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To: Hon. Chan Hak-Kan, Chairman
Panel on Environmental Affairs
Legislative Council Secretariat
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Dear Hon. Chan,

Panel on Environmental Affairs - Proposed Exemption under the Genetically Modified Organisms (Control of Release) Ordinance (Cap. 607)

Referring to the Government's proposed exemption of GM papayas from the application of the Genetically Modified Organisms (Control of Release) Ordinance, I would like to provide some opinions on the potential risk of GM papaya to biological diversity with a view to facilitating consideration of the Panel on Environmental Affairs on the proposed exemption.

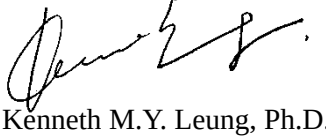
First of all, papaya is an exotic species and that no related genus or family of papaya exists in Hong Kong. This means that there is a substantial species barrier between papaya and other wild plants native to Hong Kong. Since gene transfer would normally occur between individuals of the same species, it is not possible for the foreign gene of GM papaya to transfer to a plant of different species, let alone a plant of different genus or even family. Given that species barrier can effectively prevent any gene transfer between GM papaya and other plants in Hong Kong, it is highly unlikely for gene flow from GM papaya to other native plants to occur.

Secondly, there might be worries that new varieties of GM papayas may pose unknown risk to biological diversity of Hong Kong. In order to tell if new varieties of GM papaya have any adverse biosafety effects, we shall compare the biological and safety properties of existing and new varieties GM papayas. It should be noted that all GM papayas are developed based on the same molecular approach. Thus, new varieties of GM papaya would have similar genetic construction, and hence their biological and safety properties would be comparable to existing varieties of GM papaya. As existing varieties of GM papaya have been shown to be no different to non-GM papaya biologically other than the expression of the conferred trait (e.g. PRSV resistance) and are deemed safe, new varieties of GM papaya are not expected to have dissimilar biological and safety properties.

Thirdly, no conclusive evidence has so far suggested that GM papaya would have other ecological impacts usually thought to be related to GMOs (such as production of harmful substances, horizontal gene transfer and impact on soil microbial diversity etc.). In fact, GM papaya has been so widely grown in many tropical countries in large quantity, no adverse impacts of GM papaya on the natural environment has been reported.

Finally, from the risk management point of view, the proposed exemption of GM papaya would unlikely result in any significantly unacceptable risk to the biological diversity of Hong Kong. Thank you for your kind attention and consideration.

Yours faithfully,



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