

HOME PAGE	MY TIMES	TODAY'S PAPER	VIDEO	MOST POPULAR	TIMES TOPICS	Get Home Delivery	Log In	Register Now
-----------	----------	---------------	-------	--------------	--------------	-------------------	--------	--------------

The New York Times

Environment

Science All NYT

WORLD U.S. N.Y. / REGION BUSINESS TECHNOLOGY SCIENCE HEALTH SPORTS OPINION ARTS STYLE TRAVEL JOBS REAL ESTATE AUTOS

ENVIRONMENT SPACE & COSMOS

New Trend in Biofuels Has New Risks

By ELISABETH ROSENTHAL
Published: May 21, 2008

ROME — In the past year, as the diversion of food crops like corn and palm to make biofuels has helped to drive up [food prices](#), investors and politicians have begun promoting newer, so-called second-generation biofuels as the next wave of green energy. These, made from non-food crops like reeds and wild grasses, would offer fuel without the risk of taking food off the table, they said.

Related

[Dot Earth: More Unintended Risks from Biofuels?](#) (May 21, 2008)

But now, biologists and botanists are warning that they, too, may bring serious unintended consequences. Most of these newer crops are what scientists label invasive species — that is, weeds — that have an extraordinarily high potential to escape biofuel

plantations, overrun adjacent farms and natural land, and create economic and ecological havoc in the process, they now say.

At a [United Nations](#) meeting in Bonn, Germany, on Tuesday, scientists from the Global Invasive Species Program, the [Nature Conservancy](#) and the International Union for Conservation of Nature, as well as other groups, presented a paper with a warning about invasive species.

“Some of the most commonly recommended species for biofuels production are also major invasive alien species,” the paper says, adding that these crops should be studied more thoroughly before being cultivated in new areas.

Controlling the spread of such plants could prove difficult, the experts said, producing “greater financial losses than gains.” The International Union for Conservation of Nature encapsulated the message like this: “Don’t let invasive biofuel crops attack your country.”

To reach their conclusions, the scientists compared the list of the most popular second-generation biofuels with the list of invasive species and found an alarming degree of overlap. They said little evaluation of risk had occurred before planting.

“With biofuels, there’s always a hurry,” said Geoffrey Howard, an invasive species expert with the International Union for Conservation of Nature. “Plantations are started by investors, often from the U.S. or Europe, so they are eager to generate biofuels within a couple of years and also, as you might guess, they don’t want a negative assessment.”

The biofuels industry said the risk of those crops morphing into weed problems is overstated, noting that proposed biofuel crops, while they have some potential to become weeds, are not plants that inevitably turn invasive.

“There are very few plants that are ‘weeds,’ full stop,” said Willy De Greef, incoming secretary general of EuropaBio, an industry group. “You have to look at the biology of the plant and the environment where you’re introducing it and ask, are there worry points here?” He said that biofuel farmers would inevitably introduce new crops carefully because they would not want growth they could not control.

[More Articles in Science »](#)

Great Getaways - Travel Deals by E-Mail



Sign up for travel offers from NYTimes.com's premier advertisers.

[See Sample](#) | [Privacy Policy](#)

Sign Up

SIGN IN TO E-MAIL OR SAVE THIS

PRINT

REPRINTS

SHARE

ARTICLE TOOLS

SPONSORED BY

NOTORIOUS
in theaters 09

MOST POPULAR

E-MAILED

BLOGGED

SEARCHED

The [European Union](#) and the United States have both instituted biofuel targets as a method to reduce carbon emissions. The European Union's target of 10 percent biofuel use in transportation by 2020 is binding. As such, politicians are anxiously awaiting the commercial perfection of second-generation biofuels.

The European Union is funding a project to introduce the "giant reed, a high-yielding, non-food plant into Europe Union agriculture," according to its proposal. The reed is environmentally friendly and a cost-effective crop, poised to become the "champion of biomass crops," the proposal says.

A proposed Florida biofuel plantation and plant, also using giant reed, has been greeted with enthusiasm by investors, its energy sold even before it is built.

But the project has been opposed by the Florida Native Plants Society and a number of scientists because of its proximity to the Everglades, where giant reed overgrowth could be dangerous, they said. The giant reed, previously used mostly in decorations and in making musical instruments — is a fast-growing, thirsty species that has drained wetlands and clogged drainage systems in other places where it has been planted. It is also highly flammable and increases the risk of fires.

From a business perspective, the good thing about second-generation biofuel crops is that they are easy to grow and need little attention. But that is also what creates their invasive potential.

"These are tough survivors, which means they're good producers for biofuel because they grow well on marginal land that you wouldn't use for food," Dr. Howard said. "But we've had 100 years of experience with introductions of these crops that turned out to be disastrous for environment, people, health."

Stas Burgiel, a scientist at the Nature Conservancy, said the cost of controlling invasive species is immense and generally not paid by those who created the problem.

But he and other experts emphasized that some of the second-generation biofuel crops could still be safe if introduced into the right places and under the right conditions

"With biofuels we need to do proper assessments and take appropriate measures so they don't get out of the gate, so to speak," he said. That assessment, he added, must take a broad geographical perspective since invasive species don't respect borders.

The Global Invasive Species Program estimates that the damage from invasive species costs the world more than \$1.4 trillion annually — five percent of the global economy.

Jatropha, the darling of the second-generation biofuels community, is now being cultivated widely in East Africa in brand new biofuel plantations. But jatropha has been recently banned by two Australian states as an invasive species. If jatropha, which is poisonous, overgrows farmland or pastures, it could be disastrous for the local food supply in Africa, experts said.

But Mr. De Greef said jatropha had little weed potential in most areas, adding: "Just because a species has caused a problem in one place doesn't make it a weed everywhere."

[More Articles in Science »](#)

[Need to know more? 50% off home delivery of The Times.](#)

1. [Your Money: A Primer for Young People Starting Their First Job](#)
2. [Japan, Seeking Trim Waists, Measures Millions](#)
3. [Lost in E-Mail, Tech Firms Face Self-Made Beast](#)
4. [When Mom and Dad Share It All](#)
5. [Bob Herbert: Letters From Vermont](#)
6. [Legal Drugs Kill Far More Than Illegal, Florida Says](#)
7. [Tapped Out](#)
8. [Mystery on Fifth Avenue](#)
9. [Paul Krugman: Bad Cow Disease](#)
10. [Tim Russert, 58, NBC's Face of Politics, Dies](#)

[Go to Complete List »](#)

The New York TimesTHEATER
nytimes.com/theater



Critics' picks for the Tony Awards

Also in Theater:

- [Making noise behind the scenes](#)
- [Imports Off Broadway](#)
- [Complete coverage of the 2008 Tony Awards](#)

ADVERTISEMENTS

Which movies made the 1,000 Best list?

In a world of second opinions, get the facts first.

Need to know more?
Get 50% off home delivery of The Times.

All the news that's fit to personalize.





The New York Timesnytimes.com/health

ALL THE NEWS THAT'S FIT TO CLICK

Ads by Google

what's this?

Ethanol: Savior or Scam?

The Daily Biofuels News Digest the 4 minute biofuels must-read
www.BiofuelsDigest.com

Biomass Energy

The Aquatic Plant That Could Solve America's Fuel Crisis. New Report.
www.GreenChipStocks.com/Biomass_Rpt

Green Energy

Energy Market Directory Save the Earth Now!
EnergyMRKT.com

Tips

To find reference information about the words used in this article, double-click on any word, phrase or name. A new window will open with a dictionary definition or encyclopedia entry.

Past Coverage

- Cost and Shortages Threaten Farmers' Crucial Tool: Fertilizer (April 30, 2008)
- THE FOOD CHAIN: As Prices Rise, Farmers Spurn Conservation (April 9, 2008)
- Pollution Is Called a Byproduct of a 'Clean' Fuel (March 11, 2008)
- Amid Doubts, Europe May Ban Some Biofuels (January 15, 2008)

Related Searches

- Biofuels [Add Alert](#)
- Environment [Add Alert](#)
- Energy and Power [Add Alert](#)

INSIDE NYTIMES.COM



BOOKS »



Essay: James Agee Unfettered

MAGAZINE »



When Mom and Dad Share It All

OPINION »

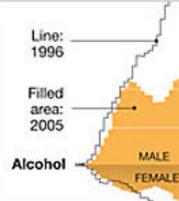
Editorial: Iowa's Disasters, From Floods to Tornadoes

IN THE REGION »



In Harmony With His Daughter

OPINION »



Charles Blow: Why Is Mom in Rehab?

BUSINESS »



In France, Plans to Make a Bit More of the Bubbly