GENETICALLY MODIFIED ORGANISMS

Lodged au Greffe on 2nd March 1999
by Deputy A.S. Crowcroft of St. Helier

STATES OF JERSEY

STATES GREFFE

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PROPOSITION

THE STATES are asked to decide whether they are of opinion -

to request the Agriculture and Fisheries Committee -

(a) to take all possible steps to designate and maintain the Island of Jersey as free from the growing of GMOs (genetically modified organisms);

(b) to suspend the programme of scientific research into PCN (potato nematode cyst, or eelworm)-resistant strains of the Jersey Royal Potato which was authorised by the States on 9th March 1991.

DEPUTY A.S. CROWCROFT OF ST. HELIER

Report

In bringing this proposition to the States against a background of intense media interest in the subject of biotechnology, I would like to point out that thus far Jersey has only participated in research into a specific aspect of genetic engineering (GE).

I am aware that officers in the Department of Agriculture and Fisheries share the concerns felt by many members of the public into the pursuit of "transgenic" organisms, i.e. the introduction of foreign genetic material into a species. Indeed, the transgenic constructs of the Jersey Royal which were created by IACR - Rothamsted in the 'blue sky' period of their research, involving the use of genetic material from the snowdrop, have been destroyed. The Department has informed me that it also views with alarm the apparently lax regime surrounding test fields of flowering GM crops in the United Kingdom, where accidental cross-pollination of non-GM maize, for example, may have occurred. There are no plans to extend GM research into other crops grown in the Island.

Research into the GM Jersey Royal was begun with the laudable aim of creating, if possible, a strain of the potato that would be resistant to PCN (potato nematode cyst, or eelworm) so that the use of expensive and dangerous chemical pesticides could be reduced. Not only is the use of chemicals in agriculture regarded with increasing levels of concern by the public of Jersey, owing to the threat of ground water pollution and concerns about food quality, but chemical use is now strictly controlled by the demands of United Kingdom supermarkets. Further, it is argued that as other countries embrace biotechnology, the palate of chemicals available to growers of non-GM crops will become restricted.

Against these arguments it must be pointed out that other solutions to the problem of eelworm do exist and are being evaluated by the Department of Agriculture and Fisheries. An approach using a particular soil fungus, the traditional use of vraic, the early lifting of the potato crop as a 'trap crop', and the growing of other suitable plants alongside or in between rotations of Jersey Royals, have all been put forward. There can be no doubt that the Jersey Royal is not dependent on the current biotechnological research for its survival - there is doubt, however, about the potential damage that could be done to our best agricultural export, it we allow it to be genetically modified.

The damage to the reputation of the Royal should be clear. Jersey has for many years prided itself on its traditional high quality crops, whether it be our milk, our tomatoes or our potatoes. In relative terms we do not have a large area of land under cultivation, and there will always be a market for such traditional high quality crops; one can confidently predict that that market will increase as customer concerns about GM food become more widespread. It is idle to assert that if we do not follow the United Kingdom and other producers down the biotechnological road we will somehow lose our competitive edge. The reverse is the case: Jersey stands to lose the specialness of its agricultural produce if it allows it to be genetically modified.

Proponents of the GM Royal argue that it will be many years before such a potato is available for commercial use. They further argue that the GM Royal could be and would be kept separate from the non-GM variety, as there is little risk of cross-pollination such as exists when plants dependent on their flowering are grown in close proximity. However, GE is a young science, and it is not possible to give guarantees that GM Royals would not flower or cross-pollinate; it is also somewhat naive to maintain that in such a small island as Jersey, GM potatoes would never find their way into the wrong fields.

Many local growers are alarmed at the potential damage the GM Royal could do to their industry. Whether or not an individual grower produces such crops, the advent of the GM potato will have inevitable effects on our ability to market the traditional product to supermarkets which have responded to popular concern by only buying from non-GM producers. Organic farmers, in particular, who have eschewed the use of chemical pesticides and herbicides, and whose fields have undergone extensive and expensive testing, stand to lose their businesses overnight through actual or perceived contamination of their crops. In farming, as in tourism and finance, confidence is important: against a background of unsafe foods which enjoyed both political and scientific endorsement, consumers are increasingly concerned about the origin and the exact nature of their food and water.

Apart from the risk posed by such plants to the livelihoods of growers whose crops continue to be traditionally grown, there are still legitimate concerns about the possibility of other environmental pollution, including effects on the food chain, created by crops whose genetic make-up has been altered by artificial means. Nor have the health implications been assessed, in which case the 'precautionary principle' should apply.

The risks of continuing our research into GM potatoes are very real, but the potential benefits of declaring the Island free from GM crops should also be pointed out. Though the Island would not be the first to declare itself GM free, it would still be able to exploit its position both in marketing its agricultural produce and in terms of its tourism. There can be little doubt that if it becomes impossible for restauranteurs and hoteliers in Europe to guarantee that all of their local produce is GM free, it will be to Jersey's advantage if all Jersey products can be so described.

It is accepted that GM food is already sold in the Island, as GM maize, tomatoes and soya are widely used in processed foods, but this should not encourage us to adopt a laisser-faire attitude to the food which we produce in Jersey. The Island is indeed fortunate in that it is not bound to accept GM crops because of political pressure from other jurisdictions.

Part (b) of this proposition requires the suspension of the programme of research into the GM Jersey Royal. The research carried out on the Island's behalf by IACR - Rothamsted has led to the creation of a number of 'constructs' which will shortly be ready for growing on and testing in Jersey. These constructs display the characteristics that were desired in the Jersey Royal, namely, resistance to eelworm, but many years' further work is required before the viability of the strains will be known, and before a successfully resistant strain might be available for commercial use. It is a fact that the research has cost in excess of £600,000, and the Agriculture and Fisheries Department is understandably reluctant to call a halt to the research programme without determining its results. (However, it should be noted that when the States approved the research in 1991 they were informed that the total cost was likely to be £276,000.)

It could be argued that research into the GM Jersey Royal could be continued at Rothamsted allowing the Island to pursue a GMO-free policy, without 'wasting' the results of many years' and many pounds' research. However, if the States decides that there is no future for GMOs in Jersey, the continuation of the research programme would not only be futile, but it would also be unethical and costly. While the waste of public funds on a discontinued research programme would attract some criticism, it must be seen in perspective: the potential loss to our agricultural industry from pursuing the development of the GM Jersey Royal would be incalculably large.