

OBITUARY



Dr A. Visalakshi

A PIONEERING PESTICIDE RESIDUE ANALYST &

ENTOMOLOGIST PASSES AWAY

1939–2024

We are deeply saddened to record the passing of Dr A. Visalakshi, former Professor and Head of the Department of Agricultural Entomology at the College of Agriculture, Kerala Agricultural University, Vellayani, Thiruvananthapuram on May 31, 2024. She was born to parents of Tamil origin in Thiruvananthapuram, Kerala in 1939. She received her B Sc degree in Agriculture, M Sc in Agricultural Entomology and doctoral degree from the Kerala Agricultural University in 1960, 1963 and 1977, respectively. Her doctoral thesis on ‘Dissipation of phorate residues in soil and cowpea plant in relation to pea aphid control and soil microbe population’ was the first of its kind in the Kerala Agricultural University.

Soon after graduation in 1960, Dr Visalakshi joined the College of Agriculture, Vellayani, then affiliated to the University of Kerala, as a Research Assistant and was later shifted to the Department of Agricultural Entomology, with which she was associated all through her professional life. Dr Visalakshi is known for her work in toxicology, pesticide residues and insect pests. She established a separate unit for pesticide residue analysis as early as 1974, under the Insect Toxicology section of the Department of Agricultural Entomology. She took the initiative to newly establish a Centre of the All India Coordinated Project on Pesticide Residues, funded by ICAR, at the College of Agriculture, Vellayani despite significant challenges and became the Residue Analyst and in-charge of the Centre in March 1987. Her determination and dedication ensured that Kerala was not left behind in this crucial area of research.

She was the first to report the presence of pesticide residues in various food items from Kerala. As the Principal Investigator, she systematically analysed pesticide residues in food commodities such as milk and milk products, cattle feed, fodder, cereals, pulses, vegetables and fruits collected from markets. Her investigations revealed the presence of HCH residues in breast milk samples, collected from lactating mothers in the Women and Children Hospital, Thiruvananthapuram for the first time in Kerala. The extent of pesticide contamination in various food commodities in the rice and spice growing belts in the state, as revealed through her studies, assisted policymakers and planners in formulating strategies for the safe use of pesticides.

During the early periods of her career as Assistant and Associate Professor, she worked closely with the personnel of the Kerala State Department of Agriculture to find solutions to many problems related to insect pests and pesticide use. She has identified and reported six new insect pests and has worked out control measures against 26

crop pests, of which nine were accepted for inclusion in the Package of Practices Recommendations of the Kerala Agricultural University. As a plant protection extension specialist, she has also trained a multitude of farmers in integrated pest management.

Under her leadership, Team Visalakshi has made significant strides in pesticide residue analysis. They elucidated the persistence and degradation of organophosphate and carbamate insecticides in various crops such as rice, bananas, vegetables and fruit crops. She further extended her focus to spices such as cardamom, pepper, and ginger, where she overcame significant challenges to develop reliable pesticide residue data. She was the first to take up pesticide residue analysis in cardamom and pepper, two high-value spices exported from Kerala.

Dr Visalakshi's commitment and dedication were unparalleled. She travelled extensively throughout the state, including the remote high ranges of Idukki district, to conduct field experiments. She collaborated with other renowned workers in the field, such as Dr A. Regupathy from TNAU, Coimbatore, to analyse samples and generate valuable data. Her research contributed to developing pesticide recommendations for managing serious pests affecting crops such as coconut, bananas, and vegetables.

Dr Visalakshi was an exceptional educator. Her unique teaching style and practical assignments inspired countless students. Her ability to create enthusiasm for entomology and pesticide courses is fondly remembered by her students. She has teaching experience of 27 years, during which she has guided one Ph D and six M.Sc. (Ag) students and served on the Advisory Committee of 27 students.

She was an active member of the Association for Advancement of Entomology and served both on the Executive Committee and the Editorial Board of *Entomon*. Dr Visalakshi was one of the key members instrumental in the revival of *Entomon* during 2013-14 and the Association owes allegiance to her for the staunch support during the struggle. She has also served the Kerala Agricultural University and other institutions in different capacities as Project coordinator of Plant Protection, member of the Board of Studies of the Annamalai University, Resource person for the T&V Project, and Pesticide Residue Expert in several externally funded projects. Besides Tamil, she had impressive literary skills in Malayalam, authoring several books and technical bulletins, aimed at agricultural extension officers as well as students of Agricultural Entomology.

Dr Visalakshi's administrative skills were equally remarkable. She served as the Residue Analyst and Principal Investigator of AICRP on Pesticide Residues from 1988 and later as the Head of the Department of Agricultural Entomology from 1995 till her retirement in 1999. Her capacity for team building was exemplary, leading teams of entomologists, residue analysts, and toxicologists in addressing pest management issues and studying insecticide dynamics.

Dr. Visalakshi's legacy includes 156 research papers published in National and International journals, edited textbooks and conference/symposium proceedings. She had research experience of 35 years in the University. She was passionate about attending scientific meetings, seminars, and conferences across India and abroad, often encouraging her team members to present their work. She has participated in 71 National and 8 International conferences. Her presentation skills, even before the advent of PowerPoint, were renowned for their creativity and effectiveness. In recognition of her research accomplishments, she was awarded the Archana Pallav Gold Medal, instituted by the Association of Environmental Biology in 1990.

Her memory will continue to inspire generations of students and teachers of entomology.

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(Students of Dr A. Visalakshi)

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