

Building trust – again



The recent furore surrounding the Financial Times' decision to run a controversial story on organic cotton 'fraud' may have died down, but the story has left the industry asking some serious questions about integrity. **John Mowbray** reports.

With typical bad timing, the February issue of *Ecotextile News* was on the printing press the day that the German edition of the Financial Times published a story on organic cotton fraud. We had heard about problems with organic certification in India this time last year, and investigated it at the time, but we were assured that the matter had been dealt with by the authorities satisfactorily.

So it wasn't a complete surprise to us when we heard that the Financial Times (FT) had unearthed this story and subjected it to widespread public scrutiny. To create the most impact, the story broke during the Berlin Fashion Week and was very bad publicity for the organic sector. As a publisher ourselves we could understand the timing. What we found difficult to accept was the FT claim that leading retailers and brands had 'knowingly' sold organic cotton clothing that was contaminated with

genetically (GM) modified cotton.

Our first question was: how could brands such as C&A, H&M and Tschibo – all implicated by the FT – even think about putting their brand reputation on the line by deliberately misleading consumers? Of course, the answer, it turned out, was that they were not doing this deliberately at all and that very surprisingly, the FT journalists didn't substantiate some of their claims.

But the FT story did uncover a few uncomfortable truths. Number one is

that European and North American retailers can actually sell organic cotton clothing which may be accidentally contaminated with GM material. This is legal. And in our view, this also blows away the argument that somehow the use of enzymes derived from GMO's in textile processing is not acceptable.

Secondly, there has been a problem with third party organic certification in India – a country that has seen unprecedented growth of organic cotton acreage in the past two or three

TESTING FOR GM COTTON]

■ Quick test for GMO DNA and Bt-Protein

A quick test for GM can be done in the field that costs just 5. It looks the Bt protein produced by GM plants as can be carried out on seeds, plants in the field and seed cotton before and during ginning.

■ DNA test

Once the fibre is ginned one has to rely on DNA testing. As in the food industry this laboratory based method uses PCR technique. It costs around 150 per sample, although quantitative conclusions are difficult. Mainly used when there is a 'suspicion' of GM contamination.



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“We hope to finalise the Indian organic standards in a few months,” Sanjay Dave, Director of APEDA, India.

years. This is such a big worry to the Indian authorities that the Agricultural and Processed Food Products Export Development Authority (APEDA) is now developing its own organic textile standards. This will be the first government body to implement mandatory organic textile standards. “The stakeholder consultations are going on and we hope to finalise the Indian standards in a few months,” said Sanjay Dave, Director of APEDA. “Thereafter, all the certification bodies will have to ensure compliance with these standards before carrying out any certification of organic textile products.”

Brands and retailers are now asking themselves if this problem is localised to certain areas of India or do the problems of product integrity simply magnify as the supply chain length increases. It’s hard to argue otherwise

TESTING COTTON FOR GM

Commenting on the Financial Times story, Dr Lothar Kruse of Impetus, told *Ecotextile News*, that most comments he had read in the media had “divorced facts from context.” He added that his laboratory had not been commissioned by the Financial Times Deutschland (FTD) to analyse cotton products from India. Most of its samples come directly from the textile industry, “we do not know the origin or background of the samples,” he said.

Dr Kruse did claim that approximately 30% of all samples “labelled as ‘organic’, ‘green’ or ‘bio’ Impetus had analysed within the last five years contained traces of genetic modifications. “But – and this is very important – I also made clear that probably most of these positive samples were ‘suspected cases’ and that this high rate does not reflect the reality,” he said. He also confirmed that the laboratory had tested around 500 samples in the last five years and that “the GMO level of approximately 80% of the positive samples was below 2%.”

It’s likely that deliberate fraud would yield much higher content levels of GMO material. Interestingly, around half of the 500 cotton samples tested by Impetus were post-ginning. Kruse says his lab can accurately test certain cotton samples for GMO material. This is at a much later stage than some in the textile industry expected. “We are able to extract DNA from raw materials like cotton fibres (washed, combed, bleached), yarns and in a very few cases garments,” he told *Ecotextile News*, but stressed that it is not simple to extract DNA from raw or slightly processed cotton fibres and that the extraction of DNA (or even the detection of genetic modifications) from fabrics is the exception rather than the rule.

to be frank, but perhaps the key question is can these long organic supply routes be adequately controlled when large volumes are being supplied?

Reputable organic cotton projects at bioRe and the excellent work done by Helvetas in Africa seem to work well. Social development as well as environmental issues drives these well established initiatives, but for brands and retailers who simply outsource huge volumes (and their own reputation) to third party certification schemes and ask as few questions as possible, then the risk of brand damage is very real indeed.

Testing questions

When the news broke about the FT story, it was understandable that the organic cotton sector wanted to pull up the draw bridge as quickly as

According to Nielsen: GMO-Free Is Fastest-Growing Corporate-Brand Claim. Sales of these items increased 67% in 2009 to US\$60.2 million, followed in popularity by gluten free (62%), absence of specific fat (53%) and lowers cholesterol (45%) store brands.



Cross contamination of organic with GM cotton in India is an issue.

MAIN CAUSES OF GM CONTAMINATION

- the prior crop grown in a field,
- transfer of pollen from a nearby field via wind or insects,
- co-mingling during harvest and handling.

possible and responded with a series of statements rubbishing the article.

In the rush that followed some of the comments issued by the organic cotton sector were confusing. One organisation claimed that: “organic cotton certifiers conduct tests on plant, seed or soil to ensure that any pesticide residues and/or GMO’s are below a fine ‘tolerance’ level and do not indicate deliberate fraud or carelessness on the part of the farmer.”

This is actually not the case and was unhelpful. Organic standards are processed based – testing for GM is

Risk management

How should we improve transparency and minimise the risks associated with potential GM contamination in the organic cotton supply chain? Asks Coral Rose.

The increase in both GM (genetically modified) and organic cotton agriculture has led to conditions that are ripe for cross contamination meaning that retailers and brands now need to implement more effective solutions to improve supply chain integrity and maintain consumer trust. This includes evaluating current business models, corporate responsibility, governance and non-GM labelling.

The first thing to make clear is the simple fact that many organisations and consumers are under the assumption that a product labelled as organic ensures that it is GM-Free. However, the term 'organic' does not guarantee that a product is 'GMO-free'.

According to the NOP (National Organic Program) the use of GM seeds are strictly prohibited but the NOP standards are 'process based'. This means that testing to detect GM material in organic products is not required. NOP states, "Certifying agents attest to the ability of organic operations to follow a set of production standards and practices that meet the requirements of the Act and the regulations. This regulation prohibits the use of excluded methods in organic operations. The presence of a detectable residue of a product of excluded methods alone does not necessarily constitute a violation of this regulation."

In addition, The International Federation of Organic Agricultural Movements (IFOAM) position on GMOs and Organic Agriculture co-existence says, "The potential

of GMO contamination does not alter the traditional approach of certifying organic as a 'production method' rather than an end-product guarantee. Organic products are not defined or certified as being 'free' of unwanted pollution. There is no way for them to guarantee that organic products will not be polluted by traces of GMOs. Contamination that results from circumstances beyond the control of the operator will not necessarily alter the organic status of the operation."

So it's not surprising to see that although GM testing is voluntary, it is becoming increasingly more popular – especially in the food sector.

Legislation

Making matters a bit more complicated is that fact that currently there is no global consistency in regards to GM tolerance. Threshold levels and labelling mandates vary by country. In the USA, the FDA does not currently require that GM food products be labelled in the US, and the EU does require labelling. The threshold for 'adventitious' contamination is 1% for approved GMOs in the EU (it is zero for unapproved). Above a level of 0.9% contamination in the EU requires that a product be labelled as containing GMOs.

In the US, NOP calls GMOs an 'excluded method' but, there is no threshold specified under which something could no longer be labelled organic. This is where global governance could make a big difference.

At the heart of the contamination of the organic cotton supply

chain matter, lies corporate responsibility. Is the lack of transparency a risk to a brands image? Where does responsibility with the end product begin and end?

As a steward of sustainability, it is the responsibility of the direct to consumer's organisation – the retailer or the brands – to ensure the integrity of the supply chain. The credibility of the brand is on the line 24/7. When any type of contamination, fraud or misuse of resources; environmental or people (social) hit the news it is the 'brand' who the consumer associates with the incident. Not the producer or anyone else in the supply chain.

In the wake of the GM report by the *Financial Times* in Germany, one of the brands affected issued a statement that read, "Accredited certification agencies have the responsibility to ensure that this is the case." Is this a lack of Corporate Responsibility or shifting blame? If my child's toy is contaminated with lead paint, and I purchased that toy at Widgets-R-Us, and my child lands in the hospital with lead poisoning, who is responsible? The certifier who claimed it was not toxic or the company who sold it to me, Widgets R-Us?

In the textile industry, there appears to be a varying degree of 'accountability' within organisations. Direct-to-consumer organisations must ask themselves, "who is responsible for my supply chain? An NGO, a Certifier?" The answer is simple: you are responsible. In this era of globalisation, perhaps a bigger question is how can organic and GM agriculture co-exist in a world where contamination has become almost inevitable? Is there a harmonious solution? And is co-existence and collaboration even remotely possible? ■



voluntary – but becoming more popular (see page 26).

Ecotextile News chose to tackle the testing house in Germany which was quoted by the Financial Times as saying that “30% of the tested samples” were contaminated with GM cotton to see if these claims stood up to scrutiny. It was claimed that GM was identified in fibres, yarns and even fabrics. [see box].

However, the claim that GM material can be accurately identified on fabrics that have undergone textile processing is widely disputed. “We can detect GMO in cotton seed or in

certain instances in cotton linters, where the genetic material is held. Once the fibres have been bleached, dyed and processed all traces of the genetic material from the seeds will be lost,” Heather Secrist, senior scientist at US-based Global ID Group

This was a view echoed by Lee Holdstock from the UK-based of the Soil Association. “GMO testing laboratories agree that processed fibres, particularly those subject to heat or chemical processes, no longer contain enough nucleic material for a reliable test result. The less processed a fibre is, the more chance

Link to an English translation of the German FT article:
<http://bit.ly/aBkrjs>

ADVENTITIOUS CONTAMINATION

On the NOP issue, there is no threshold for adventitious (accidental) contamination which is precisely why there was a need for a private industry group to create a standard. In the case of the Non-GMO Project, the standard actually has different thresholds for food, feed and seed.

In the NOP standard it simply says something to the effect that if adventitious contamination is discovered then that is an issue between the buyer and seller and is not a violation of the NOP standard.

Of course, in the EU, GMOs are not permitted in either conventional or organic, so there is an entirely different set of labeling issues. In the U.S., the organic standard calls GMOs an “excluded method” but, according to our experts here, there is no threshold specified under which something could no longer be labeled organic. In other words, if an organic certifier discovered that a farmer or a manufacturer was using GMOs, he would be given a major non-compliance and it would have to be rectified in 30 days. While one could theoretically lose their organic status, this rarely, if ever, happens. More likely, the producer would correct their practice and maintain their organic status.

This is why you hear that the U.S. NOP program is “process based” and not “testing based.” The rationale for this is that it is impractical to test every batch of product from both a logistical and cost point of view and that a better approach is simply insuring that producers are using the right methods, i.e. buying non-GMO seed, segregating their products in storage, transportation and manufacturing, etc. There is a similar approach to pesticides, i.e. they are not allowed but there is no specific threshold over which a product would have to be recalled or could not be labeled organic.

Ken Ross, CEO of the Global ID Group, USA.

WHAT THEY SAID

“I am convinced organic cotton – and perhaps organic farming more generally – needs better governance in the value chain, to make sure that approaches to production and farmer support are consistent and guarantee the rights as well as the obligations of all parties. Organic cotton also needs to develop pricing mechanisms that recognise the additional costs of delivering benefits and integrity beyond the premium to make sure these costs are covered at all times.”

Simon Ferrigno, Director of Farm Development, Organic Exchange.

“Business customers and consumers are increasingly demanding more information about where everything came from and how it was made. The drive to understand supply chains and track a great deal of data on environmental and social impacts will likely make stories like this more common as more and more value chains are opened up. But it will also, over time, prevent these kinds of problems.”

Andrew Winston, author Green to Gold.

“In terms of governance in the organic cotton industry, the checks and balances in place worked. The two certification agencies in India were fined for their administrative lapses.”

Jens Soth, Organic and Fair Trade Competence Centre, Helvetas.

“Over the long term, working to shorten supply chains, and knowing each person in the supply chain will help further transparency and stabilize our industry (organic and conventional) as a whole.”

Lynda Grose, Fashion Designer, Associate Professor California College of the Arts.

“It’s difficult to control the spread of genetically engineered genes. Nature is hard-wired to spread its seed so to expect that we can control the spread of genetically manipulated traits, as proponents of GM crops claim, is foolhardy.”

Ken Roseboro Editor, The Organic & Non-GMO Report

“The current contamination plight with cotton is compelling evidence of the need for the Non-GMO Project. The Project was created precisely to prevent situations like this one, by supporting producers with implementation of consistent best practices for GMO avoidance. Textiles are included in the scope of our standard, and we hope to work with this sector more moving forward.”

Megan Thompson-Westgate, Executive Director, Non-GMO Project

“The fact that 30% of samples have tiny amounts of GMO contamination should not incriminate organic farmers.”

Jeffrey M. Smith, Author Seeds of Deception responds to the FT report.

there is of positively detecting GM. So if you must test for GM, the most effective method remains testing of the cotton seed.”

Holdstock also questioned whether GM testing alone was even the right approach, “If organic cotton farmers are following organic practices and verifiably not using GM seed, then arguably seed testing regimes are an unnecessary burden to place on the system.”

But he said that confidence in the producer and their control body does not however remove the potential for adventitious contamination. “GM cotton is now widespread and the risk of pollen drift is real. The potential for this form of contamination highlights how important it is that the organic movement clearly defines what constitutes a pertinent test and what level of positive result points to malpractice or fraud.”

In a nutshell, Holdstock is right. Given the high prevalence of GM cotton in countries like India, and the amount of handling as it goes through the supply chain, it is virtually impossible to guarantee that all organic products will be completely free of GMO's. However, it is reasonable to assume that if the presence of GMO's is below a certain level, this is not an indication of deliberate fraud.

The organic cotton sector should not be afraid to make this clear. ■