performance of *Bt* cotton. Such misleading reports can end up influencing policy makers in a direction that could be ultimately detrimental to farmers.

Publishing a paper only using the data provided by the industry whose product is being studied, is clearly unethical. In fact, the vested interest getting its own experimental data reported in this way, is reminiscent of the old days of the tobacco industry when a spate of 'scientific publications' published in prestigious medical journals reiterated over and over again that nicotine was not harmful, that it was not addictive, that it was not connected to cancer, that there was no correlation to cardiovascular disease.... After a point, leading medical journals took a decision to stop corporate interests from promoting their wares through 'scientific papers' in their journals.

Science journals publishing in the field of food and agriculture would do well to follow this example and place strictures on corporates using a peer-reviewed forum for promoting GM crops. Given the aggressive marketing of GM products by the industry, this would be a timely precaution. GM crops are high profit items and their control is in the hands of big business. These are crops facing great opposition in Europe and now increasingly in the US. The moratorium on cultivating GM crops in Europe continues despite the threat of retaliatory action from the US. Add to this scenario the potentially large markets that an agricultural country like India offers. If India accepts and promotes GM technology, other countries in Asia are likely to accept it too. If GM technology could be accepted and implemented in the vast agricultural markets of Asia, it would neutralize quite a large part of the difficulties the GM industry faces in other parts of the world and turn in a handsome profit. Science must not fall victim to these plans and machinations.

Interestingly, even as the scientific community is debating this controversial paper, results of the first commercial crop of Bt cotton have come in. The indifferent performance has been reported at length in the media. The Bt crop in Maharashtra and Andhra Pradesh appears to have failed. The state government in Andhra Pradesh has admitted, 'Farmers have not experienced very positive and encouraging results'. Farmers, even the keen supporters of GM technology have recorded their dissatisfaction with Bt cotton

Given the contradiction between the exuberant projections of two foreign scientists publishing from an American university and the ground reality of a failed cotton crop in India, one must question the motivation of scientists in writing up such an unsubstantiated report and a reputed science journal in publishing it. One, of course, could be genuinely bad science on the part of the scientists and uncritical editorial work on the part of the editorial team of *Science*.

There are, however, lingering suspicions of other motivations, something along the pattern of what happened with the tobacco industry and medical journals.

There is an overall concern about science and scientific research losing its innocence. Now the talk is about patents, market shares, corporate dominance and keeping the competition out. It is less about putting out the best varieties and about growing food to feed the hungry, rather more about producing high tech commodities for the market and about maximizing profit. Scientists and the public need to be alert to these new developments, in what can be properly called the political economy of food and agriculture and the scientific research associated with it. Science journals have been misused before by vested interests to promote their products in the garb of scientific evidence. The vigilance of the scientific community is needed to make sure that this does not happen in the crucial sector of food and agriculture.

1. Qaim, M. and Zilberman, D., Science, 2003, **299**, 900–902.

SUMAN SAHAI

Gene Campaign, J-235/A Sainik Farms, Khanpur, New Delhi 110 062, India e-mail: genecamp@ysnl.com

**NEWS** 

## GD Birla Award for Partha Majumdar

Partha Pratim Majumdar has been awarded the 12th GD Birla Award for Scientific Research (2002). He is cited for his outstanding contributions toward understanding Human Genetics and Evolutionary Biology.

Majumdar has been successful in developing innovative paradigms and statistical methodologies applicable to mapping and transmission of complex human traits. He is also noted for his comprehensive study of mitochondrial

DNA markers present in the linguistic groups in India.

He currently heads the Anthropology and Human Genetics Unit, Indian Statistical Institute, Kolkata. He also serves on the National Bioethics Committee (Govt. of India), and UNESCO's Working Group on Human Genetics.