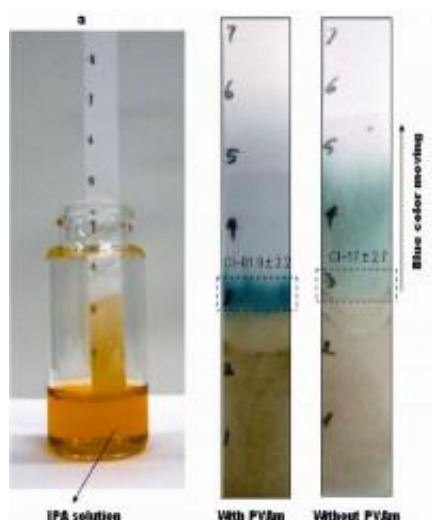


An inexpensive 'dipstick' test for pesticides in foods

November 4 2009



An experimental test strip shows a visible color change indicating the presence of pesticides in a test sample. In the future, similar strips may help detect these hidden toxins in foods and beverages. Credit: The American Chemical Society

Scientists in Canada are reporting the development of a fast, inexpensive "dipstick" test to identify small amounts of pesticides that may exist in foods and beverages. Their paper-strip test is more practical than conventional pesticide tests, producing results in minutes rather than hours by means of an easy-to-read color-change, they say.

The study is in the November 1 issue of *ACS' Analytical Chemistry*. John Brennan and colleagues note in the new study that conventional tests for

detecting [pesticides](#) tend to use expensive and complex equipment and in some cases can take several hours to produce results. They cite a growing need for cheaper, more convenient, and more eco-friendly tests for pesticides, particularly in the [food industry](#).

The scientists describe the development of a new paper-based test strip that changes color shades depending on the amount of pesticide present. In laboratory studies using food and beverage samples intentionally contaminated with common pesticides, the test strips accurately identified minute amounts of pesticides. The test strips, which produced results in less than 5 minutes, could be particularly useful in developing countries or remote areas that may lack access to expensive testing equipment and electricity, they note.

More information: "Reagentless Bidirectional Lateral Flow Bioactive Paper Sensors for Detection of Pesticides in Beverage and Food Samples", *Analytical Chemistry*, [pubs.acs.org/stoken/presspac/p ...
11/10.1021/ac901714h](https://pubs.acs.org/stoken/presspac/p.../10.1021/ac901714h)

Source: American Chemical Society ([news](#) : [web](#))

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