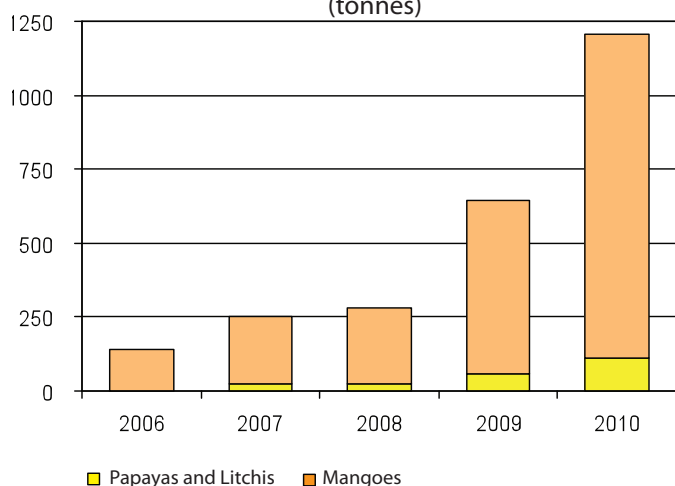


# CASE STUDY: IRRADIATED TROPICAL FRUIT EXPORTS TO NEW ZEALAND

## Tropical fruit exports to New Zealand

1. Australian mangoes, papayas and litchis (or lychees) treated with irradiation are sold widely in New Zealand.
2. New Zealand has strict quarantine measures in place to protect its pest free status in relation to a number of insects, including fruit fly. These quarantine restrictions have previously prevented some Australian fruit and vegetables from being exported to New Zealand. However, the food safety and biosecurity approval of irradiation as a phytosanitary measure for certain tropical fruits has opened up trade between the two countries.
3. Growing volumes of irradiated tropical fruit are now successfully being exported from Australia to New Zealand. In 2010, this trade in irradiated tropical fruit grew to more than one thousand tonnes of mangoes, papayas and litchis.
4. Today, New Zealand is an export success story for Australian horticulture, accounting for more than 25 per cent of total Australian mango exports. According to the Australian Mango Industry Association, New Zealand is the fastest growing market for Australian mangoes and helped the industry achieve one of its best export seasons in 2010.<sup>1</sup>

Australian Exports of Irradiated Fruit to New Zealand  
(tonnes)



1. Kristy Sexton-McGrath, 'NZ demand driving up mango exports', ABC News, 6 July 2010

## Irradiation as a phytosanitary measure

5. Food Standards Australia New Zealand (FSANZ) has approved the irradiation of nine tropical fruits – mango, papaya, breadfruit, carambola, custard apple, litchi, longan, mangosteen and rambutan – for the treatment of pest infestation (FSANZ Standard 1.5.3.).
6. In 2004, Biosecurity New Zealand, part of the New Zealand Ministry of Agriculture and Forestry, approved market access for Australian mangoes treated with irradiation. Previously the importation of fruit fly host material like mangoes from fruit fly zones in northern Australia was prohibited. Biosecurity New Zealand subsequently expanded the approval to include papaya and litchi.
7. The food safety and biosecurity approval of irradiated tropical fruits in New Zealand is consistent with international treaties and regulatory frameworks. For example, Codex Alimentarius, the world body responsible for food safety, has issued a General Standard for Irradiated Foods and the International Plant Protection Convention recognises irradiation as a phytosanitary measure (International Standards for Phytosanitary Measures No.18).
8. Irradiation is proving a commercially attractive treatment option to the horticulture industry. As a phytosanitary measure, irradiation is a non-invasive process and effective against a broad spectrum of insects. It does not heat the product or make it radioactive, leaves no chemical residues and is relatively quick and cost competitive. Moreover, it is proving to have a high degree of consumer acceptance.

## Consumer response

9. Irradiation has opened up New Zealand as a new tropical fruits market for the Australian horticulture industry. It has also given New Zealand consumers choice in tropical fruits where previously they had relied on often lower quality produce originating from Central and South America.
10. According to the New Zealand Fresh Produce Importers Association, irradiated mangoes are now considered a mainstream imported product sold successfully in supermarkets and other fresh produce retail channels.
11. The consumer acceptance of irradiated mangoes in New Zealand is high. As per FSANZ requirements the irradiated mangoes are sold with labels identifying they have been treated with ionising radiation. They are sold alongside non-irradiated products from other origins.
12. The irradiated Australian mangoes are generally priced at a premium in New Zealand over the other origin product. According to the trade, the growth in Australian mangoes is based on consumers seeking a higher quality product and potentially greater confidence in the food safety origins of fresh produce originating from Australia.

## Other issues

13. When the irradiated trade first began around five years ago there was some media interest relating to activist groups opposed to the technology, in particular Friends of the Earth. As part of their campaign, these activists raised concerns about the impact of the process on product quality and argued the labeling of the irradiated fruit was insufficient.
14. The media interest in the issue was short-lived and did not have much impact on normal commercial trade. Consumer buying behaviour has demonstrated consumers are happy with the quality of the mangoes while FSANZ has stated publicly the labels being used in New Zealand complied with their regulatory requirements.
15. Since this initial interest there is been minimal media coverage and consumers have demonstrated a high level of acceptance of irradiated tropical fruits.
16. With the commencement of exports of Australian irradiated fruits, there have been some instances of New Zealand quarantine officials questioning the presence of live insects in irradiated mango shipments. International, Australian and New Zealand guidelines acknowledge irradiation is effective against insects even if all the insects are not killed in the process. This is because the irradiation renders any surviving insects sterile and therefore unable to propagate in the importing country.
17. While the issue of insects presence is new for the quarantine officials and has resulted in some additional checking and verification of export documentation and phytosanitary certificates there have been no shipment rejections. Moreover, quarantine officials are increasingly used to dealing with shipments of irradiated fruit from Australia and have expressed confidence any future issues can be managed successfully.

**Contact:**  
Murray Lynch  
CEO Steritech  
(03) 8726 5566

**Steritech Offices:**  
Victoria (Head Office)  
160 South Gippsland Highway  
Dandenong Victoria 3175

New South Wales  
5 Widemere Road  
Wetherill Park NSW 2164

Queensland  
180-186 Potassium Street  
Narangba Queensland 4504