5 Australia-China Partnerships for Food Production, Security and Trade

It is Murdoch University’s vision to continuously contribute to the greater Australia-China relationship via its ongoing engagement with China’s key national research academies and universities. The end of 2015 will have seen the establishment of five joint research centres to undertake a variety of projects that are of national significance to both Australia and China in the important fields of food production, food security and trade.

1. The Australia-China Centre for Wheat Improvement aims to increase Australian wheat marketability in China by improving the quality attributes for producing Chinese domestic food products such as noodles and steamed bread. The centre analyses grain development for yield and quality attributes, and characterises associated grain proteins utilising advanced omic-technologies. This enables Australian grown wheat to better cater to China’s speciality product market and to increase wheat yield through genetic, molecular marker and bioinformatics technologies. (Partner: Chinese Academy of Agricultural Sciences)

2. The Australia-China Joint Centre for Postharvest Grain Biosecurity and Quality Research aims to work with the key end grain users on solving national issues in Australia and China relevant to postharvest grain biosecurity and quality, including postharvest grain storage and insect control, pesticide usage and residues, management of grain quality and standards, grain nutrition, grain processing, marketing and policy, and translation of science into application/practice. This will facilitate the best use of Australia’s grain in China’s speciality domestic food products and reduce market access hurdles between Australia and China. (Partner: Academy State Administration of Grains)

3. The Australia-China Joint Centre for the Management and Eradication of Exotic Invasive Species aims to manage plant biosecurity risk and reduce the trade hurdle between Australia and China. This will help safeguard trade and sustainability of Australia’s agriculture, horticulture and forestry enterprises. The centre will address biosecurity, crop protection technology, pathogens, insect pests, weeds, risk analysis, predication and surveillance. (Partner: Chinese Academy of Agricultural Sciences)

4. The Joint Research Centre for Abiotic and Biotic Stress Management in Agriculture, Horticulture and Forestry aims to undertake research that contributes to developing multiple stress-tolerant crops and production systems in China and Australia. Reducing crop susceptibility to drought and pests and increasing productivity are important research goals. The research outcomes will have relevance and strategic importance to achieving sustainable and durable yields of staple crops of food security significance. (Partner: Northwest Agriculture and Forestry University)

5. The Australia-China Joint Research and Training Centre for Veterinary Epidemiology aims to improve human, animal and environmental health by undertaking research and training in epidemiology, biosecurity, disease surveillance and risk assessment in the livestock sector in China. The Centre is addressing key deficiencies in epidemiology training at Chinese tertiary institutions. (Partner: Huazhong Agricultural University, with support from the Chinese Ministry of Agriculture’s Veterinary Bureau, the China Animal Health and Epidemiology Center, and FAO Beijing office)