

GEORGE MATTHAI

(1887—1947)

Foundation Fellow

EARLY LIFE & EDUCATION

PROFESSOR GEORGE MATTHAI, born on November 13, 1887, came from a noble and highly respectable family of Syrian Christians of Travancore. His father Late Thomas Matthai, had shifted first to Calicut and then to Madras where he became the Chief Inspector of Schools. Young Matthai had, therefore, his earlier education in the Calicut High School (1897-1902), Jamorin's College, Calicut (1903-1904) and Madras Christian College (1905-1906). Before going to Britain, Matthai had also gained some experience of teaching, having worked as a school/college teacher at Madras from 1907 to 1911.

In Britain, Matthai had joined the University of Cambridge as a student of the Emmanuel College. From there he had obtained his BA degree in 1913. In the month of July of the same year, Matthai was appointed as a Research Student of the Emmanuel College and the very next year i.e., 1914, the Sudbury-Hardiman prize was awarded to him. From 1914 to 1917, Matthai had worked as Mackinnon Research Student of the Royal Society and in 1918 the MA degree of the University of Cambridge was conferred on him.

For his researches at Cambridge, Matthai had at his disposal the entire coral fauna which his revered teacher—Professor Stanley Gardiner, Head of the Department of Zoology in the University of Cambridge, had collected during his numerous expeditions to the Indian Ocean. In 1915, Matthai had also spent six months in America. During this period he had examined the coral collections and types in the United States National Museum, Washington, Museum of Comparative Zoology of the Harvard University, Peabody Museum of the Yale University and the American Museum of Natural History, New York. He had also studied the living corals at the Carnegie Biological Station, Tortugas and the Bermuda Biological Station. Dr T Wayland Vaughan had invited him to a cruise on the yacht *Anton Dohrn* along the Florida reef coast from Key West to Miami. But on account of inclement weather they could not proceed beyond Key Vaca. He had, however, discussed with him and also Professor AE Verrill the various problems concerning the Madreporaria and with Professor GH Parker his own work on the Actinians.





S. Nath Rai



For his above visits and subsequent researches at Cambridge he had received several grants from the Royal Society, the Managers of the Francis Maitland Balfour Fund and also the Governing Body of the Emmanuel College.

SERVICE & RESEARCH CAREER

Professor Matthai was recruited to the Indian Educational Service while he was still in Britain and as a prominent member of this prestigious service he came back to India and joined the well known Government College at Lahore (now in Pakistan) as a Professor of Zoology. As the Department of Zoology of the then University of the Panjab was also located in this very college, he was concurrently appointed the University Professor and Head of the Department of Zoology. For the additional work connected with this office in the University of the Panjab he used to get a monthly allowance of only Rupees Two Hundred from the University.

It will not be out of place to record here the inspiring introductory remarks made by Principal HLO Garrett while writing the history of the Government College at Lahore : *If there is one lesson more than another to be gained from a study of the history of our college, it is that it has ever aimed at the production of men-men fitted to go out (and well fitted as the records of the province will show) and take their share in the bearing of the Imperial burden, men able to control men and still more to control themselves. Were our record a mere catalogue of examination room success, we should have indeed failed in our mission. But it is because the Government College has ever stood forth as the nursing mother of all that is best and manliest in the Punjab that she occupies today her proud position. The honourable achievements of her elder sons lay a heavy responsibility upon the generations yet to be. May they prove worthy of the great trust handed on to them by a long line of illustrious forbears!* As a prominent member of the staff of this premier institution of the country, Professor Matthai was able to produce many more scientists of his type to man the various teaching and research institutes not only in India but also abroad.

At Lahore, Professor Matthai continued his researches on corals. For this he used to visit Karachi almost every winter with members of his staff and students to collect the required material from the sea. In summer he used to lead some similar parties of staff and students to the high mountains in Kashmir and collect the fauna from the lakes there to be carefully studied later in his laboratories at Lahore by him and his able colleagues. Even for the fauna in and around Lahore, he himself started studying the common leech, *Limnatis granulosa* in the summer of 1919. He made very careful observations on its cocoon formation and maintained a day to day record of these in his own hand in a note-book which has been so well preserved in the museum of the Department of Zoology, University of Cambridge. A xerox of the same is also now available in the museum of the Department of Zoology of the Panjab University



at Chandigarh. The paper based on these observations entitled *Preliminary observations on Cocoon-formation by the common Lahore leech, Limnatis (Paecilobdella) granulosa* (Sav.) was published by him in the *Journal and Proceedings of the Asiatic Society of Bengal (New Series)*, Vol. XVI, 1920. The coming generations of students will feel greatly inspired to see for themselves the meticulous way in which this pioneer researcher used to maintain the record of his observations.

It was in the beginning of this very year i.e., 1920 that Professor Matthai was called upon to act as a Chairman of the Section of Zoology and Ethnography (as it was then called) of the seventh Indian Science Congress held at Nagpur due to the unavoidable absence of the Sectional President for that year. Then again in 1923, he presided over the Section of Zoology when the tenth Indian Science Congress was held at Lucknow and delivered a brilliant and highly informative address entitled *Oceanographical investigation with special reference to the Indian Ocean*. This gave ample evidence for his multidisciplinary approach to the subject and the great respect he had for his teacher—Professor Gardiner whose work he had quoted so extensively in his address.

Besides this presidential address, he had delivered a public lecture in which he described some interesting phenomena concerning coral-reef formation and also presented a paper, *On the Madreporarian coral collections in the Indian museum at Calcutta* to the members of the Section of Zoology during this session of the Indian Science Congress.

Professor Matthai had also the unique distinction of presiding even a third time over the section of Zoology of the Indian Science Congress during its Silver Jubilee Session held at Calcutta in 1938. This session was really momentous in view of the fact that it was the result of a joint meeting of the Indian Science Congress Association and the British Association for the Advancement of Science. It was to be presided over by one of the greatest scientists of the world—Lord Rutherford of Nelson, but he could not do so on account of his sudden and tragic death. As, however, he had written out his brilliant address on the then new science of nuclear physics, it was read out by the spokesman of the delegation from the British Association—Sir James Jeans. Sir James was the President of the British Association in 1934 when the invitation to hold a joint meeting in India was extended by the Indian Science Congress Association.

In his presidential address entitled *Zoology and its advancement in India*, Professor Matthai traced the history of teaching and research in zoology in the various universities and research institutes of India. He also talked at great length about his favourite subject—the Indian Ocean and its fauna and in this connection he discussed not only his own work, but also that of his beloved teacher—Professor Stanley Gardiner whose considered views on the subject were quoted extensively in his address.



As a result of his brilliant researches, Professor Matthai was awarded the ScD degree of the University of Cambridge in 1929. He was also elected a Fellow of the Linnaean Society and the Royal Society of Edinburgh and in 1935 when the National Institute of Sciences of India now the Indian National Science Academy came into being, he was enrolled as its Foundation Fellow.

To give wide publicity to the research work being produced by him and his colleagues, Professor Matthai initiated the publication of memoirs and the bulletin of the Department of Zoology of the Panjab University. The first Memoir which was published in 1927 under the Series, *Fauna of Karachi* was by Shri SS Bindra and this dealt with a study of the genus *Eurythoe* (Family Amphinomidæ). Professor Matthai's own notes on the zoological excursion to Karachi had already been published in 1921 in the *Proceedings of the Lahore Philosophical Society*. Under the same series, *Fauna of Karachi*, the second Memoir on the *Polychaetes* was published by Shri ND Aziz in 1938.

The first bulletin in the second series—*Fauna of Lahore* was published in 1931 by Shri DR Puri and this described the butterflies of Lahore. In the same year came out the second bulletin on the *Entomostraca (waterfleas) of Lahore* by Shri GL Arora. The third bulletin giving therein some preliminary notes on the life-history of the firefly, *Luciola gorhami* Rits and cytology of the light organs was published in 1932 by Shri DR Mehta. Three years later i.e. in 1935 came out the fourth bulletin of the series. This was by Shri SD Malik and it dealt with the *Spiders of Lahore*. The fifth bulletin on *Fishes of Lahore* was published by Shri Nazir Ahmad in 1943. Similarly under the Series—*Fauna of Kashmir*, Dr ML Bhatia, FNA had published an account of some leeches from Dal Lake in 1939. Professor Matthai, besides writing the introductory notes for all these publications, had also given a preliminary account of the Fauna of the mountain lakes beyond the Lidder Valley, Kashmir in the form of an abstract published in the *Proceedings of the 29th Indian Science Congress held at Baroda in 1942*.

Professor Matthai was also a great teacher. The writer of the present memoir vividly remembers his lectures on Coelenterates, Annelids and Molluscs when he was a student of the BSc (1936–38) and Honours School classes (1938-40). Professor Matthai used to lecture fully attired in a gown and cap and he used to draw beautiful and coloured diagrams of the animals and their sections which he used to explain in such a language as will be clear to every student in his class.

In the summer of 1940, the writer of this memoir had gone to Solan (Simla Hills) for the collection of his research material. Professor Matthai who also happened to be there for a day on his way back from Simla to Lahore, was invited by him for a cup of tea at his place. During the conversation that followed, Professor Matthai told that he had crossed the Indian Ocean seven times to get the coveted ScD



degree of Cambridge. This clearly showed his great interest in the study of this ocean and its rich fauna – so intimately connected with his own country. Right from the day Professor Gardiner had placed at his disposal his own collection of corals from the Indian Ocean, he became so much engrossed in their study that it became an almost life long passion for him. In the beginning he had studied only their calcareous skeleton, but later on he extended his studies even to their soft parts with the result that he could classify them much more accurately. His first monograph on the subject dealing with a revision of the recent colonial *Astraeidae* had appeared as early as 1914 in the *Transactions of the Linnæan Society of London*. This was based on the material from the Indo-Pacific Ocean and the collections in the museums located at Paris, Berlin, Vienna, Copenhagen, London and Glasgow. As, however, the first world war broke out that very year he could not publish any further work till the end of it when many more of his research papers and monographs came out on the same subject of corals in quick succession.

PERSONAL LIFE & LAST DAYS

In 1925 Professor Matthai had married Miss Mary Chandy – the second daughter of Mr C Chandy of the Mysore Civil Service, who had later become the Vice-Chancellor of the University of Mysore. From this marriage they had a son whom they named as Ariel. As, however, Mrs Matthai died in 1931, Professor Matthai badly needed some one to look after his growing son. For this purpose, therefore, Professor Matthai had engaged a Swiss nurse whom he ultimately married. She had even accompanied him to Cambridge when Professor Matthai had gone there in 1938 on one year's leave from Lahore. In 1939 when Professor Matthai was to return to India to join his duties at Lahore, the second world war broke out. He, therefore, left his wife in Switzerland and came back to India all alone. He could not meet her for nearly six years on account of the long drawn out war. Even after his retirement in 1942, he could not get back to Europe till the end of the war and lived all by himself in a small apartment on the University Hall which was so generously placed at his disposal by his great friend and admirer-Mian Afzal Hussain the then Vice-Chancellor of the University at Lahore. This long separation from his Swiss wife had certainly an adverse effect on Professor Matthai's health and therefore when he returned to Cambridge to continue his work on corals he died suddenly on June 25, 1947 with the result that the proofs of three of his research papers he had submitted for publication in the *Philosophical Transactions of the Royal Society of London* had to be seen through the press by Lt Col Seymour FNA, FRS. Thus, came to an abrupt end the work of a great specialist on corals who had gone back to Cambridge after his retirement to produce many more monographs on the subject.

ACKNOWLEDGEMENTS

The writer of this memoir is very much obliged to Professor Matthai's only son who had very kindly provided his father's portrait which now adorns the foyer of the



Department of Zoology of the Panjab University, Chandigarh. The photograph which illustrates this memoir is a copy of the same. He is also grateful to his own old students—Dr Brij L Gupta, Department of Zoology, University of Cambridge and Dr OB Chhotani, Deputy-Director, Zoological Survey of India for providing the required material for this Memoir. Similar help from Dr (Mrs) Archana Sharma, FNA, Professor and Head of the Department of Botany, Calcutta University, and Dr Abu Bakr who retired as Chairman, Department of Zoology, University of Panjab, Lahore is gratefully acknowledged.

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