

In memoriam Dr H. J. de Fluiter



Dr Hendrik Jacob de Fluiter
20 February 1907 – 28 January 1970

Dr Hendrik Jacob de Fluiter died of a heart attack on 28th January at his home in Wageningen. He was 62 years old.

He was born on 20th February in Roermond where his father who studied literature and law was a teacher at the secondary school (HBS). His mother was the daughter of a well known Utrecht pharmacist from whom he inherited his great interest in nature. In 1924 he completed his secondary education and went to Leyden University to study biology. He majored in zoology with botany and plant pathology as subsidiary subjects and received his Masters degree in 1929. Shortly afterwards he became assistant to Prof. Roepke at the Entomology Laboratory in the Agricultural University, Wageningen.

During his study at Leyden he started research on the woolly apple aphid, *Eriosoma lanigerum*. In 1929 he was awarded a prize by the L.E.B. foundation at Wageningen for this work, which also formed the basis for his Ph. D. thesis,

completed in 1932. During the first part of his assistantship at Wageningen the study of the biology of *Eriosoma* species on apple and pear occupied most of his time; this work was followed by careful research on the biology, ecology and epidemiology of a number of noxious insects and surveys of their natural enemies.

Like so many pre-war research biologists he went to the tropics, accepting a position as entomologist/phytopathologist at the Besoeki Experimental Station in Djember (E. Java). In six years he studied many insect pests, fungus diseases and nematodes of rubber, coffee and tobacco. A few examples will serve to illustrate his wide interest in these fields. His work on the biology, ecology and epidemiology of the mealy bug, *Pseudococcus citri* in coffee plantations and his discovery that the numbers of this insect could be much reduced by altering the micro-climate under shade trees was of international importance. Of the fungus diseases studied, his work on *Alternaria longipes*, which causes brown leafspot of tobacco may be cited. Much attention was also paid to root diseases of coffee and rubber, caused by various fungi e.g. *Helicobasidium compactum* and *Polyporus coffeae*. Root knot nematode (*Meloidogyne* sp.) of coffee is another important tropical pest which was investigated by him.

He was transferred in 1940 to the Experimental Station for Middle and East Java at Malang, where he was able to continue his work on mealy bug and diseases of coffee and rubber. In 1942 he was taken prisoner by the Japanese. After the war he published

a paper on his work as a biologist in P.O.W. camps, in particular on his study of the vectors of malaria and malaria control and his investigations on Anophelinae and Culicinae as vectors of Dengue fever and Filariasis. During this time of hardship, he kept a diary in P.O.W. camps on Java, Malacca and Thailand. This diary was primarily intended for his family, but it provides a valuable record of life in Japanese P.O.W. camps during the last war.

On his return to the Netherlands Dr de Fluiter worked in Prof. Roepke's laboratory in Wageningen from 1947 to 1950, this time mainly on the influence of daylength and temperature on the occurrence of sexual forms of *Aphis fabae*, the black bean aphid. He also studied the effect of the physiological state of the host plant on the development and reproduction of this aphid.

Since 1950 Dr de Fluiter has been head of the Entomological Department of the Institute of Phytopathological Research (IPO) at Wageningen and in 1954 he became also Deputy Director of this institute.

His tremendous energy and wide entomological knowledge were a great stimulus to his fellow entomologists at the institute. During the first few years he studied strawberry virus diseases and their transmission by the aphid *Pentatrichopus fragariae*. Shortly afterwards he discovered that the leafhopper *Macropsis fuscula* was responsible for the transmission of Rubus stunt virus. This was the first description of a leafhopper-borne virus disease in Western Europe.

Since 1958 Dr de Fluiter was secretary of the large Dutch Study Group on Integrated Control of Pests. Together with the Chairman Prof. de Wilde he has been a great stimulator and coordinator of the research work of the 73 scientists of this group, working in 27 University and industrial laboratories and institutes throughout the country. Only a week before his death he completed the minutes of the last meeting of the Section Heads and announced that he intended to terminate his activities as secretary this year.

Dr de Fluiter has been Vice-President of the International Organization for Biological Control (O.I.L.B.) and Chairman of its Study group on integrated control of orchard pests.

In the Institute for Phytopathological Research he was highly respected not only as a departmental head and colleague, but also because of his warm personality and wisdom. He always found time to give advice both on professional and personal problems to those who sought it.

The Netherlands Society of Plant Pathology benefitted in several ways from his great abilities. He was Secretary of the Editorial board of the *Tijdschrift over Plantenziekten* (now Netherlands Journal of Plant Pathology) from 1949–1959 and he became President of this Society in 1963, his term of office ending in 1969.

In 1966 he played an important role in the preparations for the celebration of the 75th anniversary of the Society, especially in the International Symposium on the Phytopathological consequences of changing Agricultural Methods. On the occasion of the jubilee he gave a historical account of the Society. The internationalization of the journal increased the subscriptions from abroad. For this reason he appointed a commission to investigate the structure of the Society.

He was member or chairman of a large number of commissions and for his outstanding contributions H. M. the Queen bestowed on him the honour of nomination to Officer in the Order of Oranje-Nassau.

A month before his death he received a letter from Belgium informing him that the Organizing Committee for the Annual International Symposium for Phytopharmacy and Phytiatry had unanimously awarded him the Jozef van den Brande prize. He was the first person to receive this prize which should have been presented to him at the next symposium in May. His remark to me was typical of his modesty: "I do not see what I have done to deserve this prize".

His greatest hobby was bird watching and he possessed a fine library of ornithological works from all over the world. He wrote articles on the birds of Rawa Meleman on Java and after the war on the birds of the Khwae Noi valley, Western Siam.

He has published a total of 163 articles on a wide variety of subjects, but mainly on entomology.

For his activities as founder and Head of the Hygiene Department of the Netherlands Red Cross in the Province of Gelderland he was awarded the Silver Cross of Merit of this organization.

We all shall miss this friendly, intelligent, wise and hardworking colleague, who was a gentleman in every respect. Our deepest sympathy goes to his wife and daughters.

J. G. ten Houten