

VALE, GORDON HARRY SYDNEY HOOPER

Gordon Hooper studied entomology under Fredrick Athol Perkins at the University of Queensland (UQ) in the early 1950s, being awarded his B.Sc. in 1955. One of his classmates was the late Merv Bengston who went on to become head of the Entomology Branch of the Queensland Department of Primary Industries. Gordon's first appointment was as a field entomologist with the Queensland Department of Agriculture in Toowoomba. There he worked with Dr Alan May, the then authority on Australian fruit flies. Perhaps this experience led him to return to fruit fly entomology in later years.

After completing an M.Sc. at UQ in 1959, Gordon went on to do his PhD under A.W.A. Brown at the University of Western Ontario, Canada. A.W.A. Brown was an Englishman who studied insect physiology under V.B. Wigglesworth in London, and after moving to Canada became a world leader in the genetics and biochemistry of insecticide resistance in insects. Gordon's dissertation was entitled "Insecticide resistance in the root-maggot *Euxesta notata* (Wied.)", with the PhD awarded in 1964.

Consequently, when Gordon returned to UQ as a lecturer in entomology, he was enthusiastic about teaching and research in pest management and insecticide resistance. In 1965 he developed the course "Economic Entomology" where students had to identify all pest insect species in Queensland, develop a basic knowledge of their biology, and know the then current methods of pest management. One class in 1966 had 24 students and most obtained positions in Departments of Agriculture around Australia. A version of this unit was still being taught into the 1980s, as ET 202 "Introductory Entomology for Agriculture".

Gordon taught entomology at UQ for 20 years (1965-1985), with the period from 1977-1985 being as Head of the Department of Entomology. He was an excellent teacher with logical and clear presentation of course material. He fostered enquiry and a real desire to learn. He also supervised a large number of postgraduate students, many of whom were working on their research projects within State Departments. As Head he took a punt, in 1981, on accepting a novice in entomology to teach the Insect Ecology course when he appointed Myron Zalucki as a "short-term temporary" lecturer. His mentorship was greatly appreciated, as he took the somewhat monarch-centric new appointee aside and suggested he work on the "Heliothis" pest group (as they were then known) and to also make some forays into fruit flies. Thirty-nine years later Myron continues at UQ, still working on monarchs, Heliothis and making occasional forays into fruit flies. During his career at UQ, Gordon kept an interest in past students and continued to encourage and mentor them.

In the late 1960s Gordon took an interest in fruit fly research and developed friendships and collaborations with prominent researchers at the International Atomic Energy Agency (IAEA) Seibersdorf laboratories, the United States Department of Agriculture laboratories in Hawaii, and the University of Hawaii. At that time Hawaii was the international epicenter for research into pest species of *Bactrocera* (then *Dacus*) and Medfly. From 1969-1971 he undertook a leave of absence from UQ to work at the IAEA Seibersdorf labs, near Vienna. The Seibersdorf laboratories were then, and as they remain, a global focus for research on the development and operationalization of the Sterile Insect Technique (SIT). On return from the IAEA in 1971, Gordon had a Gamma Cell installed under the UQ Entomology Building in order to continue his research into the SIT. On one occasion this unit was used to sterilize pupae for a fruit fly mark-recapture study undertaken by McFarlane *et al.* at Wangaratta, Victoria.

In fruit fly ecology research, Gordon, Myron Zalucki and R.A.I. (Dick) Drew collaborated in studies of species populations in the Cooloola rainforest of southern coastal Queensland. On one occasion Gordon had his UQ technical assistant, Clyde Dunlop, climbing high into rainforest canopies to fix pullies and ropes

to suspend male lure traps (Steiner traps) in order to measure trap catches at differing heights above ground. Workplace Health & Safety was not an issue in those years!

Gordon had a second stint at the Seibersdorf laboratories between 1982 and 1984, when the Insect and Pest Control section was under Don Lindquist's leadership. Gordon led a small fruit fly group which included Eric Busch-Petersen, who initiated the genetic sexing work on Medfly, and Harry Fay who was on a Special Service Agreement to develop a starter diet for the Medfly mass-rearing facility in Mexico. Harry recalls frequently sneaking out to lunch with Gordon and Eric so the latter two could catch up on a morning deficient in cigarettes, and invariably indulge in an oversized naturschnitzel at a local heuriger. Gordon oversaw the building of a new mass-rearing laboratory at Seibersdorf and conducted research on larval diets, rearing technologies and quality evaluation of mass-reared Medfly. In addition, he supervised entomologists on IAEA Training Fellowships at Seibersdorf from countries such as Egypt, Sudan and India. He also undertook some field trials with a genetic-sexing strain of Medfly on Procida Island in Italy with Ugo Cirio and Alan Robinson.

After missing out on the Chair of Entomology at UQ to Prof H.E.H. Paterson, Gordon decided to make a break from academia and applied for and was appointed in 1986 to the role of Director, Australian Plague Locust Commission, based in Canberra: he remained in this position until his retirement in 1997. Here Gordon oversaw the modernization of operations, shaping the development of better data capture and the development of modelling tools and software that greatly improved the timely management of incipient locust outbreak populations. For Gordon at the APLC it was not about "high impact" publication, although he always encouraged his colleagues to do so, it was about making a difference to management.

Gordon had over 60 career publications, the majority of which are listed in Daniels (2004). His first publication was Hooper (1958), and last major report 42 years later (Hooper *et al.* 2000). He made significant contributions to the fields of insecticide resistance, insect sterilization technology, and the ecology and management (especially through SIT) of tephritid fruit flies. For the international fruit fly research community, he is perhaps best remembered for his major editorship, with Alan Robinson, of the Elsevier World Crop Pests volumes on fruit flies (Robinson & Hooper 1989). For his contributions to applied entomology, Gordon was awarded a rare 'Doctor of Science' degree from the University of Queensland in 1980.

As a leading member of the Australian entomological community for many decades, Gordon accepted a number of important service roles. He was a foundation member of Australian Entomological Society and served on the first executive as Foundation Secretary of the Society from 1965-1969. He was President of the Queensland Entomological Society in 1967, and then President of the Australian Entomological Society from 1992-1996. During the incursion of *Bactrocera papayae* into north Queensland in the mid 1990s, his technical expertise was applied for national benefit as a Scientific Advisory Panel member of the Papaya Fruit Fly Eradication Program (1995-97).

Socially, Dick Drew recalls that Gordon loved playing golf but swapped this for lawn bowls in later years when arthritis in his hands made it difficult to hold the clubs. A 'contemporary' of his, longtime Director of Entomology at QDPI the late Tom Paslow, remained a lifelong friend.

Gordon's impact as an educator, applied entomologist, and research manager is considerable – a legacy from which many benefited in developing their careers and contributions in entomology. Gordon was extremely energetic and enthusiastic, and a driving force in his areas of interest.

GORDON HARRY SYDNEY HOOPER, 23 September 1932 - 15 February 2019, passed away peacefully at The Canberra Hospital, aged 87 years. He was the beloved and loving husband of Margaret Shirley. Father of Cameron and Craig (dec). Father-in-law of Li-Hsueh. Grandfather of Jennifer.

References

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Prepared by Dick Drew, Harry Fay and Myron Zaluckij; collated by Tony Clarke.