

Obituary: Professor Dan Gerling (1936–2016)

Moshe Coll Moshe Guershon

Dan Gerling, Emeritus Professor of Entomology at Tel Aviv University, passed away unexpectedly on March 26, 2016.

Dan was born on October 10, 1936 and grew up in Jerusalem. He received his B.Sc. degree in agriculture in 1959 from the Hebrew University of Jerusalem and his PhD in entomology in 1965 from the University of California, Riverside, USA. After a year of postdoctoral training at the Dry Lands Research Institute at the University of California, Riverside, Dan joined the Department of Zoology at Tel Aviv University in Israel. After serving the university for over 37 years and rising to the rank of full professor, Dan retired in 2003.



Nevertheless, he continued to be highly active until his last days, conducting research as an emeritus professor and an adjunct curator at The Steinhardt Museum of Natural History, both at Tel Aviv University.

Dan's research focused on whiteflies and their natural enemies. Over the years, he explored a wide range of morphological, physiological, behavioral, ecological and evolutionary aspects of whitefly-parasitoid relationships, both in the lab and in managed and natural habitats. He then used insights gained from these studies to enhance biological control of pestiferous whitefly species in a variety of cropping systems around the world. In this context, Dan also studied how host plants affect whitefly-enemy interactions, and the influence of various defensive mechanisms found in wild whitefly species on their natural enemies.

This work, carried out by Dan and his students, set the stage for a change in pest management practices. In Israeli cotton, for example, data they collected on the identity and population dynamics of whiteflies and their parasitoids and predators

convinced the growers association to abandon insecticide-based pest management recommendations in favor of routine pest monitoring and judicious application of selective insecticides based on established economic-thresholds. Finally, Dan's extensive work in natural ecosystems greatly enhanced our appreciation of the wild whitefly fauna and its natural enemies on native flora.

Dan served as the editor of two highly cited books on whiteflies and their natural enemies, and authored or coauthored more than 130 peer-reviewed publications, including three important review articles. This body of literature not only reflects the main thrust of Dan's research—whiteflies and their natural enemies—but also includes a significant amount of work on the biology of carpenter bees (*Xylocopa* spp.), parasitoids of pestiferous moths (*Spodoptera* and *Heliothis* spp.), herbivorous insects that feed on *Tamarix* spp. (invasive trees in the USA), and more. Dan presented the results of his research in numerous lectures worldwide.

Dan contributed to the development of modern Israeli entomology through his research, the supervision of dozens of MSc and PhD Students, and through teaching. Over the years, he taught courses in evolution, general entomology, insect physiology, parasitoid biology, and pest management.

During his career, Dan was a visiting professor in numerous academic and research institutions including the Universities of California, Georgia and Hawaii (USA), Simon Fraser University (British Columbia, Canada), the University of Sao Paulo (Brazil), the International Institute of Tropical Agriculture (Tanzania), Makerere University (Uganda), CORBANA (Costa Rica), Beijing Normal University (China), the Union Academy of Sciences in Leningrad (Russia), and the USDA research labs in Beltsville, Maryland and Phoenix, Arizona (USA). In addition, he served as a consultant for biological control and pest management in Latin America, Africa and Asia.

Between 2004 and 2011, Dan served as scientist-in-charge of the Peres Center for Peace Integrated Crop Management programs. He was instrumental in the promotion of collaborations between Israel and the neighboring countries in addressing acute pest management problems. His fluency in Arabic, which he taught himself over the years to the level of reading poetry, greatly enhanced his role as initiator and

coordinator of cooperative activities among Palestinian, Jordanian, Egyptian and Israeli researchers and growers. A case in point is the project for control of the Red Palm Weevil in date palms. Dan was the organizer or co-organizer of several international conferences, including two memorable ones on whitefly biology and control in 1994 and 2011, both held in Israel. More recently, he was a coorganizer of a meeting of the IOBC Working Group “Integrated Control in Protected Crops, Mediterranean Climate” and a COST Training Course in Biological Control of Organic Greenhouse Pests, both of which took place in October 2015. Dan’s diligent efforts to draw the attention of the international community to whiteflies, to their biological control, and to whitefly-related problems were instrumental in the recent formation of a new global series of meetings, “The International Whitefly Symposia”. He was unfortunately not well enough to present his invited talk at the second meeting in this series that took place in February 2016 in Tanzania. Dan was a hard-working, enthusiastic and tireless scientist, with never-ending curiosity about insects in their habitats. He was a true naturalist, spending his best hours outdoors, observing his surroundings, trying to capture the most hidden phenomena. His fascination with nature and keen attention to detail served him well in two of his hobbies, painting and writing poetry. Dan was a meticulous researcher and very generous to others, be they visiting professors whom he hosted in his home, or young students seeking guidance. Dan was an unusually modest and humble person. Until his last days, he commuted to the Tel Aviv University campus by bicycle. Throughout his travels, which often involved sub-optimal conditions, he never complained or asked for any upgrading. Those who knew Dan surely remember Neima, his kind and amiable companion of more than 50 years. Dan never got over her passing in 2009. They are survived by their three daughters, five grandchildren, and their extended family. Together with the family, many colleagues, students and friends around the world mourn the passing of a good friend, a scientific authority of international repute, and an exemplary mentor.