

## T. V. Desikachary (1919–2005)

Thamarapu Vedanta Desikachary, an eminent phycologist of India and a legend in algal research, passed away on 5 November 2005 at the residence of his second son T. Sridhar at Melbourne, Australia. India has lost a giant, leaving a big vacuum in the subject Algology.

Desikachary was born in Tirupati, the famous abode of Lord Venkateshwara of seven hills on 18 September 1919, into a family of erudite scholars intimately connected with the temple. He was educated at the Hindu High School, Tirupati and at the Presidency College, Madras. He obtained the MSc degree in 1944 and PhD in 1951 working under M. O. P. Iyengar. He served as demonstrator in Andhra University, Assistant Professor, Pachaiyappa's College, Madras, Junior Lecturer at University of Madras and Lecturer at the Saugar University. He rejoined the University of Madras in 1957. He got his DSc in 1963 and was appointed as Professor at the University in 1964, a post he held till 1975. He played a major role in making Madras one of the centres of Indian Phycology and in doing so became one of the leaders in Phycology in India. In addition, he guided the research of over twenty doctoral students, at Chepauk campus originally occupied by Iyengar and later at the Guindy campus.

Desikachary published a large number of research papers in diverse groups of algae. The books published and edited by him include: *A monograph on the Cyanophyta, Taxonomy and Biology of Blue Green Algae, Marine Plants and Volvocales*. He published the volumes on Rhodophyta and Phaeophyta with Balakrishnan and Krishnamurthy and the monumental *Atlas of Indian Diatoms* in five volumes with his colleagues.

Desikachary took up a large amount of unpublished material, left behind by Iyengar and published these as a series, entitled 'Contributions to our knowledge of South Indian Algae' from 1967. He humbly confessed that... 'It has been an embarrassing duty for me to edit these for the press. Aware of my limitations, I have endeavoured to present his observations to the best of my abilities'.

Desikachary has nurtured and built up the phycological tradition left behind by Iyengar. He established a culture collection of algae at the University of Madras. He was the first Indian algologist to under-

take electron microscopic studies of diatom frustules and highlight the implications in taxonomy. He was the first to initiate use of numerical methods in the taxonomy of blue green algae. His interests in diatoms included study of both living and fossil diatoms. He has also made significant contributions (with Sundaralingam)



towards elucidation of phylogeny and interrelationships in the Charophytes. Critical studies have also been made by him on the morphology and life histories of red algae (on the Nemaionales by himself and Balakrishnan) and on the coral-line red algae (with Ganesan). He established genera for commemorating Iyengar and other illustrious figures in Phycology: *Iyengariella* (Cyanophyceae); *Iyengariomonas*; *Papenfussiomonas*, *Schilleriomonas* and *Mantoniella* (Chlorophyceae, Prasinophyceae) and *Rossiella* (Bacillariophyceae). He strongly put forth Iyengar's hypothesis regarding the origin and evolution of the filamentous habit and also postulated that the development of parenchymatous thalli in many algae are modifications of the palmelloid habit. The observations that in the 'truly' parenchymatous tissues, plasmodesmata between adjacent (and genetically related) cells get dissociated prior to cell division leading to vegetative and sexual reproduction and prior to meiosis, led him (along with Swamy) to postulate that isolation and insulation are key processes in the vital phenomena of sexual reproduction and reduction division in living systems as also the survival of genetically altered cells, such as zygotes meiocytes, *in situ* mutants, etc. He organized the Interna-

tional Symposia on Taxonomy and Biology of Blue Green Algae in 1970 and Taxonomy of Algae in 1974 at the University of Madras, thus bringing about an interaction between leading phycologists from other lands and younger Indian phycologists. He was instrumental in the organization of the M.O.P. Iyengar Birth Centenary in 1986, which was celebrated with great enthusiasm by an international workshop followed by a symposium. He delivered the Prof. Birbal Sahni Memorial Lecture at Lucknow in 2001 and the Y. Bharadwaja endowment lectures at Banaras Hindu University in 2002.

Desikachary has worked on red algae with G. F. Papenfuss, University of California, Berkeley, and at the Cryptogamic Museum, Paris, and British Museum of Natural History, London.

Desikachary was a Fellow of the Indian Academy of Sciences, a Fellow of the Indian National Science Academy and a Fellow of the Phycological Society of India. He was the chief editor of *Phykos*, member of the editorial boards of *Phycologia*, the *Indian Journal of Marine Sciences* and *Hydrobiologia*. He was recipient of Sir C. V. Raman Medal of the University of Madras and the Prof. V. Puri Gold Medal of the Indian Botanical Society. Recently he was honoured by the American Phycological Association for his lifetime contribution at the International Phycological Congress, Durban, in August 2005.

During his last days, he was preparing the manuscript for the volume on Dinoflagellates and the description and keys for his diatom atlas. I had the opportunity to be associated with him from 1969 and feel that a great teacher and scholar will be missed. The encouragement and enthusiasm he initiated and inculcated will remain forever.

ACKNOWLEDGEMENT. I thank Prof. C. V. Subramanian for his suggestions and corrections in the manuscript.

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