

OBITUARY



Dr. K.S.S. NAIR

1938-2025

K.S. SADASIVAN NAIR *alias* Krishna Sivasankara Sadasivan Nair, former Forest Entomologist and Director, Kerala Forest Research Institute, Peechi, passed away on the 20th April, 2025, at his residence ‘Saketh’ in Sasthamangalam, Thiruvananthapuram. He was an astute scientist and administrator who made substantial contributions to tropical forest insect pest management. He was 87.

Dr. K.S.S. Nair was born on 18-08-1938 as the youngest child of Shri. K. Sivasankara Pillai and Smt. Madhavi Amma of Kalluvila family in Thiruvananthapuram. Late Dr. S.M. Nair, founder Director of National Museum of Natural History, New Delhi was his elder brother. KSS had his early education in the Govt. Model Higher Secondary School for Boys, Chalai, Thiruvananthapuram from where he passed his matriculation in 1954 in First Class with distinction. Thereafter, he joined the Intermediate College, Thiruvananthapuram (now University College), and completed his Pre University (1956) and B. Sc. (1958) degree courses in First Class with Distinction. As a student, KSS was very active in sports and extracurricular activities. He has represented the college in Inter-University Volleyball tournaments and

won several prizes. KSS also showed keen interest in learning various languages. He passed a certificate course in Hindi (Rashtra Bhasha Pariksha) conducted by Dakshin Bharat Hindi Prachar Sabha in 1951 and also completed a Certificate Course in German Language in 1962. With regard to English, he had excellent mastery of the language and he was an excellent orator, writer and editor.

Dr. Nair completed his M.Sc. (1960) and Ph.D. (1964) from the Department of Zoology, Maharaja Sayajirao University of Baroda, India. For his Ph.D., he worked on a topic entitled 'Studies on certain aspects of the physiology of the furniture-carpet beetle, *Anthrenus vorax* Waterhouse (Dermestidae, Coleoptera)' under the guidance of the eminent Zoologist Dr. J.C. George. On completion of Ph.D., he joined as a Lecturer in Zoology (1964-1969) in the same University. During this period, he also served as the Principal Investigator of a PL480 project to elucidate the cause-effect relationship of diapause in the stored grain pest, khapra beetle, *Trogoderma granarium* Everts.

On securing a post-doctoral Fellowship in the Department of Environmental Biology, University of Guelph, Ontario, Canada, KSS left India in 1970, to work on the biology, ecology, and chemical basis of host plant selection of the seed corn maggot complex, *Hylemya (Delia) platura* and *H. (Delia) liturata* (Diptera: Anthomyiidae) under the supervision of Prof. F. L. McEwen (1970 to 1975). As part of his post-doctoral programme, he also got trained in the Systematic Identification of Diptera with special reference to Anthomyiidae under the guidance of Dr. J.P. McAlpine of the Agriculture Department, Ottawa, Canada. While in Canada, he was President of Indian Students Association, University of Guelph from June 1971 – April 1972. In this capacity, he held monthly meetings of the Indian student community in the University and their families to discuss common issues and also organized various social and cultural activities.

On completion of his assignment in Canada, Dr. Nair returned to India in December 1975 and joined the Kerala Forest Research Institute as a Scientific Pool Officer, supported by the Council of Scientific and Industrial Research (CSIR), Government of India. At that time, KFRI was in its formative stage, and Dr. Nair was selected as its first Entomologist. On 11th Dec. 1976, he took charge as the Head of the Division of Entomology when the Division was just established. With five other Entomologists recruited subsequently, viz., Dr. R.V. Varma, Dr. George Mathew, Dr. V.V. Sudheendrakumar, Dr. K. Mohanadas and Dr. T.V. Sajeev, he carried out problem-solving research as well as pioneering fundamental studies on forest insect fauna, pest ecology and population dynamics to provide practical methods of pest management for use by the Forest Department. The results of these investigations were published in over 300 publications including Journal Papers, Chapters in Books, Reviews, Information Bulletins, Research Reports, and Books. These studies also received international recognition as it extended our knowledge on various aspects of tropical Forest Entomology. Based on his contributions to tropical forest pest management, Dr. Nair was elected as Co-Chairman and then as Chairman of the IUFRO (International Forestry Research Organizations) Working Party S2.07.07 entitled 'Protection of forest in the tropics' (later renamed 'Forest Health'), for the period 1986 to 1996. He continued to head the Division of Entomology for 18 years. During this period, he also held additional charge of the Director of the Institute for three years from 1988 to 1991. Later in Jan. 1995, he was appointed as the Director of KFRI and continued until superannuation in July 1999.

Dr. Nair was quite philosophical and at the same time very practical in his research approach. He followed an ecosystem-based approach in tackling forest pests. He carried out several studies to elucidate the population dynamics of insect pests in natural forests and in plantations. Do plantations suffer greater

pest damage than natural forests? And if so, why? This aspect was investigated in relation to teak defoliator (*Hyblaea puera* Cramer) epidemics in teak plantations in Kerala. The occurrence of migratory and non-migratory phases has been considered as the cause for seasonal epidemics in teak defoliator. He also recognized the role of nuclear polyhedrosis virus (NPV) in natural suppression of teak defoliator. Based on these findings, application of *Hp*NPV control agents within an integrated pest management strategy has been proposed against the teak defoliator.

Another major contribution of Dr. Nair was pertaining to termite control in Eucalypt plantations. In young plantations of eucalypts, termites cause serious damage due to root feeding. Though a number of control methods have been proposed, there had been no attempt to systematically evaluate them under Indian conditions. Combinations of selected insecticides in different dosages, formulations and methods of application were tested in several experiments and spot application of appropriate chemicals have been proposed.

Biology and control of insect pests of fast-growing hardwood species particularly *Paraserianthes* (*Albizia*) *falcata* and *Gmelina arborea*; seasonal Incidence, host Range and control of the Teak Sapling Borer, *Sahyadrassus malabaricus* as well as protection of fibrous raw material (reed and bamboo) in storage against deterioration by biological organisms are some other major research projects handled by him.

After his retirement from the service of KFRI, Dr. Nair worked as a Visiting Scientist at CIFOR (Center for International Forestry Research), Bogor, Indonesia from Sept. 1999 to Dec. 1999. In this capacity, he made an assessment of the insect pests and diseases situation in Indonesian forests and examined the susceptibility of plantations of exotic versus native tree species to pest outbreaks. From October 2002 to December 2004, he worked as an Emeritus Scientist Under the Department of Science and Technology, Government of India. Under this programme, he prepared the manuscript of a book entitled 'Tropical Forest Insect Pests: Ecology, Impact, and Management' which was published by Cambridge University Press in May 2007. A paperback edition of this was published later in October 2012. The book gives comprehensive information on all aspects of tropical forest insects - their diversity, ecology, circumstances in which their populations increase to assume pest status, pest population dynamics in plantations and natural forests and plantations of exotic *versus* native species, and gives detailed information on specific insect pest problems of common plantation tree species across the tropics and recommendations for their management. During this period he has also served as a Member of the Research Council of KFRI besides being a member in several State and National Expert Committees.

Dr. Nair who was a Life Member of the Association for Advancement of Entomology (AAE) since 1975 took charge as President of the Association in October 1998 and continued in this position till March 2019. During this period, he also served as the Editor of the journal, ENTOMON. It is noteworthy that during his tenure, he worked hard to bring out all pending issues of the journal.

Dr. Nair was a committed scientist and at the same time a good administrator. He was very soft and kind and at the same time, highly ethical and idealistic in nature and never yielded to any unjust pressure or recommendation. He was a unique personality who took great pleasure in helping his colleagues and students in the scientific pursuits and readily helped anyone in distress. Dr. Nair's contributions to forest entomology and his vision in shaping the destiny of KFRI to an Institution of Excellence in Tropical Forestry will always be appreciated.

Dr. Nair was a quiet, and an unassuming person but his intellectual superiority was obvious to those who worked with him. The depth of his knowledge was astounding. Above all, he was a keen and intelligent observer of nature with a deep knowledge of many fields.

Dr. Nair was a very kind, affectionate and family-oriented person. His demise will be a great loss to his wife, Smt. Sathi Nair, children and grandchildren. In fact, his wife's interest in his work and the strong support she gave throughout their happy married life contributed substantially to Dr. Nair's success in scientific pursuits. I am sure, Dr. Nair's life and work will remain to inspire others and he will be remembered with affection by all those who knew him.

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