

Environmental biotechnology*

The objective of this National Seminar was to evolve a few recommendations for sustainable development by keeping in view the opportunities and challenges in the field of environmental biotechnology. There were 63 participants from 25 different institutes of South India. Fifty three abstracts related to original research works of participants, and 50 delegates presented their papers during the four technical sessions of the seminar.

P. Namperumalsamy (Aravind Eyecare System, Madurai), a well-known ophthalmologist, in his inaugural address, stressed the significance of environmental protection and its relation with public health. He highlighted the waste water treatment and recycling efforts currently being carried out in Pondicherry Aravind Eye hospital which is spread around 28 acres and thereby ensuring that there is no water scarcity in the surrounding villages. The specific role of biotechnology and environment protection was also highlighted in his speech while discussing pollution due to oil spillage in marine ecosystem. He also dealt with the present and past biotechnological inventions that have been carried out and those that needed

to be done in future in order to tackle the growing environmental deterioration as well as sustainable development.

On the first day of the seminar, N. Raaman, University of Madras, Chennai gave an invited lecture on 'Phytochemical isolation, antimicrobial and pharmacological screening of some medicinal plants'. His lecture highlighted the basic research on phytochemistry and tools to investigate the pharmacological screening of active principles and its antimicrobial action.

The afternoon session commenced with an invited lecture by K. Balakrishnan (Bharathidasan University, Thiruchirappalli). This lecture dealt with the diversity and polymorphism of immune response genes and concluded with the role of environment in influencing gene function and evolution.

The first day papers and invited lectures had the objectives of pollution management, biotechnology and pathology. On the second day, the theme of the third session was vermiculture and biodiversity while bioprocessing was covered in the fourth technical session.

M. Vikram Reddy (Pondicherry Central University, Pondicherry) gave a lecture on vermicomposting of biodegradable municipal solid waste and its implications. He pointed out the significance of composting and vermicomposting as an environment friendly solution for garbage disposal in urban areas. He also stressed on the dual benefit of vermi-

composting namely that (a) the yield can be increased and (b) reduction of the dosage of chemical fertilizer. In the afternoon session, Partho Pratim Dhang (Ensystem Inc, North Carolina, USA) gave an invited lecture on pest management and environment. His talk highlighted the positive role of vermiculture and the negative role of mismanagement of pest control in the conservation of ecosystem. Dhang pointed out sustainable pest control by using a new kind of delivery system of chemical insecticides without polluting the ecosystem.

In his valedictory address K. Dharmalingam (Madurai Kamaraj University, Madurai) dealt with the significance of basic sciences for documenting biodiversity and stressed the need for linking basic research with biotechnological research. His talk underlined the objectives of the two days' national seminar and motivated the participants to unearth their potential for their development along with the sustainable development of the environment.

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T. Manoharan, Department of Zoology, Thiagarajar College, Madurai 625 009, India. e-mail: tczoology@yahoo.co.in

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