



ENVIRONNEWS

INTERNATIONAL SOCIETY OF ENVIRONMENTAL BOTANISTS

Newsletter

LUCKNOW (INDIA)

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April, 2014

Fifth International Conference on Plants and Environmental Pollution (ICPEP-5)



Date: 3-6 December 2014

Venue: Lucknow, India



Organized by



International Society of Environmental Botanists (ISEB)
&
CSIR-National Botanical Research Institute (CSIR-NBRI)

Chairman, Organizing Committee

Dr. C.S. Nautiyal, FNA

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ISEB President conferred FNA



Fellowship of prestigious Indian National Science Academy (FNA), New Delhi has been conferred on Dr. Chandra Shekhar Nautiyal, Director of CSIR-National Botanical Research Institute (CSIR-NBRI) and President, International Society of Environmental Botanists (ISEB) for his eminence and contributions in the field of biotechnology for enhancing the yield of plants that maximizes the economic, environmental and societal benefits to our farmers. Dr. Nautiyal joined NBRI in February 1994, after spending about 10 years in Canada and USA working on various positions ranging from Post Doctoral Fellow to Production Manager in a Biotechnology Company in USA. His research interests include area of fundamental and applied aspects of Plant-Microbe Interactions and relate to elucidation of relationships between microbial populations and environmental stresses, working out the intricacies of relationship between microbes and plants, and utilizing the knowledge base thus developed for enhancing the yield of plants through transfer of commercially exploitable technologies for its further dissemination among farmers, for the development of sustainable management of soil fertility and crop production that so desperately need to be protected. Major spin-off of his contributions has been several patents, publications and a utilization of these technologies by several biotechnology companies nationally and internationally. Dr. Nautiyal's work has thus provided best-of-scientific solutions for our country's need based oriented research in the area of biotechnology, by adopting an appropriate mix that suits its needs and resources to enhance the yield of plants that maximizes the economic, environmental and societal benefits to the people of India.

Dr. Nautiyal has received several prestigious awards such as Council of Scientific & Industrial Research (CSIR) Award for S&T Innovations for Rural Development, CSIR, Government of India; Vigyan Gaurav Samman, Council of Science & Technology, UP, Department of Science and Technology, Government of Uttar Pradesh; Life Time achievement Award, The Biotech Research Society of India (BRSI); TATA Innovation Fellowship, Department of Biotechnology (DBT), Government of India; Industrial Medal Award, BRSI; The Biotech Product and Process Development and Commercialization Award, DBT; All India Biotech Association (AIBA) Award, and Vigyan Bharati Rashtriya Puraskar. Dr. Nautiyal is a Fellow of Indian National Science Academy, New Delhi; The National Academy of Sciences, Allahabad, and National Academy of Agricultural Sciences, New Delhi.



LETTERS

Dear ISEB,

The BBVA Foundation, in collaboration with the Spanish National Research Council (CSIC) is pleased to announce **the seventh edition of the BBVA Foundation Frontiers of Knowledge Awards**, and to invite you to participate by nominating a candidate or candidates through the institution to which you belong, following the instructions provided in the accompanying call conditions. This same information can be consulted on the Foundation website: www.fbbva.es/awards.

The **BBVA Foundation Frontiers of Knowledge Awards** recognize significant scientific advances of a theoretical, methodological or empirical nature, technological innovations and developments, and the creation of outstanding works of new artistic or interpretative styles in contemporary classical music. Honors also go to diverse endeavors (from research through to practical programs) addressing two core concerns of the global society of the 21st century: climate change and development cooperation.

The **BBVA Foundation Frontiers of Knowledge Awards** in each category come with €400,000 prize money, a diploma and a commemorative artwork.

The **BBVA Foundation Frontiers of Knowledge Awards** take in the following eight categories:

Basic Sciences (Physics, Chemistry, Mathematics)	Economics, Finance and Management
Biomedicine	Contemporary Music
Ecology and Conservation Biology	Climate Change
Information and Communication Technologies	Development Cooperation

Candidates shall be one or more natural persons of any nationality, without limitation of number in the case of convergent contributions to a given advance, whether due to a formal collaboration (with the candidates belonging to one or more groups) or parallel working. In the Climate change and Development Cooperation categories, entries are also open to agencies and organizations in the public or private sector (non-for-profit in the latter case).

It would be an Honor for us to count your organization among those nominating a candidate.

Thank you in advance for your interest and participation.

Sincerely,

Rafael Pardo
Director
BBVA Foundation

Emilio Lora-Tamayo
President
CSIC
Madrid, Spain

ICPEP-5 Conference Information

Most of the environmental concerns faced by the developed countries following industrial revolution and resultant economic boom and consumerism in the past are now spreading to the developing countries as well. Among the scourges faced by mankind today, environmental pollution is in the forefront. In the greater part of the last century, it was the fast pace of industrialization, galloping demand for food, shelter and energy and reckless exploitation of natural resources, that were mainly responsible for creating the problem of environmental pollution in developed countries.

Current scenario is, however, vastly different, as widespread poverty, illiteracy and burgeoning population in the Third World countries are leading to increasing environmental pollution at a pace which were unimaginable only a few decades earlier. Climate change is the biggest threat faced by this planet since the 'Ice Age'. When it comes to the hazards of environmental pollution, there is only a very thin dividing line between developed and developing countries now. One pollutes and the other suffers from its consequences equally, if not more.

India, with a population of ca. 1.25 billion people, is home to one-sixth of the humanity. It is a developing country, where its teeming millions suffer from poverty, illiteracy, malnutrition resulting in severe degradation in environmental quality and ill health. However, with its strong industrial base, sound infra-structure and phenomenal progress in science and technology, it is poised to become a developed country in not too distant future. Being a 'Sangam' (Confluence) of developed and developing nations, it is ideally suited to host this international Conference. Because of its sheer size and population, what India does today, will have its impact on the entire planet tomorrow.

International Society of Environmental Botanists and CSIR-National Botanical Research Institute, Lucknow (CSIR-NBRI) had jointly organized four highly successful International Conferences on Plants and Environmental Pollution in Lucknow in 1996, 2002, 2005 and 2010. Some of these conferences were co-sponsored by international organizations like UNESCO, UNEP, TWAS, IUBS, Indo-US Science & Technology Forum, AusAID, Murdoch University, Australia and several ministries/departments of Government of India. It was recommended that the fifth quadrennial ICPEP (ICPEP-5) needed to be organized to provide forum for discussing scientific researches and for exchanging knowledge concerning environmental issues. As a follow-up of the above recommendations, ISEB and CSIR-NBRI shall jointly organize the Fifth International Conference on Plants and Environmental Pollution (ICPEP-5), during December 3-6, 2014, at CSIR-NBRI Campus, Lucknow India. Prestigious international scientific organizations, funding agencies like banks, foundations and corporate sector promoting environmental protection activities under their corporate social responsibility programmes are being invited to co-sponsor this conference which will deliberate on crucial issues like environmental protection, climate change impact, on biodiversity migration of species, forestry, food security and human health.

This Conference is aimed at providing a vibrant interactive forum for serious deliberations on the pressing problems of pollution and the role of plants in its amelioration. The deliberations during the Conference will focus on climate change, environment and biodiversity, environmental biotechnology, plant response to environmental pollution, environmental impact assessment, bio-indication and bioremediation, plant-microbe interaction and waste management. Promoting environment education and outreach programmes also needs to be emphasized besides other emerging environmental issues.

Detailed technical reports and recommendations of the previous Conferences (ICPEP-1 to ICPEP-4) were forwarded to relevant International agencies, academic institutions and organizations (both government and non-government) for their perusal and implementation. These can also be accessed from ISEB website: <http://isebindia.com>.

An International Advisory Committee with some of the most reputed and highly distinguished environmental and plant scientists has been constituted under the chairmanship of Dr. C.S. Nautiyal, President ISEB & Director CSIR-NBRI to guide and advise in planning and organizing this Conference.

Areas/disciplines of the Conference

1. **Bio-Indication & Bioremediation**
2. **Environmental Microbiology and Biotechnology**
3. **Environmental Impact Assessment & Eco-Auditing**
4. **Environment & Biodiversity**
5. **Plant Responses to Environmental Pollution**
6. **Climate Change & Human Health**
7. **Climate Change and Global Food Security**
8. **Impacts of Air Pollution & Climate Change on Forest Ecosystem**
9. **Role of Botanical Gardens in Climate Change Research**
10. **Environmental Education, Environmental Laws, Outreach and Information**
11. **Contemporary Environmental Issues:** (a) Paleo-environment (b) Environmental impact on cultural heritage (c) Environmental systems and disaster management (d) Hospital wastes management (e) Indoor pollutants, (f) bio-pollutants, (g) Bio-energy/Biofuel (h) Sustainable agriculture & food Security (i) Alien Plant Invasion (j) Bio-prospecting (k) Noise pollution (l) Urban pollution & green belt designing.

Procedure for Submission of Abstracts and Registration

1. Abstract of Paper

1. The Abstract not exceeding 350 words typed in "Times New Roman" 12 pt normal font, single line spacing and should include:

- (I) Title of Paper in BLOCK letter
- (II) Name of all author(s) in italics with an asterisk (*) marked against the name of the presenting author
- (III) Main body of the Abstract
- (IV) 5 to 6 key words
- (V) Author(s)' primary institutional affiliations using superscript numerals including full address of all the authors up to town and country and their E-mail IDs.
- (VI) Area/discipline which best represents your work

Abstracts should be mailed/e-mailed/faxed to Dr. Nandita Singh, Principal Scientist, Eco-auditing Group, National Botanical Research Institute, Lucknow-226001, India.

(E-mail: nanditaicpep5@gmail.com; Phone: +91-522-2287931; Fax: +91-522-2205836/ 2205839) All queries regarding abstracts and publication related matters should be addressed to her.

Last date for submission of abstract is 31st July 2014.

2. Oral presentation

Oral presentations will be of 15 minutes duration, including discussions. Overhead, 35mm projection, LCD/CD and other electronic multimedia facilities will be available for presentation.

3. Posters

The space given for the poster would be 1.5m (height) x 1.2m (width). Please ensure that your poster will fit into this space. All other details of design and format are up to the author(s), who will themselves display their posters at their respective poster sessions. Necessary materials for posting the displays will be provided by the organizers.

4. Full Papers

Full papers need not be submitted presently. If, and when, a decision is taken by the Organizing Committee regarding publication of the Proceedings of ICPEP- 5, an International committee of Experts will scrutinize all presentations (oral/poster) made during different sessions of the Conference and short list the individuals from whom the full papers will be invited for publication.

ICPEP-5 Attendance Reconfirmation Form
(To be submitted online/ e-mail/mail/fax on or before 31 October 2014)

To:
The Organizing Secretaries ICPEP-5
CSIR- National Botanical Research Institute, Lucknow-226001, India

Dear Sir/Madam,
I hereby reconfirm my personal attendance at ICPEP-5 at CSIR-NBRI, Lucknow. My travel plan is as under:

Arrival Lucknow: Date; Time

Mode of travel: Air (flight no.)

Rail (train name and no.)

Road

Departure Lucknow: Date; Time

Name City Country

Note: Submission of this form before 31 October 2014 is a pre-requisite for presentation of paper (Oral/poster) and/or publication of abstract in the Book of Abstracts and inclusion of name in the Directory of Delegates ICPEP-5 E-mail; isebrilko@gmail.com / Website: <http://isebindia.com>

Mode of Presentation of Paper

Delegates can submit their requests for mode of presentation of their papers along with their abstracts/registration either online or by e-mail/mail in the following format. Their requests will be duly considered by the Scientific Programme Committee and its decision will be communicated to the individual delegate after the deadline for the submission of Registration and Abstracts sometime in September/October 2014. No enquiries on this subject will be entertained before **September 15, 2014**. As we have already received over 800 pre-registrations and the number of actual registrations is likely to exceed 500, in spite of our best efforts it will be humanly impossible to accommodate all delegates under oral presentation in a 4-day conference with only 3 days allotted for Scientific Sessions.

Proforma

Name:

Full mailing address:

E-mail:

Title of paper/papers

Mode of presentation required (Please tick in the relevant box)

- Keynote lecture**
- Invited lecture/Special talk**
- Oral**
- Poster**
- Will only attend the Conference but not present any paper**

Note: Decision of the Scientific Programme Committee will be communicated sometime in September/October 2014

Please e-mail this form to organizing secretaries icpep-5 at isebrilko@gmail.com

Registration Fee

Registration fee payable per person for various categories of delegates is as follows

Category	Indian/SAARC Residents*		Foreign Nationals/NRIs	
	Up to 30.09.2014	After 30.09.2014	Up to 30.09.2014	After 30.09.2014
Members of ISEB	Rs. 5000	Rs. 5500	US \$ 500	US \$ 550
Non Members	Rs. 5500	Rs. 6000	US \$ 550	US \$ 600
**Students	Rs. 3500	Rs. 4000	US \$ 300	US \$ 350
Accompanying person	Rs. 3500	Rs. 4000	US \$ 300	US \$ 350

*Delegates from SAARC countries (Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka) can pay either in Indian currency or US \$.
**Post-Docs, RAs, SRFs, JRFs, Project Fellows, Project Assistants, and those in employment, are not eligible for student category.
(Note: The registration fee does not include accommodation charges)

Mode of Payment

Registration fee and other charges are to be paid by Bank Draft drawn in favour of "International Society of Environmental Botanists, Lucknow, India Account No. **10863773327**" payable at the **State Bank of India, NBRI Branch, Lucknow**.

Overseas delegates can also remit by electronic transfer using SWIFT Code **SBININBB176 (Lko Main Branch)** payable to **International Society of Environmental Botanists, Lucknow** A/c. No. 10863773327 at **State Bank of India, NBRI Branch, Lucknow**.

Cheques/credit cards will not be accepted.

Registration fee paid by a delegate will not be refunded in the event of his inability to attend the Conference due to some unforeseen circumstances. However, such delegates can collect their Conference material (bag and literature etc.) either personally or through an authorized representative till 15 January 2015.

Duly filled in registration form, complete in all respects (including a passport size coloured photograph of the delegate duly pasted on the form) and, Bank draft of the Registration fee should be mailed to the Organizing Secretaries ICPEP- 5, International Society of Environmental Botanists, National Botanical Research Institute, Lucknow-226001, India. Payment of registration fee along with the Registration form is not mandatory and it can also be paid at the Registration counter of the conference but for availing fee concession the registration fee must be remitted before 30 September 2014 positively.

Accommodation

Lucknow has several 3-5 star hotels of international standards as well as many good economy/budget hotels. Delegates may arrange their own accommodation. A limited accommodation (2/3 person per room) may also be available in the guest houses/hostels of local R & D institutes, details of which will be uploaded on our website in due course. About this matter may be addressed to: **Dr. D.K. Upreti, Convener Accommodation Committee at: <upretidk@rediffmail.com>**. To facilitate hotel/tour bookings etc. a conference travel agent has been appointed. For all your travel, local tours and hotel accommodation requirements/queries etc. please contact the authorized travel agent of the Conference.

Authorized Travel Agent of the Conference:

Mr. S. Banerjee

Branch Manager

RJ Trade-Wings (Pvt.) Ltd., 110 Shalimar Square (First Floor)

B.N. Road, Lalbagh, Lucknow-226001, India.

Tel: +91-522-4042985

Mobile: +91-9335911433; E-mail: rjtwlko@yahoo.co.in

Visa for foreign delegates

Before planning your journey please contact Indian Embassy/Consulate/High Commission in your country regarding the visa requirements. Nationals of some countries can be issued visa on arrival (Please check it from internet).

Important instructions

All ICPEP-5 related matters including submission of Registration forms (by mail/electronic mail/fax) and payment of Registration fee and other queries should be addressed to Organizing Secretaries ICPEP-5. Please, notify us by e-mail that the money had been transferred. **Please, provide your name, the amount transferred, and the number of transaction.**

Other committees responsible for Scientific Programme, Local hospitality and Reception, Transport and Accommodation will be constituted in due course and communicated to all registered delegates.

This Circular can also be accessed / downloaded from our website: <http://isebindia.com>. Any other information, including future announcements regarding ICPEP-5, will be uploaded on our website from time to time. It will not be possible for us to communicate every decision/information individually. Delegates/intending participants are, therefore, advised to visit the website regularly for updates.

Organizing Committees

Dr. C.S. Nautiyal

Chairman, Organizing Committee ICPEP-5 (Director CSIR-NBRI & President, ISEB)

Dr. K.J. Ahmad Dr. R.D. Tripathi Dr. Nandita Singh

Organizing Secretaries ICPEP-5

Steering Committee

Chairman

Dr. B.P. Singh

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Dr. Tariq Husain

Dr. Vivek Pandey

Dr. U.N. Rai

Dr. S.C. Sharma

Dr. Mrs. Nandita Singh

Ms. Kanti Srivastava

Dr. R.D. Tripathi

Prof. R.S. Tripathi

Dr. D.K. Upreti

Prof. Mohd. Yunus

Dr. Mrs. Kamla Kulshreshtha
(Convener)

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Dr. C.S. Nautiyal

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Prof. Maria De L. De Bauer (Mexico)

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Dr. C. R. Bhatia (India)

Prof. Hans Brix (Denmark)

Prof. Tao. Chen (China)

Dr. F. J. Corpas (Spain)

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Prof. O. P. Dhankher (U.S.A)

Prof. Marisa Domingos (Brazil)

Prof. Nicholas M. Dickinson
(New Zealand)

Dr. Lisa Emberson (U.K.)

Prof. Dr. Juerg Fuhrer (Switzerland)

Prof. Arun Goyal (U.S.A.)

Prof. David. A. Grantz (U.S.A.)

Dr. Margaret. Greenway (Australia)

Dr. Ahmad K. Hegazy (Saudi Arabia)

Prof. S.V. Krupa (U.S.A)

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Prof. Bernd. Markert (Germany)

Prof. Elina Oksanen (Finland)

Prof. Dr. Munir. Ozturk (Turkey)

Prof. Elena. Paoletti (Italy)

Prof. Shivendra V. Sahi (U.S.A.)

Dr. P.V. Sane (India)

Dr. Wagdy. Sawahel (Egypt)

Prof. Ming-Hung Wong (China)

Prof. Yong Guan Zhu (China)

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Chairman

Dr. P.V. Sane

Members

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Prof. Sunil Bajpai (Lucknow)

Prof. S.K. Barik (Shillong)

Dr. Gufran Beig (Pune)

Prof. Mohd. Iqbal (New Delhi)

Prof. R. K. Kohli (Punjab)

Prof. M.N.V. Prasad (Hyderabad)

Dr. Girish Sahni (Chandigarh)

Prof. P.K. Seth (Lucknow)

Prof. R.C. Sobti (Lucknow)

Prof. Pramod Tandon (Shillong)

Prof. C.K. Varshney (New Delhi)

Publication Committee

Dr. Mrs. Nandita Singh (Convener)

Prof. R.S. Tripathi

Prof. M. Yunus

Dr. Vivek Pandey

Dr. Pankaj K. Srivastava

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Dr. U.N. Rai (Convener)

Food Committee

Dr. Virendra Nath (Convener)

Accommodation Committee

Dr. D.K. Upreti (Convener)

Reception Committee

Dr. Kamla Kulshreshtha (Convener)

Poster Committee

Dr. S.K. Raj (Convener)

Venue Committee

Dr. R.K. Roy (Convener)

Cultural Programme Committee

Dr. P.B. Khare (Convener)

Past Presidents of ISEB

Dr. P.V. Sane

Dr. Sushil Kumar

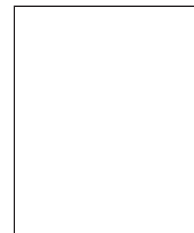
Dr. P. Pushpangadan

Dr. Rakesh Tuli

Dr. K. C. Gupta

ICPEP-5
Registration Form
Fifth International Conference on Plants & Environmental Pollution (ICPEP-5)
3-6 December 2014 Lucknow, India

To:
The Organizing Secretaries (ICPEP-5)
International Society of Environmental Botanists
National Botanical Research Institute
Rana Pratap Marg, Lucknow-226001 (India)



Dear Sir/Madam,
I wish to attend the Fifth International Conference on Plants & Environmental Pollution (ICPEP-5) and am submitting the relevant details as below;

Title/Salutation: (Mr. / Ms / Mrs. / Miss / Dr. / Prof. / Er.etc.)

Sex: M/ F

First Name:

Middle Name:

Last Name/Surname:

Designation (if any):

Organization/Affiliation (if any):

Mailing address:

Country:

Phone with full dialing code:

FAX with full dialing code:

E-mail:

I am a foreign national/NRI and my passport details are as under:

Nationality: Passport Number:

Date & place of issue:

Valid Till:

Issuing Authority:

I will be accompanied by following persons:

(Please give full name. In case of Foreign Nationals/NRIs please also give full passport details.)

- 1.
- 2.
- 3.

I intend to attend the Conference and am submitting/will submit the abstract of my paper.

I intend to attend the Conference without submitting a Paper.

I am paying herewith the Registration Charges of Rs./US Dollars
(Please write the amount in figures & in words)

The payment is being made by

Electronic transfer Wire transfer Draft No dated
through/drawn on (Name of Bank).

I will pay concessional Registration fee before 30 September 2014.

I will pay full registration fee on arrival, at the Registration Counter.

Date

Signature

Submission of this form by E-mail/Fax should be followed by signed hard copy by post

Please contact organizers, if confirmation of receipt of form is not received within 15 working days of submission

Phone: +91-522-2297821 (Direct) / +91-522-2205831 to 2205835 (PBX) Extn. 821; Fax: +91-522-2205836/2205839

E-mail: isebnbrilko@gmail.com / isebmail@gmail.com; Website: <http://isebindia.com>

WELCOME NEW LIFE MEMBERS

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Dr. Narendra Kumar, Assistant Professor, Department of Environmental Sciences, Baba Saheb Bhimrao Ambedkar University, Lucknow.
narendrakumar_lko@yahoo.co.in



NEWS FLASH

Dr. Kripal Singh life member of ISEB has been awarded with "Prof. H S Srivastava Young Scientist Award" by Prof. H S Srivastava Foundation for Science and Society, Lucknow, India for his significant contribution in restoration of degraded lands, agro-technology of *Jatropha curcas* and soil ecology.

Under the ongoing Environmental Awareness and Educational Programme of International Society of Environmental Botanists, Dr. S.C. Sharma, Vice President ISEB delivered a talk on "Global Warming, Urban Pollution and Solution" at the Jai Narayan Post-Graduate Degree College, Lucknow, on 25th February 2014. Dr. Sharma also interacted with the students and teachers of the College, and advised them to take up massive tree plantation programme in urban and rural areas of Lucknow.

Prof. R.S. Tripathi, FNA, Advisor, ISEB, and Dr. D. K. Upreti, FNAsc, Treasurer, ISEB, participated in the Lecture Workshop on "New Challenges in Plant Taxonomy, Ethnobotany & Conservation of Threatened Plant Species" under the Science Academies Education Programme sponsored by Indian National Science Academy, New Delhi, Indian Academy of Sciences, Bangalore and the National Academy of Sciences, Allahabad. The workshop was jointly organized by the Institute of Ethnobiology and School of Studies in Botany at Jiwaji University, Gwalior during 21-22 February, 2014. Prof. Tripathi delivered two lectures; first lecture on "Ecosystem Services" and second lecture on "Forest fragmentation and its ecological implications". He was also the Chief Guest at the Valedictory function of the Workshop. Dr. D.K. Upreti also delivered two lectures: first lecture on "Lichen diversity in India" and second lecture on "Bio-prospection of lichens".

Prof. R.S. Tripathi also delivered the following two invited

lectures in the Forestry and Ecology Division of Indian Institute of Remote Sensing (Department of Space, Govt. of India) at Dehradun during 12-13 March 2014. (i) "Implications of invasive alien plant species on biodiversity and ecosystems" (ii) "Millennium Ecosystems Assessment".

Dr. Jagdish Gandhi, renowned educationist and founder-manager of City Montessori School, Lucknow has been conferred with prestigious "Yash Bharti Award" for his exemplary services to the cause of education, by the Government of Uttar Pradesh. Dr. Gandhi is a Life member of International Society of Environmental Botanists since 2008.

CSIR-NBRI was awarded First Prize for its Environmental Educative Stall entitled "Role of Plants in Control of Environmental Pollution" in Flower Show of Lucknow Nagar Nigam held on 2 and 3 March 2014.

Seminar on Arsenic Problems

A one-day seminar entitled "Management of Arsenic Problems in Rice" was jointly organized by CSIR-National Botanical Research Institute, Lucknow and Rice Research Institute, Chinsurah, Department of Agriculture, Govt. of West Bengal at Agriculture Training Centre, R.K. Mission, Narendrapur, Kolkata on 30 December 2013. Dr. Chandra Shekhar Nautiyal Director CSIR-NBRI & President ISEB chaired the Seminar and addressed the gathering.

Dr. R.D. Tripathi Additional Secretary ISEB and Co-organizer of this seminar delivered a lecture entitled "Characterization of Low Grain Arsenic Accumulating Rice Genotypes and their Nutritional Quality" at the seminar. The seminar was inaugurated by Shri Pradip Majumdar, Agriculture adviser to Ms. Mamta Banerjee, Hon'ble Chief Minister of West Bengal.

All members of ISEB, who have changed their e-mail IDs during the past two years or those who did not have an e-mail ID earlier are requested to intimate their current e-mail IDs to: ISEB Secretariat at <isebnbrilko@gamil.com >.

NEWS & VIEWS

Garlic can kill deadly Bacteria

A research into garlic shows that a potent chemical substance in it neutralizes resistant bacteria by paralyzing their communication system, thus strengthening our immune system. Ajoene, the substance present in garlic, prevents the bacteria from secreting the toxin rhamnolipid which destroys white blood cells. When bacteria clump together in what is known as biofilm, where they surround themselves with a tough film of organic materials, they become resistant to antibiotics. Researchers believe that Combination treatment with ajoene and antibiotics kills more than 90% of the normally virulent biofilm. From a technical perspective, the ajoene blocks the communication system, known as Quorum Sensing, in the bacteria, which is used for creating infection.

The Benefit of Trees

In recent years the weather patterns are nothing short of crazy. While parts of the Northern Hemisphere are suffering intolerable cold conditions with floods and excessive winds and snow falls in the Southern Hemisphere there is extensive droughts, floods, winds and other horrors like super fires.

Those crying the loudest about the drought gripping their livelihoods are pictured on acreage where there is barely a tree in sight. The land is devoid of any shade and animals suffer in extreme temperatures of 40 °C and more on many days.

Where winds are roaring over the ground bare of any covering it picks up speed and before long it becomes cyclonic in its nature. It rips up whatever lies in its path and as the earth warms due to climate change things are worsening.

This planet was designed with trees to provide shade, remove carbon from the atmosphere and make oxygen that is released through their leaves. They are also habitats for birds, animals and insects which are dependent on them for their survival. Man, however, appears to have a war on trees as they are brought down to the ground and often burned.

In rainforests one can see the water that

trees pass into the atmosphere which then becomes part of the hydration system of the planet. They are, however, being removed to make way for more agriculture and animal rearing. The ideas that promote no trees in these circumstances are prominent world-wide.

So what is the value of keeping trees on properties where animal husbandry and farming takes place? Aside from the obvious, trees cool the ground and it can be several degrees lower in temperature under a tree than in the open. With rising temperatures one would think the removal of them would be considered a crime as we are all suffering the effects.

Why are there trees is a question we need to ask in the face of climate change and global warming if we want to save planet earth

Article Source:
<http://EzineArticles.com/>

Global warming may hit grain yield

A leaked report of a UN panel has predicted severe impact of global warming on food-grain production, fresh water resources and human settlements across the globe with Asia facing the brunt of it.

The document, second in series of the Inter governmental Panel on Climate Change's (IPCC) fifth assessment report which is to be made public in Tokyo on March 3, also carries details of how the global warming will create a civil-war kind of situation in many parts of the world due to huge pressure on available resources.

CSE finds toxic metals in beauty products

Several make-up lotions and creams contain toxic heavy metals, with potential health implications over long-term use. A study by Centre for Science and Environment (CSE) New Delhi claims to have found high levels of mercury in several well-known national and international brands of skin-whitening creams and chromium in several brands of lipsticks. High levels of mercury are associated with kidney damage, skin discoloration and scarring, while chromium is a carcinogen.

Despite use of mercury being banned in cosmetics under the Drugs and Cosmetics Act, 44% of the 32 fairness creams that CSE tested, reportedly contained mercury. It found chromium in 50% of 30 lipstick samples tested; and nickel in 43%. The samples also included some popular herbal products. CSE compared the heavy metals found in the cosmetics with their acceptable daily intake (ADI) – the maximum amount of toxin that a person can be exposed to over a lifetime without any appreciable health risk.

The results showed that whitening creams can contribute up to 71% of the ADI for mercury, depending on the product and the amount of cream used. Given that mercury is also ingested via food, water and air, chances are that a person using a mercury-laced cream may exceed the ADI. Lipstick users could be worse off. Among the brands that tested positive for nickel and chromium, that could expose a heavy user to over 15 times the safety limit for chromium, according to the study.

Source: Times of India

Curbs in car use due to smog in Paris

To contain unprecedented smog a day long restricted driving scheme was enforced recently in Paris. Under this drastic curb, cars with even numbered license plates were not allowed to move on city roads and over 4,000 drivers who defied the orders had to pay heavy fines, though public transport were exempted from this restriction.

Unreasonably hot and windless weather across western Europe left cooler air containing tiny particles from car emissions and other sources trapped under a warmer layer. Paris is more prone to smog than other European capitals. French policies to promote the use of diesel is seen as one factor why Paris is hit worse than other cities.

A French tax regime that favors diesel over gasoline is regularly cited as a primary cause. New registrations of French cars in 2012 were 67% diesel-powered compared with western European average of 53.3%. Recently European Environment Agency (EEA) reported 147 micrograms of particulate matter (PM) per cubic meter of air in Paris - compared with 114 in Brussels,

104 in Amsterdam, 81 in Berlin and 79.7 in London. The last restricted driving scheme was introduced in Prais in 1997.

We Are Killing the World But Who Cares?

Overpopulation, pollution, loss of habitat, genetic manipulation of plants and animals, and taking from nature to make some rich and others poor is a recipe for death. We are all on the same ship and it is going down. There are no life-boats or landing places and we will desperately swim to survive what is coming. There is already panic and there are things that are going on that could be stopped if only those in power had a mind to change.

The Japanese tsunami was horrific in both vision and consequences. People were washed out to sea in an unstoppable tide of water that swallowed everything in its path. Buildings were crushed and giant ships were washed ashore and some rested on top of buildings that remained standing. The Indian Ocean tsunami was another horrifying event that likewise washed hundreds of thousands into the sea.

The hurricanes in the USA, England, Australia and elsewhere that strike with death must be some people's worst nightmare as entire families disappear from the face of the earth. The recent one in the Philippines is a case in point. The super fires that spring up out of nowhere and engulf entire towns, take lives, destroy property and kill thousands of animals in their flames are more frequent, more horrendous and more unstoppable than ever.

Drugs are rife everywhere. Murders are occurring so often that not even the police can deal with most of them. Revenge killings, massacres in school, theatres, shopping centers and elsewhere are almost every day affair and innocent people are shot without cause by bullies who are simply looking for a thrill or to relieve their boredom. Alcohol is destroying lives and causing misery all over and yet it is promoted and favoured at parties, special occasions and so on.

We put in place man-made systems to make money and to rob nature and destroy the world. Who is really to blame when people close their eyes to

what is happening for fear of upsetting the establishment. Isn't it time we changed our ways?

We really are killing the world without any hope of saving it.

Article Source: <http://EzineArticles.com>

Hazards of Burning Agricultural Wastes

The controlled use of fire is recognized as one of humankind's great accomplishments. But we now know that using it to burn agricultural waste, like stalks and husks, or lighting a fire to heat our homes can have serious negative consequences for our health and even for the Earth's atmosphere.

Some three billion people around the world burn wood in open fires inside their homes for cooking or heating. Dioxin emissions are released from burning either agricultural wastes or wood, and are at much higher levels when waste containing pesticides or treated wood is burned. Dioxins are highly toxic, cancer-causing pollutants. Smoke from agricultural burning can produce direct, intense exposure to pollutants for nearby populations. It is estimated that burning biomass, such as wood, leaves, trees and grasses, or agricultural wastes, produces 40% of the carbon dioxide and 32% of the carbon monoxide released worldwide into the environment.

We must ensure that the wood is dry and untreated (i.e., "all natural") and avoid burning garbage or plastic. While burning wood in our home, we must ensure that we have good ventilation to allow the smoke to escape. Before burning agricultural waste, we should consider more practical ways to use it.

Climate change in top three global concerns

A new Climate Change Confidence report released by US bank HSBC lists climate change as one of the top three global concerns for consumers, alongside terrorism and economic stability. HSBC's Climate Change Centre of Excellence commissioned the report to understand the economic implications of climate change and climate-related business opportunities worldwide. This is the fourth annual study providing consumer perceptions

on climate change.

The study found respondents in developing economies have the highest concern in terms of their climate vulnerability. People in developed economies supported low-carbon solutions and pushed for businesses to invest more in resources used to tackle climate change.

The study was done by New Jersey-based Light speed Research and surveyed a total of 15,000 people in 15 countries that make up more than 50 percent of the world's population.

Source: Jessica Chen

Marine sea slug that steals chloroplasts from alga

Elysia chlorotica a "solar-powered" marine sea slug that sequesters and retains photosynthetically active chloroplasts from the algae it eats, has remarkable incorporated algal genes into its own genetic code. It is emerald green in color often with small red or white markings, and parapodia (lateral "wings") that fold over its body in life. This sea slug is unique among animals to possess photosynthesis-specific genes and is an extraordinary example of symbiosis between an alga and mollusc as well as a genetic chimera of these two organisms.

To obtain algal chloroplasts *Elysia chlorotica* slugs use their radula (tooth) to pierce a filament of the alga *Vaucheria litorea* and suck out its contents. The ingested algal cytoplasm and nuclei move through the gut but algal chloroplasts are trapped and concentrated in vacuoles along branches of the digestive tract. While inside an algal cell, functional chloroplasts use proteins encoded by their own genes as well as others encoded by genes within the algal nucleus. Within a sea slug, however, isolated chloroplasts can not receive proteins from the algal genome. Remarkably, these chloroplasts remain functional anyway because the slug genome includes the algal genes necessary for plastid function. *Elysia chlorotica* probably gained these algal genes through lateral (or horizontal) gene transfer. One possible vector is a virus that infects the sea slug and carried pieces of algal DNA (Pierce et. al.).



CONFERENCES

ICERE 2014

International Conference on Environment and Renewable Energy

7-8 May 2014, Paris, France
Contact: adeo.office@gmail.com

Urban Transport 2014

20th International Conference on Urban Transport and the Environment

28-30 May, 2014; The Algarve, Portugal
Contact: Genna West Wessex Institute, Ashurst Lodge, Ashurst Southampton, SO40 7AA
E-mail: gvest@wessex.ac.uk

Urban Environmental Pollution 2014

Climate Change and Urban Environment
12 - 15 June 2014, Sheraton Centre, Toronto, Canada
Website: www.uepconference.com/

2014 World Conference on Natural Resource Modeling

8-11 July 2014; Vilnius, Lithuania
E-mail:
contact@resourcemodellingconference2014.com
http://www.resourcemodellingconference2014.com/

International Congress on Water, Waste and Energy Management

16-18 July 2014; Oporto, Portugal
http://ewwm.net/wm.net

5th World Congress on Medicinal and Aromatic Plants.

17-20 August, 2014; Brisbane, Australia
Congress Secretariat
ICMS Australasia
PO Box 3599, Brisbane Qld 4101
Email: info@ihc2014.org

Sustainable City 2014

9th International Conference on Urban Regeneration and Sustainability

23 - 25 September, 2014; Siena, Italy
Contact: Christine Young
Wessex Institute of Technology
Ashurst Lodge, Ashurst, Southampton, SO40 7AA
Email: cyoung@wessex.ac.uk

24th IUFRO World Congress

Sustaining Forests, Sustaining People

5-11 October 2014; Salt Lake City, Utah, U.S.A.
Website: http://iufro2014.com/

ForestSAT 2014

4-7 November 2014; Riva del Garda, Italy
http://forestsat2014.com

First Global Soil Biodiversity Conference

2-5 December 2014; Dijon, France
http://www.gsbconference.elsevier.com/



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