

Vale Eric George Davis

Written by Bob Steele

Sadly, former CSIRO Scientist Eric George Davis passed away on the Wednesday 23 September 2009 aged 85.

Eric had a long and successful research career with CSIRO initially as a Senior Research Scientist for CSIRO Division of Food Preservation. Before that he served with RAAF at Cairns. A close friend tells me his job was to repair the damaged Catalina flying boats – a valuable contribution to our effort during the battle of the Coral Sea. The battle marked a turning point in the war as it was the first time the Japanese push southwards had been stopped in its tracks.

After the war Eric returned to his disrupted education to graduate with Honours in chemistry from Sydney University in the class of 49. Both he and Peter Board joined CSIRO Division of Food Preservation soon afterwards.

Eric's initial research was to examine the various means by which highly corrosive foods such as beetroot could successfully be stored in a can. He examined the various lacquers that could be used to protect the cans. The present day cans of beetroot on our supermarket shelves are a testimony to the early research of Eric.

Not satisfied with solving the major canning problems facing the Australian food industry, Eric later went on to help the Australian wine industry. This he did despite the fact that he did not drink alcohol. The success of the plastic 'wine cask' or the 'bag-in-box' wines was a direct result of Eric's research. The market for these wines was severely limited by rapid oxidation. Eric's careful and meticulous research, capably assisted by Phyllis Moy, showed that the oxidation was mostly from oxygen migrating through the dispensing tap on the casks. His research sparked many innovative designs to overcome the problem.

Another problem facing the wine industry was the loss of sulphur dioxide through the plastic packaging material. Eric's studies on the equilibration of the various forms of sulphur dioxide in foods and wines was very useful to understanding its role in a wide range of preserved foods. On Eric's retirement from the Division of Food Research in 1984 Mr Kefford noted that Eric's reputation was epitomized in a remark by the Mr Norman Law who said on the occasion of a visit to the Division that 'Eric Davis is the first man I have encountered to who talks sense about plastic packages for foods'.

I remember Eric as a kind, gentle & unassuming scientist who placed great merit on the accuracy and precision of measurements. His profound understanding of the physical chemistry of gases and their interaction with polymeric materials enabled much of the further research in food packaging which has led to the modern concepts of active and intelligent packaging.