

# THE FUTURE OF GM FOODS

## genetically modified views

Representing the Australian organic industry in Texas at the Organic Trade Association's annual conference 'All Things Organic' this May, Nutritionist Shane Heaton, funded by RIRDC and the BFA, learnt what the largely US-based Biotech industry are planning for us...

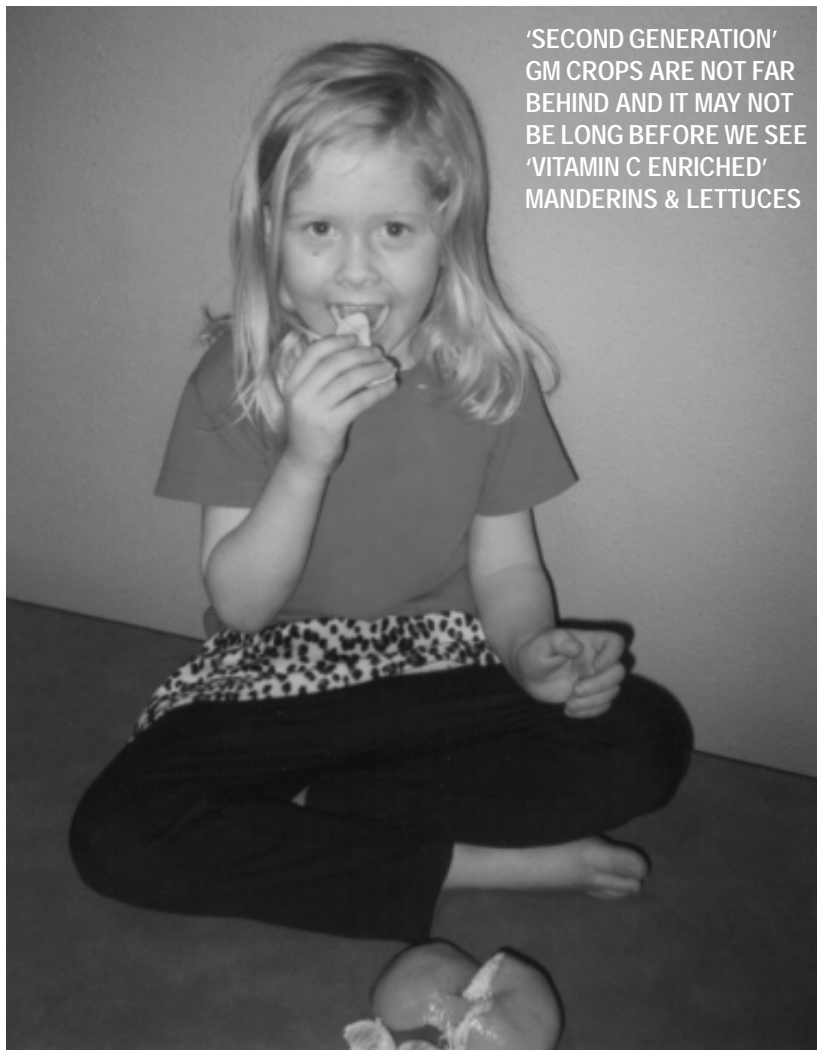
By SHANE HEATON

As countries around the world debate the economic, environmental and ethical issues surrounding genetically modified foods, the biotechnology industry continues to work hard at developing crops that can dominate the global agricultural sector. And they may soon be knocking on the organic market's door, not only through contamination, but emulation. For the next generation of GM crops is planned to move beyond claimed benefits to producers, and entice the consumer with promises of better nutrition or taste.

Surveys of consumer attitudes consistently throw up the same issues, and key among them is the fact that at present, GM crops offer no consumer benefit. It's no wonder consumers don't want GM crops...there are potential risks to the environment and their health (still unknown, despite assurances from the industry and regulators), with no tangible consumer benefit. At the heart of the biotech industry (I'm sure they have one) is business. And in business, you give people what they want, or you go out of business. And what people want, as the organic industry is showing, is nutritious food with fewer pesticide residues. But can biotechnology deliver it?

The first attempt at this new generation of GM crops was Golden Rice, enriched with beta-carotene, the pre-cursor to vitamin A - touted as solving vitamin-A deficiency induced blindness in developing countries including India. But it turns out you need to eat nine kilograms of rice to get the RDA of vitamin A, and there were, needless to say, much simpler and cheaper alternatives.

But other 'second generation' GM crops aren't far behind, and it may not be long before we see 'vitamin C enriched lettuce' or 'antioxidant enriched tomatoes'. These products may have considerable market potential, and the biotech industry sees them as the way to redeem themselves in the eyes of consumers and overcome public resistance to the first generation of production-based GM crops.



'SECOND GENERATION' GM CROPS ARE NOT FAR BEHIND AND IT MAY NOT BE LONG BEFORE WE SEE 'VITAMIN C ENRICHED' MANDERINS & LETTUCES

Another stream of GM development, some call the 'third generation' of GM crops, involves industrial applications such as plants that produce silk or bioplastics, and pharmaceutical applications - 'biopharma crops' - where plants will be used to produce medicines such as vaccines, hormones and oral contraceptives.

Considerable uncertainty remains as to whether biotechnology can deliver its promises, and even if it can, if it can do so in a safe and sustainable way. The recent UK Government's Scientific Report on GM, as part of their national debate on the issue, recognised huge uncertainties and major areas that had not been investigated. For example, the report acknowledged that "the extent and possible severity of impacts on the en-

vironment are difficult to quantify and subject to much debate" and "it may be difficult, if not impossible" to control gene flow to non-GM crops.

But don't be fooled: it's not committees or regulators holding back the introduction of GM crops. It's consumers. Supermarket chains and major food manufacturers around the world are refusing to use and sell GM foods and ingredients not because they object to them but because their customers don't want them. And regulators are only reacting to consumer pressure to delay the introduction of GM crops on a wide scale until we know at least something of their safety and environmental impacts. And that's why the battle lines are being drawn up right now in an effort to win consumers' hearts, minds and stomachs. ■