

Hong Kong DNA Chips Limited

**Written submission to the
Legislative Council Panel on Food Safety and Environmental Hygiene**

Hong Kong DNA Chips Limited

29 April 2003

Mr. Chairman,

Genetically modified (GM) foods are currently grown on over 58 million hectares of land in 16 different countries around the world. That is over 560 times the area of Hong Kong or about the size of France.

China has rapidly introduced GM technology and is now the world's fourth largest producer of GM crops (Figure 1). The number of GM crops and food products derived from them are increasing year by year (Figure 2).

Many countries around the world have introduced legislation regarding the labelling of products intended for human consumption that contain GM ingredients. They have done so after their citizens expressed overwhelming public concern.

Regardless of the health concerns over ingredients derived from GM technology, the ability of Hong Kong food manufacturers to enter such tightly regulated international markets that have introduced GM product labelling makes it inevitable that GM testing and labelling be introduced to Hong Kong as soon as possible. Only then will local companies be able to compete on a global scale.

As a biotechnology company offering a range of DNA-based products and services, we have taken the lead in providing accurate, specific and highly sensitive DNA-based tests for detecting GM food. Our laboratory has been accredited by the Hong Kong Accreditation Service (HKAS). Our GM food testing capability is one of the best in the entire Asia-Pacific region. As a result we can confidently state that the accuracy and sensitivity of molecular (that is DNA-based) tests for GM ingredients far exceeds the minimum level required in even the strictest GM labelling region in the world (European Union, 1%). Molecular assays that we have been using routinely for the last 3 years can detect the presence of specific markers

of GM crops to a level of 0.1%. Apart from quantifying the amount of GM ingredient in a food, the precise identity and strain of the GM ingredient can be identified.

There is a common misunderstanding that setting a percentage threshold, e.g. 5%, will allow food companies to comply with labelling legislation more easily. In fact, setting a threshold forces food companies to use more expensive quantitative analysis in order to demonstrate whether their products are permitted or not. Indeed, most regions including Mainland China have adopted a simple Yes / No principle for GM labelling while allowing an acceptable level of adventitious contamination. Food companies in these regions may find the legislation very clear and much more easier to follow by doing simple qualitative analysis.

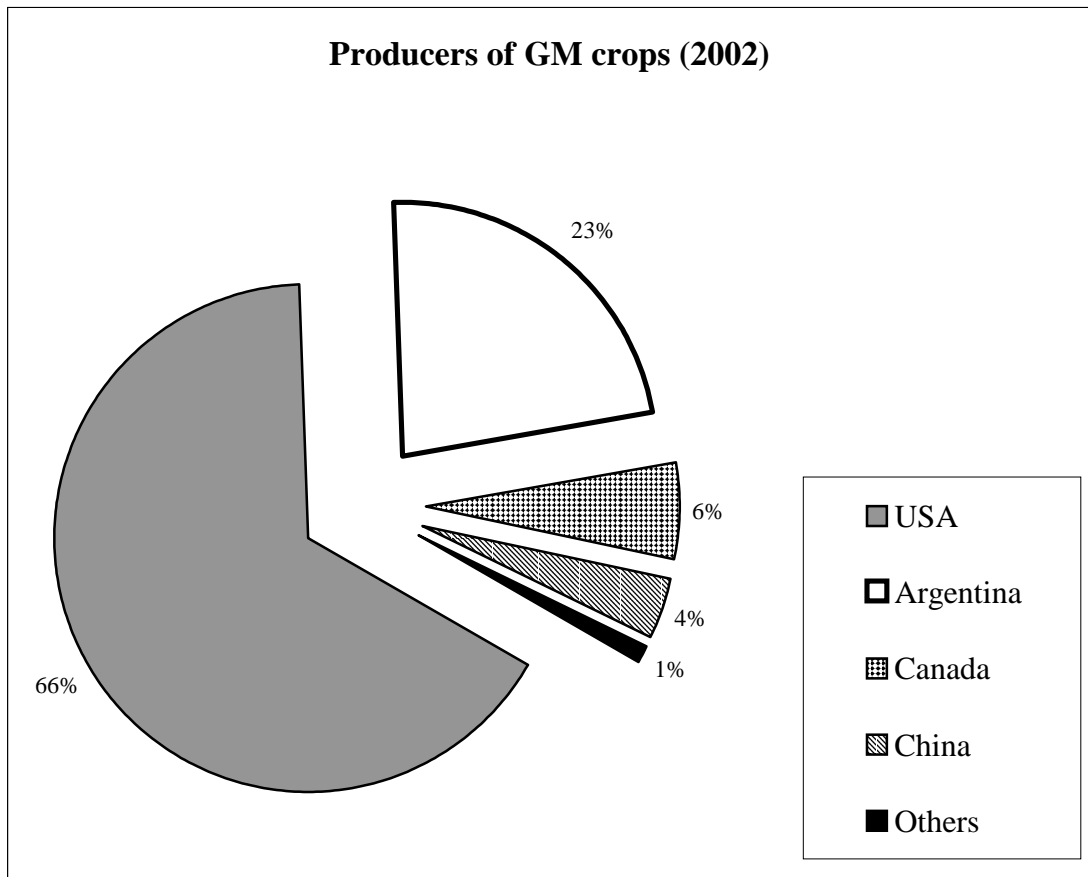
The accuracy of tests for GM ingredients can vary significantly between laboratories. The primary cause of this variation is the individual competence of the laboratory and not the nature of the technology employed in the assay. To ensure the quality of GM test results laboratories offering GMO test services should obtain appropriate accreditation.

The global trend is towards an increase in the information provided to consumers about ingredients derived from GM sources. Current technology is more than able to meet the demands of this trend.

Thank you.

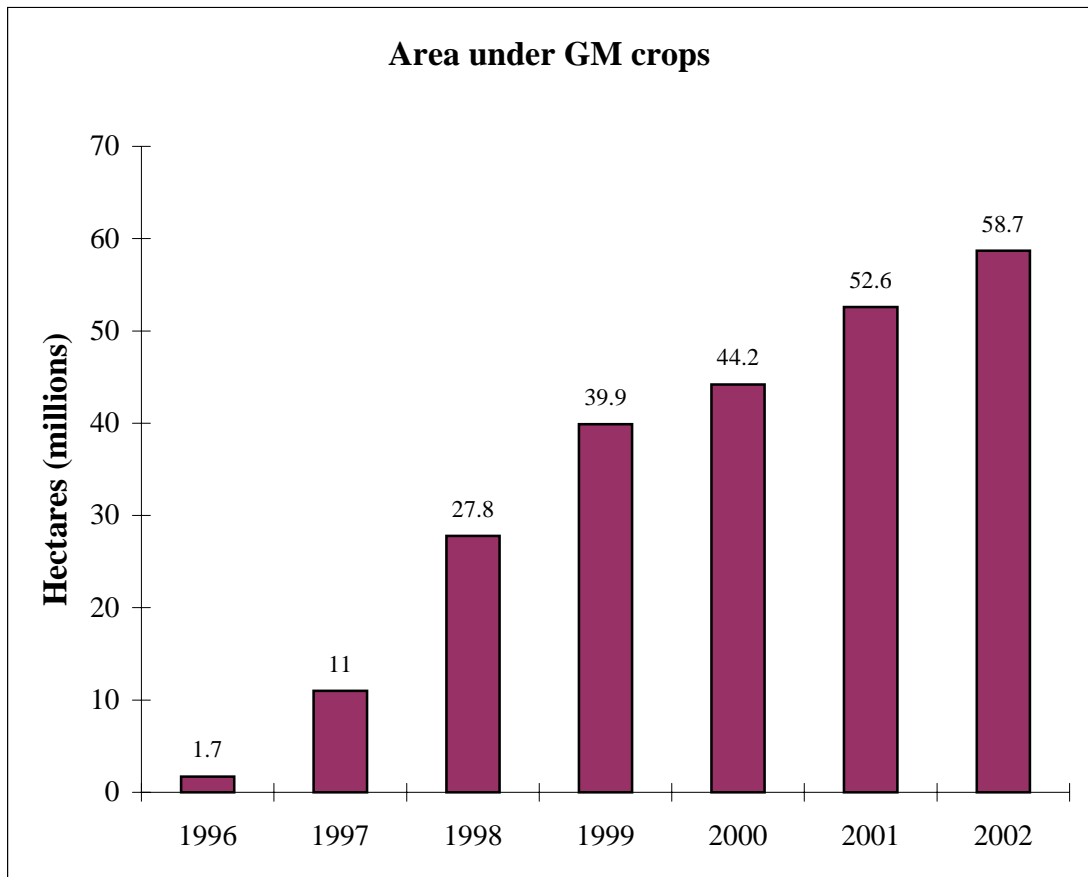
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Figure 1



Source: ISAAA

Figure 2



Source: ISAAA