

Unapproved GM papaya found in Japan

1. Summary

In December 2010, the Ministry of Agriculture, Forestry and Fisheries (MAFF), Japan, received information on potential distribution of unapproved GM papaya in one prefecture. Immediately after this, the MAFF started validation of an analytical method for detecting such GM papaya. After successful completion of the validation in February 2011, the MAFF started analysis of all papaya seeds and seedlings commercially available or stored throughout Japan. In April 2011, the MAFF confirmed the presence of the unapproved papaya.

2. Analysis of papaya seeds and seedlings

Papaya seeds were sampled by technical officers belonging to the Food Safety and Consumer Affairs Division of the MAFF and National Center for Seeds and Seedlings. Seeds of all varieties in paper bags available in the market or stocked were collected from all the vendors. Seedlings were collected from all the vendors.

The analysis was conducted to detect the specific DNA sequence¹ unique to the suspected variety extracted from seeds or leaves by using the PCR technique.

3. Features of unapproved GM papaya seeds²

- 1) The label attached to the paper bag states “Tainung No. 5”.
- 2) Approximately one hundred grams of unapproved GM were contained in the paper bag.
- 3) Since 2005, all the papaya seeds labeled “Tainung No. 5”³ had been imported from a Taiwanese seed company named “Taiwan Agricultural Development Co., Ltd.”
- 4) From 2006 to 2008, approximately 5 kg of “Tainung No. 5” seeds were imported to Japan, equivalent to 25 million grains.
- 5) Since 2009, no “Tainung No. 5” seed has been imported.
- 6) Approximately 8,000 trees of “Tainung No. 5” were being cultivated.



“Tainung No. 5”

4. Measures taken

- 1) All cultivated “Tainung No.5” trees were cut down.
- 2) Monitoring for wildy growing papaya is being carried out around the area where “Tainung No.5” had been planted.
- 3) All papaya seeds and seedlings imported to Japan are subject to GM testing in Plant Quarantine Station.

¹ Same as the sequences of papaya DNA being studied in Taiwan

² All of papaya seeds and seedlings other than “Tainung No. 5” were tested and confirmed not unapproved GM.

³ Original Tainung No.5 was bred in Taiwan as non-GM variety in 1987.