

Press Release

EMBARGOED UNTIL March 08, 2016 07:00 PM



Ultra-thin degradable plastic film helps native trees regenerate and crops flourish

Brisbane, Australia –

New degradable plastic film that is less than the width of a human hair has proved its worth in helping to regenerate native trees and establish high value crops.

The new technology has won the *Excellence in Innovation Award* for the Cooperative Research Centre for Polymers and its partners, announced tonight [Tuesday March 8] at the CRC Association gala dinner.

The ultra-thin propagation films are applied to a crop at seeding and are buried at the edges to create a mini-greenhouse that traps heat and moisture close to the ground where they are most needed by the seeds.

Then as the plants grow, the plastic film breaks down in the sunlight at just the right time. Benefits for crop growers include earlier planting, improved germination, better early growth, greater water use efficiency, and potentially higher yields.

The film technology was developed by an Australian company, Integrated Packaging, and is in regular use in Ireland for the production of maize.

John Cerini, CEO, says his company joined the CRC for Polymers seeking to improve the technology that controls the breakdown of the film to make it suitable for a wider range of crops.

“Our collaboration with the CRC led us to a new range of films that give greater control over the timing of a film’s degradation both above and below ground,” he says.

The CRC is also developing a computer-based decision support tool to help farmers decide when to use the films for a given crop by providing information on the best time to plant, the grade of film product to use, the likely yield and the potential costs and benefits.

Greening Australia, another CRC partner, was interested in how the technology could help native trees regenerate, especially in dry and marginal country.

“The new films have been shown to assist native tree species to germinate”, says Greening Australia CEO, Brendan Foran. “The films capture and store soil moisture and they potentially expand the period of time to do planting.”

The technology is being adapted to Australian conditions, farming practices and to more than a dozen commercially important crops in a series of field trials run across four States.

The trials demonstrated that use of the films resulted in more uniform germination, early growth and establishment. Also many crop specific benefits were seen, such as a wider growing season, the opportunity for a price premium for getting to market early, the ability to grow higher value crops in cooler regions, more efficient use of available water, and increased yields.

CRC for Polymers CEO, Dr Ian Dagley, says: “The new technology is the result of over a decade of research in the CRC between Integrated Packaging, University of Queensland, Queensland University of Technology, CSIRO, ANSTO, Greening Australia, Birchip Cropping and Rice Research Australia.

“It demonstrates the great value of the CRC Programme which assists companies to develop new products that result from collaborative multidisciplinary research with Australian universities and research organisations”.

(ENDS)

Contact Details

For interview: Dr Ian Dagley, CEO CRC for Polymers, phone: 0418 360 495.

For media assistance, including photos and video footage: Ms Amy Hunt, CRC for Polymers, phone: 03 9518 0400.