

CSIRO News Release - Australia's bio-based economy set to blossom

NEWSRELEASE

13 JULY 2015



AUSTRALIA'S BIO-BASED ECONOMY SET TO BLOSSOM

CSIRO has entered into an agreement that positions Australian farmers to become leading producers of key bio-based raw materials needed for global industries to transition to a more renewable, sustainable and environmentally-friendly future.

The agreement sees the licensing of a novel source of super-high purity oleic acid from safflower seeds to start-up firm GO Resources, and presents new high-value alternative crops for Australian farmers.

Oleic acid is a mono-unsaturated fatty acid found in moderate amounts in most plant oils.

The stability of the acid makes it especially suitable for high temperature industrial applications such as lubricants and transformer fluids.

It can also be processed to build a range of complex polymers for use in bioplastics and surface coatings and even has uses in the pharmaceutical, cosmeceutical and home care industries.

"We have produced a novel safflower seed oil with super-high levels of oleic acid, in the vicinity of 92-95 per cent," Research Director of CSIRO's Bioproducts program Dr Allan Green said.

"The very high level of oleic acid purity that we have achieved opens up several high value applications for the new oil as industrial raw materials and substitutes for current petrochemicals.

"Super-high oleic (SHO) acid safflower is a great example of how the composition of plant oils can be tailored to specific end uses.

"Importantly, the future production of these oils and chemicals from crop plants will help us to remove excessive CO₂ from the atmosphere rather than continuing to extract more crude oil from the ground."

SHO safflower is a key outcome of the Crop Biofactories Initiative (CBI), a long-term research partnership between the Grains Research and Development Corporation (GRDC) and CSIRO that commenced back in 2004.

"A major goal of the program was to develop crop options that address emerging markets, offering new alternatives for Australian growers," Ron Osmond from the GRDC said.

"To that end, it is exciting to see the project reach this landmark stage, and to have attracted a commercial partner in GO Resources to take this technology through the next phases of development and commercialisation."

The safflower crops can be grown in a number of farming regions, from southern Australia right through to central Queensland.

However, it is likely that growers in close proximity to oilseed crushing facilities will be the first to take advantage of these new crops.

GO Resources are now seeking expressions of interest from additional investors to support taking the technology to market, where the high-value oils offer an eco-friendly alternative in the industrial chemicals, lubricants and plastics sectors.

Director of GO Resources, Trevor Gawne, is excited by the prospects.

"This is a real breakthrough for Australia. Super-high oleic acid safflower marks a starting point for developing our sustainable industries of the future," he said.

"With finite petroleum reserves, the technology presents a viable and scalable substitute that puts Australia at the forefront of renewable resources for industrial applications.

"We are delighted to be working with CSIRO and looking forward to taking the next steps in applying the technology to a new generation of bio-based products."

CONTACTS

MEDIA

Andreas Kahl

t +61 8 8303 8888
t +61 407 751 330

e andreas.kahl@csiro.au

GO Resources

Trevor Gawne

t +61 3 8340 0423
t +61 438 955 568

e trevor.gawne@go-resources.com.au



[Contact Us](#) | [Privacy Statement](#) | [Subscribe](#) | [Unsubscribe](#) | [Update my Profile](#)
[Legal Notices](#) | www.csiro.au

This email was sent to: **tony.pinkpank@csiro.au** by **CSIRO**

Limestone Avenue, Campbell, ACT 2602 Australia