Water wonder

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A brilliant water saving idea by UNSW engineering academics Greg Leslie and Bruce Sutton has impressed the judges on ABC TV's *New Inventors* program.

Associate Professor Leslie, of the School of Chemical Engineering, and Professor Sutton, formerly of the University of Sydney and now a Visiting Fellow at UNSW, won their night on the popular program and will now go on to the finals, to be held later this year.

The pair won for ROSDI, their Reverse-Osmosis Sub-surface Drip Irrigation system, which allows salty water to be used in crop irrigation without energy-intensive water treatment.

ROSDI uses pipes made from reverse-osmosis membrane, like that used in desalination plants, to filter salt from brackish groundwater for crop irrigation in times of drought or low water availability.

Drip-feed ... a diagram of the ROSDI concept

The system uses the suction force created by a plant's roots to draw water through the membrane, dispensing with the need for pumping.

New Inventors judge james Bradfield Moody described ROSDI as a "really elegant, potentially world-first" concept.

ROSDI also won the Eureka Prize for Water Research and Innovation in 2010.

The technology is being commercialised by NewSouth Innovations, UNSW's technology commercialisation company.

More information: VIDEO: Watch their *New Inventors* appearance

Provided by University of New South Wales