

# Tiedettä tuhotaan Brasiliassa.

J. Tammisola 19.3.2015

Tieteen vastustajat ovat 5.3.2015 **sabotoineet vuosien tutkimustyön** (eko)tehokkaan puuntuotannon kehittämiseksi Brasiliassa. **Miljoonia** tutkimus- ja kehityskokeiden viimeisessä vaiheessa olevia eukalyptuksen taimia on tuhottu koekasvihuoneissa, joissa ne olivat viljelyyn hyväksymistä varten vaadittavissa Brasilian bioturvallisuusviranomaisen (CTNBio) viimeisissä turvallisuustutkimuksissa.

Tihutyö tehtiin samalla kaavalla kuin **Kultaisen riisin koeviljelmien tuhoaminen**<sup>1</sup> Maailman riisintutkimuskeskuksessa Filippiineillä 2013. Tutkimusasemalle kyörätään kymmenillä busseilla aatteen militantteja ja ”sotaturisteja” muualta maasta ja maailmasta, ja he ryntäävät yllättäen tekemään tuhoa koeviljelmille. Muutama paikalle osunut tutkija ja työntekijä ei voi laumaa estää, varsinkin kun moni tihulaisista riehuu aatteellisen transsin valtaamana. Filippiineillä sabotöörit tunkeutuivat myös meneillään olevaan Maailman riisintutkimuslaitoksen tiedekokoukseen, ja Brasiliassa he valtasivat Kansallisen Bioturvallisuusviranomaisen toimitilat.

– Uutisissa nämä geenivastustajat (”Members of the Landless Movement”) kutsuvat tätä kehitysmaan biotutkimuksen joukkohävitystä **’mielenosoitukseksi’**.

Hämäräksi jäänee, mikä kansainvälinen ”geeni-Isis”<sup>2</sup> tämän tihutyön organisoi. Yllyttäjiä ja tieteellä pelottelijoita ei kuitenkaan tarvitse kaukaa etsiä: siinä ovat maineensa mustanneet varsinkin Greenpeace ja Maan ystävät, kuten johtava geenisabotööri Mark Lynas luennoi<sup>3</sup> Oxfordin maatalouskongressille.

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<sup>1</sup> **Sabotöörit tuhosivat kultaisen riisin koeviljelmät** Maailman riisintutkimuskeskuksen pelloilla Filippiineillä 8.8.2013. [Maailman tiedeyhteisö on raivoissaan](#) Greenpeacen ym. asiattomista pelottelukampanjoista, todetaan *Science*-tiedelehden pääkirjoituksessa 20.9.2013. Muutamassa päivässä olivat jo tuhannet tutkijat kaikkialla maailmassa allekirjoittaneet [vetoamuksen](#), jossa nämä tihutyöt tuomitaan: "Global scientific community condemns the recent destruction of field trials of Golden Rice in the Philippines"

<sup>2</sup> **I-sis** ("Institute for Science in Society") on geenivastustaja Mae-Wan Ho:n vetämä "ajatushautaamo" ja kampanjajärjestö Britanniassa.

<sup>3</sup> [Johtava kasvintuhooja-aktivisti Mark Lynas](#), kertoo Oxfordin tiedekongressissa 2013 sisäpiiritietoa, kuinka tieteenvastaiset järjestöt ovat jo vuosikymmeniä [tehtailleet uskomuksia mediaan](#) maallikoiden säilyttämiseksi mukaan nykyaikaisten luonnontieteiden torjuntaan. "Tämä oli menestyksekkäin kampanja, jossa olen koskaan ollut mukana – ja avoimesti tieteen vastainen ristiretki. Nämä pelot levisivät kuin kulovalkea, ja muutamassa vuodessa geenimuuntelu saatiin käytännössä kielletyksi Euroopassa. Sitten Greenpeace, Maan ystävät ja muut levittivät perusteettomia pelkoja myös kolmanteen maailmaan – Afrikkaan, Intiaan ja muualle Aasiaan, missä geenimuuntelu on vieläkin kiellettyä."

## Tiede ei saa luovuttaa väkivallan edessä!

**Allekirjoita adressi** täällä: <http://allianceforscience.cornell.edu/>

### Geenimuuntelua vastustavien aktivistien uutistarjontaa Brasilian mediassa:

<http://business-humanrights.org/en/brazil-landless-movement-occupies-futura-gene-suzano-celulose-gm-eucalyptus-research-unit-alleging-their-introduction-could-cause-health-risks>

#### **Brazil: Landless Movement occupies FuturaGene & Suzano Celulose GM eucalyptus research unit, alleging their introduction could cause health risks**

Author: Agência Brasil, Published on: 13 March 2015

#### **“Landless protesters ransack GM eucalyptus nurseries”, 5 March 2015**

Members of the Landless Movement (MST) staged...[on March 5]...a protest against the commercial release of a genetically modified strain of the eucalyptus tree...approximately a thousand women occupied a research unit in...São Paulo state, where FuturaGene and Suzano Celulose develop the genetically engineered species. Activist Camila Bonassa...said that a number of nurseries with growing GM eucalyptus seedlings were ransacked. In Brasília, activists occupied the offices of the National Technical Commission for Biosecurity (CTNBio), where a meeting was...held on the release of the genetically modified H421 strain. Scientists declared it would show higher productivity and would be used in the wood industry. According to MST, the GM eucalyptus tree consumes more water than natural plants and represents a risk to the production of honey in Brazil...[and]...that most of the honey is produced from eucalyptus., and...the introduction of the GM strain could cause bees to produce contaminated honey. That could lead to the constraints on Brazil's honey in the global market, not to mention possible health risks to both consumers and bees...Camila Bonassa...believes the demonstration at the FuturaGene's research unit is...“...an act in defense of food sovereignty and the production of healthy food,”...Agência Brasil tried to reach FuturaGene, Suzano Celulose and CTNBio, but received no responses up to the publication of this article.

<http://agenciabrasil.ebc.com.br/en/geral/noticia/2015-03/landless-protesters-ransack-gm-eucalyptus-nurseries> (koko uutisjuttu):

- 05/03/2015 16h00 São Paulo

## **Daniel Mello reports from Agência Brasil** Edited by: **Armando Cardoso / Nira Foster** (JT 19.3.: juttu kasattu aktivistien väitteistä)

According to MST, the GM eucalyptus tree consumes more water than natural plants and represents a risk to the production of honey (Marcelo Camargo/Agência Brasil)

Members of the Landless Movement (MST) staged today (Mar 5) a protest against the commercial release of a genetically modified strain of the eucalyptus tree. According to MST, approximately a thousand women occupied a research unit in the city of Itapetininga, São Paulo state, where FuturaGene and Suzano Celulose develop the genetically engineered species.

Activist Camila Bonassa, who took part in the demonstration, said that a number of nurseries with growing GM eucalyptus seedlings were ransacked.

In Brasília, activists occupied the offices of the National Technical Commission for Biosecurity (CTNBio), where a meeting was to be held on the release of the genetically modified H421 strain. Scientists declared it would show higher productivity and would be used in the wood industry.

According to MST, the GM eucalyptus tree consumes more water than natural plants and represents a risk to the production of honey in Brazil. Movement leaders argue that most of the honey is produced from eucalyptus, and that the introduction of the GM strain could cause bees to produce contaminated honey. That could lead to the constraints on Brazil's honey in the global market, not to mention possible health risks to both consumers and bees.

“The genetically modified eucalyptus has not been released anywhere in the world; Brazil would be the first country to do it, as a sort of Guinea pig,” Camila Bonassa argued. She believes the demonstration at the FuturaGene's research unit is a way to draw people's attention to the country's food production. “It's an act in defense of food sovereignty and the production of healthy food,” she noted.

Agência Brasil tried to reach FuturaGene, Suzano Celulose and CTNBio, but received no responses up to the publication of this article

## Taustatietoa tästä vuonna 2012 käynnistyneestä tutkimus- ja kehityskokeesta:

### **FuturaGene starts final Brazilian field trial for yield enhanced eucalyptus plantations**

<http://www.futuragene.com/futuragene-brazil-field-trials.pdf>

Sao Paulo, 2 May 2012. FuturaGene, a world leader in the enhancement of yield and sustainability of woody crops for plantation forestry, biopower and biofuel markets, has received approval from the Brazilian National Technical Commission on Biosafety (CTNBio) to initiate its fourth regulatory field trial for yield enhanced Eucalyptus plantations in Brazil. The trial is designed to evaluate plantation agronomic properties and biosafety of a specific genetically modified event. FuturaGene has planted three additional regulatory trials over the last eight months. Biosafety data from trials in geographic areas representative of Eucalyptus plantations in Brazil are required for inclusion in a regulatory dossier to the CTNBio to obtain market approval for modified organisms in Brazil. FuturaGene plans to plant the trial in the coming two weeks. The initiation of this trial denotes an important milestone in the regulatory process for FuturaGene. The planting of the trial will be the culmination of a series of regulated selection, evaluation and biosafety trials which was initiated in 2006, with the first performance evaluation trial planted in a collaboration between Suzano Pulp and Paper (Suzano) and FuturaGene. This collaboration resulted in the acquisition of FuturaGene by Suzano. On successful completion of the regulatory trials which have been planted, FuturaGene plans to submit a dossier to the CTNBio, requesting regulatory approval to deploy its yield enhanced eucalyptus. Dr Stanley Hirsch, CEO of FuturaGene, said: "Over the past six years we have successfully demonstrated that our technology delivers sustainably increased yields for plantation forestry. This pioneering fourth trial is a key step towards the commercial deployment of our first plantation product designed to meet the ever increasing demands for energy at a time of declining land and water resources." "This is the most advanced trial in the world of an enhanced yield plantation forest and we are delighted that FuturaGene has achieved this important milestone. We continue with our plan to deploy our technology commercially in the next four-to-five years." -Ends Enquiries Stanley Hirsch CEO, FuturaGene +972 8 931 9550 Eugenio Cesar Ulian Vice President of Regulatory

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About FuturaGene - [www.futuragene.com](http://www.futuragene.com) FuturaGene, with facilities in Brazil, China and Israel, is a leader in plant genetic research and development for the global forestry, biopower and biofuel markets. FuturaGene develops sustainable, ecologically sound technology to meet the ever increasing demands for fiber, fuel and energy crops in the face of declining land and water resources. FuturaGene aims to be the leading crop technology company for plantation forestry, biopower and second generation biofuel through two main technology platforms: yield and processability enhancement - driving gains in yield during crop growth and greater processability of crop, post-harvest; and yield protection to protect strategic crops from emerging threats caused by changing climate and diminishing resources and to enable marginal land usage. FuturaGene's key crops are eucalyptus and poplar and its most advanced technologies are for yield improvement in sustainable industrial forestry. After developing as an independent company since its inception in 1993, FuturaGene was acquired, in July 2010 by Suzano Pulp and Paper, a Brazilian company. As a wholly owned subsidiary of Suzano, FuturaGene continues its worldwide biotech activities with enhanced resources driving its mission to be a world leader in sustainable plant genetic research and development.

**Brasilian geenisäädännössä muuntogeenisten eliöiden kenttäkokeista päättää ja viljelyyn hyväksymisestä antaa teknisen asiantuntija-arvionsa Brasilian kansallinen bioturvallisuusneuvosto (CTNBio). Viranomais-toimessa kielenä on portugali. Englanniksi systeemiä on kuvattu tällä (Minnesotan yliopiston) sivulla:**

<http://www.gmoera.umn.edu/public/regions/brazilregres.html>

## **Legislation and regulations:**

### **Biosafety law**

The new Brazilian biosafety law came into force on March 24 2005. According to the new law, the National Biosafety Council (Conselho Nacional de Biosegurança CNBS) takes the final decision on commercialisation of GM

products. The CNBS consists of 11 Ministers, and is chaired by the Minister of the President's office (José Dirceu, Casa Civil).

The Brazilian National Biosafety Committee (CTNBio) is charged with making decisions on experimental releases and making "technical opinions" on commercial release, which are submitted to the CNBS if any governmental organisation expresses disagreement with the CTNBio decision. CTNBio is part of the Ministry of Science and Technology.

The law also legalizes the production and marketing of transgenic glyphosate-resistant soybean, and planting of saved seed in 2004/255 (articles 35 and 36). An English translation of the law can be found at:[http://www.ctnbio.gov.br/index.php?action=/content/view&cod\\_objeto=1296](http://www.ctnbio.gov.br/index.php?action=/content/view&cod_objeto=1296)

### **Regulations for functioning of CTNBio**

Although the biosafety law defines the composition and competence of CTNBio, it required a Regulatory Decree to define the criteria for nomination of CTNBio members, and the definition of rules and procedures for the Commission's operation, for instance, the minimum number of votes required for a decision on the commercial release of GMOs. All GMO research activities that require laboratory certifications, importation and field releases have been waiting for this decision. The Decree has now been signed by the Brazilian President, on 22 November. Three days later the Ministry of Science and Technology published a Deliberation creating a committee of renowned scientists who will select the 12 members representing the scientific community, based on the indications made by scientific societies, universities and research institutions.

The CTNBio Decree can be read at:[https://www.planalto.gov.br/ccivil\\_03/Ato2004-2006/2005/Decreto/D5591.htm](https://www.planalto.gov.br/ccivil_03/Ato2004-2006/2005/Decreto/D5591.htm)

### **CTNBio rules for field trials of GM crops and data for risk assessment**

CTNBio specified rules in 1996 for field trials of GM crops ([CTNBio Institutional Act no. 3, de 12.11.96](#)), including the risk assessment questions to be addressed by applicants.