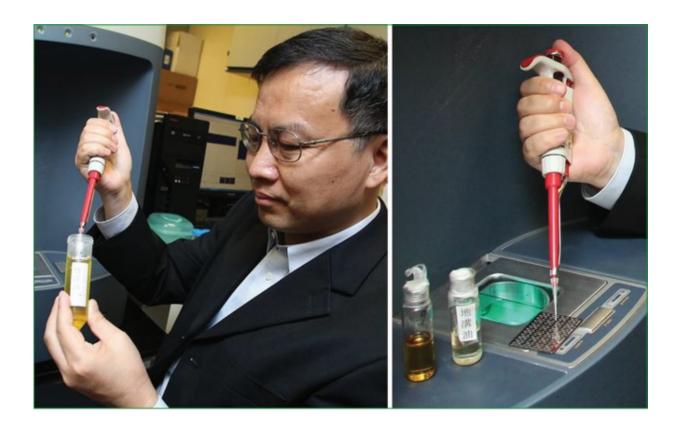


New method for rapid authentication of edible oils and screening of gutter oils

July 21 2016



Testing of oils. Credit: Hong Kong Polytechnic University

A new method has been developed to use matrix-assisted laser desorption/ionization mass spectrometry (MALDI-MS) for direct analysis of edible oils.



This method involves direct sample loading, automated data acquisition and simple data processing, and has been applied to establish a preliminary spectral database of common edible oils.

As different types of edible oils have different MALDI-MS spectral patterns, a sample of edible oil can be authenticated within minutes by comparing its spectrum with the spectra of the labeled oil in the database, and gutter oils thus can be screened out.

Special Features and Advantages:

- Set up a simple analytical protocol and a spectral library of edible oils
- Shorten the oil identification duration from few hours to few minutes

• Simple <u>method</u> for direct analysis of edible oils, with high quality and highly reproducible results

Provided by Hong Kong Polytechnic University

Citation: New method for rapid authentication of edible oils and screening of gutter oils (2016, July 21) retrieved 2 May 2024 from https://phys.org/news/2016-07-method-rapid-authentication-edible-oils.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.