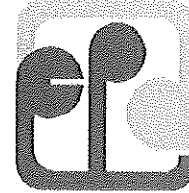


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25 May 2012

Miss Becky Yu  
Chief Council Secretary (1)1  
Legislative Council Secretariat  
Council Business Division 1  
Legislative Council Complex,  
1 Legislative Council Road, Central, Hong Kong

(By Email and by fax : 3529 2837)

Dear Miss Yu,

**Subcommittee on Genetically Modified Organisms  
(Control of Release) (Exemption) Notice**

**List of follow-up actions arising from the discussion  
at the meeting on 15 May 2012**

Further to the meeting of the Subcommittee on Genetically Modified Organisms (Control of Release) (Exemption) Notice held on 15 May 2012, we write to provide more information on the issues raised at that meeting.

The types of known GM papayas grown in Hong Kong

Based on the DNA sequencing results of a preliminary sampling exercise, the types of genetically modified (GM) papayas known to be grown in Hong Kong include two commercialized varieties (i.e. the one with the unique identifier code CUH-CP551-8 and the one with the transformation event code Huanong 1) and a variety approved for open field trial in Taiwan. There are also hybrids between these GM papayas and non-GM papayas. All of these

GM papayas known to be grown in Hong Kong were developed to confer resistance against the infection of the papaya by the Papaya Ringspot Virus.

#### Effect of planting GM papayas in close proximity of non-GM papayas

According to the requirements set by the Hong Kong Organic Resource Centre, planting GM papayas inside a certified organic farm is not allowed and a buffer zone of at least 2 metres should be established around the farm to prevent the crops in the production area from external contamination. While cross-pollination may take place between GM papayas and non-GM papayas if they are planted in close proximity, there are precautionary measures that farmers may take to avoid cross pollination, if considered necessary. It should also be pointed out that, even if cross pollination occurs, only some of the fruits produced by the non-GM papayas may bear GM seeds but the flesh would not be affected and would still be of non-GM nature. On the other hand, there is no evidence to show that the planting of GM papaya would have any adverse effect on the soil microbial biodiversity and the soil of the planting site or nearby area.

#### The safety of GM papayas

The Genetically Modified Organisms (Control of Release) Ordinance Cap. 607 (the Ordinance) aims to protect the local biological diversity from possible adverse impacts arising from the trans-boundary movement of GMOs intended for release into the environment. A risk assessment was conducted on the biosafety of GM papaya to the local biodiversity. The risk assessment has confirmed that GM papaya is unlikely to pose any adverse biosafety effect on the biological diversity of the local environment, mainly because papaya is an exotic species which does not have any close relatives in Hong Kong, making it unlikely for the release of GM papaya to the environment to affect the local biodiversity. As GM papaya is produced through genetic engineering using the same transformation systems, new varieties of GM papaya would share the same basic genetic makeup and hence possess similar biological and safety properties as existing varieties. The findings and conclusions of the risk assessment were endorsed by the Expert Group established under the Ordinance.

Regarding the safety of GM papayas for human consumption, according to the World Health Organisation, GM foods currently traded in the international market are not likely, nor have been shown, to present any risks to human health. Furthermore, it should be pointed out that the issue of GM food safety is outside the ambit of the Ordinance as well as the Cartagena Protocol on Biosafety to the Convention on Biological Diversity.

#### Assistance for replacing GM papayas with non-GM ones

As part of the GMO monitoring scheme, Agriculture, Fisheries and Conservation Department (AFCD) has provided assistance in testing papaya samples for the voluntary one-for-one papaya exchange programme undertaken by some environmental groups and organic farmers at a few selected villages. While the AFCD supports the development of local organic farming such as providing technical supports and assistance in marketing of organic produce, it should be noted that AFCD advocates diversified farming practices including the promotion of both conventional and new farming methods.

#### Lead time to phase out all GM papayas grown in Hong Kong

Papaya is a very popular fruit tree grown by the general public and local farmers. It is widely cultivated in the territory in the backyards of village houses, orchards and farmlands. It is estimated that there are about 350,000 papaya trees in Hong Kong and about 60-70% of them are genetically modified. In view of the large number of widely dispersed papaya trees in the territory and that GM papaya trees could only be distinguished from non-GM papaya trees through chemical tests, considerable time and resources would be required to identify and remove all GM papaya trees, assuming that no new GM papaya trees would be planted in the meantime. Nonetheless, as the potential risk to the biological diversity of the local environment posed by GM papaya is very low, the Administration does not have any justification or plan to remove or phase out all GM papayas grown in Hong Kong.

#### Papayas imported into Hong Kong

According to the trade statistics of the Census and Statistics Department, 6,573 tonnes of imported papaya was consumed in Hong Kong in 2011, of which 31% came from Mainland China and 7.3% was from US. It was known

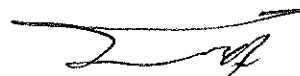
that 53% of papayas imported from Mainland China is genetically modified and mainly of the variety with the transformation event code Huanong 1. On the other hand, about 90% of the papayas from US is genetically modified and is of the variety with the unique identifier code CUH-CP551-8. However, one may also wish to note that the import of GM papaya fruit into Hong Kong for direct consumption as food or feed is not governed by the requirement under section 7 of the Ordinance regarding import of a GMO that is intended for release into the environment (as further explained in the next paragraph).

Environmental release of GM papaya fruit

According to section 7(2) of the Ordinance, a person must not knowingly import a GMO that is intended for release into the environment unless the GMO is an approved GMO. Section 7(2) however does not apply to or in relation to a GMO that is intended for direct consumption as food or feed, as provided in section 7(1). It is a matter of evidence as to whether a person commits an offence under section 7(2) of the Ordinance for importing a genetically modified papaya that is intended for release into the environment. Section 5 of the Ordinance provides that a person must not knowingly cause a GMO to be released into the environment or maintain the life of a GMO that is in a state of being released into the environment (subject to conditions specified in section 5(4)). It is also a matter of evidence as to whether a person commits an offence under section 5 for planting a genetically modified papaya by using the seeds of an imported papaya after consumption. The Genetically Modified Organisms (Control of Release) (Exemption) Notice, if approved, would make clear that members of the public who are growing papayas as a hobby would not be caught under the Ordinance.

Should you require further assistance, please contact the undersigned at 3509 8617.

Yours sincerely,



(Elvis W K Au)

for Director of Environmental Protection