

OBITUARY

BERNARD GEORGE PETERS

1903-1967

Professor B. G. Peters, M. Sc. (Bristol), Ph. D. (London), Hon. ARCS, died at his home in Sunninghill on September 9th, 1967 after a few months' illness. His scientific career was spent partly in teaching at London University, partly in research, and his interests were in helminths parasitic in animals and plants.

After graduation from the University of Bristol he held scholarships at the London School of Hygiene and Tropical Medicine, first as Ministry of Agriculture Scholar (1925-27) when he investigated the relationship between soil acidity, potato cyst nematode and disease of the potato crop in Lincolnshire, then as Research Scholar in Sanitary Science of the Grocers' Company (1927-29). During the latter period he studied the bionomics of the vinegar eelworm and also made a detailed study of the biology of fauna of sewage plants, with special reference to nematodes. He was responsible for clarifying the very complex nomenclature of the vinegar eelworm and naming it *Turbatrix aceti* and for describing a new species from sewage beds, *Dorylaimus* (now *Mesodorylaimus*) *saprophilus*.

When the Imperial Bureau of Agricultural Parasitology (now the Commonwealth Bureau of Helminthology) was started in 1929 Peters became its first Deputy Director and for three years was responsible for its organisation and for the publication of the first volumes of Helminthological Abstracts. His close connection with the Bureau was renewed nearly 30 years later when he became Consultant Director in 1961.

From 1932 to 1936 Peters was Demonstrator, then Lecturer in Helminthology at the London School of Hygiene and Tropical Medicine, University of London. During this period he recorded the occurrence of *Turbatrix aceti* in the liquor from a tannery and described a new genus and species of filarial worm, *Paronchocerca ciconiarum*, from a West African stork. In 1936 he transferred to the field station of the School of Hygiene, the Institute of Agricultural Parasitology at St. Albans, where he remained until 1947 when he removed with the group under Dr. Tom Goodey to Rothamsted Experimental Station where the new Nematology Department was formed. Peters' first field of research at St. Albans was concerned with the vector of liver fluke, *Limnaea truncatula*, and he made careful biometrical studies of the shells of this snail, finding great variations in specimens from different localities. He also studied in detail 22 habitats of the snail in England and Wales and thus provided data useful for the control of the liver fluke disease in sheep and cattle.

In his biometrical study of snail shells Peters showed his interest and ability in the use of statistical methods for the analysis of biological material, which were first obvious in his earlier work on the association between cyst nematodes and potato disease published in 1929. This interest was developed in his next field of research which was concerned with counts of helminth eggs in animal faeces. Papers on variations in dilution counts published in 1940 and 1941 were followed by several in collaboration with J. W. G. Leiper in which the methods he had developed for the analysis of counts were used in experiments with anthelmintics on sheep and goats. The underlying theories and the eelworm counting slide developed in this work have been extensively used in estimating soil populations of cyst nematodes.

After a break of two years for war-time duties Peters returned to the Institute of Agricultural Parasitology to work on the use of nematicides for the control of *Heterodera rostochiensis*. He published a series of papers describing pot tests from the results of which he laid down procedures for carrying out such tests and deduced the criteria which would give the best information about the effects of treatments. He regarded this work as exploratory and as illustrating the great complexity of the situation in the field. In subsequent work with nematicides against potato cyst nematodes he emphasised the dangers of basing forecasts of performance in the field on the results of pot tests alone. With a view to learning more of what takes place in the field he investigated the changes in nematode populations at different depths in the soil and the vertical migration resulting from the growth of a potato crop.

In 1953 Peters spent three months in the United States at the Connecticut Agricultural Experiment Station to advise on nematode problems and while there carried out, with B. F. Lownsbery, pot experiments showing the effect of *Heterodera tabacum* in reducing the growth of tobacco. Before returning to Rothamsted he visited a number of centres of nematological research in the United States and Canada.

On the retirement of Dr. Tom Goodey in 1952 Peters became head of the Nematology Department at Rothamsted, and held this post until October 1955 when he was appointed to the newly instituted Chair of Parasitology in the Department of Zoology and Applied Entomology at Imperial College, University of London. Here he organised the sub-department of Parasitology and instituted a course in nematology leading to a Diploma. This was the only course in Britain dealing exclusively with free-living and plant-parasitic nematodes and it was attended not only by staff seconded from the Ministry of Agriculture but by students from all over the world. Under his direction a new laboratory was established at the field station of Imperial College where the course is given and nematological research is carried out. Peters thus returned to University life after 23 years. He was a lucid and interesting lecturer and one whom his students found both approachable and helpful.

Through all his published papers Peters shows his ability for clear thinking and

exposition of subjects that were often detailed and complex. Very early he saw the usefulness of statistical analysis and was applying such methods to his observations in 1929 when few workers in the field of helminthology appreciated the value of such tools. He continued and developed his interest in the use of statistics and introduced the subject as an important part of the Diploma course in nematology.

Peters was an active founding member of both the British Society for Parasitology and the European Society of Nematologists. He attended six of the nine Symposia of the E.S.N., usually acting as Chairman of one of the Sessions. In this capacity he could be relied upon tactfully to keep speakers to their allotted time and to guide the discussion along the appointed lines. He served as advisory editor for the early volumes of *Nematologica* and numerous papers from members of his department have appeared in this journal.

Peters was a man who never pushed himself to the forefront but, although often anonymously, he undoubtedly played a considerable part in the development of the science of nematology not only in Britain but wherever his students are established throughout the world. His influence was exerted first by his work in the organisation of the Commonwealth Bureau of Helminthology at its formation, later by his thorough-going analysis of methods of experimentation and treatment of results in experiments with nematicides and finally by his teaching in the Imperial College nematology course. Those who knew him personally will deeply regret his untimely death and will miss his friendship, his helpfulness and his wise counsel. They would wish to extend their sympathy to his widow and daughter in their loss.

M. T. F.