



Researcher recognised for fight against cereal disease

A scientist whose research into cereal disease continues to benefit Australian grain growers and the broader community has been recognised as an international leader in plant pathology and genetics.

Professor Robert Park, the David and Judith Coffey Chair in Sustainable Agriculture at the University of Sydney, has won a New South Wales Science and Engineering Award.

Professor Park, who is also director of the Grains Research and Development Corporation-funded Australian Cereal Rust Control Program (ACRCP), was presented with the Excellence in Biological Sciences category award for his major contribution to the global effort to fight diseases that infect agricultural crops.

“I feel most fortunate to have had the opportunity to have a career working on something that is a passion and to meet and work with some remarkable people,” Professor Park said. “To be recognised for doing so is truly humbling.”

Professor Park joined the University of Sydney’s Plant Breeding Institute in 1988 and has since worked there as a world leader in seeking genetic solutions to rust control in cereals. Caused by fungal pathogens, rusts significantly reduce crop yields and, in the case of stem rust, can destroy entire crops.

For the past 24 years, Professor Park has conducted Australia-wide analyses of wheat, barley and oat rust pathogens. His research has made major impacts on understanding genetic variability in all cereal rust pathogens and the genetics of resistance to these diseases in their respective hosts.

The GRDC, which has supported Professor Park’s work for many years, has praised him for his research efforts and achievements.

GRDC Managing Director John Harvey said Professor Park’s research continued to have a profound impact on cereal disease awareness, prevention and management in Australian cropping systems.

“GRDC’s support of Professor Park goes a long way in enabling our nation’s grain growers to continue operating productive farming systems. Rust, particularly, is major issue for Australian grain growers and one that we cannot afford to be complacent about.

“The University of Sydney and Professor Park are to be congratulated for their commitment to, and track record in, finding solutions that have reduced the impact of rust diseases. Without current control measures in place, the potential yield losses would be enormous.”

Mr Harvey said the GRDC and the broader grains industry recognised the value of investing in disease-related research partnerships with dynamic universities and institutes and in building research capacity for the benefit of the grains industry. He said Professor Park’s





Wednesday, November 6, 2013

accomplishments demonstrated outstanding return on grains research, development and extension investment.

“A key factor in the University’s success has been its ability to foster partnerships with Australian and overseas research bodies,” he said.

Professor Mark Adams, Dean of the Faculty of Agriculture and Environment at the University of Sydney, acknowledged the global nature of the research: “Professor Ronnie Coffman of Cornell University was recently awarded the World Agriculture Prize for his part in this same global program. Australian funding agencies like the GRDC are to be congratulated for their support of Australian growers and the world’s population, through visionary R&D.”

The GRDC-funded ACRCP, which is led by Professor Park, involves more than 20 scientists across research nodes at the CSIRO Plant Industry, University of Adelaide, NSW Department of Primary Industries, and the International Wheat and Maize Improvement Centre in Mexico.

The ACRCP recently announced the discovery of new wheat and barley leaf rust pathotypes, underlining the importance of the program in protecting Australian crops.

Over the past 20 years, Professor Park has also developed a world-leading research program on rust resistance in barley, which has discovered new sources of durable rust resistance that are now protecting barley crops both in Australia and overseas.

Professor Park is particularly interested in the way in which fungal rust pathogens evolve and become virulent on resistant cereal cultivars.

His research group has developed DNA-based markers that have allowed them to test hypotheses on how rust pathogen populations have evolved in Australia over the past 90 years, and is now decoding the genomes of these pathogens to develop a deeper understanding of how they infect and destroy cereal crops.

ENDS

Media enquiries: Verity
Leatherdale, University of Sydney
Phone (02) 9351 4312, 0403 067 342 or
email verity.leatherdale@sydney.edu.au

Caption: Professor Robert Park receives his New South Wales Science and Engineering Award from the Governor of NSW, Professor Marie Bashir.

Media releases and other media products can be found at www.grdc.com.au/media-news

