

Obituary

Thomas Risley Odhiambo (1931–2003)

In 1965, a short communication, ‘Metabolic effects of corpus allatum hormone, in the desert locust, *Schistocerca gregaria*’, appeared in *Nature*. Thomas R. Odhiambo was the sole author, and this paper marked his arrival in the field of insect physiology. Odhiambo died of liver cancer in Nairobi, Kenya, on 26 May this year. His legacy lies not only in his work as an entomologist, but in the enduring achievements that stemmed from his promotion of scientific development across Africa.

Odhiambo completed his studies in botany and zoology at Makakere University College, Kampala, Uganda, in 1953. After graduating, he spent three years at the Tea Research Institute in Kericho, Kenya, before pursuing his fascination with African insects at the Severe and Kawanda research stations in Uganda. There, he was responsible for the discovery of several new genera and dozens of new species of the Miridae bugs (Hemiptera) of East Africa.

In 1959, he moved to study at the University of Cambridge. He spent the next six years completing, first, an MA in natural sciences, and then a PhD under the supervision of the guru of insect physiology, Vincent Wigglesworth. It is said that Wigglesworth claimed that Odhiambo was the best student he had ever had. Certainly, Odhiambo’s thesis was phenomenally productive — a series of 14 papers on the reproductive physiology of the desert locust stemmed from it.

There was expectation about the fruits of his next labours, and we did not have long to wait for them. In 1966 he published his research on the feeding behaviour and reproductive physiology of the tsetse fly, which he had begun in his new position as lecturer at the University of East Africa in Nairobi. His selection of insects was not arbitrary; the desert locust and the tsetse fly are major African pests, and Odhiambo continued to study them throughout his career.

But his research into these insects did not consume all of his considerable energies. Since his student days in Makekere, Odhiambo had continually agonized over the status of science in Africa. He knew that, historically, Africans had been world leaders in mathematics, astronomy and engineering in ancient Egypt, and also in Cartaga, Timbuktu and Zimbabwe. Yet, after the fifteenth century, African scientific enterprise seemed to have evaporated. Odhiambo was convinced that if the right environmental conditions



Champion of scientific development in Africa — and author of children’s books

were fostered, Africa’s native potential would re-emerge. He lamented the increasing brain drain from Africa, because talented students, receiving fellowships to study abroad, were reluctant to return home where they could not apply their newly acquired skills.

Odhiambo believed that scientists such as himself could be instrumental in changing the scientific conditions across the entire African continent. In 1967 he was approached by *Science* to write a review on the status of science in Africa. In this article Odhiambo made a plea for the establishment of several large centres of excellence in Africa. He proposed that these centres should be staffed by world authorities in specific scientific disciplines, who should mentor bright young postgraduate and postdoctoral fellows from Africa and other developing countries, to build the first generation of African scientists.

Strong support for Odhiambo’s ideas came from, among others, Carl Djerassi in the United States. Together they set the wheels in motion for launching the International Center of Insect Physiology and Endocrinology (later changed to Ecology), ICIPE, in Nairobi. They approached several foreign academies and research institutes for help, and in 1969 ICIPE was established. One of the objectives of the new centre was to create motivated and highly talented ‘human capital’ in insect research and related areas of science, so as, to quote Odhiambo, “to enable Africa to sustain herself and to lead

the entire pan-tropical world in this area of endeavour”.

Eventually, 21 national academies became sponsors of ICIPE, and they provided the external research directors. Odhiambo was the principal director, and he successfully headed the centre for 25 years. Running ICIPE was quite an art. The elite participating institutions expected the centre to devote itself largely to basic science, whereas the donors pushed for applications of the research. Odhiambo’s charisma, intelligence, diplomacy and patience enabled him to navigate his ship successfully through these tricky waters. In the early years, the external directors supervised the research. But both Odhiambo and the governing board understood that the ultimate proof of ICIPE’s success would be its Africanization. Today, the ICIPE remains a centre of scientific excellence and training. And as Odhiambo had hoped, it is indeed staffed mainly by African scientists.

Odhiambo’s aspirations for scientific development in Africa were larger still — he worked tirelessly to increase the priority of science in the policies of African nations. To this end, he helped to establish the Third World Academy in 1985, and he founded the African Academy of Sciences in 1987, which he chaired until 1999. He also recognized that scientific publication is an integral part of scientific research and that African scientists need to be heard. As a result, he was instrumental in creating the Academy Science Publishers and ICIPE Science Press, and launching the two journals *Insect Science and its Application* and *Discovery and Innovation*. Odhiambo also understood the compelling reasons for introducing children to science at an early age. He established ChiSci Scientific Publications for this purpose, and he himself wrote six science books for children.

In March this year, ICIPE honoured Thomas Odhiambo for his vision and his dedication to creating a science-based infrastructure in Africa that could provide the solutions to a multitude of problems in the tropics. He will be sorely missed by his friends and colleagues the world over. **Rachel Galun and Onesmo K. ole-MoiYoi**
Rachel Galun is in the Department of Parasitology, Hebrew University of Jerusalem, Jerusalem 91905, Israel.
e-mail: zoher@netvision.net.il
Onesmo K. ole-MoiYoi is at ICIPE, Duduville, PO Box 30772-00100, Nairobi, Kenya.
e-mail: oole-moiyoi@icipe.org

NATION/AF