

## Life Member

# **Nils BERDING**



#### Personal:

Nils was born in Brisbane on 23 February, 1944. He married Barbara Isbel in December 1967. They have two children and four grandchildren.

### **Education:**

Nils received his education at Nudgee State School and Banyo State High School. He was awarded a B.Agr.Sc. degree from the University of Queensland in 1966 and a M.Agr.Sc. degree in 1972, on research conducted at BSES Meringa. He was awarded a Ph.D. degree from the University of California, at Davis, in 1974, specializing in biometry, crop improvement, and population genetics.

# Career:

After being awarded a final-year scholarship by BSES, Nils commenced his career at BSES Meringa in January 1966 and worked there until his retirement in July 2010. In his career of 44.5 years with BSES he occupied positions of Scientist, Research Scientist, and Principal Scientist in crop improvement.

On retirement, Nils established SCII Consultancy Pty Ltd. He has provided sugarcane crop improvement consultancy services in Argentina, Brazil, Ecuador, Iran, Thailand, and Pakistan. In July 2013, he was appointed as a member of the Sugar Research Australia Board's Research Funding Panel.

### **Industry contributions:**

Nils was a member of, or led, a crop improvement team at BSES Meringa responsible for the release of 57 "Q" cultivars originally selected at BSES Meringa. Up to the end of the 2008 season these had produced 205,526,080 tonnes cane. He was responsible for conduct of cross-pollination activities, both natural and managed, at BSES Meringa, producing the bulk of all sexual seed used in

BSES' four crop improvement programs.

Nils' research activities resulted in a simplified, totally objective, three-stage selection program that resulted in cultivar release 12 years from the sexual seedling stage. The program was distinguished by a final stage using large, sub-station based, replicated trials.

Nils, with Alec Brotherton, was responsible for the introduction of near infra-red spectroscopic applications to the industry. Their research culminated in the development of the 'Large Cassette Module', a semi-automated analytical system used in the BSES Meringa quality component laboratory. Nils, with David Marston and staff from Biolab Analytical Technology, New Zealand, subsequently developed the SpectraCane®, a high-speed, automated analytical system using superior Fourier-transformed, near infra-red, interferometer spectroscopy. Eleven of these units now operate in eight sugar industries.

Nils conducted world-leading research on managed initiation of sugarcane flowering that consistently resulted in  $\approx$  90% of treated clones flowering and  $\approx$  70% of treated stalks producing usable panicles.

Nils left a legacy at BSES Meringa of innovative crop-improvement infrastructure that included cross-pollination facilities, cold-dehumidification seed processing and deep-freeze seed storage facilities, seed germination facilities, photoperiod facilities for managed initiation of flowering, and excellent quality component analytical capability.

#### Awards:

1989: The ASSCT's President Medal, for the best research paper, with G.A. Brotherton, D.G. le Brocq, and J.C Skinner.

1998: The inaugural Sugar Research and Development Corporation's "Researcher of the Year".

2010: Sugar Research and Development Corporation's Innovation Awards – Individual Award – "Service to Industry".

Sugar Research and Development Corporation's Innovation Awards – Team Innovation Award – "BSES Smut Buster Team Effort".

2014: ASSCT Life Member.

## **ASSCT involvement:**

Nils has authored or co-authored 33 ASSCT research papers. He was Chair of the Agricultural Section for the ASSCT Conference in Cairns in 2002. He served as ASSCT President for the 2012 Conference at Palm Cove.

### **ISSCT involvement:**

Nils led the ISSCT's 1976 germplasm collection expedition to the Indonesian Archipelago. This, the first contemporary collection effort in Indonesia, returned 520 clones to quarantine in Brisbane.

Nils served on the ISSCT's Standing Committee on Germplasm and Breeding for a number of terms including serving as Committee Chair from 2001 to 2007. He attended the  $2^{nd}$ , and  $4^{th}$  to the  $10^{th}$  Workshops of ISSCT Germplasm and Breeding Committee. He attended the  $24^{th}$ ,  $25^{th}$ , and  $26^{th}$  ISSCT Congresses. He has authored, or co-authored, seven ISSCT research papers.