

## Sweet deception: New test distinguishes impure honey from the real thing

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Scientists have developed a test to identify adulterated or impure honey. Credit: U.S. Department of Agriculture

Here's some sweet news for honey lovers: Researchers in France are reporting development of a simple test for distinguishing 100 percent natural honeys from adulterated or impure versions that they say are increasingly being foisted off on consumers. Their study appears in ACS' *Journal of Agricultural and Food Chemistry*.

Bernard Herbreteau and colleagues point out that the high price of **honey** 



and its limited supply has led some beekeepers and food processors to fraudulently make and sell impure honey doped with inexpensive sweeteners, such as corn syrup. These knock-offs are almost physically and chemically indistinguishable from the real thing. Scientists need a better way to identify adulterated honey, the researchers say.

Herbreteau and colleagues describe a new, highly sensitive test that uses a special type of chromatography to separate and identify complex sugars (polysaccharides) on their characteristic chemical fingerprints. To test their method, the scientists obtained three different varieties of pure honey from a single beekeeper and then prepared adulterated samples of the honeys by adding 1 percent corn syrup. They showed that the new technique accurately distinguished the impure honeys from the pure versions based on differences in their sugar content.

More information: "Polysaccharides as a Marker for Detection of Corn Sugar Syrup Addition in Honey", <u>Journal of Agricultural and Food Chemistry</u>

Provided by American Chemical Society (<u>news</u>: <u>web</u>)

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