



## KEIN PATENT AUF LEBEN!

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### Syngenta patents on rice genes – the list

At the Syngenta General Assembly in 2005, Swissaid, Greenpeace, and the Bern Declaration presented four “mega-gene patents” of Syngenta (patents 1,2,3, and 13) and urged the company to withdraw these patent applications.

The list below reveals that Syngenta has submitted many more similar patents. The patent applications were submitted to the World Intellectual Property Organisation (WIPO) in Geneva, as well as to the European Patent Office (EPO) and the US Patent and Trademark Office. Patents 1 through 6 belong to the same “patent family”, since they are based on a single priority document which in the file appears as a modest paper of 115-pages, but in reality comprises 12 529 pages (application number: 60/300,112). In it Syngenta claims to be the inventor of some 30’000 gene sequences (practically the entire rice genome). Moreover, each patent is accompanied by one or two additional priority documents that refer exclusively to the patent in question. The submitted patent claims (WO and EP, respectively) are accordingly voluminous. The European Patent Office (EPO) (see “state of procedure”) has already reviewed some of these patents and its reports make it appear unlikely that any of them will be granted as submitted. EPA proposes that the patents and especially the claims be completely revised and suggests that Syngenta submit partial applications. So far, Syngenta has not officially responded to these proposals concerning the first seven patents on the list. However, the deadlines have been extended.

Syngenta informed the abovementioned NGO’s at a meeting on August 9, 2005, that some of the patents in question will either be reduced in scope or not pursued at all for legal and financial reasons. This information is included in the list below (with the respective patents, *in italics*). Greenpeace, the Berne Declaration, No Patents of Life!, and Swissaid urge Syngenta to withdraw all these patents.

1. EP 1399561 A WO 03/000906 299 pages

**Title: Plant disease resistance genes**

Applicant: Syngenta

Claims: 413 DNAs, 413 peptides; transgenic plant, disease resistant; plant, seed, progeny; plant as wheat, rice, corn, sorghum, rye,...; computer-readable medium

State of procedure: first examination report is very negative: lack of novelty, inventive step cannot be acknowledged. No function of peptides is given

*Syngenta: entered the national phase only in EU and US. Under (internal) review.*

2. EP 1402038 A2 20040331 WO 2003000905 260 pages

**Title: Identification and characterization of plant genes**

Applicant: Syngenta (US)

Claims: 71 plant DNAs (rice), 71 peptides; transgenic plant cell (maize, rice, banana, sorghum,...); method of modulating carbohydrate, protein, fatty acid composition; method of plant breeding using trait marker; computer-readable medium.

State of procedure: first examination report is very negative: lack of unity, not new, no inventive step.

*Syngenta: entered the national phase only in EU and US. Both existing applications will be allowed to lapse.*

3. EP 1402042 A2 20040331 WO 2003008540 177 pages

**Title: Abiotic stress responsive polynucleotides and polypeptides**

Applicant: Syngenta (US)

Claims: Plant DNA (2303 or even 4606 sequences); peptide; transgenic plant, seed, progeny, hybrid plant; method wherein abiotic stress is saline, cold, osmotic stress or any combination; computer readable medium; antibody.

State of procedure: first examination report very negative: one or more divisional applications may be submitted.

*Syngenta: Entered the national phase only in EU and US. All other possible designations have been abandoned. A Divisional application will be filed in the US relating to a specific sequence the function of which has been experimentally proven. A similar approach will be taken in Europe.*

4. EP 1409696 A2 20040421 WO 2003000904 323 pages

**Title: Identification and characterization of plant genes**

Applicant: Syngenta (US)

Claims: Plant DNA involved in control of flowering time in rice, 70-99% identity; peptide; transgenic plant (maize, wheat, rice, sorghum, banana,...), seed; method of modulating flowering time; computer readable medium.

State of procedure: first examination report was very negative. Actions of ETC. Loss of rights 10.05.2005. *Patent is dead.*

5. WO 03/000897 235 pages

**Title: Identification and characterization of phosphate transporter genes**

Applicant: Syngenta

Claims: DNA mediating phosphate uptake; protein; transgenic plant, cereal; maize, soybean, sorghum, wheat, rice,...; method of modulating phosphate uptake; method of breeding, selecting, detecting (genes); computer-readable medium

State of procedure: *dead 06.04.2005*

*Syngenta: entered the national phase only in the US. The application is pending.*

6. WO 03/007699 A2 20030130 125 pages

**Title: Transcription factors of cereals**

Applicant: Syngenta Participations AG (US)

Claims: DNA from plant, polypeptide; plant, dicot, monocot, including cereal, rice, sorghum; computer readable medium, method for altering resistance, abiotic stress, expression of genes;

progeny; hybrid plants, seeds; uniform population of plants.  
State of procedure: first examination report is negative; *dead 16.02.2005*.

7. WO 03/027249 163 pages

**Title: High-protein-phenotype-associated plant genes**

Applicant: Syngenta

Claims: 18 DNAs from maize, rice, arabidopsis, wheat, hordeum; transgenic plant, monocot, dicot; seed, progeny; method to confer altered nutritional qualities to a plant; method of marker-assisted selection; product, food or feed product; method for producing peptide for therapy or industry

State of procedure: not yet in European phase

*Syngenta: entered the national phase only in EU and US. Both existing applications are pending.*

8. EP 1127143 WO 0026389 A2 20000511

**Title: DNA comprising rice anther-specific gene and transgenic plant transformed therewith**

Applicant: Novartis AG

Claims: DNA from Oryza, specific for anther, to disrupt formation of viable pollen. Plant, male-sterile plant: rice, wheat, maize, sorghum, orchardgrass.

State of procedure: will soon be granted at EPO.

*Syngenta: The application is pending in US and Europe. Under internal Syngenta Review.*

9. EP 1261715 WO 0166755 A2 20010913

**Title: Novel monocotyledonous plant genes and uses thereof**

Applicant: Syngenta Participations

Claims: Genes from Triticum or Oryza homologous to NIM1 gene leading to systemic acquired resistance (SAR). DNA, transgenic plant (rice, wheat,...vegetables as carrot, bean cabbage,...berries and fruits as strawberry, grape, banana....sorghum, tobacco,...)

State of procedure: *dead 27.07.2005*

10. EP 1294914 WO 2001098480 A2 20011227

**Title: Promoters for plant gene expression**

Applicant: Syngenta (US)

Claims: Plant DNA, root specific expression; 567 sequences, 80% identity; transgenic plant, dicot, monocot, maize, soybean,...sorghum, rice, wheat; seed, fruit, vegetable, progeny; method to alter phenotype of plant (regulatory, insect, stress resistance, nutrient uptake).

State of procedure: beginning of examination (Search report positive for Syngenta).

*Syngenta: entered the national phase in Europe, US, Canada, Australia. The applications are pending.*

11. EP 1313867 A2 20030528 WO 02/016655

**Title: Stress-related genes of plants, transgenic plants containing same, and methods of use**

Applicant: The Scripps Research Institute; Syngenta (US)

Claims: Method of identifying stress condition and producing transgenic plant (resistant to abiotic stress); transgenic plant, seed, cDNA; plant exhibiting increased tolerance, improved nutritional or ornamental value; computer readable medium.

State of procedure: first examination report is very negative: application is in the main part not new, not inventive, no clarity and unity

*Syngenta: the application is pending in Europe, US, Canada, Australia*

12. EP 1379659 WO 02081696 A2 20021017

**Title: Oryza sativa nuclear cap binding protein 80**

Applicant: Syngenta Participations AG (US)

Claims: Abiotic stress, water deficit or dehydration. DNA from rice, polypeptide, transformed plant (cereal, potato, wheat, rice, corn, oat, barley, rye, dicot), producing a product (seed, fruit, vegetable, progeny); plant, seed, progeny; mutagenesis cassette.

State of procedure: beginning of examination (Search report is negative for Syngenta)

*Syngenta: entered the national phase in Europe, US, Canada, Australia. The applications are pending.*

13. EP 1453950 A2 20040908 WO 2003048319

**Title: Nucleic acid molecules from rice encoding proteins for abiotic stress tolerance, enhanced yield, disease resistance and altered nutritional quality and uses thereof**

Applicant: Syngenta Participations AG (US)

Claims: DNA from rice; transgenic plant, progeny, seed; plant showing stress tolerance, enhanced yield, altered nutritional content, disease resistance; plant which is rice, wheat, corn, potato, bean, vegetables, fruit trees, pepper, apple, sorghum,...

State of procedure: request for examination: 30.06.2004

*Syngenta: entered the national phase only in EU and US. Both existing applications will be allowed to lapse.*

14. EP 1539949 WO 2003048339 A2 20030612

**Title: Nucleic acid molecules from rice encoding RAR1 disease resistance proteins and uses thereof**

Applicant: Syngenta (US)

Claims: DNA from rice; transgenic plant, progeny, seed, rice, wheat,..., vegetables, fruit trees, spices, berries,...; method of enhancing pathogen resistance (nematode, bacteria, fungus, virus, viroid).

State of procedure: beginning of examination (preliminary international examination asked)

*Syngenta: The applications are pending in Europe and US*

15. WO 2005021723 20050310

**Title: Nucleic acid molecules from rice controlling abiotic stress tolerance**

Applicant: Syngenta (US)

Claims: 98 peptides, 60% identity and 98 DNA sequences; transgenic plant, monocot (rice, maize, wheat, millet, sorghum, triticale, secale, einkorn, spelt,...), dicot (potato, vegetables, fruits, pepper, banana); plant being stress, drought tolerant; progeny, seed.

State of procedure: not yet in European phase.

*Syngenta: The application is pending in the US*

Ruth Tippe, 10/08/05