

## NAV News Letter

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### SECOND SYMPOSIUM ON VECTORS & VECTOR BORNE DISEASES

The second symposium on vectors and vector borne diseases was organised by the Academy at Goa from 17th to 19th March, 1997. The symposium was attended by more than 100 scientists from all over the world. While inaugurating the symposium at the Hotel Dalmia Resorts International, The Old Anchor, the Speaker of the Goa Assembly Mr. Tomazinho Cardoz asked the scientific community to formulate a strategy and spread the message of scientific technological knowledge among the masses for the sustained control of malaria and other vector borne diseases. Speaking as the Chief Guest after inaugurating this three day symposium Mr. Cardoz said emergence of vector borne diseases is a serious problem which has affected around 4 billion population of the world. Dr. V.P.Sharma, Director, Malaria Research Centre and President of the Academy

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presided over the inaugural function
and Dr. A.B. Knudsen from the
World Health Organisation, Geneva
delivered the keynote address on
"Global strategy for prevention and
control of dengue and DHF". The
symposium was fully sponsored by
Bayer (India) and had seven different
scientific sessions in addition to
Plenary lecture by Dr. Chusak from
the South East Asian Regional
Office of the WHO and guest
lectures by Dr. Y.D. Sharma, AIIMS,
New Delhi; Dr. P.K. Das, VCRC,
Pondicherry; Dr. Sarla Subbarao,
MRC, Delhi; Prof. Md. Hafeez,
Tirupati; Dr. G. Hesse, Germany and
Dr. C.T. Hugo, Philippines. Dr. V.P.
Sharma in his Presidential address
highlighted the present status of
different vector borne diseases. Dr.
A.P. Dash, Secretary General of the
Academy welcomed the delegates
and Dr. Aswani Kumar proposed a
vote of thanks at the inaugural
function. A committee was
constituted which submitted various
recommendations on 19th March,
1997 at the Valedictory function of
the symposium chaired by the Vice
Chancellor of the Goa University.
The Academy selected two scientists
for Best Scientist awards in the field
of vector borne diseases (one in
the field of molecular biology and
the other in the field of
Environmental aspects).

# RECOMMENDATIONS OF THE SECOND SYMPOSIUM ON VECTORS & VECTOR BORNE DISEASES

A panel discussion was held on 19th March 1997 on the concluding day of the Second Symposium on Vectors and Vector Borne Diseases, held in Goa from 17-19th March, 1997.

The panel consisted of the following members:

- Dr. R.N. Sharma,
   NCL, Pune, Chairman
- Dr. P. Chusak, WHO, New Delhi.
- Dr. A.B. Knudsen, WHO, Geneva.
- Dr. G. Hesse, Bayer, Germany.
- Dr. V.P. Sharma, MRC, New Delhi.
- Dr. (Mrs.) S. Subba Rao, MRC, New Delhi.
- Dr. N.L. Kalra, NMEP, New Delhi.
- Dr. B.D. Sathe, Haffkine Institute, Mumbai.
- Dr. A.P. Dash, RMRC, Bhubaneswar.

requested to participate freely.

The Chairman invited specific recommendations which may be incorporated as official ones by the academy. A very lively discussion followed resulting in various suggestions and recommendations. Official recommendations and most important suggestions are listed in italics.

- 1. Dengue fever may be made a notifiable disease in the whole of India.
  - The disease is reportable in Delhi, it was emphasized that it should be made reportable elsewhere in the country.
- 2. Use of impregnated bed nets was reemphasized for the whole country especially in rural areas.
- 3. In view of the Aedes mosquito breeding in coolers etc. use suitable biocides/ botanicals and/ or engineering solutions to prevent or destroy larval breeding was suggested.
- 4. After considerable discussions it was felt that a comprehensive strategy covering all mosquito vector species may impractical as well as expensive. It was therefore recommended that where possible operational synthesis of different strategies may be undertaken. NMEP representative clarified that already malaria control operations were being combined with Filaria control at the operational levels in antilarval measures.

- All other members were also 5. Community participation was emphatically recommended. In a lengthy discussion with enthusiastic contributions by many, the following suggestions emerged, which should be included as part of this recommendation.
  - a) The media may be used increasingly for the disseminating knowledge of vectors. transmission and need for community participation at all levels.
  - b) Vectors biology may be introduced in curricula at the school level.

It was agreed that instruction at home and school level is likely to be most effective and enduring in modifying attitudes and behavior. Dr. Ashwini Kumar pointed out that the subject was already introduced in the Goan Schools.

- 6. The issue of hazards and pollution caused by conventional synthetic insecticides was recognized as complex and compelling. It was recommended that
- Selective vector control should be undertaken at all levels. Use of conventional synthetic insecticides should be minimum and carefully monitored.
- b) Where possible biocides/ botanicals may be introduced for supplementing/minimizing/ replacing conventional insecticides.

The Chairman mooted a suggestion that the insecticides companies should

voluntarily undertake development of least one herbal ecofriendly pest/vector product since they have the expertise infrastructure marketing.

Dr. Hesse welcomed and appreciated the suggestion but pointed out that the major problem was inculcating consumer acceptance of such products which may not be competitive with the synthetics in terms of immediate and apparent results.

The chairman observed that this endeavor by industry should not be considered as any kind of charity since the issues involved here were Environment and Human Health in which everyone had a stake. In addition, even the economic of a safer and ecocompatible product would be more acceptable in the long run and taking into account both tangibles and intangibles.

Dr. V.P. Sharma's observation of mounting evidence of synthetic chemicals interfering with the immune system was thought to be particularly relevant in this context.

On the issue of safety of the more popular mats, several observations were made.

- a) There are reports that these mats have ceased to be as efficient as they were earlier.
- b) There was some evidence that spurious mats were being made and marketed in the country.
- c) People have taken to burning the mats for better protection.

- d) More thorough investigations into chronic exposures to mat vapors are needed.
- e) It was felt that a pragmatic approach should be adopted in the use of products such as mats and chronic or intensive exposure to them avoided.
- Special emphasis should be given to the research in Social Marketing. Dr. Chusak was emphatic in requesting inclusion of this recommendation.

He wanted Indian or Foreign Social Scientists to be involved in influencing and modifying social attitudes. He advocated a combined approach by organizing coordination between NGO's, social scientists and Health workers.

Dr. Hesse suggested that as July had been named as the antimalaria month, a beginning could be made in terms of media and other exposures for social education. He also suggested that the industry could pay a role by organizing trainer programs.

The panel discussions were concluded with a request by the Chairman that the above document and recommendations should be widely circulated and also sent to various levels in the ministries of Health, Education, Rural Development, Human Resources and Science & Development.

#### Best Scientist Award in Molecular aspects of Vector Borne Disease-1996

Best Scientist award related to excellence in molecular aspects of the vector borne diseases for 1996 goes to Dr. Shobbona Sharma, a senior Scientist of Tata Institute of Fundamental Research, Mumbai.

Dr. Shobbana Sharma has been working at TIFR for over a decade now and has been working on the surface antigens of *Plasmodium* and on the immune response to the malarial parasites. Her contributions relate to three thurst areas in molecular biology of malaria parasite to answer basic but complex questions about immunity in malaria, towards understanding the host parasite interactions. These relate to (i) novel putative protective proteins of *P. falciparum*, (ii) antigenic diversity among Indian isolate of *P. falciparum* and (iii) expression and immunogenicity of conserved domains of Cs. proteins. After having gained leads and insight into the immune mechanism with *P. falciparum* model, similar studies have now been extended to study the diversity of *P. vivax* domains using PCR.

#### Best Scientist Award related to Environmental aspects of Vector Borne Diseases - 1996

The award for 1996 goes to Dr. Sarala K. Subbarao, a Senior Scientist of Malaria Research Centre, Delhi.

Dr. Sarala K. Subbarao has been studying extensively on the *Anopheles culicifacies* species complex to map distribution and seasonal prevalence of the members of the complex in the country and to study biological variations among the members with reference to host feeding preference, vectorial potential and responses to commonly used insecticides.

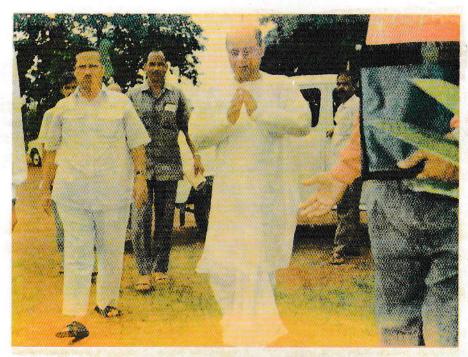
The distribution pattern and the differences in the vectorial potential of sibling species together, have for the first time explained the reasons for the differences observed in the transmission dynamics of malaria in the areas of *An. culicifacies* distribution in the country. A rational strategy for spraying insecticides for the control of *Anopheles culicifacies* sibling species has been prepared. Use of this strategy would lead to the judicious use of insecticides which would reduce the load of the insecticides in the environment.



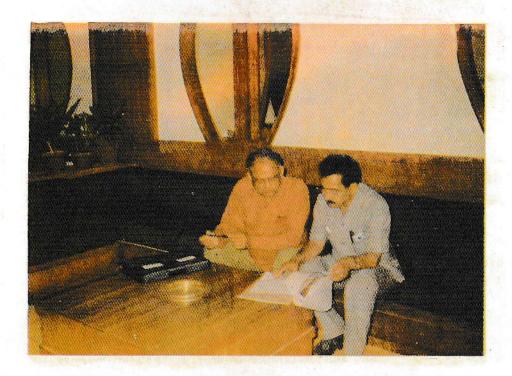
Mr. Cardoz, Speaker of the Goa Assembly is lighting the lamp at the inaugural function.



Dr. V.P. Sharma, President of the Academy, delivering the Presidential Address.



Sri Niranjan Pattanayak (left) Hon'ble Minister for Industries and Sri Jagannath Rout (right) Hon'ble Minister for Health, Govt. of Orissa, on their way to release the Proceedings of the 1st International Symposium (sponsored by Bayer) on 8th September 1995.



Dr. V.P. Sharma, President and Dr. A.P. Dash, Secretary General of the Academy giving final touch to various Scientific Programmes.

#### NATIONAL ACADEMY OF VECTOR BORNE DISEASES

(Registered under Societies of Registration Act XXI of 1860)

The National Academy of Vector Borne Diseases is a nonprofit scientific/academic organisation established in 1994 in India with more than 70 eminent senior scientists from 18 different States of the country. The Academy itself came into existence as a spin off from the recommendations made by a panel of experts from both India and abroad during the proceedings of the "First International Symposium on Vectors and Vector Borne Diseases" held at the Regional Medical Research Centre, Bhubaneswar in November, 1994.

The National Academy of Vector Borne Diseases (Academy) is a registered professional organisation dealing with vectors and vector borne diseases. The Academy published the proceedings of the International symposia on vectors and vector borne diseases in September, 1995 and 1997. The Academy also publishes a "News Letter" in every year which disseminates timely news of the Academy. The Academy also organises national/international symposia on Vectors and Vector Borne Diseases in alternate years. The Academy also co-sponsored the II Global meet on parasitic diseases held at Hyderabad from 17-22 August, 1997.

Membership is open to any individual interested in any aspect(s) of Vectors and Vector Borne Diseases (i.e., epidemiological, control, clinical, entomological, parasitological, experimental, sociological, economics and cost-benefits and cost-effectiveness of control methods, etc.). Following memberships are available:

Annual Member : Rs.100/- per annum

(US \$ 10.00 for scientists abroad)

Student Member : Rs.50/- per annum

(US \$ 5.00 for scientists abroad)

Life Member : Rs.500/- (at present), one time

(US \$ 50.00 for scientists abroad)

Institutional Member : Rs.20,000/- (one time)

(US \$ 2000.00 for institutions abroad)

Patron : By donating more than Rs.20,000/- or

US \$ 2000.00 for persons abroad.

Contact Address: Dr. R.K. Hazra, Treasurer, National Academy of Vector Borne Diseases, Regional Medical Research Centre, Bhubaneswar-751 016, India.

- The Life members of the Academy are requested to send their important achievements, if any, from time to time to Dr. (Mrs.) Namita Mahapatra, Joint secretary, National Academy of Vector Borne Diseases, Regional Medical Research Centre, Bhubaneswar-751 016 for possible inclusion in the News Letter.
- Members are also requested to intimate about their change of address, if any, to Dr. Mahapatra in the above address.
- Mini review articles (2-4 typed pages) of good quality in any aspect of vector borne diseases are invited from members of the Academy for possible use in the News Letter.
- Members are requested to renew their Annual Membership before 31.12.1997.

#### **NEW LIFE MEMBERS**

Dr. Agarwal, Om Prakash, M.Sc.,Ph.D. Reader, School of Studies in Zoology Jiwaji University Gwalior-474 011

#### Dr. Appavo, N.C.

Director, Health Govt. of Tamil Nadu, Chennai

Dr. Bhattacharya, P.R., M.Sc., Ph.D. Malaria Research Centre 22-Shamnath Marg Delhi-110 054

Dr. Chhotray, G.P., M.B.B.S., M.D. Head, Division of Pathology Regional Medical Research Centre Bhubaneswar-751 016

Dr. Fernando, M.L.F.J. Senior Entomologist Institute of Vector Control & Zoonoses Hosur, Tamil Nadu

Ms. Ghosh, Chaitali, M.Sc. C/o Dr. S.K. Ghosh Malaria Research Centre Old Madras Road, Bangalore-38

Dr. Gopalan, N., M.Sc., Ph.D.
Entomology Division
Defence Research & Development
Establishment
Jhansi Road, Gwalior

Dr. Ilango, K., M.Sc., Ph.D. (London), Dip. LSHTM Systematic Entomologist Zoological Survey of India Fresh Water Biological Station 1-1-300/B, Ashoknagar Hyderabad-500 020, A.P.

Dr. Joshi (Mrs.) Hema, M.Sc., Ph.D Senior Research Officer Malaria Research Control 22-Sham Nath Marg, Delhi-110 054

**Dr. Khan, A.M.**, M.Sc., M. Phil., Ph.D. Research Officer Regional Medical Research Centre N.E. Region, Dibrugarh-786 001, Assam

Dr. Kumar (Mrs.) Sarita, M.Sc., Ph.D. Lecturer in Zoology Acharya Narendra Dev College Kalkaji, New Delhi-110 019

**Dr. Panda, D.K.**, MBBS, M.D., Ph.D. Senior Pathologist Acharya Vihar, Bhubaneswar

Dr. Poopathi, S., M.Sc., M.Phil., Ph.D. Research Officer Centre for Research in Medical Entomology, No. 4, Sarojini Street, Chinnachokkikulam Madurai-625 002 **Dr. Raghavendra, K.**, M.Sc., Ph.D. 22-Shamnath Marg Delhi-110 054

Dr. Sharma, Arun, M.Sc., Ph.D. Malaria Research Centre 22-Shamnath Marg Delhi-110 054

Dr. Sharma, R.S., M.Sc., Ph.D. Deputy Director National Malaria Eradication Programme 22-Shamnath Marg Delhi-110 054

Dr. Srivastava, H.C., M.Sc., Ph.D. Malaria Research Centre Civil Hospital Nadiad-387 001, Gujarat

**Dr. Srivastava, Rina**, M.Sc., Ph.D. Scientist-C, Deptt. of PSM Armed Forces Medical College Pune-411 040

Tungikar, V.B., M.Sc. Scientist E-I National Chemical Laboratory Pune-411 008

**Dr. Yadav, R.S.**, M.Sc., Ph.D. Malaria Research Centre Civil Hospital Nadiad-387 001, Gujarat

Few copies of the Proceedings volume of the First International Symposium on Vectors and Vector Borne Diseases held in November, 1994 containing 40 selected research papers (246 pages) are available. Interested persons/institutions are requested to send Rs.550.00 (inclusive of postal charges) by M.O. or bank draft drawn in favour of "The Treasurer, National Academy of Vector Borne Diseases" to Dr. R.K. Hazra, Treasurer, National Academy of Vector Borne Diseases, Regional Medical Research Centre, Bhubaneswar-751 016, Orissa, India.

The Proceedings of the Second Symposium on Vectors & Vector Borne Diseases (262 pages) held in March, 1997 at Goa is now ready. Interested persons/institutions (excluding the Life Members) are requested to send Rs.550.00 (inclusive of Postal charges) by M.O. or bank draft drawn in favour of "The Treasurer, National Academy of Vector Borne Diseases" to Dr. R.K. Hazra, Treasurer, National Academy of Vector Borne Diseases, Regional Medical Research Centre, Bhubaneswar-751 016, Orissa, India.

#### NATIONAL ACADEMY OF VECTOR BORNE DISEASES

(Regn. No 19767/199 of 1994-95 under Societies Registration Act XXI of 1860)
(Regional Medical Research Centre, Bhubaneswar - 751 016, India)

#### MEMBERSHIP FORM

(Kindly fill in the form and send it to **Dr. A.P. Dash**, Regional Medical Research Centre, Bhubaneswar-751 016, Orissa, India

	Pł	none : (0674) 4404	44 Telex: 0675-491 RM	IRC IN		
1.	Name	:				
2.	Designation	: 11				
3.	Date of Birth	:				
4.	Academic Qualification (Only Post-Graduate degrees)					
5.	Address					
	a. Present (For correspondence)					
		Phone :	Fax :	Telex :		
	b. Permanent					
6.	Experience (Total No. of years)	: Research Teaching Management				
7.	Type of Membership & Fee: (Fee sent by Draft/M.O.)					
	Membership	Period	Rs.	For Scientists abroad US \$		
	Student Member	Annually	50	10		
	Ordinary Member	Annually	100	20		
	Life Member	Life time	500	50		
	Institutional Member	Life time	20,000	2,000		
	Patron	Life time	By donating more than 20,000	By donating more than US \$ 2,000		

The membership fees are likely to be enhanced from 1st April, 1998. The membership fee may be sent by bank draft (drawn in favour of Treasurer, National Academy of Vector Borne Diseases, Bhubaneswar) or M.O. to R.K. Hazra, Treasurer, National Academy of Vector Borne Diseases, Regional Medical Research Centre, Bhubaneswar-

Signature

751 016, Orissa, India.

Place :

Date :

• St. No. 2,3,4 and 6 are not applicable for institutions.