

## Evan Thornhill – 1932 - 2016

Evan Thornhill was internationally known among manufacturers of sprayers, researchers and a generation of students, for his practical knowledge and witty presentations of aspects of pesticide application at the International Pesticide Application Research Centre (IPARC).



Evan joined Imperial College in 1963 to test equipment at what was then the Overseas Spraying Machinery Centre, Silwood Park. This Centre was set up in 1955 by the UK government to acquaint Colonial service officers with different types of spraying and dusting apparatus for use in the colonial territories and provide some training. It was also made a WHO testing centre for equipment used in vector control. Previously he had attended an engineering course at the Army Apprentices College and worked for a number of companies including British Rail before deciding to apply for a Technician position at Silwood Park.

Just after he arrived at Silwood, a UK manufacturer Cooper Pegler had started to manufacture a plastic knapsack sprayer, but this was criticised by users, so he became actively involved with building a test rig that simulated field use more accurately than had been done previously. The subsequent new knapsack sprayer design survived over 2000 hours on the test rig at IPARC and is still manufactured today. Later he set up similar test equipment in Thailand, India and Colombia funded by the UK; he also travelled to the factories of manufacturers Brazil, Denmark, Germany, Switzerland and Japan to give advice. He continued to test equipment and helped WHO update

their specifications and tested the effect of pesticide formulations on materials used in the construction of sprayers under a British Crop Protection Council sponsored Central Testing Scheme.

Evan also participated in training courses, including the Tropical Pest management course and the Pesticide application module of the MSc at Silwood Park, as well as courses in Denmark, India and Malaysia. All the participants remembered him for the valuable practical advice he gave on these courses, including sprayer selection, maintenance and repair: using basic tools and readily available materials where possible. He published a number of papers about sprayer tests and development of equipment, such as a motorised insect sampler. He was especially keen to promote simple and practical devices, appropriate for small-holder farmers, to aid important benefits such as pressure regulation (to manage drift and operator contamination) and calibration.



Evan Thornhill during a training course in Sabah, Malaysia – Sprayer fitted with a Kalibottle to calibrate the spray volume being applied.

He was also an innovator, and always appeared happiest when trying-out novel equipment or helping to develop appropriate tests for improved application machinery. Inevitably perhaps, some of these did not survive the test of time: an example shown here was an adaptation for converting a motorised mistblower into a flame gun for 'organic' weed control. However, anyone consulting him could always be sure of practical, wise and often amusing advice. He was considered an authority on assessment of fogging machines, and one of the highlights IPARC training courses were the spectacular demonstrations of thermal foggers: sending clouds of blank formulation towards the Silwood football field! Behind showmanship was a serious side and Evan's practical advice was crucial for the technically difficult task of measuring the droplet size produced by these machines.



After his retirement, he continued to test sprayers until a few weeks before he died, even though he his health had declined. He felt that his interest in the equipment enabled him to keep active as long as it did: out-surviving his doctor's predictions by two years.