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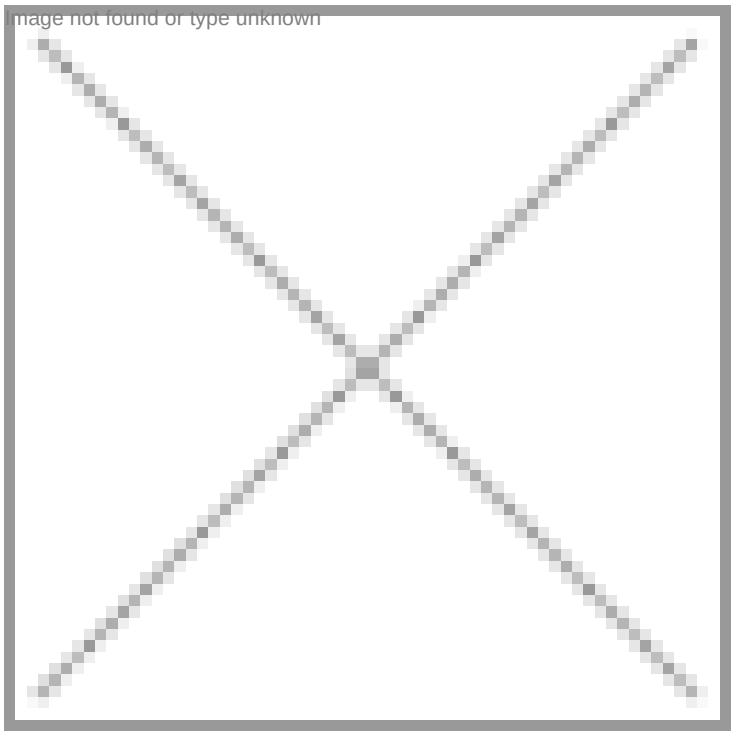

New zealand

EECA suggests govt to look at bioethanol

Bioethanol produced from forestry waste, straw, and waste paper could meet at least three per cent of New Zealand's petrol needs, a report commissioned by the Energy Efficiency and Conservation Authority (EECA) suggests.

Earlier this year the New Zealand government agreed in principle to set a sales target for biofuels in law, after several months of industry consultation. The government's focus is on two types of biofuel - bioethanol to be blended with petrol, and biodiesel to be blended with diesel.

Enough biodiesel can reportedly be produced from tallow to provide around five per cent of New Zealand's diesel, while the dairy industry could produce enough bioethanol to meet 0.3 per cent of the country's petrol needs.

"Biofuel has great potential in New Zealand," Labour Minister Pete Hodgson said. "It can help improve the security of transport fuel supplies and offer worthwhile health and emissions benefits." Hodgson added that he wanted the transport sector have the choice of biofuel by 2008 at the latest.

As an example of the benefits of biofuel production, a bioethanol refinery proposed in Taupo could potentially use willow plants grown in the area. Growing willow would provide an alternative land use for dairy farmers, and reduce the amount of

nitrogen leaching into Lake Taupo. Other companies are reported to be looking at building biorefinery operations in various New Zealand locations.

Biofuels are also gaining popularity internationally and are used in several countries, including Australia, Canada, Europe and the United States.

Source: www.nzbio.org.nz

Australia

Australians for use of stem cells in medical research

Recent research has shown that the majority of the public in Australia continue to regard the use of embryonic stem cells in medical research as acceptable, however, the public does not generally understand 'nuclear transfer' or 'therapeutic cloning' enough to be able to judge their acceptance.

While the Australian public have strong attitudes towards stem cell research and human cloning, it is difficult to gauge public attitudes towards more complex issues, such as somatic cell nuclear transfer (also called therapeutic cloning) because the terms and the technology are poorly understood.

Speaking at a forum on stem cells in Canberra, the manager of Public Awareness for Biotechnology Australia, Craig Cormick, said that the most recent research undertaken for the agency showed that when people do not have a high level of knowledge about a technology, they are likely to make emotive-based judgements.

"Over 93 percent of respondents were aware of scientists using stem cells to conduct medical research, although less (78.4 percent), were aware that scientists used embryonic stem cells for research. 63.5 percent of respondents regarded the use of embryonic stem cells in medical research as acceptable. Looking at the risks and benefits of stem cell research, 75.9 percent saw the use of embryonic stem cells as beneficial while 43.1 percent of respondents saw their use as risky," Cormick said.

The research study, undertaken by Eureka Strategic Research, involved a phone poll of 1067 people on broad biotechnology issues, and was supported with 13 focus groups.

The research found that people do recognize a worthy objective, and are generally supportive of pursuing it, despite concerns.

Source: www.biotechnology.gov.au

Biotech crops reduce pesticide use by 6 percent

After just nine years of commercialization, biotech crops have made a significant, positive impact on the global economy and environment, decreasing pesticide spraying and reducing the environmental footprint associated with pesticide use by 14 percent, according to a study.

"Since 1996, adoption of biotech crops has contributed to reducing greenhouse gas emissions from agriculture and decreased pesticide spraying," said Graham Brookes, director of PG Economics, and one of the authors who conducted the study. "While greatly enhancing the way farmers in 18 countries produce food, feed and fiber, biotech crops have reduced the environmental footprint associated with agricultural practices. This study offers the first quantifiable global look at the impact of biotech crop production."

The study, "GM crops: the global socio-economic and environmental impact - the first nine years 1996â€“2004," reported that biotech crops contributed to significantly reduced greenhouse gas emissions from agricultural practices. This reduction results from decreased fuel use, about 1.8 billion liters in the past nine years, and additional soil carbon sequestration because of reduced ploughing or improved conservation tillage associated with biotech crops. In 2004, this reduction was equivalent to eliminating more than 10 billion kg of carbon dioxide from the atmosphere, or removing 5 million cars - one-fifth of the cars registered in the UK - from the road for one year. Biotech crops have reduced the volume of pesticide spraying globally by 6 percent since 1996, equivalent to a decrease of 172.5 million kg, according to the study. That's equivalent to eliminating 1,514 rail cars of pesticide's active ingredient. The largest environmental gains from changes in pesticide spraying have been from biotech soybeans and cotton, which have reduced the associated environmental footprint by 19 percent and 17 percent, respectively.

Source: www.pgeconomics.co.uk

canada

Canadians are firm believers in biotechnology

BIOTECanada, a national association representing the broad spectrum of biotech constituents, released intriguing results from a national poll conducted by Pollara research during the first week of September.

According to the study, an overwhelming majority of Canadians (81 percent) expect to see the benefits of biotechnology positively impact the environment, their health in general, and the Canadian economy. While Canadians generally feel good about biotechnology, almost one-third of them do not regard Canada as a biotechnology leader, or able to keep pace with the rest of the world. The results of the poll indicate Canadians want to see the biotechnology industry grow and produce results.

"It's exciting to see that Canadians have a positive view of biotechnology and are looking forward to the benefits these innovative technologies will bring to society", said Peter Brenders, president and CEO of BIOTECanada. "However, for our country to meet the expectations of Canadians, our biotechnology companies need government action in two key areas: supporting capital formation, and creating a modern regulatory environment."

Poll results clearly indicate Canadians remain concerned with the nation's ability to compete globally. Michael Denny, chair of BIOTECanada noted that, "We need to create an attractive investment environment to better leverage our world class science into well-financed companies. Simple changes can be made to encourage more investment in our companies."

Source: www.biotech.ca

China

China soon to approve GM rice

China could be the first country in the world to approve genetically modified (GM) rice.

The State Agricultural GM Crop Biosafety Committee, the technical body that evaluates GM rice for research and marketing, is likely to meet in November, reported China Daily.

On the agenda will be four varieties of GM rice developed by Chinese scientists - three insect-resistant varieties and a fourth that can withstand bacterial blight. The four breeds have been undergoing pre-production safety evaluation since last December.

Quoting Zhen Zhu, a leading rice scientist, the China Daily reported that "China's GM rice technologies lead the world and they are very mature for commercialization."

Source: www.chinadaily.com.cn