Published on testbiotech (https://www.testbiotech.org)

Golden Lies: The Seed Industry's Questionable Golden Rice Project - Consumer organisation foodwatch publishes report of Testbiotech

Munich/ Berlin, 18.01.2012 Golden Rice, a prestigious agrobiotech industry project, may soon be placed on the markets after more than ten years of development. But it is still highly questionable if this rice really can help defeat vitamin A deficiency. This has been shown by a new Testbiotech report prepared for the consumer organisation foodwatch.

The rice is called 'Golden' because of the yellow colour of its kernels. It is supposed to demonstrate that genetically engineered plants can substantially help fight hunger and malnutrition – so far without success. According to announcements, the rice will be cultivated commercially in the Philippines in 2013. But the Testbiotech report shows that many crucial questions still need to be answered:

- To date no feeding trials have investigated health risks. Nevertheless, the rice has already been fed to children in China.
- Long term ecological risks have not been examined.
- Data on the stability of the carotinoids are missing. During storage of the rice kernels, in particular, this might be degraded. The carotinoids are produced in the plants as a result of the genetic engineering and are supposed to serve as source of vitamin A.
- Data on bioavailability are also lacking. Therefore it cannot be predicted how efficiently the carotinoids in the rice can be used by the human body to meet its need for a supply of vitamin A.
- Hardly any data are available on unintended changes in the composition of the plants and their metabolism. Systemic investigations concerning the plants' reaction to changing environmental conditions are also missing.
- If the plants are grown commercially, it is very likely that their genetic condition will persist in the environment and be able to invade wild species and regional rice varieties without being retrievable. The long term ecological and economical consequences of such uncontrolled spreading in the rice growing areas cannot be predicted.

Golden Rice was genetically engineered to produce carotinoids in its kernels. The rice shows a yellow colouring, and is supposed to become a source of vitamin A, which is essential for life. Vitamin A deficiency is a severe problem in poor countries. It is caused by malnutrition which is the result of poverty in large parts of the population. Among other things, this form of malnutrition can lead to eye and skin diseases and disorders of the immune and reproductive systems, and can cause growth deficiency in children. Even deaths are attributable to vitamin A deficiency.

Other measures that are already available, such as delivering vitamin A supplements and fortifying vitamin A in staple foods, are a better targeted and more cost efficient alternative for combating vitamin A deficiency. Furthermore, there are also conventionally bred plants that show a high carotinoid content.

Contact Testbiotech: Christoph Then, mobile +49 15154638040, info@testbiotech.org [1]

Contact foodwatch: Andreas Winkler, presse@foodwatch.de [2], +49 (0)30 / 24 04 76 - 23

Further information: Link to the report [3]



Golden Lies: The Seed Industry's Questionable Golden Rice Project - Consumer org

Published on testbiotech (https://www.testbiotech.org)

Source

 $\label{lem:url:https://www.testbiotech.org/en/news/golden-lies-seed-industry-s-questionable-golden-rice-project-consumer-organisation-foodwatch$

Links

[1] mailto:info@testbiotech.org [2] mailto:presse@foodwatch.de [3] http://foodwatch.de/foodwatch/content/e10/e1026/e49180/e49227/2012 gen-reis englisch final ger.pdf