

Golden rice is just a money –spinnerⁱ

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Golden Rice, which was developed by Ingo Potrykus of the Technical University, Zurich and Peter Beyer of the University of Freiburg, was funded largely by the Rockefeller Foundation. It was supposed to contain sufficient Pro Vitamin A to prevent night blindness caused by Vitamin A deficiency. This rice, it was said, would help the undernourished in the developing world. However as soon as it was announced that this nutritionally enhanced 'Golden Rice' had been developed, came the news that it may never get a chance to reach the poor. Golden Rice was found to be shackled in so many patents (over 70, big and small) that if the license fees for the use of all the patents had to be paid, the rice would price itself out of the market; certainly any market that the poor could access. Further developments in Golden Rice were watched closely. It became a test case to see how far the Life Science corporations would go to defend their patents and block research aimed at helping the poor.

The Agbiotechnology industry realized it had a public relations crisis that a food allegedly developed to address the food and nutritional needs of the poor may never reach them if some solution was not found for the myriad patents holding Golden Rice back. GM baiters set up a chorus of 'I told you so', that the life science industry never intended to solve food and nutrition problems, that the corporations owned everything through their patents and money making was their primary, if not only goal. The 70 patents on Golden Rice proved that point. The GM industry, reeling under bad press and consumer rejection, had to do some quick thinking not to look like the avaricious exploiters they were accused of being.

This product was after all their magnificent Trojan horse, to breach the wall of resistance against GM foods. Here was a product developed for the express goal of helping the poor and underprivileged and saving children from blindness.

This product could not possibly be allowed to look bad. So Astra Zeneca stepped in and made arrangements that Golden Rice could be developed further. Donations of "free licenses for humanitarian use" for intellectual property rights involved in the basic technology were negotiated and the developers of Golden Rice reached an agreement with Astra Zeneca and Greenovation, a Freiburg based biotechnology company.

Astra Zeneca was subsequently subsumed under Syngenta so the Syngenta company now controlled access to Golden Rice. To keep public criticism at bay, Syngenta set up a Humanitarian Board to negotiate access for developing countries. Terms and conditions were worked out for public research institutions in developing countries to use Golden Rice. A "freedom-to-operate" clause was negotiated to enable researchers to develop locally adapted Golden Rice varieties using their own techniques. The locally developed varieties would be made available to small farmers provided their incomes were below a certain level. Bigger farmers on the other hand, would be able to cultivate Golden Rice only after paying a license fee. This seemed fair enough.

Then suddenly comes the big turnaround. Syngenta appears to have decided recently, that since the furor over the 70 patents has died down and the public opprobrium over the industry control over Golden Rice seemed to have receded into the background, they could establish their claim over the product again. In the meantime research on Golden Rice had advanced and it was acquiring more the shape of a lucrative, money-spinning product than the laboratory exercise it was a few years ago.

To reestablish its claim to Golden Rice, Syngenta has quietly started a process by which it has acquired complete control over the way in which the genetic material of Golden Rice can be used by researchers, ignoring the earlier conditions set up by the Humanitarian Board. Syngenta can now allow or deny access to researchers at will. Rather than the open research agreements that had been agreed upon earlier with the South, the Humanitarian Board has laid down stringent new conditions under which Golden Rice will be available for breeding work to researchers in developing countries. The old contracts between the Board and the researchers have been revoked and new ones put in place. All users including the International Rice Research Institute (IRRI) in the Philippines and all research partners in India have had to sign the new contract and agree to abide by the new conditions.

Under the new contract, researchers have lost the “the freedom to operate” that was part of the earlier terms of access. They now cannot design their research using their own methods. For example, genetic transformation (transferring the Golden Rice gene into local varieties) can only be done by the one method that Syngenta has specified. The new contract demands that only those Golden Rice lines that have been transformed by Syngenta can be used further by developing country breeders/users. They cannot any more develop their own. What is more, Syngenta has demanded that all existing Golden Rice lines developed individually by the different research laboratories so far have to be destroyed. Regrettably, partner institutions have complied with this!

Only one Golden Rice line will now be available to researchers in developing countries, a japonica variety called *Oryza sativa* var *krukoidee*, all the other rice lines have been withdrawn and can not be accessed. These new developments are designed to establish Syngenta’s absolute ownership of Golden Rice, both at the process as well as the product level and are a precursor to patent claims in all countries developing Golden Rice.

The final element of corporate control over Golden Rice comes in the person of Gerard Barry who has been appointed by Syngenta as the Golden Rice Coordinator at IRRI. Mr. Barry’s major responsibility at IRRI is to work with plant breeders, biotechnologists, *intellectual property rights specialists*, and biosafety and regulatory agencies in Asian countries *‘to facilitate the development and deployment’* of the genetically engineered Golden Rice originally developed by the Technical University, Zurich. Prior to moving to IRRI, Barry had been Director of Research, Production and Technical Cooperation at Monsanto. A former Monsanto executive now has administrative control of the inter-governmental Golden Rice research project. It is ironic that the CGIAR, which claims to have more than 8,500 scientific staff on its rolls, could find no scientist of distinction to coordinate the Golden Rice program, if such coordination were indeed required and had to seek the help of Monsanto!

Mr. Barry’s new assignment to manage Intellectual Property Rights on Golden Rice would appear to have set the clock back to where it was when the charade over the Humanitarian Board and the pro-poor goal of Golden Rice was played out. Mr. Barry’s charge it would appear is to promote the adoption of patented Golden Rice for those in developing countries who can afford it. The poor blind children that were held up as the reason why Golden Rice was being developed do not seem to be part of the discourse anymore. The Life Science Industry seems to have come full circle.

ⁱ Sahai, S.,(2004), Civil Society, Dec. , pp19