

# World leader adds to soil knowledge

**Dr Ken Lee**

Soil scientist

**Born:** May 7, 1927; Wanganui, New Zealand

**Died:** January 14, 2007; Adelaide

**D**ISTINGUISHED soil scientist and long-time CSIRO officer Dr Ken Lee initiated the study of soil zoology as a subdiscipline of soil science, first in New Zealand, from 1949, and from 1965 in Australia, as a member of the staff of CSIRO Division of Soils.

Ken was a recipient of numerous awards and has an impressive publication record, including two definitive textbooks on the ecology of earthworms and termites.

He moved to Adelaide in 1965 to begin his lifelong career as a soil biologist at the CSIRO Division of Soils.

He was head of the soil zoology section from 1965 to 1977. He was officer in charge of the Adelaide Laboratories from 1986 to 1990, assistant chief of the division from 1986 to 1989 and deputy chief from 1989 to '90.

He retired in 1992 and was an honorary Research Fellow in CSIRO Land and Water from 1992 to 2003.

Ken has shown how populations of earthworms and other soil animals affect soil formation and how they can be conserved, modified and managed to improve soil structure and nutrient cycling to maintain soil fertility and increase agricultural production.

In 1985, he published a book on the ecology of earthworms and their relationship with soils and land use.

The book rapidly became the standard text on the subject and gave rise to many research



projects and practical applications of earthworm biology in Australia and many other countries. Ken also began a series of studies on the influence of termites on soil formation, the decomposition of soil organic matter and the cycling of plant nutrients.

A number of his research papers were followed by a book, *Termites and Soils* (Academic Press, London, 1971), which showed how important termites are as agents of soil development and fertility, especially in the tropics.

The book stimulated the development of similar studies, especially in Africa and Asia.

Thirty years after its publication, the book remains the basic reference for workers in the field. Arising from his research on the biology and soils of Pacific islands acquired during his time in NZ, Ken was invited by the Royal Society (London) to join the society's expedition in 1965 to the Solomon Islands.

He was then invited to lead a similar expedition to the New Hebrides, sponsored by the Royal Society and the French Academy of Science, for four months in 1971.

In more recent years, Ken made important contributions to knowledge of biodiversity in soils and its significance for the maintenance of soil fertility and ecologically sustainable farming. For his achievements in soil science, Ken was awarded the Sir Joseph Verco Medal by the Royal Society of South Australia, the J.A. Prescott Medal of Soil Science by the Australian Society of Soil Science and life membership of the Australian Society of Soil Science. Ken was a powerful champion to people who needed help and a man of high principles, an ardent supporter of social justice and immensely loyal.

During his retirement, he meticulously edited hundreds of manuscripts for various journals, CSIRO and a newly proposed book on the soils of SA.

Scientists will miss a colleague from whom they learned much. His scientific work represents a major contribution to world soil science and agriculture but, perhaps more than for anything, Ken will be remembered as a kindly man, a good husband to his wife, Norma (they met at university in 1948), a father to his two sons and daughter, and the grandfather of six children.

**Rob Fitzpatrick**