

Possible to distinguish whether Jujube(*Zizyphus jujuba*) and Glass-leaf sweet flag(*Acorus gramineus*) real or fake

Food products which are difficult to find out the authenticity with naked eyes...Developed an analytical method of genes

- □ The Ministry of Food and Drug Safety (MFDS, Minister Lee Eui-Kyung) announced that it developed an analytical method of genes in order to eradicate the sales of ingredients which are not proved to be safe since they are hard to distinguish its authenticity with naked eyes.
 - The analytical method was developed in accordance with the request from the Health Environment Research Institutes of Seoul, saying that there are many cases of selling deceived products in traditional markets, thereby the analytical method of genes is needed to distinguish between Jujube(*Zizyphus jujuba*) and Indian jujube(*Zizyphus mauritiana*), or Glass-leaf sweet flag(*Acorus gramineus* Soland.) and Sweet flag(*Acorus calamus* L.), which are hard to tell with their looks.
 - * Jujube(*Zizyphus jujuba*) and Glass-leaf sweet flag(*Acorus gramineus* Soland.) are food ingredients used in tea beverages, etc. They are frequently forged and mutated into similar looking ingredients such as Indian jujube(*Zizyphus mauritiana*) and Sweet flag(*Acorus calamus* L.), which are banned for the use as food ingredients.
 - The analytical method of genes uses DNA sequencing information which only exists at certain plant types.





- This can be utilized to analyze not only original food products but also processed food products which cut/grind the original food ingredients.
- □ The MFDS has been developing the method to distinguish the authenticity of agricultural products including Jujube(*Zizyphus jujuba*) and Glass-leaf sweet flag(*Acorus gramineus* Soland.) which are likely to be forged and mutated due to the difficulty of recognizing the difference with naked eyes. The Ministry also announced that it will further expand the development of methods to distinguish authentic food ingredients to protect consumers from fake products.
 - * Capollary wormwood(*Artemisia capillaris* thunb.), Black atractylodes rhizome(*Atractylodis lancea*), Korean chrysanthemum(*Chrysanthemum zawadskii* var. *coreanum*), Florist daisy(*Chrysanthemum morifolium*), Bokbunja(*Rubus coreanus*), Korean dandelion(*Taraxacum platycarpum*), etc.
 - For more information, visit the MFDS webpage (<u>www.mfds.go.kr</u>> Policy Information> Food policy Information> Testing Method).

[Attachment] (in Korean)

- 1. Agricultural products used for the ingredients of food products (Zizyphus jujuba : Zizyphus mauritiana, Acorus gramineus Soland. : Acorus calamus L.)
- 2. The results of authenticity test of food product ingredients (Zizyphus jujuba, Acorus gramineus Soland.)







