Robot Strawberry Pickers

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National Physical Laboratory (United Kingdom) (10/19/11)

National Physical Laboratory (NPL) researchers have developed an imaging technology that can identify the ripeness of strawberries before they are picked. The researchers say that incorporating the technology into fruit-picking robots could reduce food waste and improve productivity. The software has been designed to learn based on past experience, so it could be adapted for other crops. The NPL technology uses radio frequencies, microwaves, terahertz, and the far-infra red, which all have the potential to safely penetrate a food crop's outer layers and identify whether it meets the pre-determined standards for ripeness. The researchers first modified a microwave measurement system to analyze the structure of various crops. The data was incorporated into an algorithm, which enables the technology to provide the relevant information from a single measurement. The imaging technology also can be used for other applications, such as waste management, where it could differentiate between plastics, paper, and wood.
Full article:  http://www.npl.co.uk/news/robot-strawberry-pickers