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## OBITUARIES

## Dr. Ernst Schwarz

SYSTEMATIC mammalogy suffered a severe loss with the death on September 23, at Bethesda, Maryland, of Dr. Ernst Schwarz. Although in recent years Schwarz had retired from active work in systematic mammalogy to devote his energies to public health problems his name will long be remembered for his earlier fundamental contributions to the diagnosis of a very wide range of mammalian groups from marsupials to primates.

Schwarz was born at Frankfurt am Main on December 1, 1889. His academic studies (1907-12) were pursued at the Universities of Berlin, London and Munich, and he graduated Ph.D. at the last mentioned in 1912. During 1912-15 he was in charge of the mammal collections at the Senckenbergische Naturforschende Gesellschaft in Frankfurt, thereafter (1915-18) transferring his interests to the clinical laboratory of the University Hospital in the same city. His interest in medical science was continued after the First World War when, in 1919, he became research assistant to the Paul Ehrlich Institute for Experimental Therapy, where his interests were directed towards cancer research. In 1925 he returned to mammalogy, spending the next four years in research at the Zoological Museum of the University of Berlin. During 1929-33 he was custodian of the Natural History Museum of the University of Greifswald, but fled from Germany to London on the advent of the Nazi régime. He spent the next four years attached unofficially to the mammal room of the British Museum, whence many of his best-known papers emanated. In 1937 he transferred to the U.S. National Museum in Washington, where he remained for ten years, with numerous intermediate assignments such as a guest lectureship at the U.S. Navy Medical School at Bethesda (1942-43) and later (1947-53) to the Graduate Medical School, U.S. Naval Hospital, Bethesda. During 1948 he was organizing, planning and participating in the U.S. Navy African Expedition. In 1950 he went on a mission to Venezuela studying bubonic plague, becoming a member of the World Health Organization Commission on this disease. His last years, 1956-59, were spent as a guest research worker at the Armed Forces Research Institute of Pathology at Washington, where he was attached to the Section of Neuropathology.

Schwarz was decorated with the Medal of King Leopold II of Belgium and with the Distinguished Service Medal of the United States.

As a systematic mammalogist, Schwarz is considered a lumpier; in fact, he was perhaps overzealous in this direction, as witnessed especially by his treatment of the *Colobus* monkeys—a fact he

himself admitted after the publication of his studies. His very last publication dealt with pygmy marmosets, where here too he oversimplified the problems. The position is tersely assessed by Booth, who declared that "Schwarz's descriptions are meticulously careful, but his conception of the species is, in the case of the Primates, often too broad".

Of some sixty-eight scientific papers published by Schwarz, about two-thirds were devoted to the systematics of mammals, living and extinct. The remainder deal with problems of applied medicine dating from his early interest in carcinogenesis and some few to general problems of distribution, genetics and evolution.

Deep sympathy goes to his widow, Henrietta E. Schwarz, whom he married during his period in London, and who was a constant help to him in his work.

W. C. OSMAN HILL

## Dr. N. K. Sen

DR. N. K. SEN, who died on March 21, was born on February 26, 1917, the eldest son of late Jitendra Prosad Sen, subordinate judge, who was the son of the well-known Dewan Bahadur Sarada Prosad Sen of Dacca. Dr. Sen graduated with honours in botany from the Presidency College, Calcutta, in 1936, and M.Sc. in 1939.

During 1939-41, he was lecturer in botany, Jagannath College, and during 1942-43 in the Dacca Intermediate College and the Rajsahi College (now in East Pakistan). He joined the Botany Department of Presidency College, Calcutta, as a lecturer in botany in 1943 and stayed there until 1948. For two years (1948-50) he was a graduate student, University of California. In 1951 he was awarded the Ph.D. degree in genetics by that University. In 1951 he was also awarded D.Phil. (Science) degree of the University of Calcutta.

In 1952, Sen joined the Agricultural Engineering Department (Applied Botany Section) of the Indian Institute of Technology as assistant professor of applied botany. He published more than fifty scientific papers on genetics, cytogenetics and breeding of pulses.

He started the first course in India on applied botany. He was the editor of *Bulletin of the Botanical Society of Bengal* (1961-62), and first editor of *Bijnan Parichaya*, a scientific Bengali monthly, published from Dacca and founded by Prof. S. N. Bose, Prof. P. N. Mazumdar, Prof. S. G. Mukherjee, the late S. K. Sen, etc., under the inspiration of the late poet Rabindranath Tagore.

R. M. DATTA