Name: **DR. MOHAN KUMAR BISWAS** 

Designation: Assistant Professor, Plant pathology

Department/Institute/University: Department of Plant Protection, Unit of Plant Pathology,

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Santiniketan, Birbhum, West Bengal,

Pin-731235

Date of Birth: 08.06.1967 Sex (M/F): M Nationality: Indian

**Education** (Matriculation onwards & Professional Career)

SN		Name of the Board/University	Year of	Division/	Field of Study
			Passing	Grade	
1	H.S.Sc.	Board of Sec.Edu.Bhopal,	1983	First	Biology
		M.P.,India			
2	B.Sc.(Ag.)	Indira Gandhi Krishi Visva	1989	First	Agriculture
		Vidyalaya, Krisak Nagar, Raipur,			
		Chhattishgarh, 492012, India			
3	M.Sc.(Ag.)	Indira Gandhi Krishi Visva	1991	First	Pl. Pathology (Spe.
		Vidyalaya, Krisak Nagar,Raipur,			Mushroom science)
		Chhattishgarh, , 492012,India			
4	Ph.D.(Ag.)	Bidhan Chandra Krishi	1998	-	Pl. Pathology (Spe.
		Viswavidyalaya, Mohanpur,			Plant Virology)
		West Bengal-741 252, India			
5	MBA(HRM)	Indira Gandhi National Open	2010	Second	Human Resource
		University, Maidan Garhi, New			Management
		Delhi, 110068, India			
6	NET	ICAR	2007	-	Plant Pathology

### **Position and Employment** (Starting with the most recent employment)

SN	Institution	Position	From	To
1	Visva-Bharati, Santiniketan,	Assistant	Sept'2013	Onward
	West Bengal,731235	Professor(Stage-III)		
2	Visva-Bharati, Santiniketan,	Assistant	Sept'2008	Sept'2013
	West Bengal,731235	Professor(Stage-II)		
3	Visva-Bharati, Santiniketan,	Lecturer, Plant	Sept,2004	Sept, 2008
	West Bengal,731235	Pathology		
4	Andrew Yule & Co. Ltd.(A	Assistant Manager	Sep,1995	Oct., 2004
	Govt. of India Enterprise ,Yule	(production)		
	House ,Kolkata-700001			

## **Area of Specialization:**

**Master Degree: Mycology (Mushroom science)** 

"Exploring the methods for increasing higher Biological Title of Thesis:

Efficiency of Oyster Mushroom (*Pleurotus florida*) at Raipur"

Ph.D . Degree: **Plant Virology** 

"Studies on some important potato virus diseases (PVX,PVY **Title of Thesis:** 

& PLRV) in the plains of West Bengal"

Position and honors

#### Honors/Awards

1. State Scholarship for Higher Secondary education during the year 1980 to 1983

- 2. Research Fellowship at Dept. of Plant Pathology, IGKV, Raipur, for research during 1992-1993
- 3. University Research Scholarship at BCKV, Mohanpur, Nadia, W,B, during Ph.D. from 1993-1995
- 4. Award and trophy from NCMRT, Solan ,H.P. for best performance in training on Mushroom Cultivation.
- 5. Received 'Scroll of honour" from Indian PhytoPathological Soceity, New Delhi during 2009 and 2012
- 6 Received Best poster award and certificate in First International conference on Bio Resources and Stress Management, 6-9 February, 2013, Kolkata, India for the paper entitled "Use of spent mushroom substrate with microbial inoculants as organic manure".
- 7. Received Best paper award and Gold medal in international conference, ICOAF-2014, Colombo, Srilanka for the paper entitled "Techniques for increasing the biological efficiency of paddy straw mushroom (Volvariella volvacea) in eastern India"

#### **Professional Experience and Training:**

#### A. Working Experience:

- 1. More than ten years of experience (from 7<sup>th</sup> September 2004 to till date) in Teaching and Research, working as an Assistant Professor (Plant Pathology) stage-III in the Department of Plant Protection, Institute of Agriculture, PSB, Visva-Bharati, Sriniketan, W.B.
- 2. Nine years of experience in Administration, worked as an executive in Andrew Yule & Co. Ltd. (A Government of India Enterprise) Tea Division, (from 7<sup>th</sup> September'1995 to 6<sup>th</sup> September 2004) looking after the overall Plant Protection activities in tea garden.

## B. Other Experience relating to research field:

- 1. Active participation in **Aerial Trapping Project for insect vector** conducted by NRI., U.K. and Department of Plant Pathology, Bidhan Chandra Krishi Viswa Vidlayaya, Nadia
- 2. Active participation in training programme conducted by DRDA, Raipur and Department of Plant Pathology, I.G.K.V.V., Raipur, M.P. for training of village women on Mushroom Cultivation technology.

### C) Training Course /Winter School attended/Refresher Course

1. ICAR Training programme on "Mushroom Production Technology for Entrepreneurs" from NRCM, Solan, H.P., India,9 days (23<sup>rd</sup> April to 2<sup>nd</sup> May 1996).

- 2. ICAR sponsored Advanced Training Course on "Crop Disease Management: Needs and outlook for Transgenics, Microbial Antagonist and Botanicals'. Organized by Centre of Advanced Studies in Plant Pathology, G.B.Pant University of agriculture & Technology, Pantnagar, 263145, Udham Singh Nagar, U.T. 21 days (March21-April 10,2006.
- 3. ICAR sponsored Advanced Training Course on "Detection of Plant pathogenic Bacteria: Symptomatology to Advanced Techniques" Organized by Division of Plant Pathology IARI, Pusa, New Delhi, 100011, 21 days (Jan 14-'Feb.'03, 2008).
- 4. UGC sponsored 9<sup>th</sup> Refresher Course in **Agricultural Sciences.** Organized by ASC-Banarus Hindu University, Baranasi, U.P., 21 days (27.01.2011 to 16.02.2011)
- 5. UGC sponsored 4<sup>th</sup> Refresher Course in **Life Science.** Organized by ASC-The University of Burdwan, Burdwan, W.B., 21 daysdays(November 03 23,2012).
- 6. Training on "**Developing Human Resource for Teaching Core Course in Plant Nematology**'. Organized by AAREM and Department of Nematology, CCS Haryana Agricultural University, Hisar, Hariyana, 13days Dec 23, 2013 Jan 4, 2014.

### D) Thesis guided/Supervised:

**Completed:** M.Sc (Ag.) – 07, MBA -1, Ph.D -02

Continuing: M.Sc. (Ag.)-02, Ph.D -08

## E) Research project undertaken/ongoing:

- 1. Evaluation of Newer fungicides molecules against Late Blight of Potato and Stem rot (*Rhizoctonia* spp.)"sponsored by INDOFIL CHEMICALS Ltd, act as a Co-PI, duration –one year.
- 2. Bio+ Phytotoxicity Evaluation of some Herbicides and Fungicides in Different Crops Against Different Weeds and Disease Scenario, act as a Co-PI. Funding agency- Syngenta India Ltd, duration -2 years.

### F. International Exposure/ partnership/collaborative research:

- 1. Visited **UNESCO**, **Paris**, **France** and represented from India in the International conference "**Botanists of the Twenty-first Century: Roles**, **Challenges and opportunities**" held from 22 to 25 September 2014 at Paris, France.
- 2. Visited Colombo, Srilanka for International Conference on Agriculture and Forestry-2014 (ICOAF 2014) to be held at Colombo, Sri Lanka, on 10th and 11th June 2014.
- **3.** Visited **Dhaka, Bangladesh** and presented research paper in 5<sup>th</sup> International Botanical Conference on "Climate change and sustainable development" held at from 9-11<sup>th</sup> December, 2011.

#### **Publications:**

A. Book Chapter:		06
B. Research Papers:	i) Mushroom Science-	09
	ii)Plant Virology -	11
	iii) Fungal pathogy & others	07
C) Extension articles	:	04

### D) Abstract in Proceedings of the Symposia/conference/seminar

Internation1: 13 National: 27

#### E) Symposium/Conference attended:

International: 12 National): 26

### F) National Conference/Symposium organized

Organised National seminar on "Plant Microbe Interaction and Crop Health Management" **act as an Organizing Secretary**, held at Department of Plant Protection, PSB, Visva-Bharati from 6-7<sup>th</sup> Oct., 2012.

## **Selected publications**

#### **Research Journal**

## A) Research Publication in Journals (Mushroom Science):

- i) **M. K. Biswas** (2014). Microbial contaminants in oyster mushroom (*Pleurotus ostreatus*) cultivation their management and role of meteorological factors. *Proceedings of the 8th International Conference on Mushroom Biology and Mushroom Products (ICMBMP8*), pp -568-575.
- ii) **M. K. Biswas** (2014). Oyster mushroom cultivation: a women friendly profession for the development of rural west bengal. *International Journal of Bio-resource and Stress Management* 2014, **5**(3): pp-432-435
- iii) **M. K. Biswas** and Mrinmoy Layak (2014). Techniques for increasing the Biological Efficiency of Paddy Straw Mushroom (*Volvariella volvacea*) in Eastern India. *Food Science and Technology* **2** (4): pp-52-57
- iv) D.K. Debata, **M.K. Biswas** and K.B. Mohapatra (2014). Management of competitor fungi in paddy straw mushroom(*Volvariella volvaceae*) beds. *Journal of Plant Protection and Environment* 11(1): pp-98-102
- v) M. K. Biswas (2014). Cultivation of Paddy straw Mushrooms (*Volvariella volvacea*, ) in the Lateritic Zone of West Bengal-A Healthy food for Rural People. *International Journal of Economic Plants* 2014, 1(1):043-047
- vi) **M.K.Biswas** and Sanjeeb Kuiry (2013). Yield performance of different species of oyster mushroom (Pleurotus spp.) under the Agro-ecological condition of Lateritic zone of West Bengal. *Int. journal of Bio-resources and Stress Management* **4**(1) pp-043-046
- vii) Payal Ghosh and **M.K. Biswas** (2012) Effect of interaction of various nitrogenous and lingo-cellulosic amendments on biomass production of *Pleurotus florida*. *Int. journal of Bioresources and Stress Management* **3**(4) pp-437-439.
- viii) C.S Shukla and **M.K.Biswas**,(2000). Evaluation of different techniques for oyster mushroom cultivation. *Journal-of-Mycology-and-Plant-Pathology*.**30**(3): pp-431-432
- ix) **M.K. Biswas**, C.S. Shukla and S.M. Kumar,(1997).Methods for increasing Biological Efficiency of Oyster Mushroom (*Pleurotus florida*) in Madhya Pradesh. *Advances in Plant Science*.**10**(1):pp-69-74.

## B)Research Publication in Journals (Plant Virology):

- i) P.Pal, **M.K.Biswas**, D. Dasgupta and Pinki Pal (2013). Studies on host resistance of mungbean against mungbean yellow mosaic virus in the agro-ecological condition of Laterite zone of West Bengal, *The BioScan* 8(2).pp-583-587
- ii) P.Pal, M.K.Biswas and B. Dasgupta, (2011). Effect of intercropping on the incidence of mungbean yellow mosaic disease (YMD) caused by Mungbean Yellow Mosaic virus. J. Botan. Soc. of Bengal 65(2),pp-179-182
- iii) P.Pal, **M.K.Biswas** and B. Dasgupta, (2011). Epidemic development of mungbean yellow mosaic disease caused by Mungbean Yellow Mosaic virus *J. Botan. Soc.of Bengal* **65**(2),pp-179-182
- iv) **M.K. Biswas**, P.S.Nath. ,B.K.De and Md. Mohasin,(2006).Reaction of potato varieties hybrids against PVX,PVY and PLRV diseases in the plains of West Bengal *Journal of Interacad*, 10(3): 447-448.
- v) **M.K. Biswas**, B.K.De and P.S.Nath.(2005). Rate of spread of PVX,PVY and PLRV disease to potato varieties. *Annals of Plant Protection Science*, **13** (1): pp-175-178.
- vi) M.K. Biswas and H. Chatterjee (2005) Influence of abiotic factors on the population fluctuation of potato virus-vector in the plains of West Bengal, *Journal of Plant Protection and Environment*, 2(1): pp-147-153
- vii) **M.K. Biswas**, P.S.Nath. ,B.K.De and Md. Mohasin,(2004) Assessment of yield losses due to mild mosaic(PVX),severe mosaic (PVY),and leaf roll (PLRV) disease of potato in the plains of West Bengal . *Journal of Mycopathological Research* **42**(1):pp-119-122.
- viii) **M.K. Biswas**, P.S.Nath. ,B.K.De and Md. Mohasin,(2004). Influence of different weather factors on the population build up of vectors of potato virus. *Annals of Plant Protection Science*, **12** (2) ;352-355.
- ix) **M.K. Biswas**, P.S.Nath. ,B.K.De and Md. Mohasin,(2004). Effect of application of insecticides on incidence of aphids and spread of virus disease of potato in the plains of West Bengal . *Journal of Interacad.* **8**(1): pp -27-32.
- x) M.K. Biswas, P.S.Nath., B.K.De and Md. Mohasin, (2003). Weeds (*M.alba*, *N. slumbazinifolia and S. torvum* as a source of potato virusX from West Bengal, India. *Environment and ecology*. 21(4): pp -978-980.
- xi) M.K. Biswas, B.K.De and Md. Mohasin,(2000). Relationship between vector pressures (Myzus persicae and Aphis gossipii) and spread of PVY and PLRV diseases in the plains of West Bengal. In.Potato Global Research & Development (Eds. S.M.Pal Khuran;G.S.Shekhawat; B.P. Singh and S.K. Pandey). Proceedings of Global Conference on potato, December 6-11'1999, New Delhi, Vol.1, pp-483-486.
- C) Research Publication in Journals: Fungal Pathology and other Plant protection related topic):
- i) **M.K.Biswas** and S.B. Biswas (2014).Indigenous knowledge practice by the farmers of Lateritic belt of West Bengal in crop protection. *Research journal of Agricultural Science*, **5** (5),pp-930-933.

- ii) Anuj Mamgain, **M.K. Biswas** and Narottam Dey (2014). Host Resistance of Genotypes of Rapeseed and Mustard against *Alternaria* blight Under the Agro-ecological Conditions of Undulating Red and Lateritic Belt of West Bengal. *Int.l Journal of Adv. Research*, 2(10): pp -989-996, 1.659
- iii) Anuj Mamgain, **M.K. Biswas** and Narottam Dey (2014). Prevalence of *Alternaria* bight of rapeseed-mustard in the Undulating Red and Lateritic zone of West Bengal. *J. of Che., Bio., and Phy., Sciences*, 4 (4); pp-3367-3371- ISI-1.082
- iv) **M. K. Biswas** (2013). Influence of environmental factors on the development of *Alternaria* blight of mustard caused by *Alternaria brassicae*. *The Ecoscan*: Special issue, Vol.IV:pp-139-144.
- v) Soma Bhattacharjee (Biswas), **M.K.Biswas** and Anindita Saha (2013). Role of women in Tea Gardens: A case study in Doors. *Int. journal of Bio-resources and Stress Management* **4**(1)pp-077-083
- vi) **M.K. Biswas**, A. Ghosh and S. Biswas (2009) Performance of plant extracts and chemicals against *Alternaria* leaf blight of mustard caused by *Alternaria brassicae*. Abstract, *J. Mycol Pl Pathol* . **39** (3) , pp-568-569.
- vii) M.K. Biswas and A Ghosh (2012). Relationship between environmental factors and development of *Alternaria* blight of mustard caused by *Alternaria brassicae*. Abstract, *J. Mycol Pl Pathol.vol.* **42**(1), pp-113-114.