DR. MIKE GALE

Professor Mike Gale FRS retired from the John Innes Centre, Norwich, U.K., on 25 August, 2003, after a long and distinguished 35-year career in cereal genetics. Mike joined the former Plant Breeding Institute at Cambridge in 1968 after completing a B.Sc. at the University of Birmingham and a Ph.D. at the University College of Wales, Aberystwyth. His original interest at the Plant Breeding Institute was in the genetic control of secondary metabolites, however, he soon began a program of research into genetic dwarfism in wheat, producing the first genetic maps for the Norin 10 semidwarfing loci in the late 1970s. This period also saw the development of global collaborations with the cereal research community, which have been a continuous theme of Mike's career. He was a founding member of the International Symposium on Preharvest Sprouting in Cereals, the very successful Plant and Animal Genome conferences in San Diego, and the International Grass Genome Initiative. In addition, Mike holds consultancies and board memberships too numerous to mention.

Mike's outstanding contribution to cereal genetics grew from his early recognition of the need for improved genetic marker technologies. Following early success with isoenzymes, he greatly expanded marker technologies in wheat with the first applications of RFLPs in the late 1980s. The subsequent geometric growth in the scale and precision of the genetic map of wheat was largely driven by Mike's group. The wheat RFLP maps rapidly revealed unexpected synteny, effectively providing a single linkage map for each chromosome, triplicated across the homoeologous A, B, and D genomes. This research was quickly followed by the discovery that the same linkage groups could be used to construct the RFLP map of rye via a limited number of simple translocations and inversions. Extension of the technology to barley and millet, together with collaborations with cereal-mapping groups worldwide, founded the new science of comparative genomics. Together with Graham Moore and Katrien Devos, Mike was coauthor of the 'crop circle' model for chromosome evolution in the grasses. His immediate legacy is, thus, the genetic alignment of all cereals with rice, the model monocot genome sequence.

Mike also has pursued an active administrative career in parallel with his scientific contributions. He became the first Head of the Department of Cereals Research at the then Institute of Plant Science Research in 1988 following the privatization of the Plant Breeding Institute in Cambridge, and then Head of the Cambridge Laboratory at the John Innes Centre in 1992 after the Department was transferred to Norwich. Mike was subsequently Associate Director of Research of the John Innes Centre and also Director in 1999. His prolific output includes more than 200 refereed papers and book chapters. He was elected a fellow of the Royal Society in 1996, a Fellow of the Chinese Academy of Engineering (1998), and a Professorial Fellow of the University of East Anglia (1999). He has been awarded the Royal Agricultural Society Research Medal (1994), the Rank Nutrition Prize (1997), and the Darwin Medal of the Royal Society (1998). Happily, Mike continues with us at the John Innes Centre as an Emeritus Research Fellow and can still be found in his office or traveling, making distinguished contributions to the administration of international agricultural research, when, of course, not on the golf course.

DR. MARTIN McEWAN

New Zealand's foremost wheat breeder, Dr. Martin McEwan of Palmerston North, passed away on 19 January, 2004. In New Zealand, his achievements helped change bread from the white, unsliced loaves of the 1960s and early 1970s to the convenient, sliced multigrain loaves of today. While working for DSIR, Crop Research, Dr. McEwan bred a string of highly successful wheat cultivars, including Otane. Otane had excellent milling qualities and produced exceptionally high-grade flours. These qualities were important in the development of new bakery products and processes that became possible in New Zealand after deregulation of the wheat industry in the late 1980s. For a period in the early 1990s, Otane commanded over 80 % of New Zealand's wheat production. Other successful wheat cultivars that Martin bred and named after areas in the Manawatu were Rongotea (1979) and Oroua (1979), which were grown from Southland to the Waikato River in New Zealand as were other cultivars included Karamu (1972) and Endeavour (1994). All these cultivars resulted from semidwarf wheat germ plasm he brought to New Zealand. His influence continues today as young breeders he mentored now lead New Zealand cereal breeding programs.

Dr McEwan also worked on other cereals, releasing the successful general-purpose feed oat Awapuni, the forage oat Enterprise for Australia, the black feed oat Finlay, the forage barley Opiki, and the triticale Aranui.

Martin's international contacts were considerable and included collaborations with the Plant Breeding Institute in Cambridge, England, CIMMYT, and Agriculture and Agri-Food Canada. Many of these northern hemisphere organizations today use New Zealand for out-of-season nurseries and multiplications, a concept initially developed through Martin's contacts.

Martin retired in 1993 and has spent recent years defining the genetic relationships of our 72 native Coprosmas. Breeding Corprosmas and cricket were life-long passions. He was a Fellow of the New Zealand Institute of Agricultural Science and received the New Zealand 1990 Commemoration Medal and the DSIR Ministerial Award in 1991 for Scientific and Technological Development.

Martin played provincial cricket for several years and past scorecards record successful father and son playing days. He is survived by his wife and two sons.