



IN MEMORIAM SHRI N.L. KALRA

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*“Ignorance is the curse of the God;
Knowledge is the wing wherewith we fly
to heaven.”*

— William Shakespeare

BIOGRAPHY

Indian medical entomologist Shri Nand Lal Kalra was one of the most distinguished names in the field of vector biology and control across the globe (Fig. 1). He was born in Multan in western India (now in Pakistan) on 26th May, 1931.

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Fig. 1. Shri Nand Lal Kalra (26th May, 1931 - 4th June, 2021)

He completed early education in Multan but soon moved out to seek higher education. He finally obtained a post-graduate degree in Zoology, with specialization in Entomology, from Government College, Ajmer, Rajasthan. Although Mr Kalra was not a Ph.D., he was an examiner of Ph.D. candidates for many universities. Such was his grip on the subject of medical entomology.

Shri Kalra started his carrier as Malaria Inspector in National Malaria Eradication Programme (NMEP), Kanpur, UP and subsequently joined the post of entomologist in the National Institute of Communicable Diseases (NICD), Govt. of India, now National Centre for Disease Control (NCDC). He rose to the position of Deputy Director (Entomology) and became Head of Division of Medical Entomology and Vector Control. Not long before, however, he returned to the

NMEP, now NVBDCP (National Vector Borne Diseases Control Programme), as the Central Coordinating Officer, a rank he held till his retirement on superannuation in May, 1989.

Shri Kalra, fondly called ‘Kalra Sahib’ among his friends and colleagues, was both a mentor and a teacher. He is best remembered for his monograph on identification keys of the Indian anopheline mosquitoes, “Anopheles of India Region” (in joint authorship with Dr B.L. Wattal), which was an inevitable reference book for identification of anophelines in the field during early period of the NMEP. This book was an outcome of his extensive surveys throughout the country (Fig. 2). His *de novo* reporting cutaneous leishmaniasis in the deserts of Rajasthan State and malaria zoonosis of simian origin in Andaman & Nicobar islands are classical examples of changes in epidemiology in vector-borne disease. He is also credited for the discovery of diurnally subperiodic form of lymphatic filariasis spread by *Aedes (Finlaya) niveus*. With Dr Kondrashin, a WHO malariologist, he put forth the idea of malaria as an anthropo-ecosystem.

He was an outstanding teacher and trained a large number of medical entomologists in the NVBDCP, NCDC, IDSP (Integrated Disease Surveillance Programme), ICMR (Indian Council of Medical Research) etc. in the capital and in various States/Union Territories of India. He investigated many outbreaks of malaria, dengue and other VBDs in the country.

After superannuation, he served World Health Organization at its South East Asia Regional Office in Delhi and contributed significantly to the publication of the journal, ‘*Dengue Bulletin*’, for more than 10 years. He carried out many WHO assignments in the field of malaria in Bhutan, Indonesia, Nepal, Russia, Sri Lanka, Thailand and Timor-Leste. He was special invitee for Stockholm convention of Global alliance meeting, United Nation Environment Programme.

Bestowed with several prestigious honours, he dedicated his life to the eradication/elimination of communicable diseases in India. Three achievements single out his contribution to the VBDs, viz., (i) Overseeing malaria as an anthropo-ecosystem, (ii) Control of *Aedes*-borne diseases, and (iii) Emergence of malaria zoonosis of simian origin.

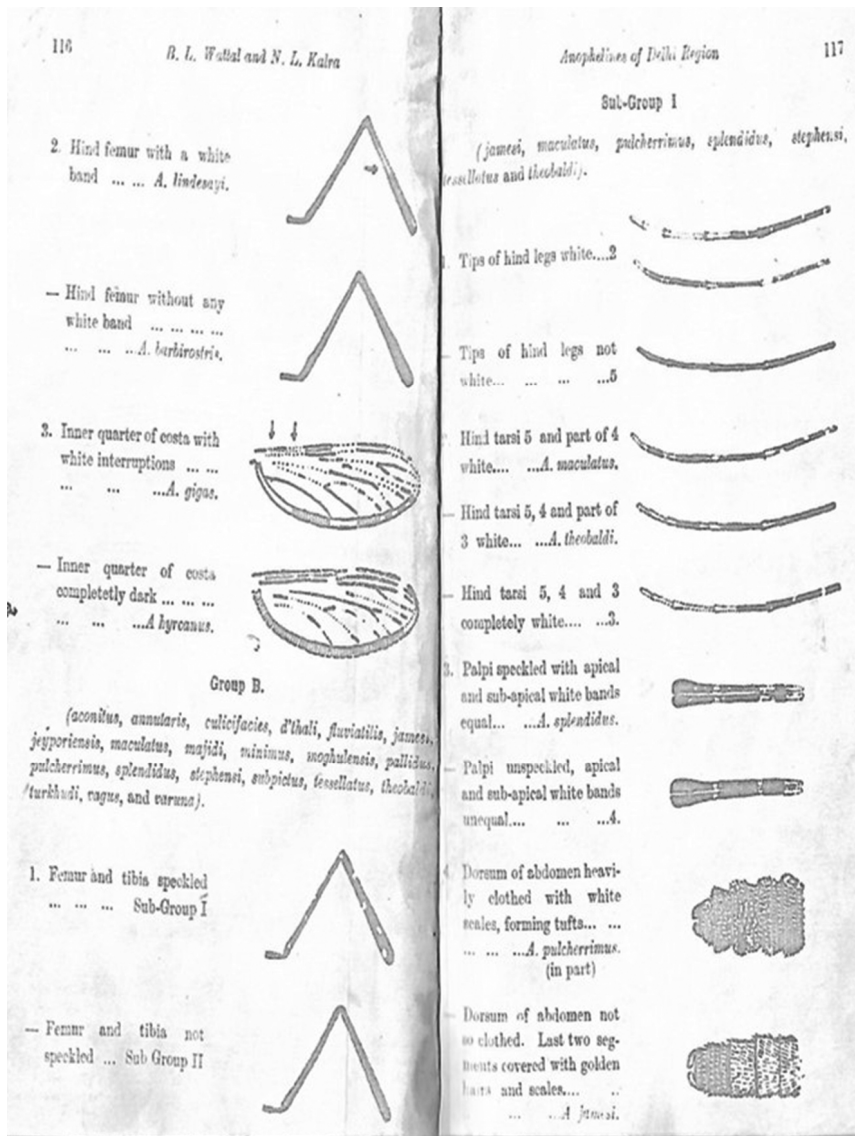


Fig. 2. Facsimile of a couple of pages from the "Region wise keys to female Indian Anopheles." (Wattal & Kalra, 1961).

He published over four dozen papers on various vector-borne diseases. National Academy of Vectors and Vector Borne Diseases, India instituted the 'Nand Lal Kalra Award' in his honour, given to a scientist with significant contributions in the area of "Field Entomology" during their periodic international conferences.

Shri Kalra, who breathed his last on the 4th June, 2021, has left a lasting impression in the hearts of many of his associates and admirers. He touched the lives of countless entomologists and malariologists across the region. An astute educator, mentor, and eminent malariologist, he truly made a difference during his long career and will be missed by his students and colleagues alike!

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