IN CONVERSATION WITH VEENAKUMARI KAMALANATHAN

A MULTIFACETED ENTOMOLOGIST WHO WORKED ON INSECT BIODIVERSITY IN VARIED ECOSYSTEMS, NPV AND TAXONOMY OF WASPS.

Dr. Veenakumari PhD was born in Kolar, Karnataka and completed her schooling there at the Methodist School. She subsequently joined the University of Agricultural Sciences (UAS), Hebbal, Bangalore where she completed her B.Sc. (Agri), M.Sc., (Agricultural Entomology), and PhD in Agricultural Entomology. Dr. G. K. Veeresh was her guide for both her Master's and PhD programmes. She received the University Gold Medal for securing the highest marks for her PhD.

On completion of her postgraduate studies, she joined the Department of Entomology, University of Agricultural Sciences as a Research Assistant. Resigning from this post she later joined the ARS as a Scientist at the Central Agricultural Research Institute (now ICAR-Central Island Agricultural Research Institute), Port Blair, Andaman and Nicobar Islands in 1989. After a fourteen years stint in the Andaman and Nicobar Islands, she was transferred to the Project Directorate of Biological Control (now the National Bureau of Agricultural Insect Resources), Bangalore from where she retired as a Principal Scientist in 2019.

During her scientific career she worked on various facets of entomology including studies on insect biodiversity in varied ecosystems, the utilization of NPV to manage *Amsacta albistriga* (Lepidoptera, Noctuoidea, Erebidae, Arctiinae), and the taxonomy of Platygastroidea (Hymenoptera). During the course of her studies on Indian Platygastroidea she described four new genera and a number of new species, and revised some genera.

Her book, the 'Butterflies of the Andaman and Nicobar Islands', coauthored with some of her colleagues at CARI, Port Blair was published in both English and Hindi. The latter received the Dr. Rajendra Prasad Puraskar for Technical Books in Hindi in Agricultural and Allied Sciences in 2010.

Post retirement, she continues to be actively engaged in taxonomic studies of the Platygastroidea.

Interview of Dr. Veenakumari Kamalanathan PhD by Dr. Rachana R.R.

RRR: Tell us about your childhood and what inspired you to pursue your career in entomology?

VK: Animals caught my fancy from a very young age. Compassion towards all living organisms was inculcated in me by my mother. I loved to listen to stories about sparrows, crows, etc. from the Jataka tales and Aesop's fables. It was easy for me to transition from the worlds of these anthropomorphised animals to living beings in the real world. When the course in entomology was offered during my undergraduate days, it was so exciting that I knew I had found my calling. People tried dissuading me from pursuing my Master's in

entomology as it was perceived to be very difficult. But my fascination for living beings was great and I was ready to rough it out.

Migrant butterflies passed in their hordes during certain seasons and the lamps at night were smothered in the most diverse array of nocturnal insects: never before– or after - have we seen such large congregations of Lucanidae and Brentidae at lights.

RRR: Your professional career began at ICAR-CIARI, Port Blair. Was this by choice or by chance?

VK: Unlike the Pandavas who were forced to spend thirteen years and Rama who was forced to spend fourteen years in the forest, I was not forced to serve in the Andaman Islands. My husband Prashanth Mohanraj opted to work at the Central Agricultural Research Institute (now ICAR- Central Island Agricultural Research Institute), Port Blair, and the Indian Council of Agricultural Research (ICAR) readily obliged by changing his posting from the Central Tuber Crops Research Institute (CTCRI), Trivandrum (even before he reported there) to CARI.

We fell in love with the islands from the time we landed. Its people were caring and friendly while its forests were dense and mysterious, and the sea was ever present. Insects were abundant. Migrant butterflies passed in their hordes during certain seasons and the lamps at night were smothered in the most diverse array of nocturnal insects: never before - or after - have we seen such large congregations of Lucanidae and Brentidae at lights. What more could one ask for. Added to this was the historical importance of the islands. It had played such an important part in our freedom struggle; so many who had fought for our freedom had been incarcerated here by transportation across the dreaded waters of Kalapani. Having experienced the islands for a while I could think of nowhere else where I'd like to work. I resigned from my permanent job as a Research Assistant at the University of Agricultural Sciences, Gandhi Krishi Vigyana Kendra (GKVK), Bengaluru - which in fact was the beginning of my professional career - and prepared for the Agricultural Research Service (ARS) examination. I knew that I was taking a tremendous risk as I stood precariously on the threshold of the age limit for entering the ARS. I had only one chance. If I failed, the door would forever be closed to me. Nevertheless, I decided to take the risk and took the plunge, and succeeded, standing first in entomology that year.

RRR: Could you share some memories from your time in the Andaman Islands?

VK: I spent fourteen unforgettable years, both professionally fulfilling and personally satisfying, on these idyllic islands.

When I joined CARI, Dr. A.K. Bandyopadhyay (a soil scientist) was the Director. A dream Director, he gave us free reign to work on aspects of our choice. His only stipulation was that we publish good papers. One of the areas of study I chose was insect biodiversity in the mangroves of the islands - an ecosystem that had been very little studied for their insects, anywhere in the world. The mangroves of the islands though not as extensive as that of the Sundarbans are the most floristically diverse in the country. Among other discoveries of insects in the mangroves, one that stands out in my mind is the discovery of the rare, handsome blue nawab butterfly (*Polyura schrieber*). Only a wing of this species had been found by the British lepidopterist who had worked most rigorously on the butterflies of these islands. As Chief Commissioner of the islands, he had no difficulty in

employing prisoners (whom he personally trained) to collect butterflies for him. No one knew if *P. schreiber* was a resident or a vagrant on the islands till I found the eggs and larvae of this butterfly and reared it on its mangrove food plant (*Rhizophora* sp.). Since there was no reference collection of the insects of the islands, particularly those of agricultural importance, we felt that the setting up of one was to be our primary goal. We were told that it would be impossible to set one up owing to the high humidity and warm temperatures that prevailed all year round on the islands. Added to this was the disdain for museums among the non-entomological community and the high cost of installing a dehumidifier. However as luck would have it, we could convince Dr.R.S. Paroda, Director General, ICAR, on the necessity for the establishment of an insect museum during one of his visits to the institute, and he sanctioned the requisite funds for a custom made dehumidifier. The collection continues to be maintained at the Institute, and is a draw to visitors there, both entomologists and lay persons.

We used to take our son, Rekil Prashanth on collection trips from a very early age. The first such trip was to Tarmugli, an uninhabited island off the southeastern coast of South Andaman, when he was a year old. We slept in the open, on mats under a starry sky. From then on, he'd accompany us to many places, and he has collected some interesting insects. He used to bring insects from school too. His desire to become an entomologist or biologist was thwarted by us, for which he continues to blame us. He has now taken up the photography of birds to satisfy the passion for the outdoors and the study of living beings that he developed early in life. That in a way is consolation to us: while we prevented him from taking up biology as a career, we at least developed in him an abiding taste for the outdoors (very unlike many of his peers who have no feeling for the environment and are most comfortable sitting indoors before a computer console).

In spite of all the hardships, even today I feel that [Port Blair] was the best place to work, a sentiment shared by the vast majority of my fellow-scientists who worked there.

RRR: How was life in general on the islands?

VK: In those days (the late 1980s and 1990s), power cuts were frequent. With no electricity we'd have to spend whole nights in the darkness. Large centipedes and snakes (especially the Andaman pit viper) were quite common. It was not uncommon to hear of people being bitten by centipedes (*kankhajuras*, in the vernacular there) that had crept into their mosquito nets. One even found its way up a colleague's leg and bit him high up on his thigh, leading the famed herpetologist Rom Whitaker, who on learning about it, remarked: "how fortunate, it could have wrecked his married life!'.

Public transportation was unreliable and maddeningly infrequent those days. Often one had to return home after having waited for hours for a bus that failed to turn up. Medical facilities were poor and meagre. We were lucky to have found a beloved friend in Dr. Radha Shyamala who took care of all our medical needs including the birth of my son Rekil. Vegetables and fruits were in perpetual short supply. If ships from the Indian mainland were delayed, the prices of onions and potatoes would shoot up. Tomatoes were priceless. Unable to put up with these circumstances many scientists posted to the Andamans were constantly on the lookout for transfers to institutes on the mainland. To me these conditions added a genuine charm to the way of life there. Bangalore (now Bengaluru) then was poised to take wing as the

software capital and tech titan of the country. It was fast losing its innocence and metamorphosing into a megalopolis from the warm-hearted garden city and pensioners' paradise that it was justly famous for. At that moment the Andaman and Nicobar Islands turned out to be the perfect counterpoint in my life.

In spite of all the hardships, even today I feel it was the best place to work, a sentiment shared by the vast majority of my fellow-scientists who worked there. Our Director A.K. Bandopadhyay during those days used to encourage us to work. Never imposing his ideas on us, he always found words of encouragement, prodding us to keep working in spite of the hardships.

RRR: Any other memories from your stint as an entomologist in the Andaman Islands?

VK: There are many, though some stand out in my mind. When I first started work as an entomologist in the Andamans I decided that I'd work on dung beetles as I had worked on them for my PhD and so was familiar with the group. But it soon became evident that these islands had a depauperate dung beetle fauna. Then I began work on the insects of mangroves and discovered that the enormous Atlas moth (*Attacus atlas*) fed on species of *Rhizophora*, the dominant plant in the mangroves of the Andamans. A perusal through the literature made it evident that there were other Saturniidae on these islands on which nothing was known about their natural history. Over the years I worked out the life histories of all the saturniids then known on the islands including species of *Actias*, *Cricula* and *Antheraea*. These also turned out to be star attractions to visitors who visited our institute.

We also rediscovered a swallowtail butterfly, *Losaria coon sambilanga* (Lepidoptera, Papilionidae) in Great Nicobar, one that had been collected in the 1880s by William Doherty, and never again. It is not known to occur on any other island in the Andamans or Nicobars. There are many other interesting insects that we collected and studied from Great Nicobar, including some Platygastroidea.

Shortly after I joined CARI, the ICAR began permitting scientists to seek funds for projects from other institutions within the country. Being a new idea, it was viewed by the scientific community there as an unsavoury, additional burden that one would be inviting on oneself. I was the first at CARI to apply for and procure funds for a project on the insects of mangroves from an external source (Ministry of Environment and Forests, Government of India). Others later followed suit.

RRR: How did your shift from ICAR-CIARI, Port Blair to ICAR-NBAIR, Bengaluru change your research interests as an entomologist?

VK: My interests had not changed. But I was not given any choice of alternatives even within the research perspectives of the erstwhile Project Directorate of Biological Control (now ICAR-NBAIR). I was assigned work on the NPV of insects. The ostensible reason being that the current expert on the subject at PDBC would soon be retiring and someone had to take on his mantle. Arrangements were made for me to be trained under Dr. R. J. Rabindra, the foremost expert on the subject then in the country, at TNAU, Coimbatore. By a quirk of fate Dr. Rabindra succeeded Dr.S.P.Singh as the Director of PDBC by the time I began work in earnest on the NPV of *Amsacta albistriga*. Work on this involved extensive field work in villages in and around Pavagada. With able assistance from Srinivas, my enthusiastic and dedicated Research Assistant, I produced large quantities of the NPV of *Amsacta* and successfully created natural epizootics of the

disease with its large-scale application in the field. Even when I retired, 20 litres of the concentrate of this virus were still available, which was handed over for further studies in the institute.

Later when the focus of the institute shifted, I began work in insect taxonomy.

RRR: You chose to work on insect taxonomy towards the later phase of your career. We would like to know the motivation behind this bold step that you took.

VK: The chance to study the sheer diversity of insects was what motivated me to pursue entomology for my post graduate studies. My PhD was on the diversity of dung beetles (Coleoptera: Scarabaeidae: Scarabaeinae) in Bengaluru. Taxonomy then appeared too daunting, though my work on dung beetles gave me some exposure to the discipline. Nevertheless, the desire to master it at some time in the future lurked deep down within me. When the opportunity finally offered itself, though late in my career, I took it – with more than a modicum of trepidation though.

RRR: We are curious to know why you selected Hymenoptera from among the several groups of insects for taxonomic studies?

VK: Hymenoptera being an important component of ecosystems in general and agroecosystems in particular – that too at multiple trophic levels – was an important consideration. When I was still undecided about which taxon to take up for my studies it was Dr. H. Nagaraja, the world renowned *Trichogramma* taxonomist (then working at our institute), who suggested that the Scelionidae (Hymenoptera) are an important and interesting taxon that I could focus my attention on. He had collected scelionids that were parasitoids of triatomids for a biological control project that he worked on when employed at the Commonwealth Institute of Biological Control, Bengaluru. He had then got in touch with Dr. L. Masner, the world's most distinguished taxonomist on Platygastroidea, who described the scelionids collected by the CIBC centre, Bengaluru as new species. Nagaraja also gave me a reprint of a paper by Masner from his personal collection. With that I made my choice.

However, my travails began after I made this choice. I found myself floundering rudderless, unable to find my footing and hopelessly lost in the maddening world of microhymenopteran diversity. It was then that Dr. Rabindra agreed to send me to any place in India to familiarise myself with the group. Even a cursory scan of the literature would indicate to anyone that Dr. K. Rajmohana, was the only expert on the taxon in our country. So, it was to her laboratory at the Zoological Survey of India (ZSI), Calicut that I went. She became the beacon to the taxonomy of this group to me. Her warmth and graciousness were boundless; and she gave me unfettered access to her collection while simultaneously sharing her intimate knowledge of the taxonomic subtleties of these little insects. After the fortnight of rigorous exposure to Platygastroidea under her guidance I gained some confidence to set out on my own. Our relationship has continued to blossom with the passage of the years.

I also knew that I could rely on the unstinting and selfless assistance of B.L. Lakshmi and Sasikala (who is sadly no more with us today), two highly motivated and committed people, whom I could count on for assistance in the collection and processing of specimens.

RRR: Have you had role models in your personal life or in your professional career?

VK: My mother was of course my first role model. Her sense of discipline in whatever she did was an

aspect of her character that I tried hard to emulate, though not always with the level of success I'd have liked.

Professionally Dr. C. A. Viraktamath is my role model. His single-minded devotion to work is unparalleled. When I was engaged in research while pursuing my PhD, he was the only member on the staff of the Department who'd be working late into the night on most days. It was then that I resolved that I too should try and work like him. After I began work on the Platygastroidea, Dr. Lubomir Masner and Dr. E. J. Talamas, both platygastroid taxonomists, have been added to my pantheon of professional role models.

Jane Goodall, the intrepid primatologist who blazed a lonely trail pioneering studies on chimpanzees in the wild, in the forests of Tanzania was an early role model. Her autobiography had appeared a few years before I began my Ph. D. which I read with awe and admiration. I now think I was at times foolish in venturing out alone to isolated and lonely locales in search of insects inspired by her example. I'd be more careful now and I don't think I'd venture out alone to such places anymore.

RRR: Is there any instance that you value as appreciation from the entomological or taxonomic community?

VK: Though it smacks of immodesty, what I consider the most memorable appreciation (one that I have only shown to a very few people) is an email from Dr. Lubomir Masner, the preeminent platygastroid taxonomist, in response to an e-copy of a paper of mine on Indian *Calotelea* that I sent him in 2022. His email to me is reproduced verbatim below:

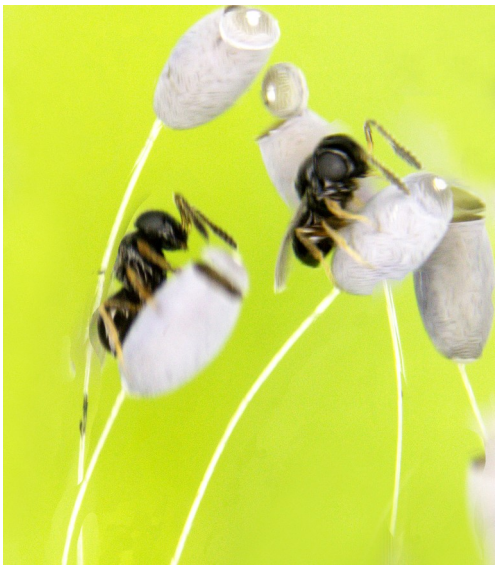
From: Lubomir Masner
Date: Thu, Feb 10, 2022 at 10:55 PM

Subject: Re: Calotelea
To: Veenakumari Kamalanathan

Dear Veena:

Congratulations! Your paper on Indian Calotelea is a real gem! I appreciate both its structure and the high quality of photos, truly a paper that is "user friendly", a model to be followed. In particular I am amazed by your rich material of freshly collected specimens all across India, I can imagine the time and effort to amass this magnificent base. The CNC has only meager amount of Oriental Calotelea which can be perhaps explained by the fact that yellow pan trapping in the past was not frequently used in the Oriental region. By contrast the CNC has tremendous holdings and diversity of Neotropical Calotelea species, though all undescribed. So. e.g. in one single locality at Trinidad (W.I.) we encountered 12 (!) sympatric species of xanthic Calotelea. I am inclined to believe that this is just a tip of an iceberg! May I encourage you to do more pan trapping in the years to come!

With the best regards,
LUBO.



Freshly emerged males of *Telenomus* sp. waiting to mate with females emerging from chrysopid eggs.

Yet another memorable moment was when Peter N. Buhl, a Danish platygastroid taxonomist, named a species after me very early in my foray into the world of insect taxonomy.

RRR: What were the biggest challenges you faced during your career?

VK: Working on the insects of mangroves and inland forests of the Andaman and Nicobar Islands threw up the greatest challenges. To study the insects of mangroves, for instance, one had to wade into the sea, and thread one's way between the slippery prop roots and menacing pneumatophores; while at the same time being ever conscious of the movement of the tides, making sure to get back before the tide rose, so rapidly at times, to cut one off from the shore and leave one stranded out at sea. These were also areas infested with crocodiles which one had to be wary of. Ticks, leeches and venomous snakes had to be contended within the forests depending on the seasons. Once I sank knee-deep into mangrove slush, and my assistants had to drag me out with considerable difficulty.

Travelling to the middle and southern Nicobars was possible only by ship in those days. It took four to five days to sail from Port Blair to Great Nicobar. Although I had rooms booked in advance for the period of my stay at Great Nicobar, I was asked one evening to leave the guest house at very short notice and told to stay in a classroom in a government school with no bed and no toilet, as a foreign dignitary was visiting the island. Food was also a problem on many of the outer islands.

Maintaining the cultures of live insects especially on the long return voyage from Great Nicobar required considerable planning. We had to ensure that we were adequately stocked with the foodplants of the insect herbivores, and the cultures had to be attended to regularly on-board ship. The cabins in which we stayed could heat up considerably making the insects restless and even leading to mortality if they were not temporarily shifted to cooler surroundings. Choppy seas could add substantially to the difficulty of attending to these insect cultures.

And, finally, the challenge of venturing into the taxonomy of Platygastroidea.

…taxonomy is a lonely occupation….the task of cataloguing [the] near limitless diversity [of insects] is gargantuan. That however is the real challenge, but it could also be why not many Venture into this sphere of work.

RRR: You superannuated in 2019. But you continue to be actively engaged in research even now. What impels you to continue working in this fashion?

VK: Having attained expertise in the taxonomy of these insects I find it hard to leave them knowing that there is so much more that has to be done. I often feel it's unfortunate that I had not taken up work on their taxonomy much earlier. The affinity that one feels for the taxon of one's acquaintance, and the immense joy and satisfaction that one gets from working with them is indescribable. When working at the microscope or writing papers I enter another world that makes me forget all my problems and ailments. To my mind no one describes this ethereal feeling better than the renowned author-lepidopterist Vladimir Nabakov. Permit me to paraphrase him at length. He said:

'*My work enraptures but utterly exhausts me to know that no one before you has seen a structure that you are examining, to trace relationships that have occurred to no one before, to immerse yourself in the wondrous crystalline world of the microscope, where silence reigns, circumscribed by its own horizon, a blindingly white arena all this is so enticing I cannot describe it.*'

RRR: Do you think young entomologists are shying away from pursuing taxonomy as a career? if true, how can we attract more people into this field?

VK: There was a time when taxonomy was considered the quintessential biological science and the best minds gravitated towards taxonomy, as a result of which others flocked to pursue it. There was a feeling that it was possible to catalogue all of life quickly if sufficient manpower and resources were committed to the task. With the passage of time however it is becoming increasingly clear that this is a task much bigger than what anyone ever thought. One reason could be the enormity of the task with no end in sight that deters the faint hearted from taking up taxonomy as a vocation. The other is the birth of disciplines like molecular biology where the money and the prestige are, that is luring the young away.

Traditional taxonomy is a lonely occupation, with very few experts in each group or taxon, and no experts in many groups. There's no one straddling all phyla across kingdoms in the manner in which Linnaeus once did. It takes tremendous courage and optimism to survey the living landscape and not balk when one realizes that the task of cataloguing this near limitless diversity is gargantuan. That however is the real challenge, but it could also be why not many venture into this sphere of work.

Money and prestige are of course the primary forces driving people to choose and pursue careers in a world that has become increasingly materialistic. If there are institutions offering lucrative positions for taxonomists you'd find youngsters clamouring for such positions. But sadly instead of proliferating, such institutions are closing down or downsizing in most parts of the world. Inculcating fascination for nature and its myriad forms at a very early age is a key factor that could motivate the young to later take up studies to document life. I can't help but recall the words of Rachel Carson. '… [G]ift to each child … a sense of wonder [of the natural world] so indestructible that it would last throughout life …'. Sage words that I think offer a surefire prescription to enthuse people to take up taxonomy and keep us from bemoaning the paucity of taxonomists.

RRR: Taxonomists fear that their work gets published in low impact factor publications. Can I have your opinion on this?

VK: This is related to your previous question. It could be one more deterrent to people taking up taxonomy as a research option. Even the best taxonomic papers will by their very nature have low

Two interesting species of phoretic platygastroids. *Sceliocerdo viatrix* (left) and *Trissolcus* sp. (right) hitching rides on a grasshopper and a hemipteran.

impact factors. The metric to judge the performance of taxonomists or the quality of their work should not be based on the impact factor as is being voiced by taxonomists worldwide.

No one judges good literature by the number of people who read a novel or a book of poetry. It is no secret that not many have read Tolstoy's *War and Peace*, or James Joyce's *Ulysses*. How many of us have read, or how many people do we know who have read, the *Ramayana* or the *Mahabharatha*? Yet these are considered classics of world literature. Similarly, any competent taxonomist or scientist can judge the value of a taxonomic work without having to count the number of people who have read or who quote the work. Consider the following example from insect taxonomy. There are many others.

It has become abundantly clear that the neglect of molecular biology would be to the detriment of taxonomy.

Alfred C. Kinsey is recognised as one of the greatest gall wasp taxonomists of the world. In 1937 he was voted by all the leading biologists of the United States of America to be worthy of being a 'starred scientist'. This meant that his name would have a star placed beside it in the list of the '*American Men of Science*'. As his biographer J. Gathorne-Hardy states, this was 'a desperately sought award' by American scientists in every field, and Indiana University where Kinsey worked had only four starred scientists till Kinsey became the fifth. Yet his two master works on the genus *Cynips* (Hymenoptera: Cynipidae) – one, a 577 pages monograph, and the other on the higher classification of this genus – have not been borrowed even once by anyone since the day they were placed on the shelves of the Indiana University library!! [N.B. Both these works were not compendia of previously published papers, but wholly original works being published *in toto* for the first time.]

There is however one subset of taxonomists who'd have had very high, if not the highest, citation indices, but for the conventions that taxonomists themselves follow. Vladimir Nabakov, the famed novelist and lepidopterist of note, whom I quote earlier, was a champion of the minority view. He championed the idea that every time the binomial Latin name is used, the name of the first describer of that species should also be mentioned. Omitting the name of the first describer was a 'deplorable practice' in his view. Just think of the impact if every time you refer to the Latin name of a crop pest, biological control agent, an endangered species or a disease vector you had to mention the original describer and list the publication in which it originally appeared!

RRR: In recent decades, molecular studies have influenced several fields of science including taxonomy. May I have your views on molecular taxonomy?

VK: Molecular taxonomy is an exciting new discipline that is being usefully harnessed to unravel problems encountered by traditional morphology-based taxonomy. It also offers a far quicker method to delimit taxa enabling biodiversity studies at a speed that was impossible before. Speed of documentation of life forms, as you know, has assumed greater significance as ecosystems are being destroyed and species are disappearing even before we know of their existence, at rates much faster than ever before.

I think the ideal situation would be healthy collaboration between morphological taxonomists and molecular biologists.It has become abundantly clear that the neglect of molecular biology would be

to the detriment of taxonomy.

RRR: How do you view the work of the new crop of young taxonomists in entomology?

VK: I think there are some very competent and dedicated young taxonomists working in entomology in our country at the moment. It would be unfair to mention names. But two factors continue to plague the field here in our country as well as elsewhere in the world. First the number of those opting for a career in taxonomy is woefully small and inadequate. Second, taxonomy continues to lose its prestige value in the biological sciences in the face of, if I may say so, 'competition' from the newer, more glamorous sciences / disciplines. Decades ago, it was customary for sociologists of science to talk of physics envy among biologists. Today many seem to be suffering from envy of the molecular sciences; by we, I mean taxonomists. This is uncalled for, greater collaboration is what is required.

RRR: Your husband is also an entomologist. How has his association helped in shaping your career?

VK: My husband has been a pillar of strength in my life, both on the personal and professional fronts. He has always encouraged me to work as well as pursue all my other interests. In addition to my mother, he is the most amazing person I have met or seen, who is an altruist to the core, which irritates me at times!

RRR: You are an excellent scientist with remarkable commanding powers. Then, why have you kept yourself away from administrative positions?

VK: During my days as a post graduate student at UAS, Bangalore I noticed that there were people who hankered after administrative positions in my department as well as in other departments. I then noticed that those who shifted to administrative positions in most, if not all cases, dropped significantly in their research output after taking up these positions. I also noticed that people like Dr. C. A. Viraktamath turned down such positions because they felt that it would adversely impact their research work. Imbibing this attitude, I decided even during my student days that I would not take up an administrative post during my research career.

In this context I have an attendant (perhaps discordant) belief. I think that in research organizations it'd always be better to have people trained in the sciences in administrative, decision-making positions. An administrator who is oblivious to the ways in which scientific research is done would ring the death knell of a research establishment. I was aghast to hear the responses of some of my colleagues in this regard when I was undergoing training at NAARM, Hyderabad.When one of our teachers posed the question of whether we'd like the DG, ICAR to be an agricultural scientist or an officer from the Indian Administrative Service, there were those (though in a minority) who said they'd prefer the latter!

It is also pertinent to mention here that the ICAR has taken a very enlightened stance by stipulating that scientists should not be burdened with administrative responsibilities. I know that I appear to be taking a contradictory stance; which however is easily resolved when one sees that in the real world there are many scientists, who at least later in their careers, like directing research in various capacities. And this ensures that research priorities remain in good hands.

Dr. RACHANA R.R. Scientist, works on the taxonomy of thrips in the Division of Germplasm Collection and Characterisation, ICAR- National Bureau of Agricultural Insect Resources, Bengaluru. Dr. Rachana R.R. talked to Veenakumari about her life in the Andaman and Nicobar Islands and her views on the current status of taxonomy as a field of study, while tracing the meandering trajectory of her career terminating in her taxonomic studies of the Platygastroidea (Hymenoptera).

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