



National Academy of Biological Sciences

Summary Proceedings & Recommendations

of

Tenth NABS- National Conference

The 10th NABS-National Conference with the theme
"Recent trends in Life Science: Research, Practices and Application for Sustainable Development"

Jointly organized by

National Academy of Biological Sciences

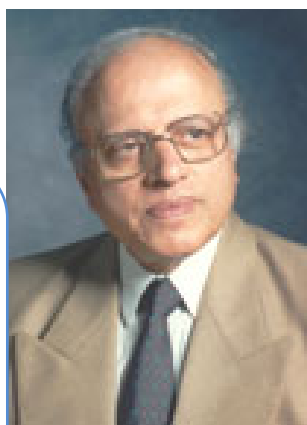
&

Departments of Botany and Zoology

Bharathiar University, Coimbatore, Tamil Nadu

from

7-8 September 2017



Dr. V. A. Parthasarathy, President, NABS;
Chief Patron, Prof. M.S. Swaminathan;
Patron and Vice Chancellor, Bharathiar University, Prof. A. Ganapathi



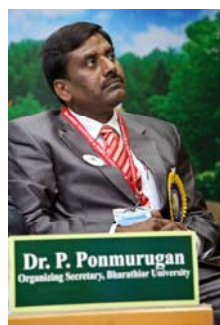
National Organizing Committee Chairperson

Dr. V. A. Parthasarathy, President of NABS

Secretary General

Prof. Dr. T. Marimuthu, Secretary, NABS

Organizing Secretaries



Dr. P. Ponmurugan

Associate Professor, Department of Botany, Bharathiar University

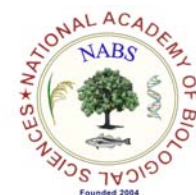
Dr. V. Ramasubramanian

Associate Professor, Department of Zoology, Bharathiar University

Conveners



Dr. A. Rajendran, Professor & Head, Dept. of Botany and
Dr. M. Ramesh, Professor & Head i/c Dept. of Zoology, Bharathiar University



Welcome
to



10th NABS-National Conference
Venue

Dr. Usha Kirtilal Mehta Convention Centre
Bharathiar university, Coimbatore
Dates: 7-8 September 2017



Inaugural Function

Arrival of Delegates to the Conference Hall



A. Proceedings of 10th NABS-National Conference

Inaugural Function

- The inaugural function of the conference was organized on 7 September 2017 at Dr. Usha Kirtilal Mehta Convention Centre, Bharathiar University, Coimbatore.
- After the invocation, Kuthuvilakku was lit by the dignitaries as a mark of auspicious beginning of the conference.



Dignitaries on the dais-Inaugural function of NABS-Conference
Dignitaries lit the Lamp of wellness (Kutthu Vilakku)



Dr. P. Ponmurugan, Organizing Secretary, Welcomed the dignitaries and delegates





Delegates stand for Prayer-
Inaugural Function

Dr. V. Ramasubramanian, Organizing
Secretary, briefed about
10th NABS-National Conference



Dr. D.J. Bagyaraj, Vice President, NABS
briefed about the activities of NABS



Dr. M. Anandaraj, Editor-in-Chief of
NABS-News Letter briefed about role of
NABS NL and its contributions



Dr. A. Rajendran, Professor & Head,
Department of Botany, BU briefed about
"Phytospectrum" magazine.



Dr. M. Ramesh, Professor & Head i/c,
Department of Zoology, BU briefed
about 'ANIMALIA', the News Letter.





Proceedings of the
Conference book
released by VC



Prof. A. Ganapathi, Vice Chancellor, Bharathiar University, Coimbatore presided over the inaugural function; released 'Proceedings of 10th NABS-National conference and delivered presidential address.



Chief Guest released
ANIMALIA



Chief Guest released
Pytospectrum



The Chief Guest, Dr. K. Murugan, Vice Chancellor, Thiruvalluvar University, Vellore, released ANIMALIA News letter & 'Pytospectrum' magazine.

Conferment of Prestigious Awards of NABS



Prof. K. Muthuchelian received "Prof. S. Kannaiyan Memorial Award" from Chief Guest



Prof. N. Anand received "Dr. APJ Abdul Kalam Memorial NABS-Life Time Achievement Award" from Prof. R.R. Hanchinal

Felicitations by the Guests

- Dr. V. A. Parthasarathy, President, National Academy of Biological Sciences, Chennai & Dr. Shilpi Paul, Member Secretary, Science and Engineering Research Board, New Delhi offered felicitation.

Prof. S. Kannaiyan Memorial Oration

Prof. Dr. K. Muthuchelian, the recipient of 'Prof. S. Kannaiyan Memorial Award' for 2017 delivered 'Prof. S. Kannaiyan Memorial Oration' on
"Nanovectors and Drug delivery Systems in Cancer Therapy"
 during a special session organized on 7th September 2017 after the inaugural function



Prof. Dr. R. R. Hanchinal, Former Chairperson, Protection of Plant Varieties and Farmers' Rights Authority, Ministry of Agriculture and Farmers' Welfare
 Presided the Special Session of Prof. S. Kannaiyan Memorial Oration &
 Felicitated the recipient, organizes and delegates



The book written by a NABSian was released

Dr. Renu Agrawal, the member of Executive Council of NABS and the author of the book received a copy after it was released during inaugural function of 10th NABS-National Conference.

Title of the book

Probiotics and Their role in Improving Human Health



Vote of Thanks by Treasurer, NABS

Dr. T. L. Baskaran
Treasurer, NABS

Proposed vote of thanks to all the
Guests, delegates, students, teachers,
faculties, members of various
organizing committees and felicitated
all the award winners



The inaugural function was concluded after the National Anthem

9th Annual General Body Meeting 08 September 2017



- ✚ The 9th Annual General Body Meeting was convened on 8th September 2017 at Dr. Usha Kirtilal Mehta Convention Centre of Bharathiar University, Coimbatore.
- ✚ Dr. V. A. Parthasarathy, President of NABS chaired the AGM. Dr. D.J. Bagyaraj, Vice President; Dr. T. Marimuthu, Secretary; Dr. M. Anandaraj, Editor-in-Chief of NABS News letter and Dr. T. L. Baskaran, Treasurer were present.
- ✚ Prof. R. R. Hanchinal, Formerly Chairperson, Protection of Plant Varieties and Farmers' Rights Authority, Ministry of Agriculture and Farmers' Welfare, GoI, New Delhi graced the occasion as a special guest to AGM.
- ✚ President welcomed the members of NABS and office bearers.
- ✚ Annual report by Secretary, Receipts and Expenditures by Treasure and the role of NABS News Letter by the Editor were presented and approved by the AGM.
- ✚ After the official transactions of AGM, the Award Ceremony was conducted.

Conferment of Fellowship to members of NABS who were selected for Award of Fellowship for the year 2016



The Secretary, NABS read out the citation before conferment of Fellowship.
President, NABS Conferred Fellowship

Dr. V. A. Parthasarathy, President, NABS Confers Fellowship (2016)



Dr. Narayan Bhaskar
[Under FS]



Dr. Dinesh Singh
[Under AS & F]



Dr. Prakash M Halami
[Under BS]



Dr. Yashpal S Malik
[Under V & F]



Dr. B. N. Chakraborty
[Under BS]



Dr. Ramesh C. Ray
[Under BS]

Fellowship conferred *in absentia*

Dr. B. Mandal
[Under AS & F]

Dr. M.K. Naik
[Under AS & F]

Dr. R. R. Sharma
[Under AS & F]

Dr. J. P. Tamang
[Under BS]

The NABS Awards were conferred by Prof. R.R. Hanchinal, Special Guest

NABS-Best Woman Scientist Award



Dr. A. Gnanamani
[Under BS]

NABS-Leadership Award



Dr. B. Vasantharaj David

NABS-Best Scientist Award



Dr. C. Ganesh Kumar
[Under BS]



Dr. N. Amaresan
NABS-Young Scientist Award
[Under BS]

NABS- Best Research Paper Awards



Dr. R. Sandeep Varma
Dr. C. M. Singh Memorial
NABS-Best Research Paper
Award [Under BS]



Dr. Y. K. Satija
Prof. T. S. Sadasivan Memorial
NABS-Best Research Paper
Award [Under BS]

Technical Sessions of 10th NABS-National Conference

Oral Presentations- Lead Lectures

Dr. A. Kumar

Principal Scientist, Indian Agricultural Research Institute
New Delhi

"Mechanism of bacterial endophytism in plants: Elucidation by expression analysis of Arabidopsis-Pseudomonas putida BP25 transcriptome"

Dr. Shilpi Paul

Member Secretary, Science and Engineering Research Board-DST, New Delhi

Medicinal Plants: Phytoconstitutents under variable phytogeographical conditions.

Dr. Sanjeeva Nayaka

Principal Scientist, National Botanical Research Institute, Lucknow

*"Lichen diversity, distribution and conservation"***Dr. Yashpal S. Malik**

Principal Scientist, Indian Veterinary Research Institute, Lucknow, UP.

"Biotechnological innovation in developing diagnostics for animal enteric viral infections"

Carl Linnaeus /Prof. M. S. Swaminathan Award Competition Presentations

The Judging committee

Dr. M. Subramanian- Chairman

Dr. K. Natarajan - Co-Chairman

Panel Members

Dr. N. Mathivanan

Dr. A. Kumar

Dr. Renu Agrawal

Dr. S. ThyagaRajan



Carl Linnaeus Award Competition Presentations: Papers presented

Veeresha, B.A.*University of Agricultural Sciences, Karnataka*

The study of expression of morpho-physiological and quality traits under drought stress in bread wheat

Suganya, M.*Department of Biotechnology, K. S. Rangasamy College of Technology, Tiruchengode*

Synergistic anticancer effect of Genistein and Doxorubicin in Lung adenocarcinoma cells

Rageshwari, S.*Department of Plant Pathology, TNAU, Coimbatore*

Dac-Elisa and RT-PCR based confirmation of systemic and latent infection by Tobacco streak virus in Cotton and Parthenium

Parthiban, M.*Department of Botany, Bharathiar University, Coimbatore*

New distributional novelties of Phytodiversity in Southern Western and Eastern Ghats of India

Vineetha, R.C.*School of Biosciences, Mahatma Gandhi University, Kottayam - 686 560, Kerala*L-Ascorbic acid and α -Tocopherol reduces arsenic trioxide induced toxicity via modulation of Nrf2 and Bcl2 transcription factors in Chang liver cells**Anuroopa, N.***PRIST University, Thanjavur, Tamil Nadu*Inoculation with selected microbial consortia not only enhances growth and yield of *Withania somnifera* but also reduces fertilizer application by 25% under field conditions**Prof. M. S. Swaminathan Award Competition Presentations-Papers****Kuleshwar, PS***Indian Agricultural Research Institute, New Delhi*

Metagenomic analysis of rice phyllospheric microbiome in relation to blast disease

**Oral Presentations- Technical Session-I
Biomedical and Pharmaceutical Sciences****Chairman:**Dr. V.A. Prabavathy
MS Swaminathan Research
Foundation, Chennai**Co-Chairman:**Dr. N. Thajuddin
Bharathidasan University,
Tiruchirappalli, TN*Number of Oral Presentations
made: 10*

Oral Presentations- Technical Session-II Biotechnology & Nanotechnology

Chairman:

Dr. G. Arjunan
*Bharathidasan University,
Tiruchirappalli, TN*

Co-Chairman:

Dr. J. Philip Robinson
*K.S.R. College of Technology,
Tiruchengode, TN*

*Number of Oral Presentations
made: 13*



Oral Presentations- Technical Session-III Environmental Sciences

Chairman:

Dr. S. Kannan
Periyar University, Salem, TN

Co-Chairman:

Dr. Edathil Vijayan
Cochin University, Kerala

*Number of Oral Presentations
made: 16*



Oral Presentations- Technical Session-IV Plant & Animal Sciences

Chairman:

Dr. Sanjeeva Nayaka
*National Botanical Research Institute,
Lucknow*

Co-Chairman:

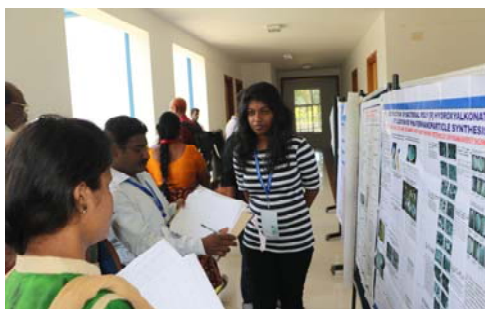
Dr. M. Nalini
Poompuhar College, Melaiyur
*Number of Oral Presentations
made: 5*



Poster Session



Poster Session



Best Posters presented were selected by a panel & Best Poster Presentation Awards were given during Valedictory Function by the Chief Guest

Valedictory Function

The valedictory function of the conference was organized on 8 September 2017 at Dr. Usha Kirtilal Mehta Convention Centre, Bharathiar University, Coimbatore.

Prof. R. R. Hanchinal, Formerly Chairperson, Protection of Plant Varieties and Farmers' Rights Authority, GoI, New Delhi presided.

Prof. K. Ramasamy, Vice Chancellor, Tamil Nadu Agricultural University, Coimbatore was the Chief Guest

Dr. V. Ramasubramanian,
Organizing Secretary of NABS-
Conference welcomed the
dignitaries and delegates



Dr. P. Ponmurugan,
Organizing Secretary of NABS-
Conference presented the
proceedings of two day
conference



Prof. R.R. Hanchinal presented participation certificates to the students and delegates; delivered presidential

Carl Linnaeus Award / Prof. M. S. Swaminathan Awards

- Carl Linnaeus Award / Prof. M. S. Swaminathan Award were introduced in 2017 for the Ph.D. / M.Sc. students pursuing their studies respectively. The best papers from their theses work presented during 10th NABS-National Conference were selected by a panel of judges. The selected students are presented with the Award. The award carries a Certificate and Cash Prize of Rs.5000/- for Carl Linnaeus Award winner and a Certificate and Cash Prize of Rs.4000/- for Prof. M. S. Swaminathan Award winner. The awards were presented during Valedictory function of the Conference.
- The Chief Guest Prof. K. Ramasamy, Vice Chancellor, Tamil Nadu Agricultural University presented the awards and delivered Valedictory address.
- The Carl Linnaeus Award was shared by Ms. S. Rageshwari and Ms. M. Suganya.
- Prof. M. S. Swaminathan Award competition could not be held as there was only one paper for the competition. However, the judging panel decided to present him "*Certificate of Appreciation*" as the presentation and contents were considered excellent.



Ms. S. Rageshwari received the award from Prof. K. Ramasamy

Carl Linnaeus Award shared



Ms. M. Siganya received the award from Prof. K. Ramasamy



Mr. PS. Kuleshwar received "Certificate of Appreciation" from Prof. K. Ramasamy



**Dr. D. J. Bagyaraj, Vice President, NABS
honored the Organizing Secretaries for ably
organizing the 10th NABS-National Conference**



**President of NABS
delivered Special
Address and
Felicited**



**Chief Guest
Delivered
Valedictory Address**



Secretary, NABS
proposed Vote of
Thanks and
expressed his Love
& Gratitude



10th NABS-National Conference was concluded
after the National Anthem



Group photo-Fellows and Local Organizing committee members



Group photo-Elected Fellows-2017

Cultural Program was organized on 7th September 2017
on the eve of 10th NABS-National Conference

Venue:

Dr. Usha Kirtilal Mehta Convention Centre



**B. Recommendations emanated from the deliberations of
10th NABS-National Conference**

- Conference provided a platform for the development of new approaches, methods, and models for biodiversity conservation and for determining issues that affect the sustainable use for human kind. Efforts shall be taken to create awareness among young children, probably, the school children so that they may serve as ambassadors to conserve the biodiversity of our nation.
- The budding researchers, students and the public shall be encouraged to participate in conserving biodiversity and also to generate new knowledge in the areas of concern.
- The new knowledge generated shall provide to develop policy papers to be adopted by the executives.
- The threats to Life Sciences- Biological Sciences such as over harvesting, pollution, habitat loss, and global climate change with reference to plants, animals, microorganisms and soil conservation including Coastal / Marine environment with respect to in biodiversity should be conserved.
- Ecologically sustainable production and consumption of natural resources assure stable jobs, traditional lifestyles, long-term food security and human health.