

Curriculum Vitae

Personal Information:

Name : Dr. A. KANDAN

Designation and Place of work : Principal Scientist (Plant Pathology)

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Date of Birth : 24-04-1976

Place of Birth & Nativity : Puducherry, India

Sex : Male

Father's Name : Mr. N. Aravindaram

Address for Communication : Principal Scientist (Plant Pathology)
Division of Germplasm Conservation and Utilization
ICAR-National Bureau of Agricultural Insect Resources
(NBAIR), P.B. No. 2491, H.A. Farm Post, Bellary Road,
Bengaluru – 560 024
India

Academic Qualifications:

Level	Degree	Institute/ University And year of pass	Subject(s) with major fields	Fellowship/ Scholarship	Class/ Grade/ Marks	Rank/ Medal/ Award
Graduation	B.Sc. (Agri.)	Tamil Nadu Agricultural University, Coimbatore (1998)	Agronomy, Plant Pathology, Entomology, Microbiology	Puducherry State Scholarship award (Rs. 600/month)	8.75/10 First class	Distincti on
Masters	M.Sc. (Plant Pathology)	Tamil Nadu Agricultural University, Coimbatore (2000)	Molecular Plant Pathology and Biotechnology	Puducherry State Scholarship award (Rs. 800/month)	9.65/10 First class	Univ. topper- Gold Medal Holder
* Ph.D	Ph.D. (Plant Pathology)	Tamil Nadu Agricultural	Molecular Plant Pathology	ICAR-Plantat ion Crops	9.79/10	Distincti on

		University, Coimbatore (2003)	and Biotechnology	Ph.D. Research Fellowship	First class	
Post-Doc	Post-doctoral Research Fellow (PDF)	Agricultural Biotechnology Research Center, Academia Sinica (2005-2011)	Cell Biology, Immunology, Biotechnology	Academia Sinica Postdoctoral Research Fellowship	First class	Four times Best Poster awards
Others	Advanced Diploma in Bio-informatics	GRD College of Science, Coimbatore (2004)	Functional Genomics and Proteomics	-Nil-	A First class	-Nil-
	Industry Diploma in Drug Design and Patenting	Bioinformatics Institute of India (BII), Noida, Uttar Pradesh (2005)	Drug design and Patent	-Nil-	A ⁺ First class	-Nil-

Employment Record & Experience (Starting from the present position): 16 years

Designation	Organization	Institution & Place of posting	Period (From-To)	Duration (Year & Months)
Principal Scientist (Plant Pathology)	Indian Council of Agricultural Research (ICAR)	Division of Germplasm Conservation and Utilization, ICAR-National Bureau of Agricultural Insect Resources (NBAIR), Bengaluru	23.06.2017 – till date. 22.07.2020	3 years, 1 month
Principal Scientist (Plant Pathology)	Indian Council of Agricultural Research (ICAR)	Plant Quarantine, ICAR-National Bureau of Plant Genetic Resources (NBPGR), New Delhi	26.02.2017 – 22.06.2017	3 months, 26 days
Senior Scientist (Plant Pathology)	Indian Council of Agricultural	Plant Quarantine, ICAR-National Bureau of Plant Genetic Resources	26.02.2011 – 25.02.2017	6 years

	Research (ICAR)	(NBPGR), New Delhi		
Postdoctoral Research Fellow	Academia Sinica, Taipei, Taiwan (R.O.C.).	Agricultural Biotechnology Research Center (ABRC) (PI: Dr. Ning-Sun Yang)	29.04.2005 to 10.02.2011	5 years, 9 months, 13 days
Research Associate	Indian Council of Agricultural Research (ICAR)	Department of Biotechnology, Sugarcane Breeding Institute, Coimbatore (PI: Dr. N. Vijayan Nair)	21.05.2004 to 28.02.2005	9 months, 7 days
Senior Research Fellow	Tamil Nadu Agricultural University (TNAU), Coimbatore	Dept. of Plant Pathology, Centre for Plant Protection Studies (CPPS), TNAU, Coimbatore (PI:Dr.R. Samiyappan)	4.11.2003 – 31.12.2003	1 month, 27 days

Awards / Recognitions / Honours:

Name of the Award/ Recognition/Reviewer	Awarding Organization (Place/Country)	Year	National/International, Institutional/Professional Society	Individual/ collaborative
1. Best Achiever Award-2016	Society for Advancement of Human and Nature (SADHNA), Himachal Pradesh, India	2016	Society for Advancement of Human and Nature (SADHNA), Dr. YS Parmar University of Horticulture & Forestry, HP, India	Individual
2. Best Poster Award- 2016	6 th IPS International Conference on “Plants, Pathogens and People- Challenges in Plant Pathology to Benefit	2016	Indian Phytopathological Society (IPS)	Collaborative

	Humankind” at NASC Complex, New Delhi, India from February 23-27, 2016			
3. Commendation Poster Award-2016	Annual Zonal Meeting and National Symposium on Biosecurity in Food Value Chain at ICAR-NBPGR, New Delhi on February 20, 2016.	2016	Indian Phytopathological Society (IPS)	Collaborative
4. Commendation Poster Award-2016	Annual Zonal Meeting and National Symposium on Biosecurity in Food Value Chain at ICAR-NBPGR, New Delhi on February 20, 2016.	2016	Indian Phytopathological Society (IPS)	Collaborative
5. “Smt Kavuri Sarada Memorial Award” for the Best Research Paper	Conference on National Priorities in Plant Health Management on 4 th February 2016 at S V Agricultural College, Tirupati - 517 502, Andhra Pradesh	2014	Plant Protection Association of India (PPAI)	Individual
6. Best Poster Award - 2014	6 th Indian Horticulture Congress, Nov 6-9, 2014, Coimbatore.	2014	Horticultural Society of India	Individual
7. Expert Member – Evaluation of R & D proposals	NOVOD Board, MOA, GOI	2012	NOVOD Board MOA, GOI	Individual

8. Reviewer – Australasian Plant Pathology (NAAS rating 7.3)	Springer	2012	International	Individual
9. Reviewer – Journal of Virological Methods (NAAS rating 7.7)	Elsevier	2012	International	Individual
10. Reviewer – Journal of Food Legumes (NAAS rating 4.3)	Indian Society of Pulse Research and Development, Kanpur, India	2011	National	Individual
11. Academia Sinica Postdoctoral Research Fellowship Award	Academia Sinica, Taiwan	2008-2010	Academia Sinica, Taiwan	Individual
12. Best Poster Award – 2009 (I)	9 th Annual ABRC Poster Competition, Academia Sinica, Taiwan	2009	Academia Sinica, Taiwan	Individual
13. Best Poster Award – 2008 (I)	8 th Annual ABRC Poster Competition, Academia Sinica, Taiwan	2008	Academia Sinica, Taiwan	Collaborative
14. Best Poster Award – 2007 (II)	7 th Annual ABRC Poster Competition, Academia Sinica, Taiwan	2007	Academia Sinica, Taiwan	Individual
15. Best Poster Award – 2007 (I)	7 th Annual ABRC Poster Competition, Academia Sinica, Taiwan	2007	Academia Sinica, Taiwan	Individual
16. National Science Council Postdoctoral Research Fellowship Award	National Science Council, Taiwan	2005-2008	National Science Council, Taiwan	Individual
17. ICAR-Plantation Crops - Student Research Fellowship Award for Ph.D. Study	ICAR-TNAU Department of Plant Pathology	2001-2003	Tamil Nadu Agricultural University	Individual

18. National Eligibility Test (NET)	ASRB, New Delhi	2001	ICAR/CSIR/ UGC	Individual
19. Dr. P. Narayanaswamy Gold Medal Award for the Best Student in Plant Pathology for M.Sc studies.	Tamil Nadu Agricultural University	2000	Tamil Nadu Agricultural University	Individual

Trainings attended

1. Attended International Pest Risk Analysis Training program jointly organized by United States Department of Agriculture (USDA)-Animal and Plant Health Inspection Service (APHIS), USA and National Institute of Plant Health Management (NIPHM), India on September 2-6, 2013 at NIPHM, Hyderabad.
2. Attended 21 days ICAR sponsored Summer school training program on “RNA-interference as a tool for Plant Functional Genomics and Crop Improvement” organized by ICAR-National Research Centre on Plant Biotechnology, Pusa Campus, New Delhi on May 6th – 26th, 2015.

Area of Specialization / Expertise:

- Isolation, molecular characterization and evaluation of entomopathogens viz. *Metarhizium* spp., *Beauveria* spp., *Lecanicillium* spp., *Pseudomonas fluorescens*, *Bacillus* spp. against the management of insects pests in several crops under greenhouse/polyhouse and field conditions.
- Molecular based fungal disease diagnosis viz. *Ganoderma* species, rice and soybean fungal pathogens.
- Genetic diversity analysis of fungal pathogens using different molecular tools viz. grouping and characterization of *Ganoderma* spp. with Internal Transcribed Spacer (ITS) primers and construction of Phylogenetic tree for the *Ganoderma* spp.
- Cloning and sequencing of immune related gene(s) and evaluated their efficacy both under *in vitro* (lab) and *in vivo* (animal model) conditions.
- Studied the efficacy of various fungal and bacterial biocontrol agents against plant pathogenic fungal, bacterial and viral pathogens both under greenhouse and field conditions.
- Established the modified vaccinia virus (MVA) system as a vaccine model.
- Mouse bone marrow derived dendritic cells culture and Human Monocyte derived dendritic cell culture studies
- Functional Genomics (Microarray), Proteomics (2-Dimensional gel electrophoresis and in-gel digestion of proteins for MALDI-TOF analysis)

- Gene-gun particle bombardment on mouse skin
- Real time PCR, ELISPOT, CTL assay etc
- Generic PCR, RT-PCR and gene cloning studies
- Bioinformatics basics, sequence analysis and phylogenetic analysis
- Serological and immunological studies including ELISA, DIBA etc.,
- Purification of protein and developed polyclonal antisera in rabbit.
- Isolation, purification and characterization microbial proteins.
- Gel electrophoresis for separation of microbial proteins, native gel electrophoresis for several isozymes studies and *Agrobacterium*-mediated transformation studies.
- Analysis of transgenic lines by Western blot.
- Experience in cDNA synthesis of microbes.

Publications and Patents:

Total Research Papers Publications and Patents:
a. Research papers: 45 nos. (International: 33 , National: 12)
b. Book Chapter: 16 nos. (International: 5 , National: 11).
c. International Patents: 2 Taiwan Patents Granted . (International: 2)
d. Research Training Manual Chapters: 24 nos. (National: 24 nos.)
e. Short Papers/Research Communications: 5 nos. (International: 5)
f. Conference Abstracts: 36 nos. (International: 17 ; National: 19)
g. e-publications: 9 nos. (National: 9).
h. More than 180 partial gene sequences published in NCBI, USA.
i. Popular articles: 12 nos. (National: 12).

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