Curriculum Vitae of Dr. Krishna Karmakar

1. Name of the Teacher	: **Dr. Krishna Karmakar**
2. Designation	: Professor & In-Charge, AINP on Acarology
3. Place of Posting	: Department of Agril. Entomology, BCKV, Mohanpur-741252. Nadia, West Bengal.
4. Date of Birth	: 01.01.1964
5. Address with telephone & E-mail	:
Official	: Department of Agril. Entomology, BCKV, Mohanpur-741252. Nadia, West Bengal. E-mail: acarikarmakar@rediffmail.com / kkbckv64@gmail.com
Residential	: B-1/243, Kalyani-741235, Nadia, West Bengal. Mobile: 09433565207
6. Area of specialization	: Agricultural Entomology with specialization in Agricultural Acarology.
7. Date of joining in the University Service	: 25.09.1991
8. Service profile	: i. Lecturer , Department of Agril. Entomology, BCKV, North Bengal Campus, NARP Terai zone, Pundibari, CoochBehar, since joining to October, 2000. ii. Associate Professor, Department of Agril. Entomology, AINP on Agril. Acarology; BCKV October, 2000 – 25th September 2008. iii) Professor, Department of Agril. Entomology & In-Charge, AINP on Agril. Acarology; BCKV, 25th September 2008 to continuing.
9. Research and Professional Experiences	: 25 Years Teaching, Research & Extension Experience
10. Academic Qualification	: B.Sc. (Ag.) Hons.; M. Sc. (Ag.); Ph. D. in Agricultural Entomology with specialization in Agricultural Acarology

11. List of research publications:

1. Karmakar, K., P.K. Sarkar, A.K. Somchoudhury and A.B. Mukherjee (1994). Role of some weather parameters vis-à-vis morphological and biochemical characteristics of pigeon pea plant on the relative abundance of *Schizotetranychus cajani* (Gupta) (Acarina: Tetranychidae). *Ann. Entomol*. 12 (1): 29-35.

2. Karmakar, K. (1995). Comparative symptomology of chilli leaf curl disease and biology of tarsonemid mite, *Polyphagotarsonemus latus* (Banks) (Acari:Tarsonemidae). *Ann. Entomol*. 13 (2): 65-70.

3. Karmakar, K., P.K. Sarkar, A.K. Somchoudhury and A.B. Mukherjee (1996). Influence of host plants on different life stages of *Polyphagotarsonemus latus* (Banks) (Acari : Tarsonemidae). *Ann. Entomol*. 14 (2): 41-45.

4. Karmakar, K., P.K. Sarkar, A.K. Somchoudhury and A.B. Mukherjee (1996). Effectiveness of some modern pesticides against different stages of yellow mite, *Polyphagotarsonemus latus* (Banks) (Acari:Tarsonemidae) infesting chilli. *Ann. Entomol*. 14 (2): 47-54.

5. Karmakar, K. (1997). Size, shape and behaviour of *Polyphagotarsonemus latus* (Banks) (Acari:Tarsonemidae). *Environment & Ecology* 15 (1): 219-220.

6. Karmakar, K. (1997). Notes on symptoms of *Polyphagotarsonemus latu*s (Banks) (Acari: Tarsonemidae) infested host plants with histological deformities in chilli. *Indian Agric*., 41 (2): 155-157.

7. Karmakar, K. (1997). Effect of micronutrients on the biology of *Polyphagotarsonemus latus* (Banks) (Acari:Tarsonemidae). *Environment & Ecology* 15 (3): 699-701.

8. Karmakar, K (1997). Relative incidence of rice pests and their integrated management under terai agro-ecological conditions. Annual Report, 1997-98, Regional Research Station, *Terai Zone, Bidhan Chandra Krishi Viswavidyalaya*, North Bengal Campus, 36-37pp.

9. Karmakar, K., Jaydeb Ghosh and S.K. Senapati (1998). Relative abundance and biology of European red mite, *Panonychus ulmi* (Koch) (Acari:Tetranychidae) infesting mulberry cultivars. *Environment & Ecology* 16 (1): 101-104.

10. Karmakar, K. and B. Bhattacharya. (2000). Performance of a local brinjal variety (*Solanum melongena* L.) and its pest management under terai agro-ecological conditions. *Environment & Ecology* 18 (2): 344-346.

11. Karmakar, K. and B. N. Panja. (2001). Glume blight disease of high yielding *Boro* (Summer) rice from sub-Himalayan terai zone of West Bengal. *Environment & Ecology* 19 (1) : 249-250.

12. Karmakar, K. (2002). Approaches for integrated pest management of rice under Terai zone of West Bengal. *Proceedings on National Seminar on " Integrated Pest Management in the Current Century"* November 29-30, 2002, Department of Agricultural Entomology, BCKV, West Bengal, India 264-274pp.

13. Karmakar, K. (2003). Effect of date of sowing on the incidence of insect pests of rape and mustard. *J. Interacad*. 7(4): 420-425.

14. K. Karmakar, Prakash Ghosh, S.B. Chattopadhyay and Md. Mohasin (2003). Effect of plant morphological characters and weather parameters on the incidence of *Leucinodes orbonalis* (Guen.) on different cultivars of brinjal. *Ann. Entomol*. 21(1-2): 21-28.

15. D. J. Pal, Md. Mahasin, A.K. Somchoudhury and K. Karmakar (2003). Preying potential of Chrysoperla carnea Stephens (Neuroptera:Chrysopidae) on the eggs of brinjal shoot and fruit borer. *Ann. Entomol*. 21(1-2): 11-13.

16. K. Karmakar (2003). Severity of infestation of coconut mite, *Aceria guerreronis* Keifer (Acari:Eriophyidae) in Southern districts of West Bengal. *Ann. Entomol*. 21(1-2): 29-31.

17. Sahoo Kr. Shyamal and K. Karmakar (2004). Screening of pumpkin cultivars against leaf miner (*Liriomyza trifolii* Burgess) (Agromyzidae: Diptera) and white fly (Bemisia tabaci Genn.) (Aleyrodidae:Hemiptera). *J. Interacad*. 8(4): 575-581.

18. Lakshman Patel and K. Karmakar. (2004). Relative susceptibility of pointed gourd (Trichosanthes dioica Roxb.) cultivars to false spider mite, *Brevipalpus phoenicis* (Geijskes) (Acari:Tenuipalpidae). *Ann. Entomol*. 22(1-2): 23-25.

19. K. Karmakar (2004). Influence of jute cultivars and crop age on the incidence of yellow mite, *Polyphagotarsonemus latus* (Banks) (Acari:Tarsonemidae). *Ann. Entomol*. 22(1-2): 26-28.

20. Mrityunjay Ghosh, K. Karmakar, A.K. Pal and S.K. Gunri (2004). Response of local aromatic rice cultivars to fertilizer levels in terai zone of West Bengal. *Bangladesh J. Agril. Sci*. 31(2): 155-159.

21. Patel, L. and K. Karmakar (2005). Seasonal abundance of false spider mite, *Brevipalpus phoenicis* (Geijskes) on selected cultivars of pointed gourd (*Trichosanthes dioica* Roxb.). *Environment & Ecology* 23 (Spl-2): 242-244.

22. Karmakar K. and G. Saha (2005). Population dynamics of false spider mite, *Brevipalpus phoenicis* (Giejskes) (Acari:Tenuipalpidae) on *Mikania micrantha* Kunth. in relation to weather parameters. *Journal of Crop and Weed*, 2**(1)**: 68-71.

23. Karmakar K. and G. Saha (2005). Preference of chilli germplasms to aphid, *Aphis gossypii* Glover (Homoptera:Aphididae) and their management under Gangetic plains of West Bengal. *Journal of Aphidology*, 19: 25-28, 2005.

24. Karmakar K. and Soma Dey (2006). Studies on seasonal incidence of phytophagous mite species on selected germplasms of banana in West Bengal. *Indian J. Crop Science*, 1(1-2): 138-139.

25. Samapika Hazra, Md. Mahasin, Amitava Banerjee and K. Karmakar (2006). Efficacy of some pesticides against the adults of two spotted red spider mite (tetranychus urticae Koch.) on Acalypha copperencis L. in laboratory condition. *Uttar Pradesh J, Zool*. 26**(1)**:109-110.

26. Krishna Karmakar, D. Mazumder and A.C. Pradhan (2007). Influence of rice cultivars, spacing and nitrogen levels on the occurrence of rice sheath mite, *Steneotarsonemus spinki* Smiley (Acari:Tarsonemidae) under Gangetic Plains of West Bengal. *Journal of Acarology*, 17(1&2) 19-20.

27. Krishna Karmakar (2008). *Steneotarsonemus spinki* Smiley (Acari:Tarsonemidae) – a yield reducing mite of rice crops in West Bengal, India. *International Journal of Acarology,* 34(**1**): 95-99.

28. Krishna Karmakar and Debasis Mazumdar (2010). Population dynamics of yellow mite, *Polyphagotarsonemus latus* (Banks) (Acari:Tarsoneidae) on different cultivars of jute (*Corchorus* spp. L) in relation to some abiotic parameters. *J. ent. Res.,* 34 (3): 229-231.

29. Krishna Karmakar and Salil K. Gupta (2011). Impact of the date of transplanting on population dynamics of the rice sheath mite, *Steneotarsonemus spinki* Smiley (Acari: Tarsonemidae), on the rice cultivar IET-4786 in the Gangetic plains ofWest Bengal, India. *In*: Moraes, G.J. de & Proctor, H. (eds) Acarology XIII: Proceedings of the International Congress. *Zoosymposia* 6: 119– 122.

30. Krishna Karmakar and Salil K. Gupta (2011). Predatory mite fauna associated with agri-horticultural crops and weeds from the Gangetic Plains ofWest Begal, India. *In*: Moraes, G.J. de & Proctor, H. (eds) Acarology XIII: Proceedings of the International Congress. *Zoosymposia* 6: 63-68.

31. Salil K. Gupta and Krishna Karmakar (2011). Diversity of mites (Acari) on medicinal and aromatic plants in India *In*: Moraes, G.J. de & Proctor, H. (eds)

Acarology XIII: Proceedings of the International Congress. *Zoosymposia* 6: 57-62.

32. Pranab Debnath, Krishna Karmakar, Amalendu Ghosh and Chiranttan Chattopadhyay (2012). Infestation of yellow mite in mung bean in West Bengal: A survey. *Pulses Newsletter*, Indian Institute of Pulses Research, Kanpur, 23 (1):6.

33. Pranab Debnath and Krishna Karmakar (2013). Garlic mite, *Aceria tulipae* (Keifer) (Acari:Eriophyoidea) – a threat for garlic in West Bengal, India. *International Journal of Acarology,* 39(**2**):89-96.

34. Pubali Mondal, Krishna Karmakar and Romen Kumar Kole (2013). Evaluation of plant extracts against two spotted spider mite, *Tetranychus urticae* Koch (Acari: Tetranychidae) infesting okra. *Ann. Entomol.,* 31(1): 121-127.

35. K. Karmakar and Sandip Patra (2013). Bio-efficacy of new acaricide molecule, Etoxazole 10% Sc (w/w) against red spider mite, *Tetranychus urticae* Koch in brinjal. *Vegetos.* 26(2): 396-402.

36. K. Karmakar, Pranab Debnath and Sandip Patra (2014). Etoxazole: A new novel acaricide molecule for effective management of tea red spider mite, Oligonychus coffeae (Neitner). *Res. On Crops.* 15(3): 662-669.

37. Pubali Mandal, Arpita Saha, P. K. Bandopadhaya and K. Karmakar (2014). Field evaluation of Garlic varieties against *Aceria tulipae* (Keifer) (Acari:Eriophyoidea). *India Journal of Entomology.* 76(3): 254-255.

38. Krishna Karmakar and Salil K. Gupta (2014). Descriptions of four new species of phytoseiid mites (Acari:Mesostigmata) from West Bengal, India. *Rec.zool.Surv. India*; 114 (Part-4):687-700.

39. Vikram Prasad & Krishna Karmakar (2015). Holotype female of *Paraphytoseius scleroticus* after 33 years: voucher photos, comments and description of a new genus (Acari: Phytoseiidae). *Persian Journal of Acarology,* 2015, Vol. 4, No. 1, pp. 27–42.

40. Vikram Prasad & Krishna Karmakar (2015). *Paraphytoseius nicobarensis* (Acari: Phytoseiidae): exact identity,comments and voucher photos of types after 37 years. *Persian Journal of Acarology,* 2015, Vol. 4, No. 2, pp. 143–162.

41. K. Karmakar and Sandip Patra (2015). Bio-efficacy of some new insecticide molecules against pod borer complex of Red gram. *Legume Research*, 38 (2): 253-259.

42. Gilberto J. de Moraes, Reham I.A. Abo-Shanaf; Yanebis Perez-Madruga, Leocadia Sanchez; Krishna Karmakar & Chyi-Chen Ho. (2015). The Lasioseius phytoseioides species group (Acari: Blattisociidae): new characterisation, description of a new species, complementary notes on seven described species and a taxonomic key for the group. *Zootaxa*, 3980 (1): 001–041.

43. Salil K. Gupta and Krishna Karmakar (2015). An updated checklist of Indian Phytoseiid mites (Acari: Mesostigmata). *Rec. zool. Surv. India*; 115 (Part-1):51-72.

44. Pranab Debnath and Krishna Karmakar (2015). Description of a new species of *Phyllocoptruta* (Acari: Eriophyoidea) on *Azadirachta indica* from West Bengal, India. *Persian Journal of Acarology,* Vol. 4, No. 3, pp. 297–304.

45. Suvash Chandra Bala, Krishna Karmakar and Dipak Kumar Ghosh (2015). Field Evaluation of Chilli Germplasms Against Yellow Mite, *Polyphagotarsonemus latus* (Banks) (Acari-Tarsonemidae) and Its Management under Gangetic Basin of West engal. *Environment Ecology* 34 (1): 17-21.

46. Krishna Karmakar and Pranab Debnath (2016). Impact of organic-inorganic nutrients combination in rice on the occurrence of *Steneotarsonemus spinki* Smiley (Acari: Tarsonemidae) in West Bengal, India. *Persian Journal of Acarology,* Vol. 5, No. 1, pp. 71–80.

47. Pranab Debnath & Krishna Karmakar (2016). Eriophyoid mites from Eastern India: description of three new species (Acari: Prostigmata: Eriophyoidea) *Zootaxa*, 4061(5): 553–568.

48. Krishna Karmakar (2016). The mites of the family Tarsonemidae (Acari: Heterostigmata) in West Bengal, India. *J. Acarol. Soc. Jpn.*, 25(S1): 75-79.

12. Significant achievements in terms of deliverable to farmers/ corporate house/stake holders with photographs.

a) The rice panicle mite, *Steneotarsonemus spinki* was observed as serious pest of rice in West Bengal during wet season. It is identified as one of the major yield reducing mite species. Rice cultivars Masuri, Ranjit are non preferred and IR-36 and IET-4786 are susceptible to mite. None of the pesticides is effective however, application of *Gliricidia* and mustard cake as organic source of nutrients reduce the mite population and increase yield.

b) Developed mass production technology of predatory mite, *Neoseiulus longispinosus* and *Agistemus industani* as the most effective bio-agents for integrated management of spider mites and yellow mite in chilli.

c) Developed mite tolerant chilli cultivar BCCH-SL-4 and rice sheath mite resistant rice lines.

d) The garlic mite, *Aceria tulipae* has been identified as a major constraints of garlic cultivation in West Bengal. The garlic variety *Katki* is tolerant and *Gangajali* is susceptible to mite.

e) Identified the false spider mite, *Brevipalpus phoenicis* 1st time as one of the damaging mite pests causing significant damage in pointed gourd.

f) Established the role of whitefly as the disseminator of chilli yellow mite.

13. Awards and recognition:

a. The best poster award obtained at the National Seminar on "Coastal Resources & their Sustainable Management: Issues & Strategies" organized by BCKV, Mohanpur-741252, West Bengal during November 24-27, 2005.

b. The best poster award obtained at the National Seminar on "Integrated production and Post-Harvest Management of Tropical Fruits" Organized by BCKV, Mohanpur, Nadia, West Bengal, during April 11th – 12 th , 2006.

c. The best poster award obtained at the *"National Symposium on climate change, plant protection & food security interface"* organized by Association for Advancement in Plant Protection on December 17 to 19th, 2009, at Lake Hall, BCKV, Kalyani, West Bengal.

d. Special Recognition Award for Organizing the Acarology Meeting on Taxonomy during April 8-10, 2010 at BCKV, Kalyani, India, in Association with Acarology Development Foundation, West Bloomfield, Michigan, USA.

e. The best poster award obtained at the *"International Symposium cum Workshop in Acarology"* organized at Lake Hall, BCKV, Kalyani, West Bengal during April 8-10, 2010.

14. Guidance in Master's and Ph.D. Programme:

A) Guided five students of Master's degree programme and submitted thesis on the following topics:

a) "Bio-ecology of *Brevipalpus phoenicis* (Geijskes) (Acari:Prostigmata) on selected pointed gourd (*Trichosanthes dioica* Roxb.) cultivars. (2003).
b) "Occurrence of yellow mite, *Polyphagotarsonemus latus* (Banks) (Acari:Tarsonemidae) and predatory mites in diversified groups of chilli cultivars" (2004).

c) "Population dynamics and management of jute yellow mite, *Polyphagotarsonemus latus* (Banks) (Acari:Tarsonemidae) in relation to biotic and abiotic parameters" (2005).
d) "Population dynamics, bio-ecology and sustainable management of yellow mite, *Polyphagotarsonemus latus* (Banks) Acari:Tarsonemidae infesting jute (*Corchorus* spp.)" (2007).
e) "Population dynamics and management of chilli yellow mite, *Polyphagotarsonemus latus* (Banks) under Bengal Basin" (2008).

B) Guided three Ph. D. scholars and submitted thesis on the following topics:

a) "Mango mites and their management"
b) "Exploration of banana mites, emphasizing population dynamics and management of *Oligonychus oryzae* Hirst. (Acari:Tetranychidae) in Gangetic plains of West Bengal"
c) "Systematics of Eriophyoids and study on bio-ecology and management of Eriophyids infesting garlic and mango"

15. Number of seminar/symposia/conference/winter school attended or organized.

A) National and International Seminar/Symposia/Conference:

a) National Seminars attended : 21
b) International Seminars attended : 10
c) International Symposium Organized : 2

B) National Workshop/ Group Meeting:

1. Participated in VIII Group meeting of AINP on Agril. Acarology, 28th -29th March, 2003; Banaras Hindu University, Banaras, Uttar Pradesh.
2. Participated in IX Group meeting of AINP on Agril Acarology, 3rd -5th March, 2005; Punjab Agricultural University, Ludhiana, Punjab.
3. Participated in X Group meeting of AINP on Agril Acarology, 27-28th February'07 at Navsari Agricultural University , Navsari, Gujarat.
4. Participated in XI Group meeting of AINP on Agril Acarology, 17-19th June '09 at Regional Horticultural Research Station, HAU, Mashobra Himachal Pradesh.
5. Participated in XII Group meeting of AINP on Agril Acarology, 27-28th January '12 at Kerala Agricultural University, Trissur, Kerala.
6. Participated in XIII Group meeting of AINP on Agril Acarology, 11-12th July '13 at Rajasthan Agril University, Jaypur, Rajasthan.

C) National/International Training/Short course/Winter & Summer School:

1. Participated in National Training in "Integrated Pest Management In Rice" at Central Plant Protection Training Institute, Hyderabad from 1st September, 1993 to 8th September, 1993.

2. Participated in National Training on "Instrumentation In Entomological Research" held from 18th January to 7th February, 2000 at Department of

Agril. Entomology, Tamil Nadu Agrilcultural University, Coimbatore-641003.

3. Participated in Summer School on "Training In Identification and Management of Mite Pests of Crops" held at Department of Agril. Entomology, UAS, GKVK, Bangalore-560065, Karnataka from 24th June to 14th July, 2001.

4. Participated in the "Summer Acarology Training program on the Introductory Acarology" at Ohio State University, 1315 Kinnear Road, Ohio, Columbus, USA during 27th June to 15th July' 2011.

5. Participated in the "Summer Acarology Training program on Agricultural Acarology" at Ohio State University, 1315 Kinnear Road, Ohio, Columbus, USA during 27th June to 15th July' 2011.

6. Participated in "A Training programme on Taxonomy of Phytoseiidae mites" at "Escola Superior de Agricultura Luiz de Queiroz", USP, Piracicaba Brazil from 13th August,2012 to 20th June, 2012.

16. No. of class catered in UG and PG level:

Regularly catered Post Graduate classes in 2nd and 3rd Semester in the Department of Agricultural Entomology Course No. Ento.-550 and Ento-609.

17. Performance of Extension Activities:

i) Extension activities are performed occasionally by participating Farmers and State Govt. officers' Training Programmes.
ii) Through participating in "Front Line Demonstration" of crops, KVK and NGOs' organized farmers programme on crop protection.

18. Patents/technology commercialization/release of variety/and publication of book:

P. Hazra, A. Chattopadhyay, **K. Karmakar** and S. Dutta (2011). Modern Technology in Vegetable Production. *New India Publishing Agency*, Pitam Pura, New Delhi-110088 413pp.

Patent filed on "Mass production, transportation and field release technique of predatory mite, *Neoseiulus longispinosus* (Evans)".

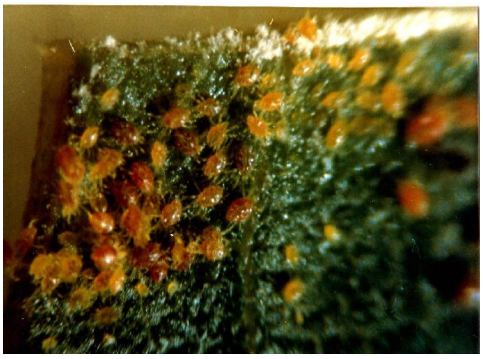
19. Number of on-going research project with funding agencies:

- Senior Acarologist & Officer-in-Charge, All India Network Project on Agril. Acarology, ICAR, Govt of India.

- Principal Investigator, “Evaluation of Bio-efficacy of Pyridalyl against pod borer complex of Red gram” Sponsored by Sumitomo Chemical India Pvt. Ltd.
- Principal Investigator, “Evaluation of Bio-efficacy of Etoxazole against spider mite complex of egg plants and red spider mite of tea” Sponsored by Sumitomo Chemical India Pvt. Ltd.
- Principal Investigator, “Evaluation of Bio-efficacy and phytotoxicity of deltamethrin 10 EC (w/v) (deltamethrin 11% w/w) (brand name : decis 10EC) against thrips in onion, Fipronil 0.6% GR and Fipronil 200 SC (w/v) against insect pests of rice” Sponsored by M/S Bayer Crop Science Ltd.
- Co-Investigator, RKVY Project on “Promotion of Bengal Aromatic Rice through Improved Production and Processing System” Govt. of West Bengal.
- Co-Investigator, RKVY Project on “Promotion of Bengal Aromatic Rice through Improved Production and Processing System” Govt. of West Bengal.
-
- Co-Investigator, NATIONAL AGRICULTURAL INNOVATION PROJECT (Component-3) “Sustainable Farming System to Enhance and Ensure Livelihood Security of Poor in Purulia, Bankura and West Midnapore Districts of West Bengal”
- Co-Investigator, RKVY Project on “Development of model for sustainable Backyard Poultry Farming System in West Bengal”.

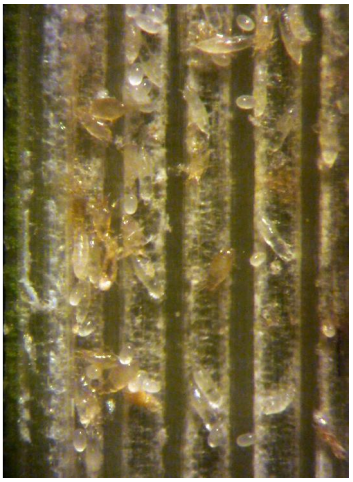
20. Photographs of the relevant topics:

1. False spider mite in pointed gourd



2. Mass production of *Agistemus industani*

3. Dissemination of yellow mite by whitefly



4. Colony of *Oligonychus sapienticolus* on banana

5. Colony of Rice sheath mite, *Steneptarsonemus spinki* Smiley

6. Predatory mite, *Neoseiulus longispinosus* (Evans)

Dr. Krishna Karmakar
Professor & In-Charge, AINP on Agril. Acarology
Department of Agricultural Entomology, BCKV, Mohanpur -741252, Nadia, West Bengal, India.