

Crop Research comes to Davies Pastoral Laboratory

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In its first two decades, plant research at Davies Laboratory was focused exclusively on improving the productivity of native and introduced pasture grasses and legumes for rangeland livestock production. During that time, CSIRO's main research focus on tropical crops had been in the north-west. By the early 1980s, however, the cropping effort in the north-west was looking shaky, with the high cost of research increasingly difficult to justify. For example, a Brisbane-Kununurra return airfare cost half as much as a round-the-world ticket. In 1981 therefore, I visited Davies Laboratory for the first time since my student days, to examine the possibility of relocating the tropical soybean program from Kununurra to Davies Laboratory.

At that time, plans were well-advanced for the construction of the Burdekin Dam, and "the hunt was on" for profitable crops to grow when irrigation water became available. Tropical soybeans were a likely prospect, and there was ample office and laboratory space available at Davies Laboratory. So the tropical soybean program in the north-west was wound down and the experimental field equipment was trucked across to Lansdown. With funding from the Oilseed Research Council, a new tropical soybean program was established at Davies Laboratory, with trials located at the QDPI stations at Ayr and Millaroo, and the Burdekin Agricultural College at Clare under the stewardship of **Ross Rebgetz** and **Rick Larson**. There was strong grower interest in the program, especially when sugar and rice prices collapsed and it was expanded to include mungbean when the newly-formed Australian Centre for International Agricultural Research (ACIAR) funded the appointment of **Dr Patricia Chay** at Davies Laboratory to lead the work.

That phase of the tropical soybean program culminated in the release of the tropical soybean variety *Leichhardt*. However, an intervening policy change expanding the production of sugar in the Burdekin, combined with a recovery in the sugar price, undercut grower interest in soybeans and *Leichhardt* initially languished. A few years later, however, *Leichhardt* became a key element of the legume fallow system developed by **Dr Alan Garside** and his colleagues in the SRDC-BSES-CSIRO Sugarcane Yield Decline Joint Venture. Alan was head-quartered at Davies Laboratory from the mid 1990s until 2009.

While it started in a small way with soybean, the main focus of crop science research at Davies Laboratory was naturally sugarcane. The first serious entry into sugar research came with the transfer, with CSR Ltd funding support, of sugarcane breeder **Dr Phil Jackson** from Macknade to Davies Laboratory. The sugar research program at Davies Laboratory grew rapidly over subsequent years, underpinned initially with funding from the SRDC and subsequently by funding from the Cooperative Research Centre for Sustainable Sugar Production. Numerous scientists participated in the sugarcane research program at Davies Laboratory during the two decades from 1990-2010, but the sugar research program is a separate story in itself.

