDIQUI 1994. Effect of individual and combined inoculation of *Meloidogyne javanica, Rhizoctonia solani* and *Fusarium oxysporum f. sp. ciceri* on chickpea. **Israel J. Pl. Sci.** Israel, 42: 207-211

M FAZAL, MI KHAN, MMA RAZA and ZA SIDDIQUI 1994. Interaction between *Meloidogyne incognita* and *Fusarium oxysporum f. sp. lentis on lentil.* **Nematol. Meditt**. Italy,22: 185-187.

M FAZAL, MI KHAN and ZA SIDDIQUI 1996. Evaluation of five nematicides as seed treatment for the control of *Meloidogyne incognita* infecting green gram, Vigna radiata. **Nematol. Meditt**., Italy, 24:279-281

TA KHAN, ST KHAN, **M FAZAL** and ZA SIDDIQUI 1997 Biological control of *Meloidogyne incognita* and *Fusarium solani* disease complex in papaya using *Paecilomyces lilacinus* and *Trichoderma harzianum.* International **Journal of Nematology**. U.K. 7:127-131

MI KHAN, A HASHIM, MA FAZAL and **M FAZAL** 1997 Pathogenicity studies on the seed borne phases of *Alternaria spp.* on cauliflower and cabbage. **Malays. App. Biol**. 26: 87-92

M FAZAL, MY BHAT, M IMRAN and ZA SIDDIQUI 1998 A disease of black gram involving *Meloidogyne incognita* and Rhizoctonia bataticola. **Nematol meditt**. Italy, 26: 63-66

M FAZAL, MY BHAT and ZA SIDDIQUI 1998 Efficacy of neem pesticides on protection of mung bean against *Meloidogyne incognita*. **J. Pl dis protec** 105 (5) 520-525

National

M FAZAL and SI HUSAIN 1991. Evaluation of lentil cultivars against *Rotylenchulus reniformis* Linford & Oliveira, 1940. **New Agriculurist,** 1: 21-22

M FAZAL and SI HUSAIN 1991. Studies on nenmaticidal effect of *Ocimum sanctum* and *Thuja orientalis***. New Agriculurist,** 1: 111-112

M FAZAL, MR SIDDIQUI and SI HUSAIN 1991. Pathogenic effect of *Meloidogyne incognita* (Kofoid & White,1919) Chitwood, 1949 on lentil. **Current Nematology**, 2:50-52

M FAZAL and SI HUSAIN 1991 Studies on the effect of co-inhabitation of *Meloidogyne incognita* and Rotylenchulus reniformis on lentil. **Current Nematology**, 2: 73-76

ZA SIDDIQUI, SI HUSAIN and **M FAZAL** 1991**.** Response of twenty varieties of pigeon pea (*Cajanus cajan*) against *Meloidogyne javanica*. **Current Nematology**, 2:139-142

SI HUSAIN, **M FAZAL,** AH KHAN and M AKRAM 1992. Individual and concomitant effect of powery mildew fungus (*Sphaerotheca fulginea*) and root-knot nematode (*Meloidogyne incognita*) on brinjal (*Solanum melongena* L.). **Acta Botanica Indica** 20: 337-338

B KHAN, **M FAZAL** and ZA SIDDIQUI 1992. Morphological response of pigeon pea cultivars to *Meloidogyne incognita*. **Indian J. Plant Pathol**., 10:35-40

M IMRAM, SK SAXENA, **M FAZAL** and MI KHAN 1993. Effect of soil applicarion of chopped plant materials on the population of root-knot nematode (*Meloidogyne incognita*). **Indian J. Mycol. and Pl. Pathol**. 23:180-182

MR SIDDIQUI, A ANWAR and **M FAZAL** 1993. Rhizobial nodulation and growth characters of chickpea as influenced by root-knot nematode. **Ann. Pl. Protect. Sci** ., 1: 89-91.

K VASHISTH, **M FAZAL**, M IMRAN, MMA RAZA and ZA SIDDIQUI 1994. Morphological and biochemical responsr of black gram cultivars to *Meloidogyne incognita*. **Ann. Pl. Protect. Sci**., 2:13-18.

M FAZAL, ST NABI, MR SIDDIQUI and K SINGH 1994. Effect of *Meloidogyne incognita* and *Rotylenchulus reniformis* on plant growth and rhizobial nodulation of green gram **. Ann. Pl. Protect**. Sci., 2:19-22.

M FAZAL, MR SIDDIQUI, M IMRAN, NH SHAH and ZA SIDDIQUI. 1995. Susceptibility of some lentil cultivars to reniform nematodes, *Rotylenchulus reniformis* and their effect on peroxidase activity and protien content. **Ann. Pl. Protect. Sci**., 3:41-45.

M FAZAL, MI KHAN, MY BHAT and ZA SIDDIQUI 1995. Management of *Meloidogyne incognita* by seed treatment with chemicals in black gram. **J. Indian bot. Soc**., 74: 349-350.

MI KHAN, M ASHAQ and **M FAZAL** 1996. A comparative study of the efficacy of some plant extracts and fungicides on mycoflora of chick pea seed. **Ann. Pl. Protect. Sci**., 4:85-87.

M FAZAL, MY BHAT and ZA SIDDIQUI 1996 Determination of threshold levels of *Meloidogyne incognita* and *Rotylenchulus reniformis* on black gram **Ind. J. Nematol**. 26:253-255

M FAZAL, MY BHAT and ZA SIDDIQUI. Response of chickpea cultivars to root knot and reniform nematodes. **Ann. Pl. Protec. Sci**. (In Press)

M FAZAL, M IMRAN, MY BHAT and ZA SIDDIQUI. Susceptibility of pigeon pea germ plasms to root knot nematode. **Ann. Pl. Proctec. Sci** (In Press)

M ASHAQ, S ASHRAF MI KHAN and **M FAZAL** Studies on fungal seed flora of gram (*C. arietinum)* and its pathogenic effect on seedlings. **Ann. Pl. Proctec Sci** (In Press)

MI KHAN, M ASHAQ and **M FAZAL.** Mycoflora of black point affected, unaffected and fungicides treated seeds of wheat. **Ann. Pl. Proctec Sci** (In Press)

Abstracts

M FAZAL, M IMRAN and ZA SIDDIQUI 1993 Morphological response of pigeon pea cultivars to *Meloidogyne incognita*. **Pro. 80th session, Indian Science Congress**, Goa, India, pp72.

ST CHANDEL, **M FAZAL** and ZA SIDDIQUI 1993 Morphological and Biochemical responses of pigeon pea cultivars/accessions against *Meloidogyne incognita*. **National Symp**.

Prospects and problems of Biotechnology, Bioved Research Society, Allahabad, India, pp14

M FAZAL, NH SHAH and AR MALIK 1993 Peroxidase and protien changes and their role in the resistance and susceptibility of lentil cultivars. **National Symp**. **Problems and Prospects of Biotechnology** Bioved Research Society, Allahabad, India, pp14

M FAZAL, M IMRAN, MMA RAZA and ZA SIDDIQUI 1994 Effect of individual and combined inoculation of *Meloidogyne javanica, Rhizoctonia solani* and *fusarium oxysporum* f>sp. *ciceri* on chickpea**. Symp. Frontiers Plant Sci**., Hyderabad, India, pp. 160-161

M FAZAL, M IMRAN, MMA RAZA and ZA SIDDIQUI 1994 Competitive interaction between *Meloidogyne incognita* and *Rotylenchulus reniformis* on green gram, *Vigna radiata*. **Symp. Frontiers Plant Sci**., Hyderabad, India, pp. 161

MY BHAT, ZA SIDDIQUI, HISAMUDDIN and **M FAZAL** 1996 Morphological and biochemical responses of pigeon pea cultivars Meloidogyne incognita race-1 and Rotylenchulus reniformis. **19th Bot Conf of the IBS** pp12

M FAZAL, MY BHAT and ZA SIDDIQUI 1996 Combined application of *Paecilomyces lilacinus* and Furadan for the management of Meloidogyne incognita and Rotylenchulus reniformis on black gram **19th Bot Conf of the IBS** pp13

MY BHAT, **M FAZAL,** HISAMUDDIN and ZA SIDDIQUI 1997 Efficacy of three neem products on protection of T-44 mung bean against *Meloidogyne incognita* race-1 **Pro 84th Session Indian Science Congress**, New Delhi, pp 19

MY BHAT, HISAMUDDIN and **M FAZAL** 1998 Combined application of *Paecilomyces lilacinus* and oil cakes for the protection of chick pea against Meloidogyne incognita **3rd ISAASN** April 16-19 Coimbatore pp94

Seminar and Conferences Attended

1993

Indian Science Congress 80 th Session, Goa, India

National Symposiun on Prospects and Problems of Biotechnology, Allahabad, India

1994

National Symposiun on Frontier in Plant Sciences Research, Hyderabad, India

1996

Indian Botanical Society, 19 th Botanical Conference, Hardwar, India

1997

Indian Science Congress, 82th Session, New Delhi, India

Rainfed Rice chickpea Cropping system to increase productivityfor high Barind tract of Bangladesh, University Putra Malaysia, Malaysia

1998

International Symposium of AfroAsian Society of Nematologist, Coimbatore, India

1999

Symposium on Biological Control in Tropics: Towards efficient biodiversity and bioresource management for effective biological control, Malaysian Agriculture Research and Development Institute (MARDI), Serdang, Malaysia

3rd UNESCO National Workshop on Promotion of Microbiology in Malaysia, University Kebangsaan Malaysia, Bangi, Malaysia

Biological control of Plant Pathogens: Harnessing the Richness of Microbial Diversity, University Putra Malaysia, Malaysia

The Endomycorrhiza: A Futile Investment ?, University Putra Malaysia, Malaysia

Avian Respiratory and Immunosuppressive Diseases- A fatal Attraction, University Putra Malaysia, Malaysia

Brief Summary of My Research Experience

I was awarded Ph.D. degree in 1993 from Aligarh Muslim University, Aligarh, India in Botany in the field of Plant Pathology and Nematology. Subsequently Council of Scientific and Industrial Research (CSIR), Ministry of Agriculture, India to further my studies on Integrated Nematode Management awarded me Research Associateship. During the studies a wide variety of products viz. nematicides, pesticides, neem products, biocontrol agents, soil amendments with oil cakes were tested, singly and were integrated in various combination to manage nematode disease of pulse crops caused by *Meloidogyne* sp. and *Rotylenchulus reniformis*. Agro-waste materials from various sources were also tested for en mass propagation of two- biocontrol fungus, *Paceliomyces lilacinus* and *Trichoderma viride*

Subsequently I was offered a Post Doctoral Fellowship in 1997 from University Putra Malaysia to work on Arbuscular Mycorrhiza (a fungal symbiont associated with plant roots) and its benefits on commonly grown tropical vegetables and ornamentals of Malaysia. The mycorrhiza application provides dual benefits to the plant. Firstly by increasing nutrient uptake (mainly P, K, ca, Mg etc) it increase the overall plant health status and secondly its application provide a cushion against the existing root pathogens (viz. fungus, nematode), thereby reducing the root pathogens (viz. fungus, nematode), thereby reducing the root diseases of all vegetables and ornamental. I am also associated with the formulation of light and easily applicable media for en mass propagation of AM fungi. During the present program I am conducting research on potential of AM in combination with commercially available and/or newly introduced chemical as well as organic fertilizers and growth regulators as well as pesticides. Research on the prophylactic abilities of AM fungi to manage soil borne pathogens is also been exploited.

During my Post-Doctoral training at Aligarh Muslim University, I was assigned to teach lab. courses to undergraduates, graduates and post graduates. In the present tenure I am also associated with Student's Bachelors and Masters degree project on beneficial effect of mycorrhiza on various crop species. I was also fortunate to work on the role of mycorrhiza on Malaysian Orchids. I was also imparted training in general methods of tissue culture techniques at National Botanical Research Institute, Lucknow, India

During my entire tenure as doctoral fellow and postdoctoral fellow I have been working in the laboratory, glass house and in field.

I have also published several research papers in different journals of repute (please see. CV)

NAMES AND ADDRESSES OF PROFESSIONAL REFERENCES

DR ZIAUDDIN AHMAD SIDDIQUI
Professor
Department of Botany
Aligarh Muslim University
202002 Aligarh, UP,
India
Ph. No.: 0091-571-408924
Fax : 0091-571-409081

DR MOHD WAJID KHAN
Professor
Department of Botany
Aligarh Muslim University
202002 Aligarh, UP,
India

Fax : 0091-571-409081

DR SAAED AHMAD SIDDIQUI
Professor and Chairman
Department of Botany
Aligarh Muslim University
202002 Aligarh, UP,
India
Ph. No.: 0091-571-408924
Fax : 0091-571-409081

DR SHAMSUDDIN JUSOP
Deputy Dean
Faculty of Agriculture
University Putra Malaysia
43400UPM, Serdang,
Selangor DE
Malaysia
Emial: samsudin@agri.upm.edu.my
Fax: 603 943 4419