

# Biofuel crops' push ignoring biosecurity impacts

Important biosecurity issues are being ignored in the global push to develop new non-food crops for biofuels and industrial and pharmaceutical uses, according to a report published recently by CSIRO.

"Compiled by representatives of 10 developed countries who attended the recent Biosecurity in the new bioeconomy summit in Canberra, the report focuses on the broad biosecurity consequences of twenty-first century non-food agriculture," said the summit's Convenor, CSIRO Entomology scientist Dr Andy Sheppard.

"It makes a series of internationally relevant recommendations for the sustainable development of crop-based biofuels and bioindustries."

## Invasiveness of new crops

"The exponential growth in non-food crops could compromise conventional agriculture if it ignores issues such as the potential invasiveness of new crops, the effects of abandoned plantings of trial crops, new pests and diseases and pest management," Andy said.

According to the Italian Institute for Environmental Protection and Research's

Dr Piero Genovesi, the European Union's generally relaxed attitude to the issue of invasive species is changing.

"It is crucial that this new awareness leads to a revision of current biofuel legislation so that the biosecurity risks caused by mandatory targets for replacing fossil fuels with renewable energy are addressed."

The head of the Biotechnology Division of the Organisation for Economic Co-operation and Development (OECD), Dr Iain Gillespie, said biosecurity is the key driver for a sustainable 'green growth' economy.

Andy said that, despite this, there are no accepted international regulatory approaches to evaluating these crops for the risks of bioinvasions, off-target pest impacts and degradation of natural ecosystems and associated ecosystem services.

## International biofuel standards

"The report stresses the role of science in developing and regulating sustainable crop-based biofuels so its recommendations are relevant to a wide international audience including farmers, industry, researchers and policy makers."

It also highlights the need for a global vision for future agricultural development

around biofuels and international standards and certification for the industry to avoid repeating the environmental harm previous agricultural 'revolutions' have caused.

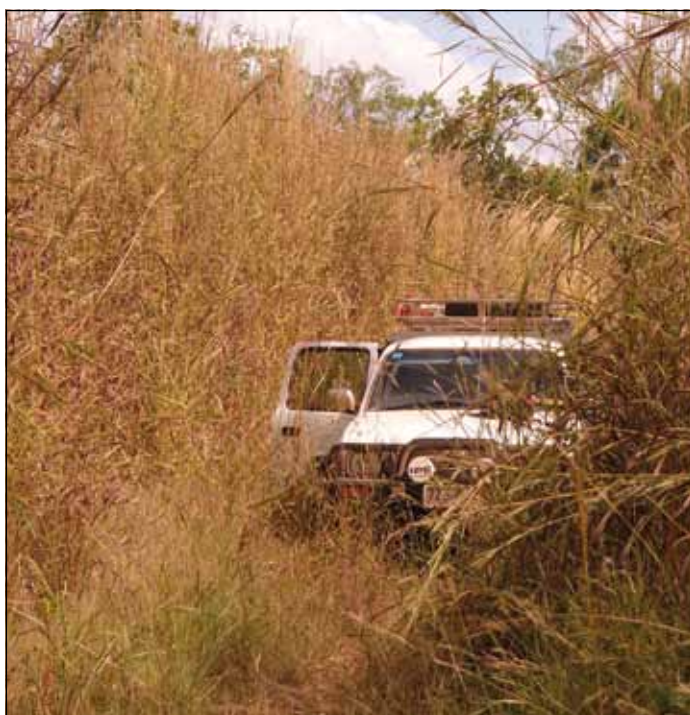
The report also recognises that developing countries will need assistance to develop best management practices, protect their environment and undertake risk assessments.

"While it is clear that biofuel-based rural industries can be beneficial, new non-food crops must meet the triple bottom line – people, planet, profit – criteria," Andy said.

In parallel, CSIRO is also undertaking a project, led by Dr Deb O'Connell, to evaluate existing and future biomass feedstocks against sustainability criteria including biosecurity.

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Growing to four metres tall, gamba grass in the Northern Territory is an example of a plant introduced without appropriate risk assessment. It has turned open forest savannah to grassland.



Gamba grass was introduced as a pasture plant. Now, in parts of the Northern Territory, it has gone feral and has changed fire regimes.