Obituary



Horst Marschner (1929–1996)

Horst Marschner died in September 1996. His name is familiar to the readers of Plant and Soil because of the many articles he published and by his long-standing service as action editor of this journal. He was one of the foremost experts in plant mineral nutrition. His "Mineral Nutrition of Higher Plants" (2nd edition 1995 from Academic Press, London) is used as a textbook in many universities around the world. All of us who worked with him, knew him as a stimulating and generous teacher, mentor, and colleague. For many of us, his teaching or discussions with him first awakened our interest in problems of plant nutrition. He found research in plant nutrition fascinating, and was able to transmit that fascination to those around him. He died after a very short illness from malaria which he probably contracted when visiting research projects in West Africa this summer.

Horst Marschner was born in 1929 in Zuckmantel (now in the Czech Republic). After the end of the war, the family moved to Thüringen which became part of the German Democratic Republic. He worked as a farmer and went to an agricultural school before he started to study agriculture and chemistry at the Universität Jena. He obtained a Ph.D. in Agricultural Chemistry in 1957 and then joined the Institut für Kulturpflanzenforschung in Gatersleben. During these years, he developed not only his interest in modern techniques for studying plant nutrient uptake but also a distrust of mixing dogmatic political interests with scientific research. Thus, in 1960 he and his wife decided to go to West Germany, took a train to Berlin, and joined the research group of Professor Michael at

Stuttgart-Hohenhiem. In 1966, he became Full Professor of Plant Nutrition at the Technische Universität Berlin, and since 1977 was Director of the Institut für Pflanzenernährung (Institute of Plant Nutrition) at the Universität Hohenheim.

Despite the success of his professional career and his heavy work load, he maintained an interest in new developments in agronomy, botany, and soil science. Personally modest, his office door was always open to students or visitors, and he tried always to understand and learn from the people he met. His reputation as a referee for scientific journals, as well as for funding agencies or government bodies was particularly high, not only because of his wide knowledge and experience, but because his interest was in the progress of science, without personal bias.

Professor Marschner enjoyed discussing ideas with many co-workers, both students and established scientists. He combined a sharp mind with a simple but persuasive way of presenting his research findings. At the beginning of his career he mainly studied the uptake of mineral nutrients, but then extended this to include nutrient transport and use within the plant. Starting in the 70s, his research greatly advanced the understanding of rhizosphere processes and iron uptake by plants. Later, he also concentrated on environmental aspects of plant nutrition, for example on the side-effects of high rates of agricultural fertiliser use, on heavy metal contamination of soils, and on the effect of changes in forest ecosystems on the uptake and use of nutrients by trees. Professor Marschner also published extensively on the adaptation mechanisms of plants to adverse soil conditions and low nutrient supply.

One of the most distinguishing features of Professor Marschner was his aim to understand the "reality" of the subject he was studying. Hence his keen interest in experimental techniques, his recent hope to use genetically transformed plants as a tool to investigate plant physiological mechanisms, his surprising memory of details in past conversations, and his constant endeavours to combine laboratory with field research. For the same reason, studies on the efficient use of fertilisers in developing countries were of particular importance to him, in recent years especially in Turkey, West Africa, and China. In hospital, his last discussions with his son included his optimistic views on a large program on sustainable agriculture in northern China which he had initiated. He believed that science and rational thinking should be used to improve human living conditions.

Among many international awards, Professor Marschner was given honorary doctorates by the universities of Hannover and Utrecht, and an honorary professorship by the China Agricultural University. He was taken from us in the middle of his very energetic work, when he was full of new ideas and sharing his interests with a large group of graduate students, technicians, befriended scientists and co-workers. We know of many people who enjoyed his contributions at conferences and waited to discuss their recent work with him. At Hohenheim, we miss his guidance and his constructive comments, and also his smile, his open ear for personal and scientific problems, and his authorative, but never autocratic, leadership of the Institute.

> The Staff Institute of Plant Nutrition Hohenheim University