

Media Release

Chiefs of Staff, News Directors

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International effort to address food security

Researchers from the University of Tasmania's School of Land and Food are partnering with a prestigious research foundation in India in a joint effort to address global food security. The Head of School of Land and Food, Professor Holger Meinke, travelled to India last week where he signed an agreement with the M S Swaminathan Research Foundation on a project to develop a variety of salt-tolerant rice.

The \$2 million project is funded under the Australian Government's Australia-India Strategic Research Fund and includes equal contributions from the Australian and Indian Governments. The Fund supports Australian researchers to work with Indian scientists in leading-edge scientific research projects and workshops.

Professor Meinke said rice is one of the most important staple foods in the world, with 92 per cent of all rice produced in Asia. Production in this region is increasingly impaired by seawater intrusion or saline water tables rendering vast areas of land unproductive and threatening the livelihood of many rice farmers.

"Researchers from the University of Tasmania, supported by the Tasmanian Institute of Agriculture, will be using a variety of wild rice that is capable of growing in highly saline coastal areas to identify and transfer traits that confer its remarkable salinity-stress tolerance," Professor Meinke said.

"These traits will be transferred to traditional rice cultivars using a range of modern plant-breeding techniques to create a salt-tolerant rice variety which will be suitable for growing conditions in India and other saline environments around the world.

"The project will include exchange visits between India and Australia and is a great example of Tasmanian researchers forming international partnerships and sharing expertise to address issues of global significance."

The three-year project is being led by University of Tasmania Professor Sergey Shabala who said the project is an important effort to improve global food security as well as production efficiencies for Australian farmers.

"Rice is Australia's third largest cereal grain export, and the ninth largest agricultural export. The industry generates around \$800 million revenue per annum, with around \$500 million of this coming from value-added exports," Professor Shabala said.

“The development of a salinity-tolerant rice variety will help improve outcomes for Australian farmers who are affected by transient salinity.

“This is the first step towards developing agricultural systems that are highly salt-tolerant. The capabilities and technologies developed through this project have the potential to ultimately enhance the agricultural productivity for other major crops such as barley and wheat.”

The University of Tasmania will also work closely with Dr Zhonghua Chen from the University of Western Sydney.

Information released by:

The Tasmanian Institute of Agriculture
Phone: 61 3 6226 6216 or 0438 387 436
Email: tia.comms@utas.edu.au